Guidebook for Environmental Permits in New Hampshire

2002 Edition

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Guidebook for Environmental Permits in New Hampshire

2002 Edition

http://www.des.state.nh.us/permitguide

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October 2002

RE: ***Guidebook for Environmental Permits in New Hampshire*** – 2002 Edition

Dear Colleague:

I am pleased to provide you with the latest edition of the New Hampshire Department of Environmental Services' *Guidebook for Environmental Permits in New Hampshire*. This document represents an important education and outreach tool that will enable you to gain a better understanding of DES's environmental programs and their requirements.

The *Guidebook* is intended for use by those who seek guidance in completing applications for a project or activity that impacts the environment and requires a permit from this agency. It addresses 81 different types of DES permits, licenses, certificates, approvals, and notifications that implement permitting programs concerning air quality, drinking water, surface water, wetlands, groundwater, dam safety, septic systems/real property subdivision, wastewater, the Winnipesaukee River Basin Program, petroleum storage/site remediation, solid waste, and hazardous waste. It is available in hard copy form, compact disk, or online at http://www.des.state.nh.us/permitguide.

I believe this *Guidebook* will serve as a valuable resource for applicants by providing the insight and direction needed to effectively interact with the permitting programs here at DES.

Sincerely,

George Dana Bisbee
Acting Commissioner

Enc.

http://www.state.nh.us

TDD Access: Relay NH 1-800-735-2964

Disclaimer

Use of the 2002 Edition of the ***Guidebook for Environmental Permits in New Hampshire*** is not intended to replace or otherwise substitute for the more comprehensive and formal administrative procedures that govern the permitting programs administered by the New Hampshire Department of Environmental Services. The New Hampshire Legislature has set forth formal procedures and requirements that are carefully designed to provide both substantive and procedural due process of law to agency constituents. Since each type of authorization is unique, a specific application may require more detailed information to complement what is summarized in this document. Further, many permit application processes must also satisfy both federal and local requirements before they become effective. Finally, the user must also bear in mind that state statutes and administrative rules are subject to change at any time. Please remain cognizant of these limits when using the *Guidebook*.

Preface

The 2002 Edition of the ***Guidebook for Environmental Permits in New Hampshire*** ("Guidebook") represents a significant education and outreach tool for accomplishing one of the most important "core" responsibilities of the New Hampshire Department of Environmental Services ("DES") – fair, consistent, timely, and enforceable permitting. DES's environmental permitting programs are important to the agency's mission *to help sustain a high quality of life for all citizens by protecting and restoring the environment and public health in New Hampshire*. The various permitting programs are designed to encourage the wise use of natural resources, protect the rights of public and private landowners, complement New Hampshire's robust economy, and contribute to a healthy and sustainable lifestyle for all residents and visitors. DES follows a three-tiered hierarchy in carrying out its responsibilities to the regulated community: education/outreach, technical assistance, and compliance assurance (including compliance monitoring). Education and outreach form the cornerstone of creating a better understanding of why and how environmental permitting is accomplished by providing permit applicants with all of the information necessary to efficiently navigate though the process and receive a reasoned, technically-sound decision within the shortest possible time.

This *Guidebook* has been designed for use by a wide audience, assisting those who are unfamiliar (or only somewhat knowledgeable) with environmental permitting requirements, as well as those who are more experienced with DES programs. It provides information on the substantive and procedural aspects of environmental permitting, but does so in common terms (whenever and wherever possible) to explain what is expected in permit applications. Its format is designed with a chapter introduction for each major category of permitting (*e.g.*, air quality, groundwater, solid waste, *etc.*) to orient the reader with the broader scope of a permitting program at DES, and then proceeds to a more detailed presentation of facts and requirements for individual authorizations contained within that chapter. The individual authorization types are presented in a format that highlights important regulatory information (*e.g.*, State statute, administrative rules, fees, how to modify or renew, *etc.*) and then matches that with practical considerations, including challenging the user to ask the most basic "qualifier question" possible to determine whether or not a particular authorization is needed. If it is, the application process and its requirements are then listed in a condensed form below the qualifier question. The scope of this listing stops at the point of actual application submittal to DES. A list of typical types of projects or practices is provided as a final check for the *Guidebook* user to further gauge the authorization's applicability to his/her particular project, practice, or need. This gives the user some insight into how this authorization has actually been applied in the past. Every possible Internet link to useful documents (*e.g.,* federal and state statutes, administrative rules, guidance documents, fact sheets, and forms) has been added to the text to expand the scope and usefulness of the *Guidebook*. However, special care was also taken to make the *Guidebook* equally as useful to those who either do not have access to the Internet or prefer not to use it.

We sincerely hope that this new *Guidebook* will be of help to you. If there are questions, or ways to improve its usefulness, please submit all comments or concerns to:

Timothy W. Drew, Administrator, Public Information and Permitting Unit, Office of the Commissioner, New Hampshire Department of Environmental Services, P. O. Box 95, 6 Hazen Drive, Concord, New Hampshire 03302-0095. Telephone at (603) 271-3306, fax at (603) 271-8013, or email at tdrew@des.state.nh.us

Public Information and Permitting Unit

After years of debate and testimony, the New Hampshire Legislature created the Department of Environmental Services ("DES") by enacting RSA 21-O ("Department of Environmental Services", http://gencourt.state.nh.us/rsa/html/indexes/21-O.html), which became operational on January 2, 1987. Prior to DES's creation, legislators and officials of precursor agencies (*e.g.*, Water Supply and Pollution Control Commission, Air Resources Agency, *etc.*) received requests for information (and fielded complaints) from businesses, organizations, the media, and private individuals who were trying to determine the official "State" position or response to a particular environmental event or public health issue. The resulting responses were sometimes piecemeal or inadequate (or even contradictory) in failing to consider all aspects of an issue, due in part to the institutional separation of the various agencies with jurisdiction over the matter. To address this need, the State Legislature created the Public Information and Permitting ("PIP") Unit, within the DES Office of the Commissioner, to fulfill that crucial coordinating function, as set forth in RSA 21-O:12, IV ("Department of Environmental Services/Office of the Commissioner", http://gencourt.state.nh.us/rsa/html/I/21-O/21-O-12.htm). This represented a first-of-its-kind coordination unit established in any State agency, and was designed for the expressed purpose of addressing all aspects of integrated environmental permitting and public information delivery for the benefit of the new agency's constituents.

Specifically, RSA 21-O:12, IV defined the PIP Unit's role as follows: *Public information and permitting shall include all initial public contact relative to permits and applications; furnishing members of the general public with all permit applications and information needed for any project which comes under the jurisdiction of the department, as well as information as to federal or local permits which may be required; assisting members of the general public, whenever possible, to fill out permit applications by directing them to the appropriate person within the relevant division of the department; and generally providing members of the general public with all of the information necessary for meeting permit requirements, including information as to where to find the relevant federal laws and regulations, rules, and municipal ordinances.* From this charge, the mission of the PIP Unit was specifically crafted to: ***Integrate and disseminate public information, data, and technical guidance to enhance compliance with environmental programs, create a better understanding of contemporary issues and events, and provide the tools for more informed decision making and stewardship by those we serve.***

The PIP Unit is constantly seeking ways to improve its service delivery system. The goal is to support more effective and informed decision making by applicants for efficiently navigating though the application process and to obtain a reasonable decision within the shortest possible time. Several specific services have been developed to fulfill the legislative intent as set forth above. Examples include:

- Preparation of the 2002 Edition (including future updates) of the ***Guidebook for Environmental Permits in New Hampshire*** to support the PIP Unit's mission and its goals relative to comprehensive permit coordination.
- Offering voluntary pre-application meetings in the pre-planning stages of simple to very complex, multi-discipline projects to ensure that all requirements are known before any plans of action are finalized. This may include multiple agency conferences, as well as participation by federal and local officials. These meetings provide for effective one-on-one discourse (and an early problem-solving opportunity) between the applicant and DES permitting staff members from the outset of the project.
- Permit consultation services offered by telephone, email, or in person to suggest ways in which projects can be designed to comply with applicable requirements, infrastructure limits, and natural resource constraints. Project development follow through activities are also offered by the PIP Unit.
- Once all requirements have been identified, providing all relevant guidance documents, laws, rules, fact sheets, and forms to the applicant for use in preparing applications for the various programs indicated.

The staff of the PIP Unit stands ready to assist those of you who look to DES for guidance and resources, and encourage you to contact us as follows:

- **For permitting assistance**, email at tdrew@des.state.nh.us or pip@des.state.nh.us, or call (603) 271-3306 or fax at (603) 271-8013.
- **For public information inquiries,** email at cknox@des.state.nh.us, or call (603) 271-3710 or fax at (603) 271-2867
- **For publication availability**, email at pberube@des.state.nh.us or lknowland@des.state.nh.us, or call either (603) 271-2975 or (603) 271-8876, or fax at (603) 271-8815
- **For file reviews**, email at filereview@des.state.nh.us, or call either (603) 271-2919 or (603) 271-8808

- **Or contact by mail at:** Public Information and Permitting Unit, Office of the Commissioner, New Hampshire Department of Environmental Services, P. O. Box 95, 6 Hazen Drive, Concord, NH 03302-0095

Acknowledgements

The preparation of the 2002 Edition of the ***Guidebook for Environmental Permits in New Hampshire*** would not have been possible without the critical assistance of several groups and individuals. Sincere appreciation goes to those who deserve so much credit for successfully completing this very complex and multi-disciplined project on behalf of DES stakeholders.

- The staff of the DES Public Information and Permitting Unit who worked so tirelessly to make this document the most complete and timely guide available to meet the environmental permitting needs of the agency's constituents;

- The application review staff at DES for their timely submission of information, their insight into nuances or details important for applicants to address within the various application processes, the time and effort put forth in editing the initial and final drafts for each authorization type, and the reflection in the text of their collective experiences within the various DES permitting programs;

- The DES Senior Leadership Team for its important oversight and timely advice on the *Guidebook's* direction, scope, and content;

- Gretchen Rule, Administrator of the DES Legal Unit, for her many hours of meticulous editing of the final draft document and for asking the tough questions to ensure that the *Guidebook* was complete, accurate, and logically presented.

- Special appreciation goes to Tim Drew, who prepared this *Guidebook*, and Juliette Dages, now a staff member of the DES Waste Management Division, who worked so diligently to complete an earlier draft. Thank you, Tim and Juliette, for your fine workmanship and outstanding dedication.

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nps@des.state.nh.us (Non-Point Source Program),
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rivers@des.state.nh.us (Rivers Program),
swap@des.state.nh.us (Source Water Assessment
vlap@des.state.nh.us (Volunteer Lakes Assessment Program),
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nhpcas@des.state.nh.us (Planning and Community Assistance),
nhppp@des.state.nh.us (Pollution Prevention Program),
report2@des.state.nh.us (Reporting Section), and
swcomp@des.state.nh.us (Solid Waste Compliance)

*For a more complete listing of agency contacts arranged by topic, please refer to the ***DES Directory to Programs & Services – 2002***, which can also be found at http://www.des.state.nh.us/phonedir.htm, or see Appendix E of this *Guidebook*.

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Chapter 1:

Air Quality

2002 Edition

Chapter 1: Air Quality

Introduction

The State of New Hampshire has administered an air quality permitting program since the early 1960s. The New Hampshire Legislature has identified the State's policy and the purpose of RSA 125-C ("Air Pollution Control" at http://gencourt.state.nh.us/rsa/html/indexes/125-C.html) as being *to achieve and maintain a reasonable degree of purity of the air resources of the state so as to promote the public health, welfare, and safety; prevent injury or detriment to human, plant, and animal life, physical property or other resources; foster the comfort and convenience of the people; promote the economic and social development of the state; and facilitate the enjoyment of the natural attractions of the state*. New Hampshire's Air Quality Program represents a blueprint for the state's efforts to achieve and maintain air quality that is protective of both the public health and the natural environment. DES, through its Air Resources Division and with guidance from the Air Resources Council, is committed to promoting sensible, cost-effective strategies and control measures to address contemporary air quality issues. These include the control of ground-level ozone, particulate matter, regional haze (visibility), mercury emissions, increasing concentrations of "greenhouse gases" and global warming trends, acid deposition, and air toxics. The regulation of air quality in New Hampshire must be accomplished with a regional (or even national) perspective, since air emissions and weather patterns know no boundaries. For example, attainment with the ozone standard is greatly affected by emission sources upwind from New Hampshire as a result of atmospheric transport from Midwestern and Southeastern states. The DES Air Quality Program is based on the following considerations:

- Pollution prevention approaches, including energy efficiency and conservation programs, are preferable to control technology whenever feasible and cost-effective.
- Actions should be supported by the most recent scientific and health effects data available, while at the same time recognizing that new information will emerge in the future.
- Public education and outreach activities should be emphasized because they transcend all programs, and because contributions by citizen activities (*e.g.*, backyard burn barrels http://www.des.state.nh.us/factsheets/ard/ard-33.htm, off-road vehicles, lawnmowers http://www.des.state.nh.us/factsheets/ard/ard-22.htm, *etc.*) represent an increasing share of air emissions.
- Alternative approaches to the "command and control" regimen are needed to face contemporary issues and to develop solutions that provide better environmental and public health outcomes faster and more cost-effectively.

National Ambient Air Quality Standards

The DES Air Resources Division, through its Stationary Source Management Bureau, is responsible for managing a statewide permitting program for businesses, institutions, commercial enterprises, industrial concerns, and other stationary sources that release air pollutants into the atmosphere, to limit and carefully control the emissions. This program's purpose is to achieve and maintain air quality standards throughout the state. Many elements of the program are based on the requirements of federal Clean Air Act (see http://www.epa.gov/oar/caa/contents.html and http://www4.law.cornell.edu/uscode/42/ch85.html). The Clean Air Act regulates air emissions from area, stationary, and mobile sources (see http://www.des.state.nh.us/ard/mobilesources/). The original federal law was enacted in 1970 with a goal of achieving compliance (by 1975) with the National Ambient Air Quality Standards for six "criteria" pollutants, including ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, particulate matter, and lead (see http://www.des.state.nh.us/ard/polut.htm). Ground-level ozone, a colorless gas that is the major constituent of photochemical smog, is formed as a result of chemical reactions between oxygen, volatile organic compounds ("VOCs"), and oxides of nitrogen ("NO_x"). Sources include motor vehicles, landfills, industrial solvents, and miscellaneous small sources such as gas stations and lawn equipment. Carbon monoxide ("CO"), also an odorless and colorless gas, results from the incomplete combustion of fossil fuels in automobiles, boilers, and some industrial processes. Nitrogen dioxide ("NO_2") is a smog-forming pollutant that causes acid rain and is

emitted by the burning of fuels at such places as utility power plants, industrial boilers, and trucks. Particulate matter ("PM") is emitted in smoke and vapors from the burning of wood, diesel fuel, agricultural activities, and unpaved road construction. Sulfur dioxide ("SO_2") is a colorless and odorless gas that is emitted from industrial, institutional, and utility boilers, petroleum refineries, paper mills, and chemical plants. Finally, lead which is the only heavy metal that is considered to be a criteria air pollutant, becomes airborne from lead-contaminated soil, coal burning, and solid waste incineration. (Originally, leaded gasoline was the most significant source of lead emissions.) DES is responsible for ensuring that concentrations of these pollutants do not exceed the levels set by the Clean Air Act and the National Ambient Air Quality Standards. The Clean Air Act's establishment of maximum pollutant standards was coupled with a directive for states to develop state implementation plans ("SIPs"). SIPs explain how each state will operate its air quality program and how the goals of the Clean Air Act will be met. The Clean Air Act was amended in 1977, primarily to set new target dates for achieving attainment with the NAAQS, since many areas of the country failed to meet the original deadlines. The subsequent 1990 amendments to the Clean Air Act were largely intended to meet unaddressed or insufficiently addressed problems such as acid rain, ground-level ozone, stratospheric ozone depletion, and air toxics. Changes to EPA's and DES's permitting programs were made as a result of the 1990 amendments. In addition to the statewide permitting system, DES expanded its role with "New Source Review" and added the new "Title V Operating Permit" to its responsibilities for major sources of air emissions (see http://www.des.state.nh.us/ard/titleV.htm).

Legal Authority

The primary state statute providing the state with legal authority to regulate air pollution is RSA 125-C ("Air Pollution Control"), http://gencourt.state.nh.us/rsa/html/indexes/125-C.html. Other related statutes include RSA 125-D ("Acid Rain Control Act", http://gencourt.state.nh.us/rsa/html/indexes/125-D.html), RSA 125-I ("Air Toxic Control Act", http://gencourt.state.nh.us/rsa/html/indexes/125-I.html), RSA 125-J ("Emissions Reduction Credit Trading Programs", http://gencourt.state.nh.us/rsa/html/indexes/125-J.html), RSA 125-L ("Voluntary Greenhouse Gas Emissions Reductions Registry", http://gencourt.state.nh.us/rsa/html/indexes/125-L.html), RSA 125-M ("Mercury Emissions Reduction and Control Program", http://gencourt.state.nh.us/rsa/html/indexes/125-M.html) and RSA 125-N ("Dioxin Emissions Reduction and Control Program", http://gencourt.state.nh.us/rsa/html/indexes/125-N.html). Several of these statutes were enacted to comply with legal requirements of the federal Clean Air Act and the State Implementation Plan process. To implement these legal mandates, existing air quality administrative rules were adopted as NH CODE ADMIN. RULES Env-A 100 *et seq.*, ***Rules Governing the Control of Air Pollution*** (see http://www.des.state.nh.us/ard/ardrules.htm).

Device/Source Thresholds

The primary purpose of the DES statewide air permitting program is to achieve and maintain the National Ambient Air Quality Standards throughout the state. Sources of air emissions that require permits include "point sources" (major stationary commercial and industrial facilities), "area sources" (smaller stationary clusters of sources like dry cleaners and print shops), and individual devices (burners, furnaces, internal combustion generators, *etc.*). The following table provides a summary of the triggering thresholds for various sources and devices that require an air emission permit from DES prior to installation or operation.

Devices and Sources that Require Permits for Air Emissions

Device/Source	Design Rating	Fuel
Fuel Burning Device	≥ 10 million BTU/hr	Natural Gas, LP Gas, #2 fuel oil
Fuel Burning Device	≥ 4 million BTU/hr	#4 fuel oil
Fuel Burning Device	≥ 2 million BTU/hr	Coal, wood, #6 fuel oil, used oil
Internal Combustion Engine	≥ 1.5 million BTU/hr	Liquid fuel oil
(One or more at a source; design rating threshold is combined total of all engines)	≥ 10 million BTU/hr	Natural Gas or LP Gas
	Potential to emit > 25 tons per year of any single regulated air pollutant	

Incinerator	≥ 1,000 lbs/hr	Type 0, 1, 2, 3 waste
Incinerator	≥ 200 lbs/hr	Type 4, 5, 6, 7 waste
Stationary Source, Area Source, or Device	Total actual photochemically-reactive VOC emissions ≥ 10 tons per year	
Aboveground, Vertical, VOC Storage Tank	Capacity ≥ 40,000 gallons containing VOC's with a true vapor pressure ≥ 1.52 psia at 60°F	
Device for loading tank trucks with gasoline at a gasoline terminal*	Design throughput ≥ 20,000 gal/day	
Woodworking Device employing pneumatic transfer system, using a cyclone but no baghouse, for collecting any amount of sander dust	Wood waste collection rate ≥ 20 tons/yr	
Pneumatic dust transfer equipment used to convey materials, other than wood waste, into bins or silos, and not using a baghouse or filter for controlling dust		
Fixed non-metallic mineral processing plant or coal crusher	Design throughput ≥ 25 tons/hr	
Portable sand and gravel or crushed stone plant or coal crusher	Design throughput ≥ 150 tons/hr	

*See also the Certificate requirements for gasoline vapor recovery.

Additional Qualifying Criteria

In addition to the specific sources or devices noted in the table above, the DES air rules also contain other conditions under which a source is required to obtain a permit. Examples include:

- Sources that choose to limit their potential to emit by accepting enforceable permit conditions
- Sources at which documented and repeated violations occur for any of the applicable opacity or emission limits found in the DES air rules
- Sources at which documented and reported violations of any National Ambient Air Quality Standards occur and the source is a significant contributor to the violation
- Sources subject to "New Source Review", a pollutant-specific program for new sources or modifications to sources that have emission levels above certain applicability thresholds
- Sources subject to the National Emission Standards for Hazardous Air Pollutants ("NESHAP") standards for source categories defined in the Code of Federal Regulations at 40 CFR Parts 61 (see http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfr61_main_00.html) and 40 CFR Part 63 (see http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfr63_main_00.html)
- Sources operating as hazardous waste treatment, storage, or disposal facilities (see Env-Wm 700 at http://www.des.state.nh.us/hwrb/hwrules.pdf)
- Sources subject to the DES air rules governing toxic air pollutants (see Env-A 1400 at http://www.des.state.nh.us/rules/env-a1400.pdf and http://www.des.state.nh.us/ard/toxpage.htm)
- Sources subject to the DES air rules governing reasonably available control technology ("RACT") for volatile organic compounds (see Env-A 1204 at http://www.des.state.nh.us/ard/enva1204.pdf) and nitrogen oxides (see Env-A 1211 at http://www.des.state.nh.us/ard/enva1211.pdf)
- Sources where a permit is required to achieve compliance with National Ambient Air Quality Standards (see http://www.des.state.nh.us/rules/env-a300.pdf and http://www.epa.gov/oar/caa/caa109.txt)
- Sources affected by (or opting into) the Acid Rain Program under Title IV of the federal Clean Air Act Amendments of 1990 (see http://www.epa.gov/oar/caa/contents.html#titleiv)
- Sources defined in the DES air rules (see http://www.des.state.nh.us/rules/env-a600.pdf) as "major sources", based on the type and amount of pollutant emitted from the source and the geographical location of the source, and as required by Title V of the Clean Air Act Amendments of 1990 (see http://www.des.state.nh.us/ard/titleV.htm and http://www.epa.gov/oar/caa/contents.html#titlev).

Stationary Source Management Bureau

The Stationary Source Management Bureau in the DES Air Resources Division issues four types of permits to control air pollution in New Hampshire: Temporary Air Emission Permit, State Air Emission Permit-to-Operate, General State Air Permit for Emergency Generators, and Title V Operating Permit. The following is a brief description of each type.

Temporary Air Emission Permit

A Temporary Air Emission Permit is issued prior to the commencement of construction or installation of any new or modified source or any air pollution control device. This permit is issued for a period no longer than 18 months and contains terms and conditions that establish the parameters under which the source or device is to be constructed and operated. This permit is issued to sources or devices based on several criteria, including the source or device type, its design ratings, levels of production, and annual emission levels. A Temporary Air Emission Permit represents the first step toward obtaining either a State Air Emission Permit-to-Operate or a Title V Operating Permit.

State Air Emission Permit-to-Operate

The State Air Emission Permit-to-Operate is issued prior to regular operation of any new or modified source or device. Such permits are valid for a period not to exceed five years and may be renewed. This permit contains the emission limits and any other conditions the source is required to meet to ensure that the operation of the source will not result in a violation of any air quality standard or rule. These permits are issued to sources that were required to hold Temporary Air Emission Permits and are not subject to the Title V Operating Permit Program, either because the source's potential emissions are below the emission threshold for triggering the Title V Program or because the source chooses to limit potential emissions to a level below that of a "major source" threshold that would trigger a Title V Operating Permit (called a "synthetic minor source").

Emergency Generator Registration

DES administers a general permitting program for emergency generators (internal combustion engines) which saves administrative time and effort for both the state and the facility. This permit program requires facilities to register the equipment with DES and, in return, the facility receives a General State Air Permit. The permit has already been subject to public notice and comment, so DES is able to process the permit faster. The General State Air Permit for Emergency Generators is only available to the following:

- Facilities where the facility-wide actual emissions are less than the major source threshold
- Facilities wishing to limit the operating hours of each emergency generator to 500 hours per year
- Devices that operate as a mechanical or electrical power source only when the primary power source has been lost during an emergency, such as a power outage. Devices that are load-shaving units, peaking power production units, or standby engines in energy assistance programs do not qualify for a General State Permit and must apply for a Temporary Air Emission Permit and a State Air Emission Permit-to-Operate.

The *Emergency Generator (Internal Combustion Engine) General State Permit Registration Information* form is available at http://www.des.state.nh.us/ard/egreg.pdf) or by contacting DES. The registration form requests facility and device identification information, technical contacts, proof of ownership, and certification statements from a responsible official at the facility. The General State Air Permit for Emergency Generators specifies the emission limits, operating hours, and any other conditions the source is required to meet to

ensure that the operation of the emergency generator(s) will not result in a violation of New Hampshire air quality standards or administrative rules (see http://www.des.state.nh.us/ard/whatsrce.htm).

Title V Operating Permit

The Title V Operating Permit Program became effective on June 30, 1995 and represents a requirement of the federal Clean Air Act Amendments of 1990 (see http://www.epa.gov/oar/caa/contents.html#titlev). The Title V Operating Permit is a federally enforceable permit issued to major sources that emit (or have the potential to emit) the following pollutants at the levels specified:

Pollutant Type	Emission Rate	Location
Any single hazardous air pollutant	10 tons per year or more	Statewide
Any combination of hazardous air pollutants	25 tons per year or more	Statewide
Nitrogen oxides	100 tons per year or more	Belknap, Carroll, Cheshire, and Coös Counties
Nitrogen oxides	50 tons per year or more	Hillsborough, Merrimack, Rockingham, and Strafford Counties
Volatile organic compounds	50 tons per year or more	Statewide
Sulfur dioxide	100 tons per year	Statewide
Carbon monoxide	100 tons per year	Statewide
Total suspended particulates	100 tons per year	Statewide

Other sources, including area sources, may also be required to obtain a Title V Operating Permit if they are subject to federal requirements relating to “New Source Performance Standards”, hazardous air pollutants, or acid rain control.

The application review process for a Title V Operating Permit is divided into four steps: application review, public notice and comment, review of proposed Title V Operating Permit, and final permit issuance. The administrative completeness determination consists of a review by DES Title V permitting staff of the initial application within 60 days of its receipt. If any deficiencies are found, the applicant is notified in writing and must provide the corrected information within 30 days of the notice. Once the application is deemed to be complete, a Title V permit is drafted and the public is notified of the application and review within ten days after the completion of the draft. During the public review period, a public hearing may be requested by any affected party (see http://www.des.state.nh.us/rules/env-a200.pdf and http://www.des.state.nh.us/ard/titleV.htm). Once all comments have been received, the draft Title V Operating Permit is revised as appropriate in response to the comments and a copy of the proposed permit is sent to the U. S. Environmental Protection Agency (“EPA”), the applicant, and all other interested parties. The EPA has 45 days to comment on the proposed permit prior to it being issued as final. At the end of this period (or earlier, if EPA forwards a letter to DES that indicates it has no objection to the permit), and when all comments and changes have been made, the final Title V Operating Permit is issued to the applicant. The permit is valid for five years from the date of issuance and may be renewed.

Fees

The fees associated with all contemporary DES air permits were established on June 30, 1995 and were designed to support the development, implementation, and administration of the statewide air permitting program. There are three types of fees: (1) emission-based, (2) testing and monitoring, and (3) permit review. The emission-based fee is assessed annually, and requires all permitted sources to pay for each ton of pollutant that has been emitted during the previous calendar year (up to 4,000 tons per pollutant). This method provides an economic incentive for sources to reduce their emissions, since the fee is based on pollutants actually emitted during that year (see http://www.des.state.nh.us/ard/inventory.htm). The fee is calculated using a formula set forth in Env-A 704 (see http://www.des.state.nh.us/rules/env-a700.pdf) which sets a base

fee of $36 per ton. The base fee is adjusted annually by a Consumer Price Index ("CPI") multiplier and an Inventory Stabilization Factor ("ISF"). The current rate is $57.65 per ton for calendar year 2000 emissions. Sources having actual annual emissions of less than 1,000 tons are required to pay the emission-based fee by October 15 for the preceding calendar year. Those having annual emissions greater than 1,000 tons must pay the fee on a quarterly schedule (January 15, April 15, July 15, and October 15). Permit review fees are assessed for certain types of permit reviews (*e.g.*, "New Source Review"). Testing and monitoring fees are assessed to companies that are not subject to the Title V Operating Permit Program for which Temporary Air Emission Permits are issued. The fees are determined by the number of hours spent by DES personnel testing and/or monitoring emissions, multiplied by their hourly rates.

Petition for Tax Exemption for Air Pollution Control Facilities

RSA 72:12-a ("Persons and Property Liable to Taxation/Property Taxes/Water and Air Pollution Control Facilities", http://gencourt.state.nh.us/rsa/html/V/72/72-12-a.htm) provides that *[a]ny person, firm or corporation which builds, constructs, installs, or places in use in this state any treatment facility, device, appliance, or installation wholly or partly for the purpose of reducing, controlling, or eliminating any source of air or water pollution shall be entitled to have the value of said facility and any real estate necessary therefore, or a percentage thereof determined in accordance with this section* [*i.e.*, RSA 72:12-a]*, exempted from the taxes levied under this chapter* [*i.e.*, RSA 72] *for the period of years in which the facility, device, appliance, or installation is used in accordance with the provisions of this section*. Application for a tax exemption for air pollution control facilities must be made to the DES Commissioner in letter form and should include the following:

- An adequate description of the air pollution control facilities, including plans, property assessment record cards, photographs, a list of equipment subject to the request, and property descriptions
- A description of the function or functions of the air pollution control facilities
- The applicant's total investment in the air pollution control facilities and the portion allocable to each function

It is DES's responsibility to determine whether the purpose of the facility for which an exemption is sought is solely or only partially for pollution control. If the purpose of the facility is only partially for pollution control, DES must determine the percentage used to control pollution, based on the applicant's total investment therein. Applications for this exemption for air pollution control facilities should be directed to: Commissioner, New Hampshire Department of Environmental Services, P. O. Box 95, 6 Hazen Drive, Concord, NH 03302-0095. Telephone: (603) 271-3449 or fax: (603) 271-2867

Air Quality Impact Modeling

A key part of the permitting and compliance activities of the DES Air Resources Division involves the modeling of air emissions. Air quality modeling is a method of analyzing impacts from pollution sources and is usually done using specifically-designed computer modeling software and quality-assured monitoring data. For the criteria pollutants described above, a modeling analysis is required if it has been determined that a permit is necessary for that particular device. For Title V sources, this requirement only applies when a new device or modification is involved. In the case of toxic air pollutants, modeling is customarily required even if no permit is issued. DES offers a guidance document, ***NHDES-ARD Procedure for Air Quality Impact Modeling*** (see http://www.des.state.nh.us/ard/guidance.htm), to assist those subject to this requirement.

Statewide Air Quality Monitoring Network

The DES Air Resources Division's Technical Services Bureau operates a network of air quality monitors throughout the state to measure levels of ozone, sulfur dioxide, nitrogen dioxide, carbon monoxide, and particulate matter, as well as other regulated toxic air pollutants (see

http://www.des.state.nh.us/ard/airmap.htm and http://www.des.state.nh.us/ard/air_monitoring.htm). Although locations and parameters have changed over the years, the state has monitored air quality since 1962, when the first monitoring station was installed in the City of Berlin. The federal Air Quality Act of 1967 required states to establish of air quality control regions in the state and gave the former New Hampshire Air Pollution Control Commission the authority to adopt standards for each control region. In New Hampshire, this led to the development of the state's first air quality monitoring network under the direction of the former New Hampshire Air Pollution Control Commission. As a result of subsequent amendments to the Clean Air Act in 1972, 1977, and 1990 (as discussed above), a steadily-increasing emphasis was placed on monitoring "criteria" pollutants across the state. Results from these monitoring activities provided the basis for determining the effectiveness of DES's air quality permitting program and whether or not sources outside the state were contributing to negative impacts on ambient air resources within the state. Meteorological monitoring is also performed at many of these sites to determine the relationships between weather conditions and the behavior of these pollutants. Samples of air are collected continuously and are passed through a number of different analyzers inside shelters at the monitoring sites. The data are recorded on strip charts (as well as electronically) and are automatically transferred to DES headquarters in Concord via telephone lines. There, the data are quality-checked and eventually transmitted to EPA for evaluation and storage, and to map pollutant trends (see http://www.epa.gov/air/data/index.html). The monitoring sites are serviced regularly by DES field technicians, and the instruments are routinely calibrated to ensure their accuracy. Since 1977, New Hampshire's monitoring network has recorded levels that demonstrate improvements in ambient air quality for nearly all pollutants.

State I/II Gasoline Vapor Recovery Program

The DES Air Resources Division's Compliance Bureau also administers the Stage I and Stage II Gasoline Vapor Recovery Program, which began in 1993 (see http://www.des.state.nh.us/ard/vapor.htm). Stage I gasoline vapor recovery systems capture the vapors expelled from underground storage tanks at gasoline service stations during refilling from bulk tanker trucks. Stage II systems capture gasoline vapors which otherwise would be vented to the atmosphere during refueling of individual vehicles at gasoline dispensing facilities. Stage I and Stage II systems not only reduce air pollution, but also conserve gasoline that otherwise would be lost to the environment and reduce exposure by customers to inhalation of gasoline vapors (which contain benzene and other toxic substances). Volatile organic compound emissions have been reduced by as much as 95 percent as a result of these controls. Stage I controls are required statewide on all gasoline storage tanks with a capacity of 1,100 gallons or more. Stage II controls are required at gas stations in Hillsborough, Merrimack, Rockingham, and Strafford Counties that have a yearly throughput of 420,000 gallons or more. Either Stage I (alone) or Stage I/II Certification is required for all gasoline dispensing stations across the state. DES staff regularly inspects gasoline dispensing facilities to check for such problems as loose fittings, traps in vapor return piping, missing or incorrect vent caps, malfunctioning vapor recovery nozzle systems, or improperly sealed plungers in spill buckets. The DES Gasoline Vapor Recovery Program uses standard forms that can be used by facility owners for station notification (see http://www.des.state.nh.us/ard/2003_form.pdf), self-inspection (see http://www.des.state.nh.us/ard/Selfchk.pdf), and reporting throughput (see http://www.des.state.nh.us/ard/Thruput2.pdf. New Hampshire has adopted the State of California Air Resources Board ("CARB") vapor recovery standards (see http://www.arb.ca.gov/vapor/vapor.htm) and Env-A 1205 (see http://www.des.state.nh.us/ard/enva1205.pdf) to operate its program. Information and data related to specific facilities can be researched through the DES "One-Stop" database at http://www.des.state.nh.us:1522/des/ONESTOP.WEB_VAPOR_RPT.SHOW_PARMS.

Emissions Reductions Trading Programs

The DES Air Resources Division administers two Emissions Reductions Trading Programs: the "Open Market Program" and the "NO_x Budget Trading Program". The "Open Market" Program has two sub-programs: the Discrete Emissions Reductions Trading Program and the Emissions Reduction Credits Trading Program, both authorized by RSA 125-J ("Emissions Reduction Credits Trading Program",

http://gencourt.state.nh.us/rsa/html/indexes/125-J.html). DES provides a registry of these currently-available discrete emission reductions and emission reduction credits (see http://www.des.state.nh.us/ard/registry.pdf). The Discrete Emissions Reductions Trading Program is an open-market system of trading mass-based units representing discrete, retrospective emission reductions (see http://www.des.state.nh.us/ard/dertp.htm). Credits can be generated by stationary, mobile, or area sources. Nitrogen oxides and volatile organic compounds are included because New Hampshire lies with the Ozone Transport Region. This trading program is intended to give compliance flexibility and the opportunity to reduce compliance costs to sources subject to "reasonably available control technology" or New Source Review requirements, while benefiting the environment by requiring that ten percent of all credits be retired without being used. The Emissions Reduction Credits Trading Program also is an open market system for trading emissions reduction credits, but the credits are rate-based units representing continuous, permanent emission reductions (see http://www.des.state.nh.us/ard/erctp.htm). For more information, the EPA has developed a program summary of its Open Market Trading Rule (see http://www.des.state.nh.us/ard/ertsmry.htm) with an associated DES overview sheet (see http://www.des.state.nh.us/ard/ertfs.htm). DES's Open Market Program administrative rules are designated as Env-A 3100 for discrete emissions (see http://www.des.state.nh.us/ard/enva3100.htm) and Chapter Env-A 3000 for emission reduction credits (see http://www.des.state.nh.us/ard/enva3000.htm). A guidance document entitled, ***Emissions Trading Handbook***, prepared by the Emissions Trading Education Initiative, also is available for use by those who wish to participate in these programs (see http://www.etei.org). The NO_X Budget Trading Program focuses on a "cap and trade" process (see http://www.des.state.nh.us/ard/enva3200.htm). New Hampshire adopted Env-A 3200 to implement the Ozone Transport Commission's Memorandum of Understanding, signed on September 27, 1994. This agreement called for regional reductions in ozone season (May through September) nitrogen oxide emissions beginning in 1999, to be accomplished through a market-based budget (or "cap") and trading program (see http://www.des.state.nh.us/ard/ctfs.htm). The EPA administers a separate Acid Rain Program for sulfur dioxide trading (see www.epa.gov/airmarket/acidrain/index.html). DES plans to develop additional trading programs for annual emissions of SO_2, NO_x, mercury, and carbon dioxide ("CO_2") from existing power plants.

Municipal Burn Authorization

For years, communities across New Hampshire have been struggling with dwindling disposal capacity in the face of burgeoning solid waste generation and requirements for eventual landfill closure. In response, DES examined its existing laws, administrative rules, and policies to find ways to assist those communities. Brush, leaves, and clean (untreated) construction/demolition debris were found to be consuming a significant volume of disposal space at existing landfills, sometimes causing their premature closure. As an alternative to disposing of these materials at landfills, a process was established in 1988 to allow clean waste wood that had been segregated from the rest of the solid waste stream to be handled separately. The DES Municipal Burn Authorization was created to combine legal and administrative requirements implemented by the Waste Management Division and Air Resources Divisions to allow open burning of clean waste wood at approved municipal or county facilities. If such open burning is contemplated, officials of the municipality, solid waste district, or county that wishes to undertake this activity (the "operator") must first prepare a formal request on official letterhead that identifies the exact site to be used, the operating hours, any other permits needed, and the name of the individual who will be responsible for site operations. The resulting authorization will apply only to the specified location of the burn site and will require the operator to design an appropriate burn structure, control unauthorized access, install proper signage, prevent nuisance conditions from developing, notify the Fire Warden prior to burn activities, specify the hours for burning, and require the waste wood to be segregated from all other types of solid wastes. Ash disposal is regulated under NH CODE ADMIN. RULES Env-Wm 100-300, 2100 *et seq.* ("Solid Waste Rules", http://www.des.state.nh.us/rules/swrules.pdf). The authorization will include an expiration date, but the operator can seek renewal. The DES Municipal Burn Authorization represents the first of two steps for burning clean waste wood. The applicant must also obtain permission from forest fire warden for the municipality in which the burning will occur prior to kindling a fire, pursuant to RSA 227-L:17, II ("Woodland Fire Control/Permits; Damages; Penalties", http://gencourt.state.nh.us/rsa/html/XIX-A/227-L/227-L-17.htm). Approximately 157 communities across the

state have taken advantage of this opportunity and currently operate burn sites at DES-permitted transfer stations, recycling centers, and landfills.

Summary

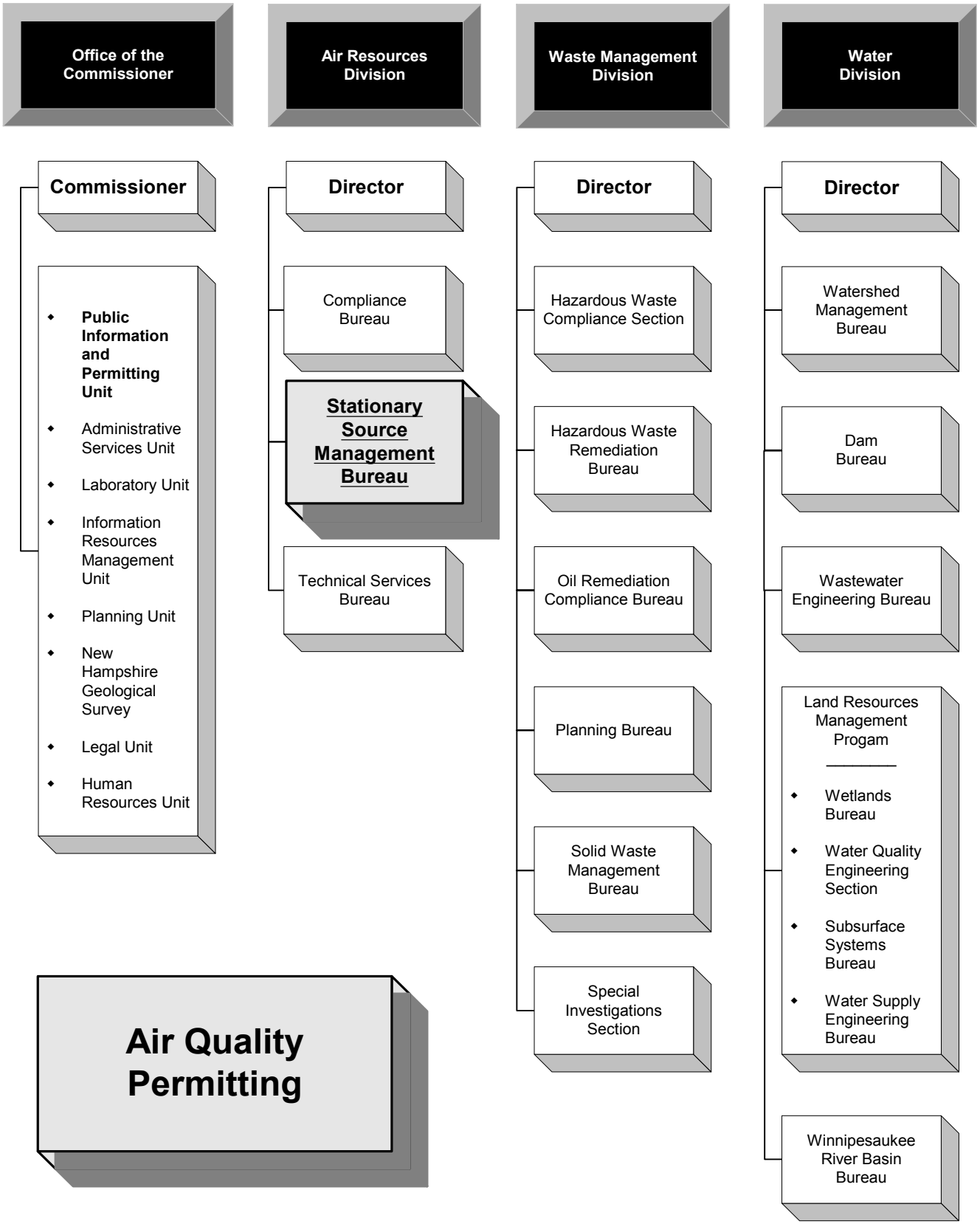
The Stationary Source Management Bureau of the DES Air Resources Division performs the primary role of air quality permitting. However, closely integrated in these permitting decisions are data, recommendations, and technical information provided by modeling, monitoring, and compliance activities contributed by the Division's Compliance Bureau and Technical Services Bureau. Appeals of final decisions on permit applications or orders issued for violations or air-related requirements should be directed to the Air Resources Council (http://www.des.state.nh.us/councils/#air).

Chapter Contents

- ✓ **Temporary Air Emission Permit**
- ✓ **State Air Emission Permit-to-Operate**
- ✓ **General State Air Permit for Emergency Generators (Internal Combustion Engines)**
- ✓ **New Source Review/Prevention of Significant Deterioration Permit**
- ✓ **Title V Operating Permit**
- ✓ **Stage I/II Gasoline Vapor Recovery Certificate**
- ✓ **Municipal Burn Authorization**

Organizational Chart

New Hampshire Department of Environmental Services



Temporary Air Emission Permit

Introduction: DES administers a two-step permitting program for such sources of air emissions, which begins with a Temporary Air Emission Permit and culminates with a State Air Emission Permit-to-Operate or Title V Operating Permit. Permit issuance signifies that the source will hold the emissions at, or below, air quality limits for a particular geographic area. A Temporary Air Emission Permit regulates the construction of facilities or devices that will emit air pollutants and the emissions testing of new or modified sources of air pollution. Before any new or modified device that requires an air permit is constructed or installed and tested, an application for this permit must be filed with DES. Certain activities are allowed prior to permit issuance, but solely at the risk of the owner/operator. On-site construction of permanent, multi-use facilities, such as office buildings or warehouses, is allowed. However, all permanent construction and installation of equipment (foundations, building supports, or laying of feed-water piping for an incinerator or boiler) is prohibited until DES issues a Temporary Air Emission Permit for the proposed source or device. The decision whether to issue this permit is based on several criteria, including the source or device type, design ratings, levels of production, and annual emission levels. This permit also represents the first step toward obtaining either a State Air Emission Permit-to-Operate or a Title V Operating Permit.

Estimated number of permits issued annually: 40-50

Fees: No fixed application fee. The emission-based fee is an annual fee that all permitted sources pay for each ton of pollutant emitted for each calendar year, up to 4,000 tons per pollutant. All permitted sources are subject to the emission-based fee. The applicability of the fee is not based on the type of permit, but whether the source is required to have a permit, and then the fee is based on actual emissions. This method provides an economic incentive for sources to reduce emissions, since the fee is assessed only for pollutants actually emitted. Testing and monitoring fees for this permit, for sources not subject to the Title V Operating Permit Program, are assessed based on expenses incurred in coordinating compliance testing, witnessing the actual test, and reviewing the final technical report submitted to DES. Testing/monitoring expenses include the DES engineer's salary/benefit costs for the time spent on a particular testing program, travel expenses, and lodging/meal costs (see NH CODE ADMIN. RULES Env-A 702, "Rules Governing the Control of Air Pollution/Permit Review Fees", http://www.des.state.nh.us/rules/env-a700.pdf. See also http://www.des.state.nh.us/ard/whatfees.htm).

Estimated processing time after application is deemed "complete": 30-60 days for most sources

Permit duration: 18 months, subject to re-issuance

Permit transferability: Transfers are considered as an administrative amendment to the permit. In some cases (*e.g.*, when there is a change in company ownership or responsible official designation), the new owner or operator must file an amended permit application using the *General Information – All Permit Applications* form only (ARD-1) with DES (see http://www.des.state.nh.us/ard/ard1.pdf). If the amendment represents a change in company name (only), the pertinent information may be forwarded in writing to DES on official company letterhead.

Permit modification: The owner or operator must file an amended permit application coupled with all additional information required by Env-A 612.03(c) ("Rules Governing the Control of Air Pollution/Permit Amendments, Modifications and Revisions", http://www.des.state.nh.us/rules/env-a600.pdf) at least 90 days prior to any proposed change to the physical structure or operation of the device covered by a Temporary Air Emission Permit which increases or decreases the amount of emissions discharged or results in the release of an additional pollutant. Before making such changes an amended permit must be issued by DES.

Permit re-issuance: The owner or operator must file a written request for a re-issuance, specifying the basis for such request, at least 90 days prior to the designated expiration date of the Temporary Air Emission Permit. This permit expires if construction has not begun within 18 months from the date of issuance. DES may re-

issue this permit if construction is not completed within 18 months following issuance, if compliance testing is incomplete, if the applicant is in the process of obtaining a permit or permits from another government entity, or if the applicant is involved in litigation regarding other permits.

State statutes: RSA 125-C:11-13 ("Air Pollution Control", http://gencourt.state.nh.us/rsa/html/indexes/125-C.html) and RSA 125-I:3 ("Air Toxic Control Act", http://gencourt.state.nh.us/rsa/html/indexes/125-I.html)
Federal law: 42 U. S. C. §7401, *et seq*. (1970) ("Clean Air Act", http://www.epa.gov/oar/caa/contents.html)

N. H. Code of Administrative Rules: Env-A 100, *et seq.* ("Rules Governing the Control of Air Pollution", http://www.des.state.nh.us/ard/ardrules.htm)
U. S. Code of Federal Regulations: 40 CFR Parts 60 – 63 ("Standards of Performance for New Stationary Sources", http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfr60_main_00.html, http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfr61_main_00.html, http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfr62_main_00.html, http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfr63_main_00.html)

Appeals body: Air Resources Council at RSA 21-O:11 ("Department of Environmental Services/Air Resources Council", http://gencourt.state.nh.us/rsa/html/I/21-O/21-O-11.htm; see also http://www.des.state.nh.us/rules/env-ac200.pdf and http://www.des.state.nh.us/councils/#air)

Additional information: N. H. DES, Air Resources Division, (603) 271-1370
N. H. DES, Public Information Center, (603) 271-2975 or (603) 271-8876

Temporary Air Emission Permit – *Work Sheet*

Key Qualifier Question: *Does your new or modified emission unit meet any of the requirements listed in the table below? If so, then you are required to obtain a Temporary Air Emission Permit.*

Devices and Sources that Require Permits for Air Emissions

Device/Source	Design Rating	Fuel
Fuel Burning Device	≥ 10 million BTU/hr	Natural Gas, LP Gas, #2 fuel oil
Fuel Burning Device	≥ 4 million BTU/hr	#4 fuel oil
Fuel Burning Device	≥ 2 million BTU/hr	Coal, wood, #6 fuel oil, used oil
Internal Combustion Engine (One or more at a source; design rating threshold is combined total of all engines)	≥ 1.5 million BTU/hr	Liquid fuel oil
	≥ 10 million BTU/hr	Natural Gas or LP Gas
	Potential to emit > 25 tons per year of any single regulated air pollutant	
Incinerator	≥ 1,000 lbs/hr	Type 0, 1, 2, 3 waste
Incinerator	≥ 200 lbs/hr	Type 4, 5, 6, 7 waste
Stationary Source, Area Source, or Device	Total actual photochemically-reactive VOC emissions ≥ 10 tons per year	
Aboveground, Vertical, VOC Storage Tank	Capacity ≥ 40,000 gallons containing VOCs with a true vapor pressure ≥ 1.52 psia at 60°F	
Device for loading tank trucks with gasoline at a gasoline terminal*	Design throughput ≥ 20,000 gal/day	
Woodworking Device employing pneumatic transfer system, using a cyclone but no baghouse, for collecting any amount of sander dust	Wood waste collection rate ≥ 20 tons/yr	
Pneumatic dust transfer equipment used to convey materials, other than wood waste, into bins or silos, and not using a baghouse or filter for controlling dust		
Fixed non-metallic mineral processing plant or coal crusher	Design throughput ≥ 25 tons/hr	
Portable sand and gravel or crushed stone plant or coal crusher	Design throughput ≥ 150 tons/hr	

*See also the Certificate requirements for gasoline vapor recovery.

In addition to the specific sources/devices listed in the above table, the NH CODE ADMIN. RULES Env-A 100 *et seq*. (see http://www.des.state.nh.us/ard/ardrules.htm) contain other conditions under which a source would be required to obtain a permit. Examples include:

- Sources choosing to limit their potential to emit by accepting enforceable permit conditions
- Sources at which documented and repeated violations occur of any of the applicable opacity or emission limits found in the air rules
- Sources at which documented and repeated violations of any National Ambient Air Quality Standard ("NAAQS") occur and the source is a significant contributor to the violation
- Sources subject to New Source Review and Prevention of Significant Deterioration ("NSR/PSD"), a pollutant-specific program for new sources or modifications to sources that have emission levels above certain applicability thresholds as contained in the requirements of 40 CFR 51 and 52 (see

http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfr51_main_00.html and Env-A 622 ("Rules Governing the Control of Air Pollution/Additional Requirements in Non-Attainment Areas and the New Hampshire Portion of the Northeast Ozone Transport Region", http://www.des.state.nh.us/rules/env-a600.pdf)

- Sources subject to New Source Performance Standards ("NSPS") contained in 40 CFR 60 (see http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfr60_main_00.html)
- Sources subject to National Emission Standards for Hazardous Air Pollutants ("NESHAP") for source categories defined in federal regulations 40 CFR Parts 61 and 63 http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfr61_main_00.html http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfr63_main_00.html
- Sources operating as treatment, storage or disposal facilities under NH CODE ADMIN. RULES Env-Wm 100 *et seq*. (*New Hampshire Hazardous Waste Rules,* see http://www.des.state.nh.us/hwrb/hwrules.pdf)
- Sources subject to Env-A 1400 ("Rules Governing the Control of Air Pollution/Regulated Air Toxic Pollutants", http://www.des.state.nh.us/rules/env-a1400.pdf) that also may require a permit
- Sources subject to Env-A 1204 governing reasonably available control technology ("RACT") for volatile organic compounds (VOCs) or Env-A 1211 governing RACT for nitrogen oxides (NO_x) (see Rules Governing the Control of Air Pollution/Prevention, Abatement, and Control of Stationary Sources of Air Pollution", http://www.des.state.nh.us/ard/enva1200.htm)
- Based on air dispersion modeling, sources where a permit is required in order to achieve compliance with NAAQS
- Sources affected by or opting into the Acid Rain program under Title IV of the federal Clean Air Act Amendments of 1990 (see http://www.epa.gov/oar/caa/contents.html#titleiv)
- Sources defined in Env-A 101.168 ("Major Source") as "major sources," as determined by the type and amount of pollutant emitted from the source and the geographical location of the source as required by Title V of the federal Clean Air Act Amendments of 1990 (see http://www.epa.gov/oar/caa/contents.html#titlev; *e.g.*, major sources of hazardous air pollutants subject to Section 112(g) of the Clean Air Act and 40 CFR 63 at http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfr63_main_00.html)

What must you do to apply? (See http://www.des.state.nh.us/ard/whatinfo.htm)

- Application Forms - Submit complete application forms as described in Env-A 1700 (see Rules Governing the Control of Air Pollution/Permit Application Forms", http://www.des.state.nh.us/ard/enva1700.htm and http://www.des.state.nh.us/ard/permit.htm). Submit the applicable forms from the following list:
  - Form ARD-1, *General Information for all Permit Applications* (see http://www.des.state.nh.us/ard/ard1.pdf)
  - Form ARD-2, *Information Required for Permits for Fuel Burning Equipment* (see http://www.des.state.nh.us/ard/ard2.pdf)
  - Form ARD-3, *Information Required for a Permit for a Unit of Processing or Manufacturing Equipment* (see http://www.des.state.nh.us/ard/ard3.pdf)
  - Form ARD-4, *Information Required for Permits for Storage Tanks Containing Fuel or Volatile Organic Compounds* (see http://www.des.state.nh.us/ard/ard4.pdf)
  - Form ARD-5, *Information Required for Permits for a Fuel Loading Facility* (see http://www.des.state.nh.us/ard/ard5.pdf)
  - Form ARD-6, *Information Required for Permits for Incinerators* (see http://www.des.state.nh.us/ard/ard6.pdf)
- Modeling - Conduct air dispersion modeling to examine the impacts on the NAAQS or submit a written request for DES to conduct the air dispersion modeling.
- Proof of Title, Right and Interest - Submit adequate information to demonstrate title, right and interest in the property proposed for development or use, consistent with Env-A 605.02:

- If the property is owned, a copy of the deed of the property on which the source or device is located, referencing the book and page number as recorded in the Registry of Deeds;
- If the property is under an option to buy, a copy of any option agreement which contains terms which establish future title; or
- If the property is leased, a copy of the lease, indicating that the lease is of sufficient duration to permit construction, use, or development.

- Proof of Legal Authority - Submit a written statement establishing that such applicant has the requisite authority to act on behalf of the owner for purposes of the application, if the applicant is not the legal owner of source/device.
- Responsible Official Certification - With the permit application and any report or compliance certification submitted to DES pursuant to Env-A 100, *et seq.* (see http://www.des.state.nh.us/ard/ardrules.htm); submit a written statement certifying the truth, accuracy, and completeness of the document that has been signed by the responsible official. Unless otherwise specified, this certification shall state that, to the best of the responsible official's knowledge and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- Submit a check or money order for the appropriate fee(s), made payable to "Treasurer, State of New Hampshire", with the application and all supporting information to: Air Resources Division, New Hampshire Department of Environmental Services, 6 Hazen Drive, P. O. Box 95, Concord, NH 03302-0095. Telephone: (603) 271-1370; fax: (603) 271-1381; or online: http://www.des.state.nh.us/ard_intro.htm

What types of sources typically require this permit? (See http://www.des.state.nh.us/ard/whatsrce.htm)

- An existing facility adding a new natural gas-fired boiler with a rating of 15 mmBtu/hr heat input
- A new facility with VOC emissions greater than 10 tons per year ("tpy")
- A facility adding a pneumatic dust transfer system *without* a baghouse or filter to control dust
- A facility meeting the New Source Review/Prevention of Significant Deterioration provisions as described under the NSR/PSD Permit section
- A facility adding a fuel combustion device burning No. 6 fuel oil with a design rating of 5 mmBtu/hr heat input
- A facility located in Hillsborough County (an ozone non-attainment region) that has the potential to emit 75 tpy of NO_x, but has actual NO_x emissions of 20 tpy and who would like to limit the emissions to below major source threshold (50 tpy for NO_x)

If there are any questions regarding this page or any other section of the Guidebook, please contact Tim Drew, Administrator, DES Public Information and Permitting Unit, at tdrew@des.state.nh.us or at (603) 271-3306.

State Air Emission Permit-to-Operate

Introduction: The most effective means of protecting air quality in New Hampshire is to control the emission of pollutants from specific sources or devices before release to the atmosphere. DES administers a two-step permitting program for such sources of air emissions, which begins with an 18-month Temporary Air Emission Permit, and culminates with a State Air Emission Permit-to-Operate. Issuance of this permit signifies that the source's operating conditions and/or control technology will hold air emissions at or below air quality limits for a particular geographic area. A State Air Emission Permit-to-Operate is issued prior to the regular operation of any new or modified source or device that meets any of the following criteria:

- The source/device already holds a DES Temporary Air Emission Permit (Not all sources are required to obtain a Temporary Permit, such as sources that were in existence before any permits were required or those that operate as a "synthetic minor source".), or
- The source/device is not subject to the Title V Operating Permit Program (called a "true minor sources"), or
- The source/device chooses to limit its potential emissions to a level below a "major source" threshold level, which would trigger a Title V Operating Permit (called a "synthetic minor source").

In addition to incorporating the design plans, modeling data, and other site-specific information, the State Air Emission Permit-to-Operate will also specify the emission limits, operating hours, and any other conditions the source is required to meet to ensure that the operation of the source (manufacturing unit process, boiler, whole facility, *etc.*) will not result in a violation of New Hampshire air quality standards or other applicable requirements (see http://www.des.state.nh.us/ard/whatprmt.htm).

Estimated number of permits issued annually: Approximately 100 (There are currently about 400 permitted sources in the state.)

Fees: No application fee. The emission-based fee is an annual fee that all permitted sources pay for each ton of pollutant emitted for each calendar year, up to 4,000 tons per pollutant. This method provides an economic incentive for sources to reduce emissions, since the fee is assessed only for pollutants actually emitted (see NH CODE ADMIN. RULE Env-A 702 ("Rules Governing the Control of Air Pollution/Permit Review Fees", http://www.des.state.nh.us/rules/env-a700.pdf). Also see "What Fees Are Required for an Air Permit" (http://www.des.state.nh.us/ard/whatfees.htm) and DES Fact Sheet #ARD-17 (http://www.des.state.nh.us/factsheets/ard/ard-17.htm) for more information about fees.

Estimated processing time after application is deemed "complete": 30-60 days

Permit-to-Operate duration: 5 years, subject to renewal

Permit-to-Operate transferability: Transfers are considered an administrative amendment to the permit. In some cases (*e.g.*, when there is a change in company ownership or responsible official designation), the new owner or operator must file an amended permit application using the *General Information – All Permit Applications* form only (ARD-1) with DES (see http://www.des.state.nh.us/ard/ard1.pdf). If the amendment represents a change in company name (only), the pertinent information may be forwarded in writing to DES on official company letterhead.

Permit-to-Operate modification: At least 90 days prior to any proposed change to the physical structure or operation of the device covered by a State Air Emission Permit-to-Operate which increases or decreases the amount of emissions discharged, or which results in the release of an additional pollutant, the owner or operator must file an amended permit application along with all additional information required by Env-A 612.03(c) ("Rules Governing the Control of Air Pollution/Permit Amendments, Modifications and Revisions", http://www.des.state.nh.us/rules/env-a600.pdf) with DES. Before such changes may take place, DES must issue an amended permit.

Permit-to-Operate renewal: The owner or operator must submit an application for permit renewal at least 90 days prior to the designated expiration date of the existing State Air Emission Permit-to-Operate. DES may conduct a compliance inspection prior to renewing the permit.

State statutes: RSA 125-C:11-13 ("Air Pollution Control", http://gencourt.state.nh.us/rsa/html/indexes/125-C.html) and RSA 125-I:3 ("Air Toxic Control Act", http://gencourt.state.nh.us/rsa/html/indexes/125-I.html)
Federal law: 42 U. S. C. §7401, *et seq*. (1970) ("Clean Air Act", http://www.epa.gov/oar/caa/contents.html or http://www4.law.cornell.edu/uscode/42/ch85.html)

N. H. Code of Administrative Rules: Env-A 100 *et seq*. ("Rules Governing the Control of Air Pollution", http://www.des.state.nh.us/ard/ardrules.htm)
U. S. Code of Federal Regulations: 40 CFR Parts 60–63 ("Standards of Performance for New Stationary Sources",
http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfr60_main_00.html,
http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfr61_main_00.html,
http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfr62_main_00.html,
http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfr63_main_00.html)

Appeals body: Air Resources Council at RSA 21-O:11 ("Department of Environmental Services/Air Resources Council", http://gencourt.state.nh.us/rsa/html/I/21-O/21-O-11.htm; see also http://www.des.state.nh.us/rules/env-ac200.pdf and http://www.des.state.nh.us/councils/#air)

Additional information: N. H. DES, Public Information Center, (603) 271-2975 or (603) 271-8876
N. H. DES, Air Resources Division, (603) 271-1370

State Air Emission Permit-to-Operate – *Work Sheet*

Key Qualifier Question: *Does your new or modified emission unit meet any of the requirements listed below? If so, then you are required to obtain a State Air Emission Permit-to-Operate.*

Devices and Sources Which Require Permits for Air Emissions		
Device/Source	**Design Rating**	**Fuel**
Fuel Burning Device	≥ 10 million BTU/hr	Natural Gas, LP Gas, #2 fuel oil
Fuel Burning Device	≥ 4 million BTU/hr	#4 fuel oil
Fuel Burning Device	≥ 2 million BTU/hr	coal, wood, #6 fuel oil, used oil
Internal Combustion Engine (One or more at a source; design rating threshold is combined total of all engines)	≥ 1.5 million BTU/hr	Liquid fuel oil
	≥ 10 million BTU/hr	Natural Gas or LP Gas
	Potential to emit > 25 tons per year of any single regulated air pollutant	
Incinerator	≥ 1,000 lbs/hr	Type 0, 1, 2, 3 waste
Incinerator	≥ 200 lbs/hr	Type 4, 5, 6, 7 waste
Stationary Source, Area Source, or Device	Total actual photochemically-reactive VOC emissions ≥ 10 tons per year	
Aboveground, Vertical, VOC Storage Tank	Capacity ≥ 40,000 gallons containing VOCs with a true vapor pressure ≥ 1.52 psia at 60°F	
Device for loading tank trucks with gasoline at a gasoline terminal*	Design throughput ≥ 20,000 gal/day	
Woodworking Device employing pneumatic transfer system, using a cyclone but no baghouse, for collecting any amount of sander dust	Wood waste collection rate ≥ 20 tons/yr	
Pneumatic dust transfer equipment used to convey materials, other than wood waste, into bins or silos, and not using a baghouse or filter for controlling dust		
Fixed non-metallic mineral processing plant or coal crusher	Design throughput ≥ 25 tons/hr	
Portable sand and gravel or crushed stone plant or coal crusher	Design throughput ≥ 150 tons/hr	

*See also the Certificate requirements for gasoline vapor recovery.

In addition to the specific sources/devices listed in the table above, the DES air rules contain other conditions under which a source would be required to obtain a permit (see http://www.des.state.nh.us/ard/ardrules.htm). Examples of these conditions include:

- Sources choosing to limit their potential to emit by accepting enforceable permit conditions
- Sources where documented/repeated violations occur of any applicable opacity/emission limits in air rules
- Sources at which documented and repeated violations of any National Ambient Air Quality Standard ("NAAQS") occur and the source is a significant contributor to the violation
- Sources subject to New Source Performance Standards ("NSPS") contained in 40 CFR 60 (see http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfr60_main_00.html)

- Sources subject to National Emission Standards for Hazardous Air Pollutants ("NESHAP") for source categories defined in federal regulations 40 CFR Parts 61 and 63, (see http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfr61_main_00.html, and http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfr63_main_00.html)
- Sources operating as treatment, storage or disposal facilities under NH CODE ADMIN. RULES Env-Wm 100-1000 *(New Hampshire Hazardous Waste Rules*, see http://www.des.state.nh.us/hwrb/hwrules.pdf)
- Sources subject to Env-A 1400 ("Rules Governing the Control of Air Pollution/Regulated Air Toxic Pollutants", http://www.des.state.nh.us/rules/env-a1400.pdf) that also may require a permit
- Sources subject to Env-A 1204 governing reasonably available control technology ("RACT") for volatile organic compounds (VOC's) (see http://www.des.state.nh.us/factsheets/ard/ard-21.htm) or Env-A 1211 governing RACT for nitrogen oxides (NO_x) (see http://www.des.state.nh.us/factsheets/ard/ard-9.htm and
- http://www.des.state.nh.us/ard/enva1200.htm)
- Based on air dispersion modeling, sources where a permit is required to achieve compliance with NAAQS
- Sources affected by or opting into the Acid Rain program under Title IV of the federal Clean Air Act Amendments of 1990 (see http://www.epa.gov/oar/caa/contents.html#titleiv)

What must you do to apply? (See http://www.des.state.nh.us/ard/whatinfo.htm)

- Application Forms - Submit complete application forms as described in Env-A 1700 (see "Rules Governing the Control of Air Pollution/Permit Application Forms", http://www.des.state.nh.us/ard/enva1700.htm and http://www.des.state.nh.us/ard/permit.htm) Submit the applicable forms from the following list:
    - Form ARD-1, *General Information for all Permit Applications* (see http://www.des.state.nh.us/ard/ard1.pdf)
    - Form ARD-2, *Information Required for Permits for Fuel Burning Equipment* (see http://www.des.state.nh.us/ard/ard2.pdf)
    - Form ARD-3, *Information Required for a Permit for a Unit of Processing or Manufacturing Equipment* (see http://www.des.state.nh.us/ard/ard3.pdf)
    - Form ARD-4, *Information Required for Permits for Storage Tanks Containing Fuel or Volatile Organic Compounds* (see http://www.des.state.nh.us/ard/ard4.pdf)
    - Form ARD-5, *Information Required for Permits for a Fuel Loading Facility* (see http://www.des.state.nh.us/ard/ard5.pdf)
    - Form ARD-6, *Information Required for Permits for Incinerators* (see http://www.des.state.nh.us/ard/ard6.pdf)
- Modeling - Conduct air dispersion modeling to examine the impacts on the NAAQS or submit a written request for DES to conduct the air dispersion modeling.
- Proof of Title, Right and Interest - Submit adequate information to demonstrate title, right and interest in the property proposed for development or use, consistent with Env-A 605.02:
    - If the property is owned, a copy of the deed of the property on which the source or device is located, referencing the book and page number as recorded in the Registry of Deeds,
    - If the property is under an option to buy, a copy of any option agreement which contains terms which establish future title, or
    - If the property is leased, a copy of the lease, indicating that the lease is of sufficient duration to permit construction, use, or development.
- Proof of Legal Authority - Submit a written statement establishing that such applicant has the requisite authority to act on behalf of the owner for purposes of the application, if applicant is not the legal owner of the source/device.
- Responsible Official Certification - With the permit application and any report or compliance certification submitted to DES pursuant to Env-A 100, *et seq.* (see http://www.des.state.nh.us/ard/ardrules.htm);

submit a written statement certifying the truth, accuracy, and completeness of the document that has been signed by the responsible official. Unless otherwise specified, this certification shall state that, to the best of the responsible official's knowledge and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

- Submit a check or money order for the appropriate fee(s), made payable to "Treasurer, State of New Hampshire", with the application and all supporting information to: Air Resources Division, New Hampshire Department of Environmental Services, 6 Hazen Drive, P. O. Box 95, Concord, NH 03302-0095. Telephone: (603) 271-1370; fax: (603) 271-1381; or online: http://www.des.state.nh.us/ard_intro.htm

What types of sources typically require this permit? (See http://www.des.state.nh.us/ard/whatsrce.htm)

- A modified source holding a temporary permit, nearing completion of the modification, or a new source holding a temporary permit, nearing completion of construction (both at least 90 days before temporary permit expiration)
- A facility adding a pneumatic dust transfer system *without* a baghouse or filter to control dust.
- A facility adding a fuel combustion device burning No. 6 fuel oil with a design rating of 5 mmBtu/hr heat input.
- A facility located in Hillsborough County (an ozone non-attainment region) that has the potential to emit 75 tons per year of NO_x, but has actual NO_x emissions of 20 tons per year and who would like to limit the emissions to below major source threshold (50 tons per year for NO_x).

If there are any questions regarding this page or any other section of the Guidebook, please contact Tim Drew, Administrator, DES Public Information and Permitting Unit, at tdrew@des.state.nh.us or at (603) 271-3306.

General State Air Permit for Emergency Generators (Internal Combustion Engines)

Introduction: An effective means of protecting air quality in New Hampshire is to control the emission of pollutants from specific sources or devices before release to the atmosphere. DES administers a general permitting program for emergency generators (internal combustion engines) which saves administrative time and effort for both the state and the facility. This permit program requires facilities to register the equipment with DES and, in return, the facility receives a General State Air Permit. The permit has already been subject to public notice and comment, so DES is able to process the permit faster. The General State Air Permit for Emergency Generators is only available to the following:

- Facilities where the facility-wide actual emissions are less than the major source threshold
- Facilities wishing to limit the operating hours of each emergency generator to 500 hours per year
- Devices that operate as a mechanical or electrical power source only when the primary power source has been lost during an emergency, such as a power outage. Devices that are load shaving units, peaking power production units, or standby engines in energy assistance programs do not qualify for a General State Permit, and must apply for a Temporary Air Emission Permit and a State Air Emission Permit-to-Operate.

The *Emergency Generator (Internal Combustion Engine) General State Permit Registration Information* application form is available at http://www.des.state.nh.us/ard/egreg.pdf) or by contacting DES. The registration form requests facility and device identification information, technical contacts, proof of ownership, and certification statements from a responsible official at the facility. The General State Air Permit for Emergency Generators specifies the emission limits, operating hours, and any other conditions the source is required to meet to ensure that the operation of the emergency generator(s) will not result in a violation of New Hampshire air quality standards/administrative rules (see http://www.des.state.nh.us/ard/whatsrce.htm).

Estimated number of permits issued annually: Approximately 30

Fees: No application fee. The emission-based fee is an annual fee that all permitted sources pay for each ton of pollutant emitted for each calendar year, up to 4,000 tons per pollutant. This method provides an economic incentive for sources to reduce emissions, since the fee is assessed only for pollutants actually emitted (see NH CODE ADMIN. RULES Rule Env-A 702 ("Rules Governing the Control of Air Pollution/Permit Review Fees", http://www.des.state.nh.us/rules/env-a700.pdf). Also see "What Fees Are Required for an Air Permit" (http://www.des.state.nh.us/ard/whatfees.htm) and DES Fact Sheet #ARD-17 (http://www.des.state.nh.us/factsheets/ard/ard-17.htm) for more information about fees.

Estimated processing time after registration package is received: 15 days

Permit duration: Until November 30, 2003, unless re-established by DES

Permit transferability: The new owner or operator must submit a revised *Emergency Generator General State Permit Registration Information* form (see http://www.des.state.nh.us/ard/egreg.pdf).

Permit modification: The owner or operator must file an amended *Emergency Generator General State Permit Registration Information* form (see http://www.des.state.nh.us/ard/egreg.pdf). If an emergency generator will operate more than 500 hours per consecutive 12-month period, then the owner or operator must submit an application for a State Air Emission Permit-to-Operate.

Permit renewal: The General State Permit for Emergency Generators is valid until November 30, 2003. DES anticipates that it will re-establish the General Permit prior to its expiration, and will notify facilities which are covered by the General Permit of the outcome of the re-establishment process. If the General Permit is not re-

established, the owner or operator must submit an application for a State Air Emission Permit-to-Operate within 90 days of being notified by DES in accordance with Env-A 608 ("Rules Governing the Control of Air Pollution/State Permits to Operate", http://www.des.state.nh.us/rules/env-a600.pdf). If the General Permit is re-established, then the owner or operator must submit a request for re-registration in accordance with Env-A 610.06 within 90 days of being notified by DES.

State statute: RSA 125-C:11-13 ("Air Pollution Control", http://gencourt.state.nh.us/rsa/html/indexes/125-C.html)
Federal law: 42 U. S. C. §7401, *et seq*. (1970) ("Clean Air Act", http://www.epa.gov/oar/caa/contents.html or http://www4.law.cornell.edu/uscode/42/ch85.html)

N. H. Code of Administrative Rules: Env-A 100 *et seq.* ("Rules Governing the Control of Air Pollution", http://www.des.state.nh.us/ard/ardrules.htm)
U. S. Code of Federal Regulations: Not applicable

Appeals body: Air Resources Council at RSA 21-O:11 ("Department of Environmental Services/Air Resources Council", http://gencourt.state.nh.us/rsa/html/I/21-O/21-O-11.htm; see also http://www.des.state.nh.us/rules/env-ac200.pdf and http://www.des.state.nh.us/councils/#air)

Additional information: N. H. DES, Air Resources Division, (603) 271-1370
N. H. DES, Public Information Center, (603) 271-2975 or (603) 271-8876

General State Air Permit for Emergency Generators (Internal Combustion Engines) – *Work Sheet*

Key Qualifier Questions: *Does your new or modified emergency generator (internal combustion engine), or all of your internal combustion engines combined, meet any of the requirements listed below? Are your actual facility-wide emissions below the major source threshold? Will your emergency generator operate for less than 500 hours per consecutive 12-months? If so, you are required to obtain a General State Air Permit for Emergency Generators.*

(Note: If the emergency generator operating hours will exceed 500 hours per consecutive 12-months, a State Air Emission Permit-to-Operate will be required.)

Emergency Generators (Internal Combustion Engines) Required to Obtain a General State Permit	
Design Rating (for all engines at a facility, combined)	**Fuel Type**
≥ 1.5 million BTU/hr	Liquid fuel oil
≥ 10 million BTU/hr	Natural Gas or LP Gas
Potential to emit > 25 tons per year of any single regulated air pollutant	

What must you do to apply? (See http://www.des.state.nh.us/ard/permit.htm)

- Registration Form - Submit a complete registration form (see http://www.des.state.nh.us/ard/egreg.pdf) as described in NH CODE ADMIN RULE Env-A 610.06 (see "Rules Governing the Control of Air Pollution/Statewide Permit System/Procedures for Registering to Operate under A General State Permit", http://www.des.state.nh.us/rules/env-a600.pdf). The *Emergency Generator (Internal Combustion Engine) General State Permit Registration Information* form requires the following:
  - Facility Information, including facility name and address, device location, and technical contact
  - Proof of Title, Right and Interest in the Property
  - Device-Specific Information, including installation description, date of installation, manufacturer, model number, serial number, fuel type, maximum design fuel flow (in gallons per hour or cubic feet per minute), maximum engine output rating (in horsepower or kilowatts), and maximum gross heat input rating (in million British thermal units per hour, "MMBtu/hr")
  - Certification Statements signed by a responsible official certifying facility compliance and truth, accuracy, and completeness of the registration package, and a statement requesting a General State Air Permit for Emergency Generators
- Modeling – Emergency generators that qualify for this permit are exempt from air dispersion modeling. If other types of devices are located at the facility, the other devices may require an air dispersion modeling impact analysis in accordance with Env-A 606 (see "Rules Governing the Control of Air Pollution/Statewide Permit System/Air Pollution Dispersion Modeling Impact Analysis Requirements", http://www.des.state.nh.us/rules/env-a600.pdf). DES offers a guidance document to assist those subject to this requirement entitled, ***NHDES-ARD Procedure for Air Quality Impact Modeling*** (see http://www.des.state.nh.us/ard/guidance.htm).

What types of sources typically require this permit? (See http://www.des.state.nh.us/ard/whatsrce.htm)

- A facility with actual emissions below the major source threshold that will add an emergency generator, fired with No. 2 fuel oil with a design rating of 2 MMBtu/hr, with operating hours limited to less than 500 hours per consecutive 12-months
- A facility with actual emissions below the major source threshold that will add an emergency generator, fired with natural gas with a design rating of 15 MMBtu/hr, with operating hours limited to less than 500 hours per consecutive 12-months
- A facility with actual emissions below the major source threshold that will add ten emergency generators, fired with natural gas with a design rating of 1.5 MMBtu/hr each (combined capacity of 15 MMBtu/hr), with operating hours for each emergency generator limited to less than 500 hours per consecutive 12-months

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If there are any questions regarding this page or any other section of the Guidebook, please contact Tim Drew, Administrator, DES Public Information and Permitting Unit, at tdrew@des.state.nh.us or at (603) 271-3306.

New Source Review/Prevention of Significant Deterioration Permit

Introduction: New Source Review ("NSR") and Prevention of Significant Deterioration ("PSD) of air quality permits are issued to certain sources of air emissions, defined as "major sources" in NH CODE ADMIN. RULES Env-A 100 *et seq*., "Rules Governing the Control of Air Pollution", specifically Env-A 101.168(b)(2) (see http://www.des.state.nh.us/ard/enva101.pdf) and Section 302 of the 1990 Clean Air Act Amendments (see http://www.epa.gov/oar/caa/caa302.txt). Non-attainment NSR Permits (or more commonly known as "NSR Permits") are required for a new major source or major modifications to an existing major source in areas designated as "Non-Attainment Regions". All counties within New Hampshire are designated as non-attainment for ozone. The four southern counties (Hillsborough, Rockingham, Merrimack, and Strafford) are classified as "serious" non-attainment areas for ozone. As such, these counties have lower applicability thresholds than the rest of the state's counties. PSD Permits are required for a new major source or major modifications to an existing major source in areas designated as "Attainment Regions". Excluding the non-attainment areas noted above, all parts of New Hampshire are classified as "attainment" for all other pollutants. NSR and PSD Permits are a type of "temporary permit" for major sources. Before the NSR or PSD expires, the source must apply for a Title V Operating Permit. An NSR or PSD permit is based on different thresholds:

New Source Review Permit

SOURCE TYPE	THRESHOLD^	POLLUTANT	COUNTY
NSR - New/Major	50 tons per year	Nitrogen oxides	Hillsborough, Merrimack, Rockingham, and Strafford
NSR - New/Major	100 tons per year	Nitrogen oxides	Belknap, Carroll, Cheshire, Coös, Grafton, and Sullivan
NSR - New/Major	50 tons per year	Volatile organic compounds	Statewide
NSR - Existing/Major w/major modification	25 tons per year or more (over any five-year period)	Nitrogen oxides	Hillsborough, Merrimack, Rockingham, and Strafford
NSR - Existing/Major w/major modification	40 tons per year or more	Nitrogen oxides	Belknap, Carroll, Cheshire, Coös, Grafton, and Sullivan
NSR - Existing/Major w/major modification	25 tons per year or more (over any five-year period)	Volatile organic compounds	Hillsborough, Merrimack, Rockingham, and Strafford
NSR – Existing/Major w/major modification	40 tons per year or more	Volatile organic compounds	Belknap, Carroll, Cheshire, Coös, Grafton, and Sullivan

Prevention of Significant Deterioration Permit

SOURCE TYPE	THRESHOLD^	POLLUTANT	COUNTY
PSD - New/Major	100 tons per year or more for 28 specific source categories listed in the federal Clean Air Act	Nitrogen oxides, sulfur dioxide, carbon monoxide, particulate matter (10 microns in diameter), ozone and lead	Statewide
PSD - New/Major	250 tons per year or more of any criteria pollutant for all other source categories	Nitrogen oxides, sulfur dioxide, carbon monoxide, particulate matter (10 microns in diameter), ozone and lead	Statewide
PSD – Existing/Major w/major modification	40 tons per year or more	Nitrogen oxides	Statewide
"	40 tons per year or more	Sulfur dioxide	Statewide
"	100 tons per year or more	Carbon monoxide	Statewide
"	40 tons per year or more	Volatile organic compounds	Statewide
"	15 tons per year or more	Particulate matter (10 microns in diameter)	Statewide
"	25 tons per year or more	Total suspended particulates	Statewide
"	0.6 tons per year	Lead	Statewide
"		Other pollutants at various levels specified by federal requirements	Statewide

^ Emissions thresholds listed are the potential to emit as defined in Env-A 101.27 and 40 CFR 70.2.

Estimated number of permits issued annually: 1-2

Fees: Sources subject to either NSR or PSD permits are required to pay a permit review fee in accordance with Env-A 702 ("Rules Governing the Control of Air Pollution/Permit Review Fees", http://www.des.state.nh.us/rules/env-a700.pdf). The permit review fee is based on the actual time spent by DES staff in processing the permit application. Sources also pay an emission-based fee, which is an annual fee that all permitted sources pay for each ton of pollutant emitted during each calendar year, up to 4,000 tons per pollutant. This method provides an economic incentive for sources to reduce emissions, since the fee is assessed only for pollutants actually emitted. For more information on fees, see "What Fees Are Required for an Air Permit" (http://www.des.state.nh.us/ard/whatfees.htm) and DES Fact Sheet #ARD-17 (http://www.des.state.nh.us/factsheets/ard/ard-17.htm).

Estimated processing time after application is deemed "complete": Up to one year

Permit duration: 18 months (renewable for up to an additional 12 months if construction has not yet been completed, during which application for a Title V Operating Permit must be initiated)

Permit transferability: Transfers are considered an administrative amendment to the permit. In some cases (*e.g.*, when there is a change in company ownership or responsible official designation), the new owner or operator must file an amended permit application using the *General Information – All Permit Applications* form only (ARD-1) with DES (see http://www.des.state.nh.us/ard/ard1.pdf). If the amendment represents a change in company name (only), the pertinent information may be forwarded in writing to DES on official company letterhead.

Permit modification: Prior to any modification, the owner/operator must file an amended DES permit application using the *General Information – All Permit Applications* form (ARD-1) (see http://www.des.state.nh.us/ard/ard1.pdf), along with all additional information required by Env-A 623 (see http://www.des.state.nh.us/rules/env-a600.pdf) and 40 CFR Parts 51 and 52. Prior to any modification, see http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfr51_main_00.html; http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfr52_main_00.html.

Permit renewal: The owner/operator must file with DES a written request for a re-issuance, specifying the basis for such a request, at least 90 days prior to the designated expiration date of a Temporary Air Emission Permit (*i.e.,* an NSR or PSD Permit). The Temporary (NSR/PSD) Air Emission Permit expires if construction has not begun within 18 months from the date of issuance. DES may re-issue this permit if construction is not completed within 18 months following issuance, compliance testing is not complete, the applicant is in the process of obtaining a permit or permits from another governmental entity, or if the applicant is involved in litigation regarding other permits. Once a source has completed construction and commenced operation, it must apply for a Title V Operating Permit within one year.

State statutes: RSA 125-C:11-13 ("Air Pollution Control", http://gencourt.state.nh.us/rsa/html/indexes/125-C.html) and RSA 125-I:3 ("Air Toxic Control Act", http://gencourt.state.nh.us/rsa/html/indexes/125-I.html)
Federal law: 42 U. S. C. §7401, *et seq*. (1970) ("Clean Air Act", http://www.epa.gov/oar/caa/contents.html#ic or http://www4.law.cornell.edu/uscode/42/ch85.html)

N. H. Code of Administrative Rules: Env-A 100, *et seq*., ["Rules Governing the Control of Air Pollution", http://www.des.state.nh.us/rules/env-a200 (Procedural Rules) and http://www.des.state.nh.us/rules/env-a600 ("Statewide Permit System")]
U. S. Code of Federal Regulations: 40 CFR Part 52.21 ("Prevention of Significant Deterioration of Air Quality", http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfr52_main_00.html)

Appeals bodies: For permits or orders issued by DES: Air Resources Council at RSA 21-O:11 ("Department of Environmental Services/Air Resources Council", http://gencourt.state.nh.us/rsa/html/I/21-O/21-O-11.htm);

see also http://www.des.state.nh.us/rules/env-ac200.pdf and http://www.des.state.nh.us/councils/#air). For PSD Permits or orders related thereto: U. S. Environmental Protection Agency's Environmental Appeals Board (see http://www.epa.gov/eab/)

Additional information: N. H. DES, Public Information Center, (603) 271-2975 or (603) 271-8876
N. H. DES, Air Resources Division, (603) 271-1370
U. S. EPA, Region I, (617) 918-1652

New Source Review/Prevention of Significant Deterioration Permit – *Work Sheet*

Key Qualifier Questions: *Will your new (proposed) facility qualify as a major source? Are you proposing to make a major modification at a major source? Will the proposed modification cause the facility to become a major source? Are you reconstructing or replacing an emission unit? Are you "de-bottlenecking" a process? Are you making a significant process change?*

Note: If the potential emissions of a new source exceed the major source emission thresholds specified in the following chart or your modification at a major source exceeds the major modification thresholds or if the modification itself will cause the source to exceed major source emission thresholds, then you are required to obtain a New Source Review/Prevention of Significant Deterioration Permit ("NSR/PSD").

Federal New Source Review Programs

Federal PSD Program		Non-Attainment Program	
"Major Source" Levels	**"Major Modification" Levels**	**"Major Source" Levels**	**"Major Modification" Levels**
250 tpy Emissions of Criteria Pollutants*	SO_2 = 40 tpy	NO_x = 50 tpy Non-Attainment Region	NO_x = 25 tpy over 5 year period Non-Attainment Region**
100 tpy for 28 source categories listed in the Clean Air Act	NO_x = 40 tpy	NO_x = 100 tpy Ozone Transport Region	NO_x = 40 tpy Ozone Transport Region
	CO = 100 tpy	VOC = 50 tpy Statewide	VOC = 25 tpy over 5 year period Non-Attainment Region
	TSP = 25 tpy		VOC = 40 tpy Ozone Transport Region***
	PM_{10} = 15 tpy		
	Other Pollutants = Various Levels		

* Criteria Pollutants: (NO_x, CO, SO_2, PM, Lead, Ozone including VOCs and NOx as ozone precursors)
** Non-Attainment Region: Hillsborough, Rockingham, Merrimack, and Strafford Counties
***Ozone Transport Region: Counties outside of the Non-Attainment Region
Key: tpy = tons per year, SO_2 = sulfur dioxide, NO_x = nitrogen oxides, CO = carbon monoxide, VOCs = volatile organic compounds, TSP = total suspended particulates, and PM_{10} = particulate matter with a ten-micron diameter or smaller.

What must you do to apply? (See http://www.des.state.nh.us/ard/whatinfo.htm)

- Pre-application Meeting - Meet with a representative from the DES Air Resources Division to explain the proposed facility or proposed modification and to discuss the timeframe of the project.
- Netting - Examine all federally enforceable emission increases and decreases for the five-year period preceding the date that construction will commence. If the net emission increase is less than the emission thresholds listed above, **then a NSR/PSD Permit is not required**.
- BACT Analysis/LAER Analysis - For PSD, conduct an analysis to ensure the application of best available control technology ("BACT"). BACT takes into consideration the energy, environmental, economic, and other costs associated with each alternative technology as well as the emission reduction benefits. For NSR, ensure that the lowest achievable emission rate ("LAER") is achieved, by examining the most stringent emission limitation contained in any State Implementation Plan (SIP) for that class or category of source or the most stringent emission limitation achieved in practice. The LAER requirement does not take into consideration economic, energy, or other environmental factors.
- Modeling

- Conduct air dispersion modeling to examine the impacts on the National Ambient Air Quality Standards ("NAAQS"), taking into consideration background emission concentrations, and other sources.
- Conduct additional modeling to determine how much of the "increment" (or allowed growth) has been consumed for a specified pollutant.
- Conduct additional modeling to determine the impacts on Class I Areas [see 40 CFR 52.21(e), "*Restrictions on Area Classifications",* http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfr52_00.html]

- PSD-Impact Analysis
  - Determine growth that will be associated with the proposed change and estimate any air impacts from that growth.
  - Conduct an analysis to determine the effect of the air emissions on soils and vegetation.
  - Assess the potential for visibility impairment and conduct more detailed analysis, if warranted.
- NSR-Offsets - Prior to the issuance of the permit, obtain emission reductions to offset any emission increases associated with the new emission unit(s) or process changes. The offset ratio is equal to 1.2 to 1 in the four county ozone non-attainment areas and 1.15 to 1 outside the four county ozone non-attainment region. Information for offsets, such as offset pollutants, offset donor source(s) and location(s), actual annual and typical ozone season emission estimates of new/modified source and the donor source(s), must be submitted to DES.
- NSR-Alternative Site Analysis - Conduct an analysis of alternative sites, production processes, and environmental control techniques to demonstrate that the benefits of the proposed source significantly outweigh the environmental and social costs imposed as a result of the location, construction, or modification.
- NSR-Demonstration of Compliance - Demonstrate that all major sources owned or operated by the same entity as the proposed new or modified source are in compliance or on a schedule for compliance.
- Application Forms - Submit complete application forms as described in NH CODE ADMIN. RULES Env-A 1700 (see "Rules Governing the Control of Air Pollution/Permit Application Forms", http://www.des.state.nh.us/ard/enva1700.htm) and provided on the DES Web site at http://www.des.state.nh.us/ard/permit.htm. The applicable forms from the following list shall be submitted:
  - Form ARD-1, *General Information for all Permit Applications* (see http://www.des.state.nh.us/ard/ard1.pdf)
  - Form ARD-2, *Information Required for Permits for Fuel Burning Equipment* (see http://www.des.state.nh.us/ard/ard2.pdf)
  - Form ARD-3, *Information Required for a Permit for a Unit of Processing or Manufacturing Equipment* (see http://www.des.state.nh.us/ard/ard3.pdf)
  - Form ARD-4, *Information Required for Permits for Storage Tanks Containing Fuel or Volatile Organic Compounds* (see http://www.des.state.nh.us/ard/ard4.pdf)
  - Form ARD-5, *Information Required for Permits for a Fuel Loading Facility* (see http://www.des.state.nh.us/ard/ard5.pdf)
  - Form ARD-6, *Information Required for Permits for Incinerators* (see http://www.des.state.nh.us/ard/ard6.pdf)
- Proof of Title, Right, and Interest - Submit adequate information to demonstrate title, right and interest in property proposed for development/use, pursuant to Env-A 605.02 (see "Rules Governing the Control of Air Pollution/Statewide Permit System", http://www.des.state.nh.us/rules/env-a600.pdf):
  - If the property is owned, a copy of the deed of the property on which the source or device is located, referencing the book and page number as recorded in applicable Registry of Deeds;
  - If the property is under an option to buy, a copy of any option agreement which contains terms which establish future title; or
  - If the property is leased, a copy of the lease, indicating that the lease is of sufficient duration to permit construction, use, or development.

- Proof of Legal Authority - Submit a written statement establishing that such applicant has the requisite authority to act on behalf of the owner for application purposes, if the applicant is not the legal owner of the source or device.
- Responsible Official Certification - With the permit application and any report or compliance certification submitted to DES pursuant to Env-A 100, *et seq.* (see http://www.des.state.nh.us/ard/ardrules.htm), submit a written statement certifying the truth, accuracy, and completeness of the document that has been signed by the responsible official. Unless otherwise specified, this certification shall state that, to the best of the responsible official's knowledge and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- Submit a check or money order for the appropriate fee(s), made payable to "Treasurer, State of New Hampshire", with the application and all supporting information to: Air Resources Division, New Hampshire Department of Environmental Services, 6 Hazen Drive, P. O. Box 95, Concord, NH 03302-0095. Telephone: (603) 271-1370; fax: (603) 271-1381; or online: http://www.des.state.nh.us/ard_intro.htm.
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What types of sources require this permit? (See http://www.des.state.nh.us/ard/whatsrce.htm)

- An existing landfill with VOC emissions greater than 50 tons per year to which is being added additional capacity to the landfill such that the potential VOC emissions from the expansion and other miscellaneous sources will exceed 25 tons per year over a five-year period
- A new waste incinerator located in Hillsborough County with two boilers that will have NO_x emissions over 50 tons per year
- A new electric power generating facility in Grafton County that will have two boilers with NO_x emissions over 100 tons per year
- An existing pulp and paper mill located in Coös County with actual NO_x emissions greater than 100 tons per year that is adding a boiler that will have NO_x emissions greater than 40 tons per year

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If there are any questions regarding this page or any other section of the Guidebook, please contact Tim Drew, Administrator, DES Public Information and Permitting Unit, at tdrew@des.state.nh.us or at (603) 271-3306.

Title V Operating Permit

Introduction: The Title V Operating Permit Program, which became effective on June 30, 1995, represented a new requirement of the federal Clean Air Act Amendments of 1990 (see http://www.epa.gov/oar/caa/contents.html#titlev or http://www4.law.cornell.edu/uscode/42/ch85schV.html and 40 CFR Part 70 at http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfr70_main_00.html). Title V Operating Permits are issued to "major sources" of air emissions that emit (or have the potential to emit) the following pollutants to the atmosphere at the following levels (see http://www.des.state.nh.us/ard/whatprmt.htm)

- 10 tons per year ("tpy") or more of any single hazardous air pollutant as defined in the Clean Air Act (see http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfr61_main_00.html)
- 25 tpy or more of any combination of hazardous air pollutants,
- 100 tpy or more of nitrogen oxides (NO_x) for sources located in Belknap, Carroll, Cheshire, Coös, Grafton, or Sullivan Counties
- 50 tpy or more of NO_x for sources located in Hillsborough, Merrimack, Rockingham, or Strafford Counties
- 50 tpy or more of volatile organic compounds (VOCs)
- 100 tpy or more of any of the six criteria pollutants (*i.e.*, sulfur dioxide, carbon monoxide, total suspended particulates, ozone, nitrogen dioxide, and lead)

Emission sources subject to the Title V Operating Permit Program prior to or on the effective date of the program were required to file permit applications by June 30, 1996. Each source that becomes subject to the Title V Program after the effective date is required to submit a Title V Operating Permit application within 12 months of triggering the Title V thresholds (see http://www.des.state.nh.us/ard/titleV.htm). All Title V applications received after June 30, 1996 must be processed within 18 months of filing.

Average number of permits issued annually: 9 (New Hampshire has 54 Title V sources as of June 2002)

Fees: An annual emission-based fee which requires all permitted sources to pay for each ton of pollutant emitted for each calendar year, up to 4,000 tons per pollutant. For calendar year 2000 emissions, the emission-based fee is $57.65 per ton. This fee is re-established annually by the DES Air Resources Division (see http://www.des.state.nh.us/ard/whatfees.htm)

Estimated processing time after application is deemed "complete": 1-5 years for the initial issuance of Title V Operating Permits, and 18 months for all new Title V sources thereafter

Permit duration: The Title V permit is valid for 5 years from the date of issuance, and is subject to renewal.

Permit transferability: Title V permits may be transferred by the owner/permittee to another entity through an administrative permit amendment. This allows for a change in ownership or operational control of a source where the permitting authority determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new permittee has been submitted to the permitting authority.

Permit modification: There are three types of permit modifications – administrative amendments, minor modifications, and significant modifications. Each type of modification has different administrative requirements. These requirements are listed in NH CODE ADMIN. RULES Env-A 612; specifically, Env-A 612.01 for administrative amendments, Env-A 612.04 for minor modifications, and Env-A 612.05 for significant modifications (see "Rules Governing the Control of Air Pollution/Statewide Permit System", http://www.des.state.nh.us/rules/env-a600.pdf).

Permit renewal: The owner or operator must submit an application for Title V renewal at least 6 months prior to the designated expiration date of existing permit. DES may conduct a compliance inspection before renewing a Title V permit.

State statutes: RSA 125-C ("Air Pollution Control", http://gencourt.state.nh.us/rsa/html/indexes/125-C.html), RSA 125-D ("Acid Rain Control Act", http://gencourt.state.nh.us/rsa/html/indexes/125-D.html), RSA 125-I ("Air Toxic Control Act", http://gencourt.state.nh.us/rsa/html/indexes/125-I.html), RSA 125-J ("Emission Reduction Credits Trading Program", http://gencourt.state.nh.us/rsa/html/indexes/125-J.html), RSA 125-L ("Voluntary Greenhouse Gas Emissions Reductions Registry", http://gencourt.state.nh.us/rsa/html/indexes/125-L.html), RSA 125-M ("Mercury Emissions Reduction and Control Program", http://gencourt.state.nh.us/rsa/html/indexes/125-M.html), and RSA 125-N ("Dioxin Emissions Reduction and Control Program", http://gencourt.state.nh.us/rsa/html/indexes/125-N.html).
Federal law: 42 U. S. C. §7401, *et seq*. (1970) ("Clean Air Act", http://www.epa.gov/oar/caa/contents.html or http://www4.law.cornell.edu/uscode/42/ch85.html)

N. H. Code of Administrative Rules: Env-A 100, *et seq*. ("Rules Governing the Control of Air Pollution", http://www.des.state.nh.us/ard/ardrules.htm)
U. S. Code of Federal Regulations: 40 CFR Part 70 ("Title V Operating Permit Program", http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfr70_main_00.html), 40 CFR Parts 60 - 63 ("Standards of Performance for New Stationary Sources", http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfr60_main_00.html, http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfr61_main_00.html, http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfr62_main_00.html, http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfr63_main_00.html)

Appeals bodies: Air Resources Council at RSA 21-O:11 ("Department of Environmental Services/Air Resources Council", http://gencourt.state.nh.us/rsa/html/I/21-O/21-O-11.htm; see also http://www.des.state.nh.us/rules/env-ac200.pdf and http://www.des.state.nh.us/councils/#air); and the U. S. Environmental Protection Agency's Environmental Appeals Board at http://www.epa.gov/eab/ (for Title V Permits)

Additional information: N. H. DES, Air Resources Division, (603) 271-1370
U. S. EPA, Region I, (617) 918-1653
N. H. DES, Public Information Center, (603) 271-2975 or (603) 271-8876

Title V Operating Permit - *Work Sheet*

Key Qualifier Questions: *Does your facility emit one or more of the following?* (See also http://www.des.state.nh.us/ard/whatprmt.htm).

- 10 tons per year or more of any single hazardous air pollutant (from the list of 188 hazardous air pollutants)
- 25 tons per year or more of any combination of hazardous air pollutants
- 100 tons per year or more of oxides of nitrogen (NO_x) for sources located in Belknap, Carroll, Cheshire, Coös, Grafton, or Sullivan Counties
- 50 tons per year or more of NO_x for sources located in Hillsborough, Merrimack, Rockingham, or Strafford Counties
- 50 tons per year or more of volatile organic compounds (VOCs)
- 100 tons per year of sulfur dioxide (SO_2)
- 100 tons per year of carbon monoxide (CO)
- 100 tons per year of total suspended particulates (TSP)

OR

Are you subject to federal requirements relating to new source performance standards, hazardous air pollutants or acid rain controls?

If you answered "yes" to any of the above questions, your site must obtain a Title V Operating Permit.

What must you do to apply? (See http://www.des.state.nh.us/ard/whatinfo.htm)

- Apply for and obtain a Temporary Air Emission Permit (which may take the form of either a New Source Review Permit or a Prevention of Significant Deterioration Permit – "NSR/PSD Permits") from DES prior to commencing construction.
- Within 12 months of commencing operation, submit a permit application to DES to obtain a Title V Operating Permit.
- Submit a copy of the permit application package to the U. S. EPA's Office of Environmental Stewardship at the following address (see http://www.epa.gov/region1/about/oeschart.html): Director, Air Compliance Programs, Office of Environmental Stewardship (Mail Code SEA), U. S. Environmental Protection Agency, Suite 1100, One Congress Street, Boston, MA 02114-2023.
- Include complete application forms and supplemental information as specified in NH CODE ADMIN. RULES Env-A 1709 ("Rules Governing the Control of Air Pollution/Information Required for Title V Sources", http://www.des.state.nh.us/ard/enva1709.pdf and http://www.des.state.nh.us/ard/permit.htm). Submit the applicable forms from the following list:
    - Form ARD-1, *General Information for all Permit Applications* (see http://www.des.state.nh.us/ard/ard1.pdf)
    - Form ARD-2, *Information Required for Permits for Fuel Burning Equipment* (see http://www.des.state.nh.us/ard/ard2.pdf)
    - Form ARD-3, *Information Required for a Permit for a Unit of Processing or Manufacturing Equipment* (see http://www.des.state.nh.us/ard/ard3.pdf)
    - Form ARD-4, *Information Required for Permits for Storage Tanks Containing Fuel or Volatile Organic Compounds* (see http://www.des.state.nh.us/ard/ard4.pdf)
    - Form ARD-5, *Information Required for Permits for a Fuel Loading Facility* (see http://www.des.state.nh.us/ard/ard5.pdf)

- Form ARD-6, *Information Required for Permits for Incinerators* (see http://www.des.state.nh.us/ard/ard6.pdf)

- Include the name and title of the responsible official to whom correspondence regarding the source shall be sent on all application forms.
- Include a quantification of the actual and potential emissions for all regulated pollutants for each emission unit, and a description of the method of calculation used (*e.g.*, stack test data, EPA's AP-42 emission factors, mass balance, *etc.*).
- Cite and describe all applicable state and federal air pollution control regulations and requirements applicable to each emission unit.
- Identify and describe work practice standards or limitations on source operations affecting emissions of all regulated pollutants.
- Include information required by any other applicable requirement of the Clean Air Act, including, but not limited to stack height limitations. (See http://www.epa.gov/oar/caa/contents.html#titlev or http://www4.law.cornell.edu/uscode/42/ch85.html).
- Include a narrative description or reference to test methods used or required for initial compliance demonstration with each applicable regulation.
- Include a written explanation of proposed exemptions.
- Include any information required to evaluate alternative operating scenarios or to define permit terms and conditions.
- Include compliance information including the following:
  - A narrative description of the compliance status of the source with respect to all applicable requirements
  - A narrative statement of methods used to determine compliance, including a description of monitoring, record keeping, and reporting requirements and test methods
  - A statement that the source shall continue to comply with all applicable requirements
  - A statement that the source shall meet all applicable requirements that will become effective during the permit term
  - A compliance schedule stating all applicable requirements with which the source is not in compliance, and a narrative description of how the source shall achieve compliance, a schedule of remedial measures/enforceable milestones, and a schedule for submission of certified progress reports no less frequently than every six months
  - The following certified statement signed by the responsible official:

    The undersigned certifies that, based on information and belief formed after reasonable inquiry, I certify that the source is in compliance with all applicable requirements.

- List equipment and devices located at the source classified as insignificant pursuant to Env-A 609.03(g) (*i.e.*, below the threshold quantities specified in Env-A 607.01 and any device, source, or activity whose actual emissions are less 1,000 pounds per year for all criteria pollutants and hazardous air pollutants in aggregate).
- Submit adequate information to demonstrate title, right and interest in the property proposed for development or use, consistent with Env-A 605.02 (see http://www.des.state.nh.us/rules/env-a600.pdf):
  - If the property is owned, a copy of the deed of the property on which the source or device is located, referencing the book and page number as recorded in the Registry of Deeds;
  - If the property is under an option to buy, a copy of any option agreement which contains terms which establish future title; or
  - If the property is leased, a copy of the lease, indicating that the lease is of sufficient duration to permit construction, use, or development.
- Submit a written statement establishing that such applicant has the requisite authority to act on behalf of the owner for purposes of the application, if the applicant is not the legal owner of the source or device.

- Along with the permit application and any report or compliance certification submitted to DES pursuant to Env-A 100 *et seq.* (see http://www.des.state.nh.us/ard/ardrules.htm), submit a written statement certifying the truth, accuracy, and completeness of the document that has been signed by the responsible official.
- Submit the application and all supporting information to: Air Resources Division, New Hampshire Department of Environmental Services, 6 Hazen Drive, P. O. Box 95, Concord, NH 03302-0095. Telephone: (603) 271-1370; fax: (603) 271-1381; or online: http://www.des.state.nh.us/ard_intro.htm

What types of sources typically require this permit? (See http://www.des.state.nh.us/ard/whatsrce.htm)

- A fossil fuel-fired boiler greater than 100 mmBtu/hr heat input that generates electricity
- A waste incinerator charging more than 15,000 tons of refuse per day into a boiler rated at 15 mmBtu/hr
- A hospital with a medical waste incinerator
- A VOC/solvent coating operation

If there are any questions regarding this page or any other section of the Guidebook, please contact Tim Drew, Administrator, DES Public Information and Permitting Unit, at tdrew@des.state.nh.us or at (603) 271-3306.

Stage I/Stage II Gasoline Vapor Recovery Certificate

Introduction: The federal Clean Air Act Amendments of 1990 require states to implement numerous programs to combat ground-level ozone formation, also known as photochemical smog (see http://www.epa.gov/oar/caa/contents.html#titlevi). New Hampshire has exceeded the federal health standards for ground-level ozone in Hillsborough, Merrimack, Rockingham, and Strafford Counties over the past several years. Ozone is created through an interaction in the lower atmosphere between hydrocarbon emissions (volatile organic compounds, or VOCs) and oxides of nitrogen (NO_x) in the presence of sunlight. Gasoline vapors, especially evaporative emissions from motor vehicle fuels, emit hydrocarbons that contribute significantly to ground-level ozone concentrations. Therefore, the control of hydrocarbon emissions represents a top priority in New Hampshire, and DES has created the Stage I and Stage II Gasoline Vapor Recovery Program to implement that pollution prevention requirement. Stage I recovery systems capture the vapors expelled from underground gasoline storage tanks located at service stations during refilling from tanker trucks. These vapors are captured and returned to the tanker truck. Stage II recovery systems capture gasoline vapors (which would otherwise be released to the atmosphere) during refueling of individual motor vehicles at the pump. Stage II systems employ special dispensing nozzles to collect the vapors and return them to the underground storage tank. These recovery systems not only serve to reduce ozone formation and conserve gasoline that would otherwise be lost to the atmosphere, but also reduce human inhalation exposure to gasoline vapors (whose constituents include known cancer-causing agents) (see http://www.des.state.nh.us/factsheets/ard/ard-3.htm). These recovery systems must also be certifiable by California Air Resources Board ("CARB") standards before being certified for use in New Hampshire (see http://www.arb.ca.gov/vapor/vapor.htm).

Average number of certificates issued annually: 150

Fees: With each notification of construction, installation or significant modification, a non-refundable fee of $75 is required for Stage I, and a non-refundable fee of $200 is required for Stage II systems. The Stage I fee is waived for facilities which also are required to have Stage II. Upon completion of a significant modification to a Stage I or Stage II system, the facility owner must submit a new fee and, for Stage II systems, the facility must successfully complete a new vapor recovery test. A Stage II certification renewal fee of $200 is due within 90 days prior to the 3-year certificate expiration date, and the facility must successfully complete a new vapor recovery test (see NH CODE ADMIN. RULES Env-A 1205.09 and Env-A 1205.28, "Rules Governing the Control of Air Pollution/Volatile Organic Compounds (VOCs): Gasoline Dispensing Facilities and Cargo Trucks", http://www.des.state.nh.us/ard/enva1205.pdf).

Estimated processing time after application is deemed "complete": 60 days, following a successful stage II vapor recovery test

Certificate duration: Stage II certificates remain valid for three years, as long as no modifications are made. Upon the completion of a significant modification to a gasoline dispensing facility, the certificate expires and the modified Stage II system must be retested.

Certificate transferability: The owner of a gasoline dispensing facility that is subject to Stage I or Stage II requirements must notify the DES Air Resources Division within 60 days after a change of ownership. The certificate of compliance for a Stage II facility is transferable to the new owner.

Certificate modification: The owner of a gasoline dispensing facility that is subject to Stage II requirements must notify the DES Air Resources Division at least five days prior to any construction, installation, or significant modification involving a Stage II system. Once modifications are complete, the facility must successfully complete a new vapor recovery test. A change from gasoline storage to another product must also be reported within 60 days.

Certificate renewal: Within 90 days prior to a Stage II certificate of compliance expiration, the owner of the gasoline dispensing facility must submit a non-refundable renewal fee of $200 to the DES Air Resources Division and must successfully complete a new vapor recovery test.

State statute: RSA 125-C:11-13 ("Air Pollution Control", http://gencourt.state.nh.us/rsa/html/indexes/125-C.html) and RSA 125-I:3 ("Air Toxic Control Act", http://gencourt.state.nh.us/rsa/html/indexes/125-I.html)
Federal law: 42 U. S. C. §7511c (b)(2) and 42 U. S. C. 7511a (b)(3)(A) ("Clean Air Act", http://www.epa.gov/oar/caa/contents.html or http://www4.law.cornell.edu/uscode/42/ch85.html)

N. H. Code of Administrative Rules: Env-A 1205 ("Rules Governing the Control of Air Pollution/Volatile Organic Compounds (VOCs): Gasoline Dispensing Facilities and Cargo Trucks", http://www.des.state.nh.us/ard/enva1205.pdf)
U. S. Code of Federal Regulations: No nationwide USEPA regulations currently exist. The Stage I/Stage II Program is based by reference on California Air Resources Board ("CARB") Standards found at http://www.arb.ca.gov/vapor/vapor.htm, with agency contacts at http://www.arb.ca.gov/vapor/contact2.htm.

Appeals body: Air Resources Council at RSA 21-O:11 ("Department of Environmental Services/Air Resources Council", http://gencourt.state.nh.us/rsa/html/I/21-O/21-O-11.htm; see also http://www.des.state.nh.us/rules/env-ac200.pdf and http://www.des.state.nh.us/councils/#air)

Additional information: N. H. DES, Public Information Center, (603) 271-2975 or (603) 271-8876
N. H. DES, Air Resources Division, (603) 271-1370

Stage I/Stage II Gasoline Vapor Recovery Certificate – *Work Sheet*

Key Qualifier Questions: *Do you own and operate a gasoline-dispensing facility that has a storage tank with a volume equal to or greater than 1,100 gallons or that has an annual gasoline throughput of 120,000 gallons or more (anywhere in the state)? Do you own and operate a new gasoline-dispensing facility that was constructed after November 15, 1990 in Hillsborough, Merrimack, Rockingham, or Strafford County? Do you own and operate a gasoline-dispensing facility constructed prior to November 15, 1990 in Hillsborough, Merrimack, Rockingham, or Strafford County that has an annual throughput of 420,000 gallons or more?*

Vapor Recovery System	Facility Type	Application Requirements	Geographic Location
Stage I	A gasoline storage tank with a capacity greater than 1,100 gallons **OR** Facilities with annual gasoline throughput of 120,000 gallons or more	- Installation of a California Air Resources Board ("CARB") approved Stage I vapor recovery system, - Must have at least 95% recovery efficiency, - Submission of a *Station Notification Form,* - Submission of a Stage I fee.	Statewide
Stage II	A new facility constructed after November 15, 1990 **OR** Facilities with annual gasoline throughput of 420,000 gallons or more	- Installation of a California Air Resources Board ("CARB") approved Stage II vapor recovery system, - System must have at least 95% recovery efficiency, - Submission of a *Station Notification Form*, - Submission of a Stage II fee, - Performance of a successful Stage II system test, as outlined in DES Administrative Rule Env-A 1205.	Hillsborough County Merrimack County Rockingham County Strafford County

What must you do to apply? (See http://www.des.state.nh.us/factsheets/ard/ard-3.htm)

For Stage I:

- Once a storage tank or facility meets the threshold for throughput or capacity as noted in the above table, it qualifies as a gasoline dispensing facility that requires Stage I controls. Upon construction or significant modification of a Stage I system, the following steps must be completed, using the *Station Notification Form* available from the DES Air Resources Division (see "Rules Governing the Control of Air Pollution/Volatile Organic Compounds (VOCs): Gasoline Dispensing Facilities and Cargo Trucks", http://www.des.state.nh.us/ard/enva1205.pdf).
- Provide the owner's name, address, and signature
- Provide the name and location of the gasoline dispensing station
- Provide the amount of throughput for the facility
- The type of equipment to be constructed, installed, or modified, the start date, and completion date (if applicable)
- Submit the Stage I non-refundable fee of $75

For Stage II:

- Submit a Stage II notification form
- Submit the Stage II non-refundable fee of $200 along with the Stage II notification form to: Stage I/Stage II Gasoline Vapor Recovery Program, Air Resources Division, New Hampshire Department of Environmental Services, P. O. Box 95, 6 Hazen Drive, Concord, NH 03302-0095. Telephone: (603) 271-1370; fax: (603) 271-1381; or online: http://www.des.state.nh.us/ard/vapor.htm.
- Schedule a Stage II test, which must be witnessed by DES staff, by contacting the DES Air Resources Division's Compliance Bureau at (603) 271-1370.
- Following completion of a successful Stage II test, submit the completed results of the required tests (including, but not limited to, the pressure decay test, dynamic pressure test, blockage test, vapor recovery ratio test, Healy vacuum and tightness tests, as applicable)
- Stage II facilities are waived from paying the Stage I $75 fee.
- Note: The DES Gasoline Vapor Recovery Program uses standard forms that can be used by facility owners for station notification (see http://www.des.state.nh.us/ard/2003_form.pdf), self-inspection (see http://www.des.state.nh.us/ard/Selfchk.pdf), and reporting throughput (see http://www.des.state.nh.us/ard/Thruput2.pdf. New Hampshire has adopted the State of California Air Resources Board ("CARB") vapor recovery standards (see http://www.arb.ca.gov/vapor/vapor.htm) and Env-A 1205 (see http://www.des.state.nh.us/ard/enva1205.pdf) to operate its program. Information and data related to specific facilities can be researched through the DES "One-Stop" database at http://www.des.state.nh.us:1522/des/ONESTOP.WEB_VAPOR_RPT.SHOW_PARMS.

What types of projects typically require this notification/certificate?

- For Stage I, a gasoline service station in Grafton County that has a 1,100 gallon storage tank
- For Stage I, a gasoline dispensing facility in Sullivan County that sells more than 120,000 gallons per year
- For Stage II, any new gasoline dispensing facility to be constructed in Rockingham County
- For Stage II, an existing gasoline facility in Hillsborough County, whose gasoline throughput in calendar year 1999 exceeded 420,000 gallons per year

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If there are any questions regarding this page or any other section of the Guidebook, please contact Tim Drew, Administrator, DES Public Information and Permitting Unit, at tdrew@des.state.nh.us or at (603) 271-3306.

Municipal Burn Authorization

Introduction: For years, communities across New Hampshire have been struggling with dwindling disposal capacity in the face of burgeoning solid waste generation and requirements for eventual landfill closure. In response, DES examined its existing laws, administrative rules, and policies to find ways to assist those communities. Brush, leaves, and clean (untreated) construction/demolition debris were found to be consuming a significant volume of disposal space at existing landfills, sometimes causing their premature closure. As an alternative to disposing of these materials at landfills, a process was established in 1988 to allow clean waste wood that had been segregated from the rest of the solid waste stream to be handled separately. The DES Municipal Burn Authorization was created to combine legal and administrative requirements implemented by the Waste Management Division and Air Resources Divisions to allow open burning of clean waste wood at approved municipal or county facilities. If such open burning is contemplated, officials of the municipality, solid waste district, or county that wishes to undertake this activity (the "operator") must first prepare a formal request on official letterhead that identifies the exact site to be used, the operating hours, any other permits needed, and the name of the individual who will be responsible for site operations. The resulting authorization will apply only to the specified location of the burn site and will require the "operator" to design an appropriate burn structure, control unauthorized access, install proper signage, prevent nuisance conditions from developing, notify the Fire Warden prior to burn activities, specify the hours for burning, and require the waste wood to be segregated from all other types of solid wastes. Ash disposal is regulated under NH CODE ADMIN. RULES Env-Wm 100-300, 2100 *et seq.* ("Solid Waste Rules", http://www.des.state.nh.us/rules/swrules.pdf). The authorization will include an expiration date, but the operator can seek renewal. The DES Municipal Burn Authorization represents the first of two steps for burning clean waste wood. The applicant must also obtain permission from forest fire warden for the municipality in which the burning will occur prior to kindling a fire, pursuant to RSA 227-L:17, II ("Woodland Fire Control/Permits; Damages; Penalties", http://gencourt.state.nh.us/rsa/html/XIX-A/227-L/227-L-17.htm). Approximately 157 communities across the state have taken advantage of this opportunity and currently operate burn sites at DES-permitted transfer stations, recycling centers, and landfills.

Average number of authorizations issued: 157

Fees: None

Estimated processing time after application is deemed "complete": 2-4 weeks

Authorization duration: 3 years

Authorization transferability: Not transferable

Authorization modification: If modifications are needed, the appropriate official of the operator must submit a request on official letterhead to the DES Air Resources Division requesting the desired change(s).

Authorization renewal: Renewal request letters must be sent to the DES Air Resources Division at least 30 days prior to the current expiration date.

State statutes: RSA 125-C ("Air Pollution Control", http://gencourt.state.nh.us/rsa/html/indexes/125-C.html) and RSA 149-M ("Solid Waste Management", http://gencourt.state.nh.us/rsa/html/indexes/149-M.html)

N. H. Code of Administrative Rules: Env-A 1000 ("Rules Governing the Control of Air Pollution", http://www.des.state.nh.us/ard/enva1001.pdf) and Env-Wm 2602 ("Ash", http://www.des.state.nh.us/hwrb/swrules.pdf)

Appeals body: Air Resources Council at RSA 21-O:11 ("Department of Environmental Services/Air Resources Council", http://gencourt.state.nh.us/rsa/html/I/21-O/21-O-11.htm; see also http://www.des.state.nh.us/rules/env-ac200.pdf and http://www.des.state.nh.us/councils/#air)

Additional information: N. H. DES, Air Resources Division, (603) 271-0537
N. H. DES, Public Information Center, (603) 271-2975 or (603) 271-8876
N. H. DRED, Forests and Lands Division, (603) 271-2214

Municipal Burn Authorization – *Work Sheet*

Key Qualifier Question: *Does your community, solid waste district, or county require an alternate means for reducing the volume and ultimately disposing of tree tops, limbs, saplings, tree cuttings, or untreated timbers, boards, or scrap dimensional lumber?*

What must you do to apply?

- The Fire Chief, City Engineer, Selectmen, County official, or solid waste facility operator defines the need and communicates that finding to DES through a letter prepared on official letterhead.

- The letter must specify:

  - Location of the proposed burn site
  - Tax map/Lot number
  - "911" street address (if available)
  - Name and type of facility (*e.g.*, "Centerville Transfer Station and Recycling Center")
  - All communities that will be using these burn facilities
  - Preferred days of the week to burn
  - Facility operating hours
  - Name of the responsible official for operations at the burn site

- Submit the letter for review to DES at: Air Resources Division, New Hampshire Department of Environmental Services, 6 Hazen Drive, P. O. Box 95, Concord, NH 03302-0095. Telephone: (603) 271-1370; fax: (603) 271-7053; or online: http://www.des.state.nh.us/ard/permit.htm
- Prior to a decision being made, a DES inspector may visit the proposed site to check for appropriate siting, design, and compliance considerations.
- A decision will be forwarded within 30 days following receipt of the request.
- Before the DES Municipal Burn Authorization can be used, permission must first be obtained from either the forest fire warden for the municipality in which the burning will occur prior to kindling the fire. See http://www.nhdfl.com/ and RSA 227-L:17, II ("Woodland Fire Control/Permits; Damages; Penalties", http://gencourt.state.nh.us/rsa/html/XIX-A/227-L/227-L-17.htm).
- Any nuisance conditions or environmental contamination created by the open burning of these materials (smoke, surface water runoff, *etc.*) may result in the authorization being suspended (or revoked), or other enforcement action being taken.

What types of local needs may benefit from this authorization?

- The community is witnessing increased activity in population growth and homebuilding, with untreated waste wood accumulating at the local solid waste facility at a rate and volume beyond its capacity.
- The solid waste district has collected a large volume of brush and limbs (less than five inches in diameter) from its residents with no other beneficial use available for the materials (*e.g.*, firewood, landscaping chips/mulch, *etc.*).
- The county regularly receives, separates, and stores untreated demolition debris from building sites or rehabilitation projects in quantities not economically feasible to send to a wood processing facility or wood-fired power generation facility.

If there are any questions regarding this page or any other section of the Guidebook, please contact Tim Drew, Administrator, DES Public Information and Permitting Unit, at tdrew@des.state.nh.us or at (603) 271-3306.

Chapter 2:

Drinking Water

2002 Edition

Chapter 2: Drinking Water

Introduction

DES administers the state drinking water program through its Water Supply Engineering Bureau, in concert with the U. S. Environmental Protection Agency ("EPA") and the New Hampshire Department of Health and Human Services. EPA operates in this area under the authority of the federal Safe Drinking Water Act [see 33 U. S. C. Section 300f *et seq*. (1974) at http://www4.law.cornell.edu/uscode/42/300f.html], which was last reauthorized in 1996. The State of New Hampshire has received "primacy" (that is, authority to administer the program in lieu of the EPA) for a number of the provisions of this federal law. DES has developed its regulatory program under the authority of RSA 485 ("New Hampshire Safe Drinking Water Act", http://gencourt.state.nh.us/rsa/html/indexes/485.html) and the rules adopted to implement that statute, NH CODE ADMIN. RULES Env-Ws 300 ("Drinking Water Rules", http://www.des.state.nh.us/wseb/wsebrules.htm). The program addresses such areas as reviewing plans and issuing approvals for public water systems, providing technical assistance (including emergency response expertise), sampling public water systems, conducting field inspections, licensing water system operators, and inspecting and licensing youth recreational camps. To ensure that all laboratories who offer testing compliance services have the capability to do so, DES implements an Environmental Laboratory Accreditation Program ("NH ELAP") (see http://www.des.state.nh.us/nhelap/) to assess and accredit both in-state and out-of-state environmental laboratories who serve clients in New Hampshire. DES has also provided millions of dollars in grants and loans to New Hampshire's communities for their water systems over the past two decades. Please review the brochure entitled ***Grants and Loans from the New Hampshire Department of Environmental Services*** or access the information online at http://www.des.state.nh.us/grants_loans.htm.

Water System Security

In response to recent events, both DES and EPA have focused their efforts on making more information readily available to water system operators in an effort to protect the safety and security of these critical services. DES's information can be found at http://www.des.state.nh.us/wseb/capacity/security.htm; EPA's is located at http://www.epa.gov/safewater/security/index.html#emergency. In addition, DES offers a direct link (see **http://www.des.state.nh.us/emergency_response.htm)** to its emergency response personnel and resources for those who need such services.

Capacity Assurance

RSA 485 and the federal Safe Drinking Water Act require public water systems to ensure that they are providing safe drinking water to consumers. These requirements can result in a sizeable investment in facilities and substantial operational costs. However, systems that do not comply with these requirements face enforcement actions and penalties at both the state and federal levels. To help bridge the gap and provide assistance to water system owners/operators, DES has created the Small Public Water Supply Help Center at http://www.des.state.nh.us/wseb/capacity/ to assist water system commissioners, board members, owners and operators in providing an adequate volume of high-quality drinking water to their consumers. From a regulatory standpoint, well-run water systems are considered to have adequate "capacity". The terms "capacity development" and "capacity assurance" are unique to the drinking water industry and are not related to volume or competence, but to ability and sustainability. Capacity development is a process through which a water system voluntarily plans and implements activities to ensure that a water system can meet both its immediate needs and long-term obligations of providing safe and reliable drinking water to its customers. The term "capacity" includes the following three groups:

- *Technical capacity*, which refers to the physical infrastructure of the water system, including (but not limited to) the adequacy of the source water, infrastructure (source, treatment, storage, and distribution), and the ability of system personnel to implement the requisite technical knowledge.
- *Managerial capacity*, which refers to the management structure of the water system, including (but not limited to) ownership accountability, staffing, organization, and effective linkages to customers and regulatory agencies.
- *Financial capacity*, which refers to the financial resources of the water system, including (but not limited to) revenue sufficiency, credit worthiness, and fiscal controls.

DES's Public Water Supply Capacity Program was established in 1999 with the adoption of NH CODE ADMIN. RULES Env-Ws 363, ("Capacity Assurance for Existing Public Water Systems", http://www.des.state.nh.us/wseb/wsebrules.htm) and Env-Ws 371 ("Capacity Assurance for Proposed Public Water Systems", http://www.des.state.nh.us/wseb/wsebrules.htm). New Hampshire's capacity assurance program focuses on services to existing systems and design review approval for new systems. For existing systems, DES staff provides services to water systems that are at risk of significant non-compliance with RSA 485, Env-Ws 300, and the federal Safe Drinking Water Act. This program is characterized by no-cost assistance to public water systems in the form of education and outreach. Technical advice is typically provided by DES staff, while managerial and financial advice is provided by third party, independent specialists (see http://www.des.state.nh.us/factsheets/ws/ws-25-1.htm). For new systems, the goal of the program is to ensure, in advance, that proposed public water systems have sufficient technical, managerial, and financial capacity to fully meet their obligations RSA 485, Env-Ws 300, and the federal Safe Drinking Water Act. The principal tool used by proposed water systems to attain these goals is the preparation of a business plan that includes a realistic appraisal of anticipated capital and operational costs (see http://www.des.state.nh.us/factsheets/ws/ws-25-2.htm). DES has also created the *Public Water System Check-up and Self-Assessment Form* (see http://www.des.state.nh.us/wseb/capacity/pdf/SelfAssessment.pdf) as a guide to present a structured series of yes/no questions that pertain to the technical, managerial, and financial aspects of a water system. These questions are intended to help owners/operators identify and prepare for operating costs and major capital improvement costs brought about by future demand for drinking water and by the adoption of new regulations. This assessment also represents an excellent tool to prepare both a business plan and a long-range plan. For information on the various aspects of the capacity assurance program, access its fact sheets at http://www.des.state.nh.us/wseb/capacity/factsheets.htm or call DES at (603) 271-2949 or (603) 271-2952.

Municipal and Small System Technical Assistance

A "public water system" is defined by RSA 485:1-a, I ("New Hampshire Safe Drinking Water Act/Definitions", http://gencourt.state.nh.us/rsa/html/L/485/485-1-a.htm) as one *that provides piped water for human consumption, that has at least 15 service connections, or which regularly serves an average of at least 25 individuals daily for at least 60 days per year*. All new public water systems, or modifications to existing public water systems, must meet federal and state standards for water quality, design, construction, materials, and workmanship. Examples of projects that need to be submitted, reviewed, and approved by DES include the construction of new water systems or new treatment facilities, extension and replacement of waterlines, addition of new wells or intakes, modification to treatment facilities, and installation of water storage tanks (see http://www.des.state.nh.us/ws.htm). All municipal water systems, including those public water systems with a design flow of greater than 20,000 gallons per day subject to major Water User Registration and Reporting requirements (see http://www.des.state.nh.us/factsheets/geo/geo-4.htm), must be designed by a professional engineer licensed to practice in the state of New Hampshire (see http://www.state.nh.us/jtboard/pe.htm). Smaller public water systems for schools, workplaces, restaurants, and campgrounds (*i.e.,* those with design flows of less than 20,000 gallons per day or with 50 or fewer service connections) may be designed by a person with the demonstrated skills to do such work. Public water systems can be divided into three categories: community residential systems, non-community/non-transient systems, and non-

community/transient systems. Examples of community residential systems include those that serve municipalities, apartment or condominium developments, mobile home parks, and single-family home subdivisions. Non-community/non-transient systems serve schools, daycare centers, year-round office buildings, and businesses with permanent employees. Non-community/transient systems serve restaurants, motels, hotels, ski areas, beaches, and campgrounds.

Source Water Protection Program

One of the key programs with the DES Water Supply Engineering Bureau is the Source Water Protection Program (see http://www.des.state.nh.us/dwspp/). That program is authorized by RSA 485-C ("Groundwater Protection Act", http://gencourt.state.nh.us/rsa/html/indexes/485-C.html). In 1992, DES initiated an 18-month process for canvassing and conducting in-depth interviews with stakeholders from all levels of government, advocacy groups, and the general public to provide the basis for devising a long-term work plan for source water protection. From the information gathered, DES produced its first source water protection five-year work plan in 1994, entitled ***Comprehensive State Source Water and Groundwater Protection Program*** (see http://www.des.state.nh.us/dwspp/strategy.htm). The program included tasks related to preventative action, corrective action, groundwater discharges, groundwater data, and outreach. The program has been renamed as the ***New Hampshire Groundwater and Drinking Water Protection Strategy*** and, starting in 1999, the next five-year plan was begun (see http://www.des.state.nh.us/factsheets/ws/ws-12-9.htm). DES established the Drinking Water Source Assessment Program in 1998 and drafted a plan to provide information about the vulnerability of each of the 2,950 public water supply sources in the state. This plan, required by the federal Safe Drinking Water Act in 1996 (see http://www.epa.gov/OGWDW/sdwa/sdwa.html), was accepted and approved by the EPA in May 1999 (see http://www.des.state.nh.us/factsheets/ws/ws-12-7.htm). An outgrowth of the assessment process identified lands that surrounded critical surface water and groundwater reserves that were at risk of contamination by development, which would make them unusable as public drinking water supplies. Fortunately, the Water Supply Land Conservation Grant Program (see http://www.des.state.nh.us/dwspp/ws_landgrant.htm) was created to provide grant monies to communities for purchase of such lands to protect the water source from contamination. DES also reviews, evaluates, and issues decisions relative to the siting of large and small community production well sites (see http://www.des.state.nh.us/dwspp/newcomm.htm), after which they must be registered with the Water Well Board.

Water Treatment Plant Operator Certification and Training

Pursuant to RSA 332-E ("Water Treatment Plant Operators and Water Distribution System Personnel", http://gencourt.state.nh.us/rsa/html/indexes/332-E.html), the DES Water Supply Engineering Bureau certifies water treatment plant operators and water distribution system personnel and hosts training and outreach courses each year. The federal Safe Drinking Water Act, as amended in the 1996, required that states have an operator certification program in place to qualify for full funding of the capitalization grants for the Drinking Water Revolving Loan Fund, used to finance the cost of drinking water infrastructure needs (see http://www.des.state.nh.us/factsheets/ws/ws-17-2.htm), including funding for eligible "disadvantaged" community systems (http://www.des.state.nh.us/factsheets/ws/ws-17-3.htm). More than 1,160 water works operators are certified by DES each year through this training program.

Bottled Water Regulation

To protect water consumers and the environment, DES, in partnership with the New Hampshire Department of Health and Human Services ("DHHS"), regulates bottled water sources, as well as the handling and labeling of bottled water (see http://www.dhhs.state.nh.us/DHHS/BOTTLEDBEVERAGE/default.htm). DES regulates sources of bottled water through NH CODE ADMIN. RULES Env-Ws 389 ("Groundwater Sources of Bottled Water Rules", http://www.des.state.nh.us/rules/envws389.pdf) and DHHS regulates the handling and labeling of bottled water through RSA 143:11 ("Sanitary Production and Distribution of Food/Licenses; Fees", http://gencourt.state.nh.us/rsa/html/X/143/143-11.htm) and NH CODE ADMIN. RULES He-P 2100 ("Food and

Beverage Sanitation Rules", http://www.gencourt.state.nh.us/rules/he-p.html). Once both the source approval and bottled water license have been obtained, bottled water can be sold to the public from the facility.

Youth Camp Licensing

DES also is responsible for licensing youth camps in New Hampshire. A "youth camp" is defined by NH CODE ADMIN. RULES Env-Ws 1120 ("Rules Pertaining to the Operation of Youth Recreation Camps", http://www.des.state.nh.us/rules/envws1120.pdf) as *an entity that represents itself as a camp, is in operation for at least ten days per license year for recreational purposes (or for a combination of recreation and instruction), is for-profit or under philanthropic or charitable auspices, and serves ten or more campers per day.* Both day camps and residence camps are included (see http://www.des.state.nh.us/factsheets/ws/ws-20-1.htm). DES evaluates such areas as drinking water source and quality, toilet facilities, garbage and waste disposal areas, food preparation areas, and communicable disease isolation and reporting. Each year, more than 170 licenses are issued to youth camp operators around the state.

Water Well Board

An integral part of the drinking water program lies with the siting, construction, and operation of wells. The New Hampshire Water Well Board is authorized by RSA 482-B ("New Hampshire Water Well Board, http://gencourt.state.nh.us/rsa/html/indexes/482-B.html; see also http://www.des.state.nh.us/factsheets/ws/ws-23-1.htm) to set standards for well development and abandonment and regulates Water Well Contractors and Pump Installers to ensure the production high-quality and reliable water supplies for public or private use.

Summary

In summary, the DES Water Supply Engineering Bureau is charged with the primary administration of the drinking water program in New Hampshire. Appeals of final decisions relating to public water supply approvals, community well siting, laboratory accreditation, bottled water source approvals, or youth camp licenses (or orders issued for violations relating to these activities) should be directed to the Water Council (see http://www.des.state.nh.us/councils/#1). Appeals of final decisions relating to Water Well Contractor or Pump Installer Licenses (or orders issued for violations of well installation or decommissioning requirements) should be directed to the Water Well Board (see http://gencourt.state.nh.us/rsa/html/indexes/482-B.html).

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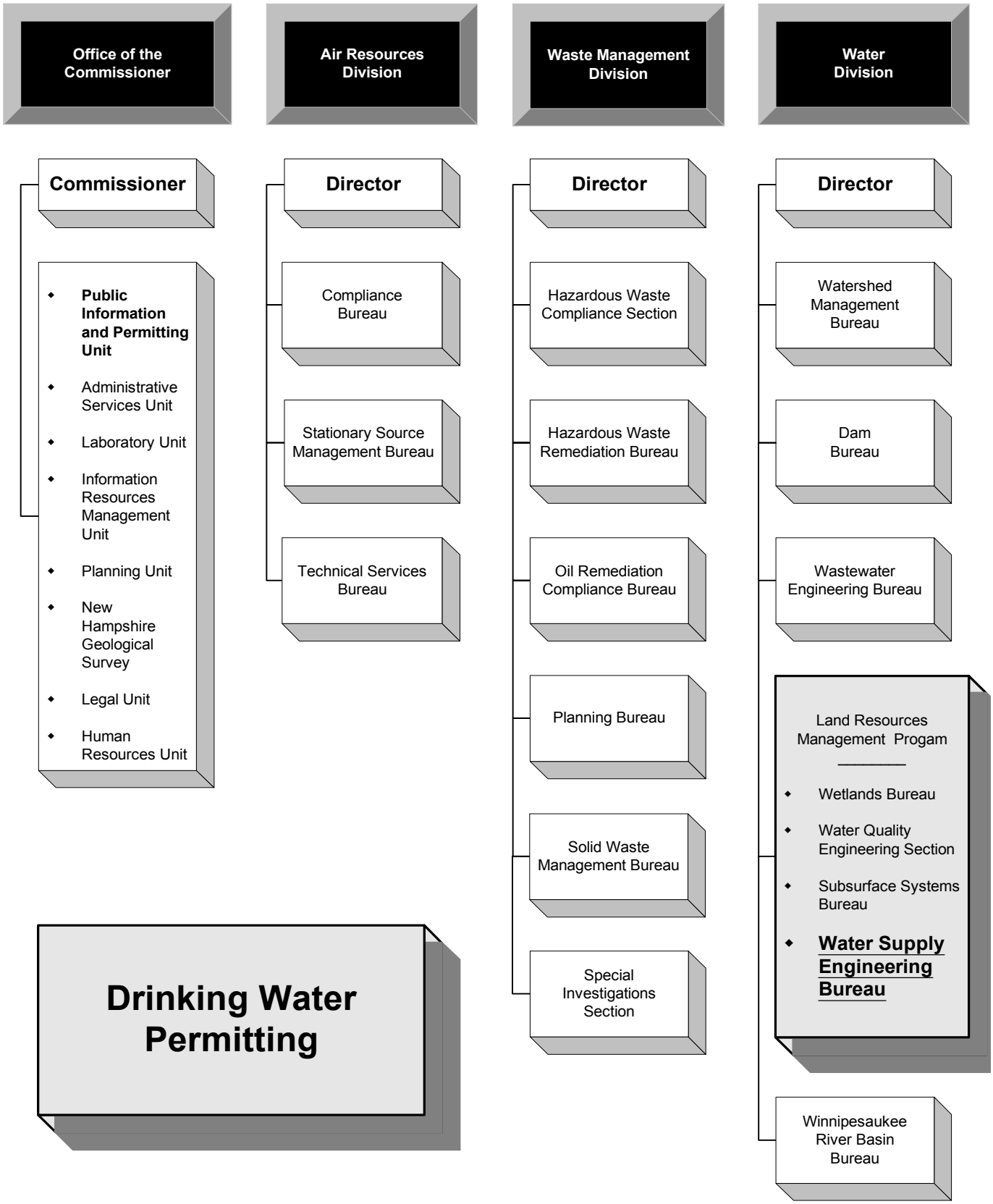
- ✓ **Community Small Well Site Approval**
- ✓ **Public Water System Design/Letter of Approval**
- ✓ **Public Water System Permit-to-Operate**
- ✓ **Drinking Water System Operator Certificate**
- ✓ **Environmental Laboratory Accreditation**
- ✓ **Water Well Contractor License**
- ✓ **Pump Installer License**
- ✓ **Bottled Water Source Approval**
- ✓ **Youth Recreation Camp License**

Organizational Chart

New Hampshire Department of Environmental Services



Community Large Well Site Approval

Introduction: Approval is required before a new or reactivated well may be used by a community water system. A "community water system" is defined by RSA 485:1-a, I ("New Hampshire Safe Drinking Water Act/Definitions", http://gencourt.state.nh.us/rsa/html/L/485/485-1-a.htm), as *a public water system that serves at least 15 service connections used by year-round residents or regularly serves at least 25 year-round residents*. A large community water system is one that serves more than 1,000 people. A large bedrock production well is defined as one *that produces a permitted production volume equal to or greater than 57,600 gallons over 24 hours and which is exposed to or draws water from any type of consolidated material* (see http://www.des.state.nh.us/rules/envws379.pdf). The permitted withdrawal represents the maximum volume of water that may be withdrawn from the well, and must be registered with the DES Water User Registration and Reporting Program (see http://www.des.state.nh.us/factsheets/geo/geo-4.htm). The total volume of water a system requires depends on a number of factors, including the size of the population served and the types of uses (*e.g.*, fire protection, industrial uses, *etc.*). The standards for large water systems are specified in NH CODE ADMIN. RULES Env-Ws 370 (see page 19 of "General Design Standards", http://www.des.state.nh.us/rules/envws365-370.pdf). Applicants for a new Community Large Well Site Approval must submit a preliminary report detailing the site and describing the testing that will be done to define its water quality and available quantity. Site requirements include provisions for setbacks from surface water bodies, exclusion of activities and legal control of the land in the immediate area, and identification of potential contamination sources in an estimated wellhead protection area. Following DES's approval of the preliminary report and construction of the well, the applicant must conduct testing, analyze results, develop a wellhead protection program, and prepare a final report which details compliance with all well siting criteria. DES will provide written approval once the final report is complete, the information presented in it is correct, and all well siting requirements have been met. Public Water System Design Review Approval must also be obtained from DES before a new well can be connected to the community water system. If the new well is located near a river designated for protection under the New Hampshire Rivers Management and Protection Program, provisions of that program must be met as well (see http://www.des.state.nh.us/rivers/ and http://www.des.state.nh.us/factsheets/ws/ws-22-11.htm). A permit for a large groundwater withdrawal must also be obtained from the DES Drinking Water Source Protection Program (see http://www.des.state.nh.us/dwspp/lgwith.htm). (For more information on Large Groundwater Withdrawal Permits, please refer to the "Groundwater" chapter of this *Guidebook*.)

Average number of approvals issued annually: 10

Fees: None

Estimated processing time after report is deemed "complete": Up to 60 days

Approval duration: No limit on new community well siting approvals. System design approval is for four years.

Approval transferability: Legal control of the well site must be transferred with water system ownership for well site approval to remain valid. Ownership transfer must be registered with the DES Water Division.

Approval modification: Modifications may be approved after the owner/operator has demonstrated that the modified source complies with current DES administrative rules.

Approval renewal: Renewals may be granted after the owner/operator has demonstrated that the source complies with current DES administrative rules.

State statute: RSA 485:8 and 48 ("New Hampshire Safe Drinking Water Act", http://gencourt.state.nh.us/rsa/html/indexes/485.html)

N. H. Code of Administrative Rules: Env-Ws 379 ("Site Selection of Large Production Wells for Community Water Systems", http://www.des.state.nh.us/rules/envws379.pdf)

Appeals body: Water Council at RSA 21-O:7 ("Department of Environmental Services/Water Council", http://gencourt.state.nh.us/rsa/html/I/21-O/21-O-7.htm; see also http://www.des.state.nh.us/rules/env-wc200.pdf and http://www.des.state.nh.us/councils/#1)

Additional information: N. H. DES, Tim Nowack, Program Manager, (603) 271-8866
N. H. DES, Water Supply Engineering Bureau, (603) 271-2513

Community Large Well Site Approval – *Work Sheet*

Key Qualifier Question: *Do you plan to develop a new, or reactivate an existing production well that will produce equal to or greater than 57,600 gallons in any 24-hour period and will comprise part of a drinking water system that serves at least 15 residential service connections or 25 year-round residents on a daily basis?*

What must you do to apply?

- Obtain a copy NH CODE ADMIN. RULES Env-Ws 379, "Site Selection of Large Production Wells for Community Water Systems", from the DES Public Information Center or online at http://www.des.state.nh.us/rules/envws379.pdf.
- Demonstrate that the well location complies with surface water related setbacks in accordance with Env-Ws 379.05.
- Demonstrate that the land use within the sanitary protective area will be under the direct control of the water system and will be maintained in a natural state in accordance with Env-Ws 379.06.
- Develop a conceptual hydrogeologic model of the aquifer, wellhead protection area, and potential impacts in accordance with Env-Ws 379.07.
- Prepare a preliminary estimate of the wellhead protection area and propose a method for refining the estimate by Env-Ws 379.08 (see http://www.des.state.nh.us/factsheets/ws/ws-12-2.htm).
- Prepare a preliminary contamination source and water use inventory in accordance with Env-Ws 379.09 (see http://www.des.state.nh.us/factsheets/ws/ws-12-3.htm).
- Identify and evaluate any known contamination sources in accordance with Env-Ws 379.10.
- Prepare a proposal for a pumping test (Env-Ws 379.11) and water quality sampling (Env-Ws 379.12).
- Submit a preliminary report (before significant resources are expended) to provide an early assessment of site suitability for a community well in accordance with Env-Ws 379.13 and to ensure that plans are consistent with other DES rules.
- Receive DES approval or denial of the preliminary report in accordance with Env-Ws 379.14.
- Upon DES approval of the preliminary report, perform pumping test and water quality sampling program in accordance with Env-Ws 379.15.
- Demonstrate that under existing land use and aquifer conditions, acceptable water quality can be continuously delivered to the community water system.
- Establish the permitted production volume in accordance with Env-Ws 379.16 and refine the wellhead protection area delineation in accordance with Env-Ws 379.17.
- Update and revise the contamination source and water use inventory in accordance with Env-Ws 379.18 (see http://www.des.state.nh.us/factsheets/ws/ws-12-6.htm).
- Establish a contamination source control program in accordance with Env-Ws 379.19 for sources identified under Env-Ws 379.10.
- Establish a wellhead protection program in accordance with Env-Ws 379.20 (see http://www.des.state.nh.us/factsheets/ws/ws-12-5.htm).
- Provide documentation that the well complies with the well construction criteria in Env-Ws 379.21.
- Submit final report to DES in accordance with the requirements set forth in Env-Ws 379.22.
- Submit all information and data to: Tim Nowack, Water Supply Engineering Bureau, Water Division, New Hampshire Department of Environmental Services, 6 Hazen Drive, P. O. Box 95, Concord, NH 03302-0095. Telephone: (603) 271-8866; fax: (603) 271-0656; or online: http://www.des.state.nh.us/dwspp/newcomm.htm

What types of projects require this approval?

- The siting of a new or replacement bedrock production well to serve a large community water system
- The reactivation of an existing community bedrock well to supplement existing capacity

If there are questions regarding this page or any other section of the Guidebook, please contact Tim Drew, Administrator, Public Information and Permitting Unit, at tdrew@des.state.nh.us or at (603) 271-3306.

Community Small Well Site Approval

Introduction: Approval is required before a new or reactivated well may be used by a community water system. A "community water system" is defined by RSA 485:1-a, I ("New Hampshire Safe Drinking Water Act/Definitions", http://gencourt.state.nh.us/rsa/html/L/485/485-1-a.htm), as *a public water system that serves at least 15 service connections used by year-round residents or regularly serves at least 25 year-round residents*. A small community water system is one that serves 25 to 1,000 people. A small bedrock production well is defined as one *that produces a permitted production volume of less than 57,600 gallons over 24 hours and is installed in either bedrock or overburden* (see "Site Selection of Small Production Wells for Community Water Systems", http://www.des.state.nh.us/rules/378adpt.pdf). The permitted withdrawal represents the maximum volume of water that may be withdrawn from the well, and must be registered with the DES Water User Registration and Reporting Program if the system uses more than an average of 20,000 gallons in any 24-hour period (see http://www.des.state.nh.us/factsheets/geo/geo-4.htm). The total volume of water a system requires depends on a number of factors, including the size of the population served and the types of uses (*e.g.*, fire protection, industrial uses, *etc.*). The standards for small water systems are specified in NH CODE ADMIN. RULES Env-Ws 372 ("Design Standards for Small Public Water Systems", http://www.des.state.nh.us/rules/env-ws372.pdf). Applicants for a new Community Small Well Site Approval must submit a preliminary report detailing the site and describing the testing that will be done to define its water quality and available quantity (see http://www.des.state.nh.us/dwspp/prelim.pdf). Site requirements include provisions for setbacks from surface water bodies, exclusion of activities and legal control of the land in the immediate area, and identification of potential contamination sources in an estimated wellhead protection area. Following DES's approval of the preliminary report and construction of the well, the applicant must conduct testing, analyze results, develop a wellhead protection program, and prepare a final report (see http://www.des.state.nh.us/dwspp/fnlchk.pdf), which details compliance with all well siting criteria. DES will provide written approval once the final report is complete, the information presented in it is correct, and all well siting requirements have been met. Public Water System Design Review Approval must also be obtained from DES before a new well can be connected to the community water system. If the new well is located near a river designated for protection under the New Hampshire Rivers Management and Protection Program, provisions of that program must also be met (see http://www.des.state.nh.us/rivers/ and http://www.des.state.nh.us/factsheets/ws/ws-22-11.htm).

Average number of approvals issued annually: 15

Fees: None

Estimated processing time after report is deemed "complete": Up to 30 days

Approval duration: No limit on new community well siting approvals. System design approval is for four years.

Approval transferability: Legal control of the well site must be transferred with water system ownership for well site approval to remain valid. Ownership transfer must be registered with the DES Water Division.

Approval modification: Modifications may be approved after the owner/operator has demonstrated that the modified source complies with current DES administrative rules.

Approval renewal: Renewals for system design may be granted after the owner/operator has demonstrated that the source complies with current DES administrative rules.

State statute: RSA 485:8 and 48 ("New Hampshire Safe Drinking Water Act", http://gencourt.state.nh.us/rsa/html/indexes/485.html)

N. H. Code of Administrative Rules: Env-Ws 378 ("Site Selection of Small Production Wells for Community Water Systems", http://www.des.state.nh.us/rules/378adpt.pdf)

Appeals body: Water Council at RSA 21-O:7 ("Department of Environmental Services/Water Council", http://gencourt.state.nh.us/rsa/html/I/21-O/21-O-7.htm; see also http://www.des.state.nh.us/rules/env-wc200.pdf and http://www.des.state.nh.us/councils/#1)

Additional information: N. H. DES, Community Well Siting Program Manager, (603) 271-3303
N. H. DES, Water Supply Engineering Bureau, (603) 271-2513

Community Small Well Site Approval – *Work Sheet*

Key Qualifier Question: *Do you plan to develop a new, or reactivate an existing community production well that will produce less than 57,600 gallons in any 24-hour period and will comprise part of a drinking water system that serves at least 15 residential service connections or 25 year-round residents on a daily basis?*

What must you do to apply?

- Obtain a copy of the NH CODE ADMIN. RULES Env-Ws 378, "Site Selection of Small Production Wells for Community Water Systems", from the DES Public Information Center or online at http://www.des.state.nh.us/rules/378adpt.pdf.
- Demonstrate that the well location complies with surface water related setbacks in accordance with Env-Ws 378.05.
- Demonstrate that the land use within the sanitary protective area will be under the direct control of the water system and will be maintained in a natural state in accordance with Env-Ws 378.06.
- Prepare a preliminary estimate of the wellhead protection area and propose a method for refining the estimate by Env-Ws 378.07 (see http://www.des.state.nh.us/factsheets/ws/ws-12-2.htm).
- Obtain a preliminary contamination source and water use inventory from DES in accordance with Env-Ws 378.08 (see http://www.des.state.nh.us/factsheets/ws/ws-12-3.htm).
- Identify and evaluate any known contamination sources in accordance with Env-Ws 378.09.
- Prepare a proposal for a pumping test and water quality sampling in accordance with Env-Ws 378.10.
- Submit a preliminary report (before significant resources are expended) to provide an early assessment of site suitability for a community well in accordance with Env-Ws 378.11 and to ensure that plans are consistent with other DES rules (see http://www.des.state.nh.us/dwspp/prelim.pdf).
- Receive DES approval or denial of the preliminary report in accordance with Env-Ws 378.12.
- Upon DES approval of the preliminary report, perform pumping test and water quality sampling program in accordance with Env-Ws 378.13.
- Demonstrate that under existing land use and aquifer conditions, acceptable water quality can be continuously delivered to the community water system.
- Establish the permitted production volume in accordance with Env-Ws 378.14.
- Refine the wellhead protection area delineation in accordance with Env-Ws 378.15.
- Update and revise the contamination source and water use inventory in accordance with Env-Ws 378.16 (see http://www.des.state.nh.us/factsheets/ws/ws-12-6.htm).
- Establish a contamination source control program in accordance with Env-Ws 378.17 for sources identified under Env-Ws 378.09.
- Establish a wellhead protection program in accordance with Env-Ws 378.18 (see http://www.des.state.nh.us/factsheets/ws/ws-12-5.htm).
- Provide documentation that the well complies with the well construction criteria in Env-Ws 378.19.
- Submit final report to DES in accordance with Env-Ws 378.20 (see http://www.des.state.nh.us/dwspp/fnlchk.pdf).
- Submit all information and data to: Diana Morgan, Water Supply Engineering Bureau, Water Division, New Hampshire Department of Environmental Services, 6 Hazen Drive, P. O. Box 95, Concord, NH 03302-0095. Telephone: (603) 271-2947; fax: (603) 271-0656; or online: http://www.des.state.nh.us/dwspp/newcomm.htm

What types of projects require this approval?

- The siting of a new overburden or bedrock production well to serve a small community water system
- The reactivation of an existing community overburden or bedrock well to supplement existing capacity

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If there are questions regarding this page or any other section of the Guidebook, please contact Tim Drew, Administrator, Public Information and Permitting Unit, at tdrew@des.state.nh.us or at (603) 271-3306.

Public Water System Design/Letter of Approval

Introduction: The DES Water Supply Engineering Bureau reviews all design plans and specifications for new public water systems, and expansions or modifications to existing public water systems, in compliance with RSA 485:8 ("New Hampshire Safe Drinking Water Act/Approval of Construction Plans", http://gencourt.state.nh.us/rsa/html/L/485/485-8.htm) and the federal Safe Drinking Water Act (see http://www.epa.gov/OGWDW/sdwa/sdwa.html). No construction or modification of a public water supply system may commence until DES has issued a Public Water System Design/Letter of Approval for the proposed project's design plans and specifications (see http://www.des.state.nh.us/factsheets/ws/ws-25-2.htm). Some of the public water supply system components that require WSEB review and approval include drinking water treatment facilities, water supply wells, water storage tanks, pump houses, and pipelines. The WSEB's goal is to insure that a sufficient quantity of safe and reliable drinking water is available for the public (see http://www.des.state.nh.us/factsheets/ws/ws-15-1.htm). A "public water system" is defined by RSA 485:1-a, XV ("New Hampshire Safe Drinking Water Act/Definitions", http://gencourt.state.nh.us/rsa/html/L/485/485-1-a.htm) as *a system for the provision to the public of piped water for human consumption that has at least 15 service connections, or regularly serves an average of at least 25 individuals daily at least 60 days per year*. All new public water systems and expansions, or modifications to existing public water systems, must meet federal, state, and national standards for water quality, design, construction, materials, and workmanship. Examples of projects that need to be submitted, reviewed, and approved by DES include construction of new treatment facilities, extension and replacement of waterlines, addition of new wells or intakes, modification to treatment facilities, installation of water storage tanks, and construction of new water systems (see http://www.des.state.nh.us/ws.htm). A licensed professional engineer must design all public water systems, including those with a design flow that is greater than 20,000 gallons per day or those with 50 or more service connections [see NH CODE ADMIN. RULES Env-Ws 372.05(d)]. These systems must also be registered with the DES Water User Registration and Reporting Program (see http://www.des.state.nh.us/factsheets/geo/geo-4.htm). Smaller public water systems (*i.e.,* less than 20,000 gallons per day or less than 50 service connections) designed for schools, workplaces, restaurants, and campgrounds may be designed by a person with the demonstrated skills to do such work. Finally, each community water system owner must prepare an emergency plan (see http://www.des.state.nh.us/wseb/emergency_planning.htm) to address emergency situations pursuant to NH CODE ADMIN. RULES Env-Ws 360.14 ("Emergency Plans for Community Water Systems", http://www.des.state.nh.us/wseb/adopted_ws360.pdf). DES also provides several sources of information on water system capacity/security (see http://www.des.state.nh.us/wseb/capacity/security.htm), as does the U. S. EPA (see http://www.epa.gov/safewater/security/index.html#emergency). DES has also created a fact sheet entitled *Emergency Planning for Public Water Systems* that may be of additional assistance (see http://www.des.state.nh.us/factsheets/ws/ws-6-5.htm).

Average number of approvals issued annually: 125-150

Fees: A design review fee applies only to projects that create a new public water system or to projects for the conversion of a non-community system to a community system. Projects that expand or modify existing public water systems do not require a design review fee. The fee is $45 per residential unit or residential equivalent unit. A residential equivalent unit is equal to 300 gallons per day.

Estimated processing time after application is deemed "complete": 30 days

Letter of Approval duration: 4 years

Letter of Approval transferability: The owner/operator is required to submit a written notification to the DES requesting a change in ownership.

Letter of Approval modification: The owner/operator is required to submit a revised set of plans and specifications to the DES for review and approval.

Letter of Approval renewal: The owner/operator is required to re-submit a new or revised set of plans and specifications to the DES for review and approval. Projects for new public water systems are also required to submit a new design review fee.

State statute: RSA 485:8 ("New Hampshire Safe Drinking Water Act/Approval of Construction Plans", http://gencourt.state.nh.us/rsa/html/L/485/485-8.htm)

N. H. Code of Administrative Rules: Env-Ws 300 ("New Hampshire Drinking Water Rules", http://www.des.state.nh.us/desadmin.htm#water)

Appeals body: Water Council at RSA 21-O:7 ("Department of Environmental Services/Water Council", http://gencourt.state.nh.us/rsa/html/I/21-O/21-O-7.htm; see also http://www.des.state.nh.us/rules/env-wc200.pdf and http://www.des.state.nh.us/councils/#1)

Additional information: N. H. DES, Water Supply Engineering Bureau, (603) 271-2513
N. H. DES, Public Information Center, (603) 271-2975 or (603) 271-8876
U. S. EPA, Region I, Boston, MA, (617) 918-1111

Public Water System Design/Letter of Approval – *Work Sheet*

Key Qualifier Question: *Will the proposed project involve the creation of a new, or the expansion/modification of an existing system for the provision of piped water for human consumption having at least 15 service connections or regularly serving an average of at least 25 individuals daily for at least 60 days per year?*

What must you do to apply?

- Plans and specifications, and (where required by NH CODE ADMIN. RULES Env-Ws 300-389, "Drinking Water Rules", http://www.des.state.nh.us/wseb/wsebrules.htm) design calculations and water quality results, must be submitted to the DES for review and approval.
- A cover letter describing the proposed project and explaining the request being made must accompany the submittal.
- If the proposed project is for a new public water system, a request for a concept approval in accordance with Env-Ws 372.03 must be submitted to DES before commencing any design work (see http://www.des.state.nh.us/rules/env-ws372.pdf).
- If the proposed project is for a new community or non-transient/non-community public water system, a business plan in accordance with Env-Ws 371 *Capacity Assurance for New Water Systems*, must be submitted to the DES (see http://www.des.state.nh.us/rules/envws360-377.pdf).
- If the proposed project involves a new well at a community public water system, the submittal must be in compliance with Env-Ws 378 ("Site Selection of Small Production Wells for Community Water Systems", http://www.des.state.nh.us/rules/378adpt.pdf) or Env-Ws 379 ("Site Selection of Large Production Wells for Community Water Systems", http://www.des.state.nh.us/rules/envws379.pdf).
- The owner of each community water system must also prepare an emergency plan to address emergencies; either natural or man-made (see NH CODE ADMIN. RULES Env-Ws 360.14, "Emergency Plans for Community Water Systems", http://www.des.state.nh.us/wseb/adopted_ws360.pdf).
- A design review fee is required for projects proposing to create new public water systems. Projects to expand or modify existing public water systems do not require a design review fee.
- Submit a check or money order for the appropriate amount made payable to "Treasurer, State of New Hampshire", and submit all application materials, design plans, data, and specifications to: Water Supply Engineering Bureau, Water Division, New Hampshire Department of Environmental Services, 6 Hazen Drive, P. O. Box 95, Concord, NH 03302-0095. Telephone: (603) 271-2513; fax: (603) 271-5171; or online: http://www.des.state.nh.us/wseb/

What types of water system projects require design review and approval?

- Projects that involve the design, construction, and operation of a new public water system
- Projects that involve the expansion or modification of an existing public water system
- Projects that involve the installation or modification of treatment facilities at a public water system
- Projects that involve the installation of water storage tanks, booster stations, or other related appurtenances at a public water system
- Projects that involve the replacement of water lines at a public water system
- Projects that involve the development of new water supply sources at a public water system

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If there are questions regarding this page or any other section of the Guidebook, please contact Tim Drew, Administrator, Public Information and Permitting Unit, at tdrew@des.state.nh.us or at (603) 271-3306.

Public Water System Permit-to-Operate

Introduction: Based on authority granted by RSA 485 ("New Hampshire Safe Drinking Water Act", http://gencourt.state.nh.us/rsa/html/indexes/485.html) and the U. S. Environmental Protection Agency under the federal Safe Drinking Water Act (see http://www.epa.gov/OGWDW/sdwa/sdwa.html), DES administers the State's public drinking water program to protect the health and safety of New Hampshire consumers. The DES Water Supply Engineering Bureau reviews and evaluates new construction, well sitings, and the operation of public water systems, including storage, distribution, and treatment as primary program functions (see http://www.des.state.nh.us/factsheets/ws/ws-15-1.htm). Routine water sampling, analysis, and the upgrading of water delivery system infrastructure by incorporating new technologies (*e.g.*, more effective filtration and disinfection) play key roles in the management of New Hampshire's vital public water systems. The intent of the Public Water System Permit-to-Operate is to more closely regulate these facilities, to generate revenue for the purpose of supporting the DES drinking water program in its efforts to more efficiently implement new and existing federal and state requirements, and to assure a safe, reliable, and adequate supply of drinking water to all New Hampshire citizens and visitors. (See http://www.des.state.nh.us/factsheets/ws/ws-25-1.htm and http://www.des.state.nh.us/factsheets/ws/ws-25-2.htm.)

Community	**Non-transient/Non-community**	**Transient/Non-community**
A "community water system" distributes water to a stable residential population and is designed to serve, or be capable of serving, at least 25 people or 15 service connections on a year-round basis.	A "non-transient, non-community water system" serves, or is designed to serve, at least 25 people for six months of the year. These systems are not considered a population's primary water source.	A "transient, non-community water system" serves, or is designed to serve, at least 25 people for at least 60 days per year. The public uses these systems on a seasonal or infrequent basis.
Examples include systems that serve a town or city, mobile home park, condominium complex, or apartments.	Examples include systems that serve day cares, schools, hospitals, and work places.	Examples include systems that serve restaurants, campgrounds, motels, hotels, and service stations.
Permit-to-Operate Fee = $10 per residential-equivalent unit, with a maximum fee of $300.	**Permit-to-Operate Fee** = $150/year	**Permit-to-Operate Fee** = None
***Note**: Facilities owned by New Hampshire political subdivisions are exempt from these fees, pursuant to Article 28-a of the New Hampshire Constitution.		

Average number of permits issued annually: 780

Fees*: Public water systems are defined in three categories, dependent upon the frequency with which the public uses them. All "community" and "non-transient/non-community" systems must obtain a Permit-to-Operate, but only privately-owned systems are required to pay a fee.

Estimated processing time after application is deemed "complete": 2-3 weeks

Permit-to-Operate duration: One year

Permit-to-Operate transferability: If a public water system is sold, the Permit to Operate is transferred with the system. The new owner must provide DES with a written notice of all changes and system modifications.

Permit-to-Operate modification: Not applicable

Permit-to-Operate renewal: This permit is valid for the duration of the State fiscal year (July 1 to the following June 30). Applications are sent out in April and are due by June 1; new permits-to-operate are issued before July 1.

State statute: RSA 485:3-a ("New Hampshire Safe Drinking Water Act/Permit Authority", http://gencourt.state.nh.us/rsa/html/L/485/485-3-a.htm)

N. H. Code of Administrative Rules: Env-Ws 303.03 ("Permit to Operate", http://www.des.state.nh.us/rules/envws300-309.pdf)

Appeals body: Water Council at RSA 21-O:7 ("Department of Environmental Services/Water Council", http://gencourt.state.nh.us/rsa/html/I/21-O/21-O-7.htm; see also http://www.des.state.nh.us/rules/env-wc200.pdf and http://www.des.state.nh.us/councils/#1)

Additional information: N. H. DES, Water Supply Engineering Bureau, (603) 271-3544
N. H. DES, Public Information Center, (603) 271-2975 or (603) 271-8876
U. S. EPA, http://www.epa.gov/OGWDW/

Public Water System Permit-to-Operate – *Work Sheet*

Key Qualifier Question: *Do you own a public water system classified as either "community" or "non-transient/non-community"?*

Note*:* See http://www.des.state.nh.us/factsheets/ws/ws-15-1.htm and NH CODE ADMIN. RULE Env-Ws 372.01(d) ("Design Standards for Small Public Water Systems", http://www.des.state.nh.us/rules/env-ws372.pdf), as well as related information listed on the U. S. EPA Web page at http://www.epa.gov/safewater/pws/pwss.html).

What must you do to apply?

- Obtain a copy of NH CODE ADMIN. RULE Env-Ws 303.03 from the DES Water Supply Engineering Bureau, DES Public Information Center, or online at http://www.des.state.nh.us/rules/envws300-309.pdf.
- Applications for existing Public Water System Permits-to-Operate are mailed to the owner in April of each year and are due back to DES by June 1. The new permits are then mailed to the owner before July 1 for the next State fiscal year (*i.e.*, July 1 through June 30 of the following year).
- If you own a qualifying public water system and have not received an application for the upcoming State fiscal year by the end of April, contact the DES Water Supply Engineering Bureau at (603) 271-3544. If the system is not already known to DES, a site inspection will be scheduled to evaluate the system and, if it is deemed to be "public", it will be enrolled into the New Hampshire Drinking Water Inventory and a Permit-to-Operate application will be sent to the owner.
- For a non-transient, non-community water system, provide the name of the system, the name address, and telephone number of the owner and an estimate of the number of persons served by the system on a repeat basis for at least six months per year. The fee for these systems is $150.
- For a community water system, provide the name of the system; the name, address, and telephone number of the owner; the number of persons served by the water system; and the number of household service connections or residential-equivalent units that the system has. A "residential-equivalent unit" is defined as one which has *an average daily demand of 300 gallons per day* [see Env-Ws 372.06(b)(2), "Drinking Water Rules", http://www.des.state.nh.us/wseb/wsebrules.htm].
- To calculate the number of persons served by a community water system, DES will assume 2.5 persons per household service connection or residential equivalent unit.
- Based on this assumption, the fee for a community water system shall be as follows:
    - For community water systems having 30 or more household service connections or household equivalents, the fee is $300.
    - For community water systems with less than 30 household services connections or household equivalents, the fee is $10 per household service connection or household equivalent.
- If the permit fee has not yet been paid for the current fiscal year and the water system changes ownership, the new owner must pay the entire permit fee for that year at the time of transfer. The owner is free to seek reimbursement from the prior owner.
- Fees for permits granted to new systems placed in operation in mid-year will be calculated and paid on a prorated basis for that permit period.
- For purposes of calculating the fee, two or more systems on the same property owned by the same party will be treated as a single water system.
- Fees for the Public Water System Permit-to-Operate must be paid by check separately from other fees that may be due to DES.
- Submit a check or money order for the appropriate fee made payable to "Treasurer, State of New Hampshire" and submit all supporting materials or changes to: Water Supply Engineering Bureau, Water Division, New Hampshire Department of Environmental Services, 6 Hazen Drive, P. O. Box 95, Concord, NH 03302-0095. Telephone: (603) 271-3544; fax: (603) 271-5171; or online: http://www.des.state.nh.us/wseb/

What types of projects require this Permit-to-Operate?

- The operation of a community water system that serves a New Hampshire town or city
- The operation of a community water system that serves a condominium complex
- The operation of a non-transient/non-community water system that serves a day care center

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If there are questions regarding this page or any other section of the Guidebook, please contact Tim Drew, Administrator, Public Information and Permitting Unit, at tdrew@des.state.nh.us or at (603) 271-3306.

Drinking Water System Operator Certificate

Introduction: In 1974, the U. S. Congress passed the federal Safe Drinking Water Act ("SDWA") (see http://www.epa.gov/OGWDW/sdwa/sdwa.html). The goal of the SDWA was to improve the safety of public drinking water in the United States. The SDWA recognizes that operator competence is as important to providing safe, reliable drinking water to consumers as sampling, monitoring, equipment maintenance, and facility operations. In 1979, the New Hampshire Legislature enacted RSA 332-E ("Water Treatment Plant Operators and Water Distribution System Personnel", http://gencourt.state.nh.us/rsa/html/indexes/332-E.html), which initiated the drinking water certification program in this state. The legislation established a five-member advisory committee to oversee the program and authorized DES to develop qualifications, conditions, and procedures for operator certification. The SDWA was amended in 1996 (see http://www4.law.cornell.edu/uscode/42/300f.html) with the added requirement that states must have an operator certification program in place to qualify for full funding of the capitalization grants for the drinking water revolving loan fund program. A certified operator is required for community (residential) public water systems and non-transient, non-community public water systems (*e.g.*, schools, day care centers, and workplaces). Transient, non-community public water systems (*e.g.*, restaurants, motels, and campgrounds) are not required to have a certified operator (see http://www.des.state.nh.us/factsheets/ws/ws-10-1.htm). There are two categories, treatment and distribution, for certification of drinking water system operators and each category consists of five levels of increasing complexity. Grade 1A represents the least complex and Grade IV is the most complex certification. The Grade 1A certification is issued typically for operators of very small and simple water systems serving residential developments, schools, or workplace systems and covers both treatment and distribution. Grades I through IV are reserved for larger, more complex water systems, and treatment and distribution certificates are issued separately for this category. Although no formal reciprocity arrangements exist with other states, operators currently certified by other states may request reciprocity privileges from New Hampshire before working here.

Average number of certificates issued annually: 1,150

Fees: The fee for water treatment certifications, distribution certifications, or combined treatment/distribution (Grade 1A) certifications is $50 per certification. For a person who holds both a treatment and distribution certificate in Grades I - IV, the fee is $100. The fee to re-take the certification exam is $50.

Estimated processing time after application is deemed "complete": 6 weeks

Certificate duration: 2 years, beginning on the forthcoming January 1

Certificate transferability: Not transferable

Certificate modification: Not applicable

Certificate renewal: DES reissues renewal certificates every two years upon payment of a $50 renewal fee and demonstration that the minimum number of training contact hours has been obtained. If the fee is not submitted within 90 days after the certificate's expiration date, the certificate will be deemed expired. Operators wishing to renew must have five training contact hours for Grade 1A and 20 training contact hours for Grades I, II, III, and IV.

State statute: RSA 332-E ("Water Treatment Plant Operators and Water Distribution System Personnel", http://gencourt.state.nh.us/rsa/html/indexes/332-E.html)

N. H. Code of Administrative Rules: Env-Ws 367 ("Certification of Water Works Operators", http://www.des.state.nh.us/rules/envws-367.pdf)

Appeals body: New Hampshire Drinking Water Operator Certification Advisory Board

Additional information: N. H. DES, Water Supply Engineering Bureau, (603) 271-2410
N. H. DES, Public Information Center, (603) 271-2975 or (603) 271-8876

Drinking Water System Operator Certificate – *Work Sheet*

Key Qualifier Question: *Do you plan to seek employment in New Hampshire as a treatment and/or distribution system operator for a community or a non-transient/non-community public drinking water system?*

What must you do to apply?

- Obtain a copy of the *Application for Water Works Operator Certification* from the DES Water Supply Engineering Bureau, DES Public Information Center, or online at http://www.des.state.nh.us/wseb/applicat.pdf.
- Provide the applicant's name, mailing address, date of birth, and social security number.
- Identify the name, mailing address, and telephone number of the water system or company of current employment (if applicable).
- Indicate the type and grade of certificate for which application is being made.
- Indicate the present status of the operator certificate (if other than a new candidate).
- Provide a description of prior relevant education and training.
- List any pertinent professional associations to which the applicant belongs.
- If drinking water treatment certification is desired, provide a detailed description of all prior water treatment experience.
- If drinking water distribution certification is desired, provide a detailed description of all prior water distribution experience.
- An applicant must be in a physical condition that enables him/her to satisfactorily perform the intended duties relative to the size and complexity of the particular water system.
- An applicant must be able to read and write in the English language.
- Submit evidence that the following minimum education and experience is held by the applicant:

Operator Type	Diploma/GED	Post-Secondary Education	Relevant Experience
Grade 1A	Yes	None required	6 Months
Grade I	Yes	None required	1 Year
Grade II	Yes	None required	3 Years
Grade III	Yes	2 Years	4 Years
Grade IV	Yes	4 Years	6 Years

- Applicant must verify that at least 50 percent of his/her experience represents actual operating experience in a plant or system.
- Under certain circumstances specified by NH CODE ADMIN. RULES Env-Ws 367, some education may be substituted for experience, and vice versa (see "Certification of Water Works Operators", http://www.des.state.nh.us/rules/envws-367.pdf; specifically Env-Ws 367.12).
- Submit a check or money order for $50 made payable to "Treasurer, State of New Hampshire", and submit the application and all supporting materials at least 30 days in advance of the posted examination date to: Water Supply Engineering Bureau, Water Division, New Hampshire Department of Environmental Services, 6 Hazen Drive, P. O. Box 95, Concord, NH 03302-0095. Telephone: (603) 271-2410; fax: (603) 271-5171; or online: http://www.des.state.nh.us/wseb/

What types of projects require operators to possess this certificate?

- The operation of a community drinking water system comprised largely of residential customers
- The operation of a public drinking water treatment system for a high school or university
- The operation of a public drinking water distribution system for a large office complex

If there are questions regarding this page or any other section of the Guidebook, please contact Tim Drew, Administrator, Public Information and Permitting Unit, at tdrew@des.state.nh.us or at (603) 271-3306.

Environmental Laboratory Accreditation

Introduction: Any laboratory that tests drinking water samples for the purpose of submitting data to DES to demonstrate compliance with applicable drinking water or wastewater requirements must obtain an Environmental Laboratory Accreditation from DES (see RSA 485:44, "New Hampshire Safe Drinking Water Act/Water Testing Laboratory Accreditation", http://gencourt.state.nh.us/rsa/html/L/485/485-44.htm). A laboratory also may voluntarily request New Hampshire accreditation to demonstrate the quality of its work to clients. From 1988 to 1998, DES has administered a laboratory certification program based on the U. S. Environmental Protection Agency's ***Manual for the Certification of Laboratories Analyzing Drinking Water***. In 1998, the program was revised legislatively to be an accreditation program, now based on National Environmental Laboratory Accreditation Conference ("NELAC") Standards (see http://www.epa.gov/ttn/nelac/). Under the NELAC standards, a laboratory must apply for primary accreditation from its home state, if available. If the host state is not a recognized NELAC accrediting authority, the laboratory must request primary accreditation from one of the 12 recognized NELAC accrediting authorities. Since the New Hampshire Environmental Laboratory Accreditation Program ("NH ELAP") is a recognized accrediting authority for drinking water and wastewater analyses, all New Hampshire laboratories must obtain primary accreditation for those analyses from NH ELAP (see http://www.des.state.nh.us/nhelap/). Out-of-state laboratories may request NH ELAP to be either their primary or secondary accrediting authority. A primary accrediting authority may only award accreditation based on an on-site assessment of the laboratory, the laboratory's proficiency test ("PT") results, and analyses in the NH ELAP fields of testing (see http://www.epa.gov/ttn/nelac/). A secondary accrediting authority may only award accreditation by reciprocity based on the accreditation awarded by the laboratory's primary accrediting authority.

Average number of accreditations issued annually: Approximately 90 laboratories nationally have NH ELAP accreditation as of September 2002 (see http://www.des.state.nh.us/nhelap/accredited/).

Fees:

(1) A base fee of $100 plus the applicable amount(s) from (2) below must be submitted with the application. The fee is non-refundable.

(2) The non-refundable fee paid must include the applicable amount(s) from the table below:

Additional Charges to be Included with the Non-Refundable Fee:

Type of Accreditation Requested	Charge
Microbiology	$100
Limited inorganic chemistry (only)	$100
One or two metals (only)	$100
Microbiology and limited inorganic chemistry	$150
Microbiology and one or two metals	$150
Microbiology, limited inorganic chemistry, and one or two metals	$250
Metals and/or inorganic chemistry	$400
Organic chemistry	$400
Radiological chemistry	$250
Each performance-based method that must be evaluated	$175

(3) In addition to the fee specified above, the laboratory must reimburse the State of New Hampshire for staff time and travel expenses of the on-site assessment. The exact amount will vary depending on the analyses for which accreditation is requested and the location of the laboratory.

Estimated processing time after application is deemed "complete": If an in-state laboratory requests accreditation, the process takes from three to nine months, depending on the preparedness of the laboratory. When an out-of-state laboratory requests NH ELAP to be the primary accrediting authority, it will be put on a waiting list until staff is available to conduct the on-site assessment (possibly as long as several years to complete). If the laboratory has applied for secondary accreditation, the process will take from two to three weeks to complete.

Accreditation duration: One year

Accreditation transferability: The accreditation is not directly transferable when ownership, location, a majority of the principal officers, or a majority of the local corporate management of the laboratory changes. The laboratory director must inform DES in writing within 30 calendar days of the changes listed below as to how the changes will affect the day-to-day operations of the laboratory. The laboratory must reapply for accreditation as specified in NH CODE ADMIN. RULES Env-C 302.01 within 30 calendar days of any change in ownership, location, a majority of the principal officers, or a majority of the local corporate management of the laboratory. DES will reissue new certificates within 14 calendar days of receiving the application for a change in name, location, or scope of accreditation. DES will re-inspect a laboratory having NH ELAP as its primary accrediting authority within 60 calendar days if there are significant changes that affect the laboratory's day-to-day operations. The expiration date on the new certificates will be the same as the expiration date on the certificates before the change. No additional fees are required for transferring or changing ownership, location, a majority of the principal officers, or a majority of the local corporate management of the laboratory. If renewal is required at the same time, the renewal fees must accompany the application.

Accreditation modification: A laboratory wishing to modify its scope of accreditation must request the modification in writing. If New Hampshire is the laboratory's primary accrediting authority, the request must include a copy of the laboratory's standard operating procedure, an "Initial Demonstration of Capability", and the results of two or more sets of proficiency tests that are at least one month (but no more than six months) apart. An on-site assessment must take place before accreditation is granted if the laboratory was not assessed for that type of analysis during its most recent on-site assessment. If New Hampshire is the laboratory's secondary accreditation authority, the request must include a copy of the certificate and analyte list issued by its primary accrediting authority for that analysis, and no on-site assessment will take place. If the additional fee for that group of analyses was not included in the original nonrefundable fee, the amount of that fee must be included with the request for modification of either primary or secondary accreditation.

Accreditation renewal: Laboratories must renew their accreditation annually.

State statute: RSA 485:44, 46, 47 ("New Hampshire Safe Drinking Water Act/Laboratory Accreditation", http://gencourt.state.nh.us/rsa/html/L/485/485-44.htm; http://gencourt.state.nh.us/rsa/html/L/485/485-45.htm; http://gencourt.state.nh.us/rsa/html/L/485/485-46.htm; http://gencourt.state.nh.us/rsa/html/L/485/485-47.htm; http://www.des.state.nh.us/nhelap/nhelap_rsa485.htm)

N. H. Code of Administrative Rules: Env-C 300 ("Laboratory Accreditation", http://www.des.state.nh.us/nhelap/nhelap_envc300.htm)

Appeals body: Water Council at RSA 21-O:7 ("Department of Environmental Services/Water Council", http://gencourt.state.nh.us/rsa/html/I/21-O/21-O-7.htm); see also http://www.des.state.nh.us/rules/env-wc200.pdf and http://www.des.state.nh.us/councils/#1)

Additional information: N. H. DES, Environmental Laboratory Accreditation Program, (603) 271-2991
N. H. DES, Public Information Center, (603) 271-2975 or (603) 271-8876
NELAC Web site http://www.epa.gov/ttn/nelac/

Environmental Laboratory Accreditation – *Work Sheet*

Key Qualifier Questions: *Does your laboratory analyze drinking water or wastewater samples for the purpose of submitting the results to support environmental compliance in a state where accreditation is required? Do the owners wish to have the laboratory become voluntarily accredited for other analyses?*

What must you do to apply?

- Obtain a copy of an application package from the Program Manager, New Hampshire Environmental Laboratory Accreditation Program ("NH ELAP"), or contact Charles Dyer at cdyer@des.state.nh.us, or access online at http://www.des.state.nh.us/nhelap/nhelap_app.htm.
- To request initial or renewed accreditation, the applicant must provide the following:
    - Date of application
    - New Hampshire laboratory identification number, if a renewal
    - Legal name, mailing address, street address, billing address, telephone number, and fax number of the laboratory
    - Laboratory hours of operation
    - Name, telephone number, extension number, and e-mail address of the laboratory contact person
    - Name(s), telephone number(s), and extension(s) of the responsible party of record and quality assurance officer
    - Amount of fees, as specified by NH CODE ADMIN. RULES Env-C 302.01(n) (see "Laboratory Accreditation", http://www.des.state.nh.us/nhelap/nhelap_envc300.htm)
    - Names and addresses of owners, date of incorporation, and names and addresses of principal corporate officers
    - Analyte(s) for which certification is desired
    - Education and experience background of responsible part of record
    - List of technical directors
    - Type of building housing the laboratory, space, utilities, and word processing software available
    - Identification of all general use laboratory equipment
    - Analytical methodology and equipment used for the analyte(s) for which certification is desired
- Upon request, NH ELAP will provide the laboratory with an electronic copy of the application in Corel WordPerfect® or Microsoft Word® format, as well as a hard copy of the form to be used for reference by the laboratory
- The applicant shall provide NH ELAP with one completed hard copy and an electronic form of the application
- In addition to the application, a laboratory with the NH ELAP as its primary accrediting authority must provide the following:
    - A signed certificate of compliance, as required by Section 4.1.9 of the NELAC Standards (see http://www.epa.gov/ttn/nelac/)
    - In years for which an on-site assessment has been scheduled, the laboratory must also provide results of the method detection limit ("MDL") studies as specified in Chapter 5, Appendix D, Section D.1.4 of the NELAC Standards (see http://www.epa.gov/ttn/nelac/), including:
        - Name of the analyte or test
        - Sample matrix, such as drinking water, wastewater, soil, hazardous waste, air
        - Date of analysis
        - Identification of analyst
        - Instrument used, including the name of the manufacturer and model number
        - Concentration of standards used
        - Actual values determined
        - Units of concentration
        - Mean of the values
        - Standard deviation

        - Calculated method detection limit
    - In years for which an on-site assessment has been scheduled, the laboratory must also provide a hard copy printout in Corel WordPerfect® or Microsoft Word® format the quality systems manual and standard operating procedures ("SOPs") as specified in Env-C 307.02 and Enc-C 307.03 (see http://www.des.state.nh.us/nhelap/nhelap_envc300.htm)
    - In years for which an on-site assessment has been scheduled, the laboratory must also provide a college transcript for the responsible party of record.
- The applicant must inform NH ELAP as to which of the following methods the laboratory intends to use to notify all prospective New Hampshire clients concerning which analytes or categories it is accredited by New Hampshire to test:
    - Will provide a copy of the laboratory's current certificate and analyte list to prospective clients with all sample kits,
    - Will provide a list of tests for which the laboratory is accredited with all sample kits, or
    - Will use an asterisk or other mark with the appropriate legend next to the test on a price list or other literature supplied with all sample kits
- A laboratory may choose to inform repeat clients in writing of changes in accreditation status by forwarding a copy of the new analyte list at the time of the change, instead of informing the client each time a sample kit is sent.
- The applicant must supply NH ELAP with an example of the test report that will be provided to New Hampshire clients that indicates which analytes tested were New Hampshire-accredited and which tests were subcontracted (if any).
- The list of tests for which the laboratory is accredited to perform by the State of New Hampshire must be indicated with the test report by one of the following means:
    - Using an asterisk or other mark next to the result or the name of the test with the appropriate legend on the face of the report,
    - Providing a copy of the laboratory's current certificate and analyte list with all test results, or
    - Providing a list of tests for which the laboratory is accredited with all test results
- A laboratory may choose to inform repeat clients in writing of any changes in certification status, or by sending a copy of the new certificate and/or analyte list at the time of the change instead of informing the client each time a test report is sent.
- Calculate the appropriate fee, complete all application requirements, and submit the fee and all supporting materials to: Program Manager, New Hampshire Environmental Laboratory Accreditation Program, New Hampshire Department of Environmental Services, 6 Hazen Drive, P. O. Box 95, Concord, NH 03302-0095. Telephone: (603) 271-2991 or (603) 271-2998; fax: 603) 271-2997; or online: http://www.des.state.nh.us/nhelap/

What types of laboratory operations and services require this accreditation?

- A private or municipal laboratory submits data to the DES Water Supply Engineering Bureau for microbiological and/or chemical monitoring required by the federal Safe Drinking Water Act
- A laboratory is seeking to analyze samples for any agency of the federal government
- A private or municipal laboratory submits data to the DES Water Supply Engineering Bureau for new public water system wells
- A laboratory analyzes environmental samples for real estate transactions (Many banks and other financial lending institutions require certification or accreditation.)
- A laboratory is analyzing samples for industries that require a high degree of confidence in the results generated, or that must know exactly how the sample was handled by the laboratory
- A laboratory is analyzing samples for wastewater discharge compliance purposes

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Water Well Contractor License

Introduction: The New Hampshire Legislature established the New Hampshire Water Well Board in 1983 pursuant to RSA 482-B ("New Hampshire Water Well Board, http://gencourt.state.nh.us/rsa/html/indexes/482-B.html; see also http://www.des.state.nh.us/factsheets/ws/ws-23-1.htm). One of the responsibilities assigned to the Water Well Board is the licensing of individuals, partnerships, and corporations that provide construction services related to drilled wells, washed wells, dug wells, and monitoring wells. Water well construction means any method, procedure, or operation to obtain water from a well including drilling, digging, and well development (including hydrofracturing or other methods). The Water Well Board also regulates technical drilling contractors and well decommissioning. Applicants for a Water Well Contractor License must specify one or more types of construction (*e.g.*, cable tool rig, rotary drilling machine, jetting/washing/drilling well points, auger rig, or percussion hammer) in which they have at least three years of experience. Applicants must also pass a written examination administered by the Water Well Board, based on the type of equipment used. The license will be issued by the Water Well Board based on the type of equipment used for installing the wells; the annual license fee is also based on the type of equipment used. A licensed water well contractor must display a four-inch by six-inch decal plus the Water Well Contractor License number in two-inch high letters or larger on both sides of his/her service truck that designates the year the license was validated. The decal features the State seal and the words "Licensed New Hampshire Water Well Contractor" and must be affixed directly adjacent to the contractor license number. The Water Well Contractor License is not transferable; it expires on June 30 of each year and must be renewed by July 1 each year to remain valid. The Water Well Board offers reciprocity with other states that also allow reciprocity if the standards and requirements are equivalent to those in New Hampshire. DES staff routinely assists local code enforcement officers and private citizens regarding the proper practice and standards to be followed by a licensed water well contractor. The Water Well Board conducts public meetings to discuss appropriate requirements for the water well contractor program, promulgates and enforces rules for the construction of wells, and hears consumer complaints relative to improper well installation.

Average number of licenses issued or renewed annually: 200

Fees: $25 application fee for new license applicants; $10 examination fee for each license category; $225 annual fee for technical drilling contractors; and for contractors (other than technical drilling contractors), an annual fee based on the type of equipment used, as follows:

Well Type	Construction Equipment/Technique	Fee
Dug wells	Backhoe (or similar equipment)	$100
Point Wells	Jetting, Driving, or Auguring	$150
Washed Wells	Wash Well Machine	$150
Drilled Wells	Cable Tool Machine	$150
Drilled Wells	Rotary Drilling Machine	$225
Monitor Wells	Includes Multiple Technologies/Equipment	$225

For contractors who are licensed for more than one type of equipment, the fee charged is the highest applicable fee.

Estimated processing time after application is deemed "complete": Examinations are administered quarterly. Applications must be received at least ten days prior to the examination date for the applicant to sit for that examination. Processing is completed approximately four weeks after the exam.

License duration: One year

License transferability: Not transferable

License modification: Not applicable

License renewal: An expired license may be renewed within one year following expiration by submitting information specified in NH CODE ADMIN. RULES We 401.01. A late fee of $20 is required if the license is renewed after July 31. The exam is not required if the request for renewal is made within one year following the license's expiration date.

State statute: RSA 482-B ("New Hampshire Water Well Board", http://gencourt.state.nh.us/rsa/html/indexes/482-B.html)

N. H. Code of Administrative Rules: We 100-1000 ("New Hampshire Water Well Board Code of Administrative Rules", http://www.des.state.nh.us/rules/100-1000.pdf)

Appeals bodies: New Hampshire Water Well Board (see http://www.des.state.nh.us/councils/#3), then to the New Hampshire Supreme Court (see http://www.state.nh.us/courts/supreme.htm)

Additional information: N. H. Water Well Board, (603) 271-2410 or (603) 271-1974

Water Well Contractor License – *Work Sheet*

Key Qualifier Question: *Do you, as an individual or as a representative of a partnership or corporation, wish to construct monitoring wells, drilled wells, point wells, or dug wells at residential, commercial, industrial, or municipal sites in New Hampshire using techniques such as rotary drilling, cable tool drilling, auguring, jetting, washing, or excavation?*

What must you do to apply?

- Obtain a copy of the *Water Well Contractor License Application* and a copy of NH CODE ADMIN. RULES We 100-1000 from the DES Public Information Center or the New Hampshire Water Well Board (see http://www.des.state.nh.us/factsheets/ws/ws-23-1.htm).
- Type or print (in ink) the information required by the application.
- Identify the type of construction the applicant is qualified to perform.
- Identify the type of equipment used for constructing wells.
- For business entities, provide the name and address of the qualified individual and the name and address of the business entity to be licensed.
- Identify the state in which the applicant is incorporated (if applicable).
- Describe all active experience gained in installing wells that is directly related to the license being sought, including the name(s) of the employer(s), dates of employment, and tasks performed (see http://www.des.state.nh.us/ws.htm). The amount of experience must add up to at least three years.
- Specify the type of examination the applicant wishes to take (based on the type of equipment used).
- Submit a check or money order made payable to "New Hampshire Water Well Board" for the appropriate fee(s), application form, and all supporting information to the New Hampshire Water Well Board, c/o New Hampshire Department of Environmental Services, 6 Hazen Drive, P. O. Box 95, Concord, NH 03302-0095. All application materials must be received no less than ten days prior to the scheduled examination date to allow the applicant to sit for that examination.
- An applicant seeking a reciprocal license must follow the procedure noted above in addition to submitting the following:
    - A certified copy of the license held in the jurisdiction in which the reciprocal agreement exists
    - Proof of residency within the jurisdiction in which the reciprocal agreement exists
- The applicant must achieve a score of 70 percent to pass the examination. If not, the applicant must wait a minimum of 90 days before re-examination may occur.

What types of projects require this license?

- The installation of a dug well with a backhoe at a New Hampshire residence for use as a private drinking water supply
- The installation of a bedrock production well using a rotary drilling machine, a cable tool machine, or a wash well machine to supply a private or community public water system
- The use of any well construction technique or equipment to install monitoring wells near a closed municipal landfill to track a suspected groundwater contamination plume

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If there are questions on this page or any other section of the Guidebook, please contact Tim Drew, Administrator, Public Information and Permitting Unit, at tdrew@des.state.nh.us or at (603) 271-3306.

Pump Installer License

Introduction: The New Hampshire Legislature established the New Hampshire Water Well Board in 1983 pursuant to what is now RSA 482-B ("New Hampshire Water Well Board", http://gencourt.state.nh.us/rsa/html/indexes/482-B.html; see also http://www.des.state.nh.us/factsheets/ws/ws-23-1.htm). One of the responsibilities assigned to the Water Well Board is the licensing of individuals, partnerships, and corporations that install pumps in water wells at residences (for pumps up to three horsepower) and/or at commercial, industrial, and municipal sites (for any horsepower rating). Applicants for this license must have been actively engaged in work which is directly related to the type of license for which application is made for a period of three years prior to the date of application and must pass an examination prepared and administered by the Water Well Board. Pump installers must also complete a minimum of two hours of continuing education each year to maintain proficiency. A licensed plumber may not engage in pump installation unless he or she also holds a Pump Installer License. A licensed pump installer must display a four-inch by six-inch decal plus the installer license number in two-inch high letters or larger on both sides of his or her service truck that designates the year the license was validated. The decal features the State seal and the words "Licensed New Hampshire Pump Installer" and must be affixed directly adjacent to the pump installer license number. The Pump Installer License is not transferable; it expires on June 30 of each year and must be renewed by July 1 each year to remain valid. The Water Well Board offers reciprocity with other states that also allow reciprocity if the standards and requirements are equivalent to those in New Hampshire. DES staff routinely assists local code enforcement officers and private citizens regarding the proper practice and standards to be followed by a licensed pump installer. The Water Well Board conducts public meetings to discuss appropriate requirements for the Pump Installer Program, promulgates and enforces rules for the installation of pumps, and hears consumer complaints relative to improper pump installation.

Average number of licenses issued or renewed annually: 475

Fees: $25 application fee; $10 examination fee for either domestic or commercial license category; $100 annual license fee

Estimated processing time after application is deemed "complete": Examinations are administered quarterly. Applications must be received at least ten days prior to the examination date. Processing is completed approximately four weeks after the exam.

License duration: One year

License transferability: Not transferable

License modification: Not applicable

License renewal: Applicant must submit written request, the required fee, and proof of compliance NH CODE ADMIN. RULES We 402. An expired license may be renewed within one year following expiration by submitting required information, defined by We 401.01. A $20 late fee is required if the license is renewed after July 31. The exam is not required if the request for renewal is made within one year following the license's expiration date.

State statute: RSA 482-B ("New Hampshire Water Well Board", http://gencourt.state.nh.us/rsa/html/indexes/482-B.html)

N. H. Code of Administrative Rules: We 100-1000 ("New Hampshire Water Well Board Code of Administrative Rules", http://www.des.state.nh.us/rules/100-1000.pdf)

Appeals bodies: New Hampshire Water Well Board (see http://www.des.state.nh.us/councils/#3), then to the New Hampshire Supreme Court (see http://www.state.nh.us/courts/supreme.htm)

Additional information: N. H. Water Well Board, (603) 271-2410 or (603) 271-1974
N. H. DES, Public Information Center, (603) 271-2975 or (603) 271-8876

Pump Installer License – *Work Sheet*

Key Qualifier Question: *Do you, as an individual or as a representative of a partnership or corporation, wish to install pumps at residential, commercial, industrial, or municipal sites in New Hampshire?*

What must you do to apply?

- Obtain a copy of the *Pump Installer License Application* and a copy of NH CODE ADMIN. RULES We 100-1000 from the New Hampshire Water Well Board (see http://www.des.state.nh.us/factsheets/ws/ws-23-1.htm) or the DES Public Information Center.
- Type or print (in ink) the information required by the application.
- Identify the type of installation the applicant is qualified to perform (*i.e.*, domestic or commercial/industrial).
- For business entities, provide the name and address of the qualified individual and the name and address of the business entity to be licensed.
- Identify the state in which the applicant is incorporated (if applicable).
- If the applicant is a registered plumber, provide the current plumber's license number.
- Describe all active experience gained in installing well pumps during the previous three years that is directly related to the license being sought, including the name(s) of the employer(s), dates of employment, and tasks performed. The amount of experience must add up to at least three years.
- Specify that the applicant wishes to take the pump installer's examination.
- Submit a check or money order made payable to "New Hampshire Water Well Board" for the appropriate fee, the application form, and all supporting information to the New Hampshire Water Well Board, c/o New Hampshire Department of Environmental Services, 6 Hazen Drive, P. O. Box 95, Concord, NH 03302-0095. All application materials must be received no less than ten days prior to the scheduled examination date.
- An applicant seeking a reciprocal license must follow the procedure noted above in addition to submitting the following:
    - A certified copy of the license held in the jurisdiction in which the reciprocal agreement exists
    - Proof of residency within the jurisdiction in which the reciprocal agreement exists
- The applicant must achieve a score of 70 percent to pass the examination. If not, the applicant must wait a minimum of 90 days before re-examination may occur.

What types of projects require this license?

- The installation of a well pump with up to three horsepower at a private residence
- The installation of a production well pump at a community public water supply system
- The installation of a large production well pump at an industrial site

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If there are questions regarding this page or any other section of the Guidebook, please contact Tim Drew, Administrator, Public Information and Permitting Unit, at tdrew@des.state.nh.us or at (603) 271-3306.

Bottled Water Source Approval

Introduction: The bottling of water for the purpose of public consumption is jointly regulated by the New Hampshire Department of Health and Human Services' ("DHHS") Bureau of Food Protection (see http://www.dhhs.state.nh.us/DHHS/BOTTLEDBEVERAGE/default.htm) under NH CODE ADMIN. RULES He-P 2100, and the DES's Water Supply Engineering Bureau under NH CODE ADMIN. RULES Env-Ws 389 (see "Groundwater Sources of Bottled Water", http://www.des.state.nh.us/rules/envws389.pdf). Before bottled water can be offered for sale, the applicant must first register with DHHS, obtain a Bottled Water License from that agency, and comply with its requirements for design and construction of the buildings and facilities, production and processing in the bottling plant, employee hygiene, and information to be included on labels. The applicant must also consent to weekly and annual water quality testing and reporting. Approval of a new groundwater or spring water source must be obtained from DES before the source can be used as a supply for any bottled water product (see http://www.des.state.nh.us/factsheets/ws/ws-19-1.htm). This process involves the hiring of a hydrogeologist, compliance with setbacks and land use restrictions, conducting an evaluation of the source and the potential impacts of the withdrawal, delineating a wellhead protection area, and submitting a report to DES. In addition, the applicant must demonstrate that the construction of the spring or well complies with NH CODE ADMIN. RULES Env-We 600 ("Standards for the Construction, Maintenance, and Abandonment of Wells", http://www.des.state.nh.us/rules/100-1000.pdf). For a source outside New Hampshire, the applicant must obtain approval from the state or province in which the source is located and provide documentation of that approval to DHHS. If the source will produce 57,600 gallons or more in any 24-hour period, the applicant must also obtain a Large Groundwater Withdrawal Permit (see http://www.des.state.nh.us/factsheets/ws/ws-22-11.htm) from DES.

Average number of source approvals issued annually: 1 (for sources)/15 (for DHHS bottler registrations)

Fees: None for DES/$125-$140 for DHHS Bottled Water License

Estimated processing time after report is deemed "complete:" Up to 60 days

Approval duration: 5 years

Approval transferability: Bottled Water Source Approval of an active source is automatically transferred with the ownership of the source. Ownership transfer must be registered with the DES Water Division.

Approval modification: Modifications may be approved after the owner/operator has demonstrated that the modified source complies with current DES and DHHS administrative rules.

Approval renewal: Renewals may be granted after the owner/operator has demonstrated that the source is in compliance with current DES and DHHS administrative rules.

State statutes: RSA 485:3, XI ("New Hampshire Safe Drinking Water Act/Drinking Water Rules", http://gencourt.state.nh.us/rsa/html/L/485/485-3.htm) and RSA 143:11 ("Sanitary Production and Distribution of Food/Licenses; Fees", http://gencourt.state.nh.us/rsa/html/X/143/143-11.htm)

N. H. Code of Administrative Rules: Env-Ws 389, ("Groundwater Sources of Bottled Water Rules", http://www.des.state.nh.us/rules/envws389.pdf) and He-P 2100 ("Food and Beverage Sanitation Rules", http://www.gencourt.state.nh.us/rules/he-p.html)

Appeals body: Water Council, RSA 21-O:7 ("Department of Environmental Services/Water Council", http://gencourt.state.nh.us/rsa/html/I/21-O/21-O-7.htm; see also http://www.des.state.nh.us/rules/env-wc200.pdf and http://www.des.state.nh.us/councils/#1)

Additional information: N. H. DES, Bottled Water Source Program Manager, (603) 271-3303
N. H. DES, Water Supply Engineering Bureau, (603) 271-2513
N. H. DES, Public Information Center, (603) 271-2975 or (603) 271-8876

Bottled Water Source Approval – *Work Sheet*

Key Qualifier Question: *Do you plan to develop or reactivate a groundwater or spring water source for use in the commercial bottling of water (or water products) for public consumption?*

What must you do to prepare the source report?

- Obtain a copy of the NH CODE ADMIN. RULES Env-Ws 389, *Groundwater Sources of Bottled Water*, from the DES Bottled Water Source Program Manager, the DES Public Information Center, or online at http://www.des.state.nh.us/rules/envws389.pdf.
- Information concerning the licensing of bottled beverage facilities by the New Hampshire Department of Health and Human Services is available from its Beverage and Bottled Water Inspection and Licensing Program (see http://www.dhhs.state.nh.us/DHHS/BOTTLEDBEVERAGE/default.htm).
- Provide a description of the source location to demonstrate that it meets surface water setbacks in accordance with Env-Ws 389.05.
- Provide a description of the sanitary protective area to demonstrate that the land is under the control of the water supplier (*e.g.*, through easements or leases) and shall be maintained in a natural state within 150 to 400 feet of the source in accordance with Env-Ws 389.06.
- Develop a conceptual hydrogeologic model for the wellhead protection area in accordance with Env-Ws 389.07, including a description of the geology, groundwater flow, and aquifer recharge patterns, and complete a preliminary estimate of the wellhead protection area in accordance with Env-Ws 389.09.
- Complete a source evaluation program (*e.g.*, pumping test) in accordance with Env-Ws 389.11 and establish the chemical quality of the source. It is recommended that DES staff be consulted to provide feedback on the program before the applicant carries out the fieldwork.
- Establish the permitted production volume in accordance with Env-Ws 389.12 and demonstrate that the withdrawal from the source will not cause adverse impacts to water resources or existing water users.
- Prepare a source classification statement (*e.g.*, artesian water, well water, or spring water) in accordance with Env-Ws 389.14 and refine the wellhead protection area in accordance with Env-Ws 389.15.
- Update and revise the contamination source and water withdrawal inventory in accordance with Env-Ws 389.16 and establish a contamination control program for known contamination sources within the wellhead protection area in accordance with Env-Ws 389.17.
- Submit a source classification statement in accordance with Env-Ws 389.14.
- Submit a copy of the well completion report prepared in accordance with NH CODE ADMIN. RULES We 800, adopted by the New Hampshire Water Well Board, to demonstrate that the construction of the wellhead complies with We 600 (see http://www.des.state.nh.us/rules/100-1000.pdf).
- Submit a report to DES in accordance with Env-Ws 389.19. Approval is contingent upon notification requirements provided in RSA 485-C:21 ("Groundwater Protection Act/Approval for Large Groundwater Withdrawals", http://gencourt.state.nh.us/rsa/html/L/485-C/485-C-21.htm) and rules regarding impact assessment and mitigation requirements adopted pursuant to RSA 485:3, XIII ("New Hampshire Safe Drinking Water Act/Drinking Water Rules", http://gencourt.state.nh.us/rsa/html/L/485/485-3.htm).
- Provide all source report information to: Bottled Water Source Program Manager, Water Supply Engineering Bureau, Water Division, New Hampshire Department of Environmental Services, 6 Hazen Drive, P. O. Box 95, Concord, NH 03302-0095. Telephone: (603) 271-3303; fax: (603) 271-5171; or online: http://www.des.state.nh.us/dwspp/bottled.htm.

What types of projects require this approval?

- The development of new groundwater or spring water sources for the bottling of drinking water
- The reactivation of existing groundwater or spring water sources for the production of bottled water products

- The development of an out-of-state groundwater or spring water source for a bottling operation in New Hampshire

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If there are questions regarding this page or any other section of the Guidebook, please contact Tim Drew, Administrator, Public Information and Permitting Unit, at tdrew@des.state.nh.us or at (603) 271-3306.

Youth Recreation Camp License

Introduction: The New Hampshire Department of Environmental Services ("DES") licenses youth recreation camps under RSA 485-A:23-24 ("Water Pollution and Waste Disposal/Recreation Camps", http://gencourt.state.nh.us/rsa/html/L/485-A/485-A-23.htm). The DES program does not apply to day care centers, which are licensed by the New Hampshire Department of Health and Human Services. The DES licensing program does not evaluate camp curricula, but does address a broad range of health and safety issues including staff qualifications, buildings, sleeping quarters, equipment, water supply, swimming pools and beaches, toilet facilities, sewage disposal facilities, garbage and waste disposal, toxic chemical storage, food and food preparation, dishwashing, fire safety, overnight camping, required health staffing, communicable disease isolation and reporting, and physical examinations prior to admission. A "youth camp" is defined by NH CODE ADMIN. RULES Env-Ws 1120 ("Rules Pertaining to the Operation of Youth Recreation Camps", http://www.des.state.nh.us/rules/envws1120.pdf) as *an entity that represents itself as a camp, is in operation for at least ten days per license year for recreational purposes (or for a combination of recreation and instruction), is for-profit or under philanthropic or charitable auspices, and serves ten or more campers per day.* Both day camps and residence camps are included (see http://www.des.state.nh.us/factsheets/ws/ws-20-1.htm). In 2001, there were approximately 170 licensed youth recreation camps in New Hampshire. The annual licensing period extends from June 1 of the current year through May 31 of the following year. For a new camp, the licensing process includes a field inspection of the facilities after receipt of an application, during which the DES inspector judges the safety and adequacy of the facilities to be used, including a bacterial drinking water analysis. Once the camp is in operation, a second inspection is scheduled to evaluate operational issues.

Average number of licenses issued annually: 170

Fee: $50 per camp per year

Estimated processing time after application is deemed "complete": 30 days

License duration: One year (from June 1 of current year through May 31 of the following year)

License transferability: Upon a change in facility ownership, a written request must be made to DES by the current licensee to describe the proposed transfer and identify to whom the license will be transferred.

License modification: If activities, facilities, or services offered are to change, a written request must be submitted to DES outlining those changes before the license can be modified during the current license year.

License renewal: DES must receive an application for renewal no less than 30 days prior to the camp's opening date.

State statute: RSA 485-A:23, 24, 25, 25-a ("Water Pollution and Waste Disposal/Recreation Camps", http://gencourt.state.nh.us/rsa/html/indexes/485-A.html)

N. H. Code of Administrative Rules: Env-Ws 1120 ("Rules Pertaining to the Operation of Youth Recreation Camps", http://www.des.state.nh.us/rules/envws1120.pdf)

Appeals body: Water Council at RSA 21-O:7 ("Department of Environmental Services/Water Council", http://gencourt.state.nh.us/rsa/html/I/21-O/21-O-7.htm; see also http://www.des.state.nh.us/rules/env-wc200.pdf and http://www.des.state.nh.us/councils/#1)

Additional information: N. H. DES, Youth Camp Licensing Program, (603) 271-2542 or (603) 271-2952
N. H. Camp Directors Association, (800) 549-CAMP or (603) 473-8849

American Camping Association (NE Section), (508) 647-2267
N. H. DES, Public Information Center, (603) 271-2975 or (603) 271-8876

Youth Recreation Camp License – *Work Sheet*

Key Qualifier Question: *Do you plan to establish a new, or continue to operate an existing, facility that represents itself as a camp, is in operation for at least ten days per license year for recreational purposes (or for a combination of recreation and instruction), is for-profit or under philanthropic or charitable auspices, and serves ten or more campers per day, whether as a day camp or a residential camp?*

What must you do to apply?

- Obtain a copy of the *Youth Recreation Camp License Application* from the DES Youth Recreation Camp Licensing Program, DES Water Supply Engineering Bureau by telephone at (603) 271-2542, or access the Bureau online at http://www.des.state.nh.us/wseb/.
- Identify the name of the youth recreation camp.
- Identify the location of the youth recreation camp by street address and municipality.
- Provide the name, summer and winter mailing addresses, and telephone numbers of the individual or organization that owns the youth recreation camp.
- Provide the name(s) of any lake(s) or river(s) on which the youth recreation camp is located.
- Provide the name of the youth recreation camp director.
- Specify the number of persons the youth recreation camp can safely accommodate, as follows
    - Number of male campers
    - Number of female campers
    - Number of staff
- Specify the opening date for the campers
- Specify the closing date for the campers
- Provide a voluntary disclosure statement or documentation of a criminal background check on the owner/operator.
- Submit a check or money order for $50 made payable to "Treasurer, State of New Hampshire", the application, and all supporting materials to: Youth Camp Licensing Program, Water Supply Engineering Bureau, Water Division, New Hampshire Department of Environmental Services, 6 Hazen Drive, P. O. Box 95, Concord, NH 03302-0095. Telephone: (603) 271-2542; fax: (603) 271-5171; or online: http://www.des.state.nh.us/wseb/

What types of projects require this license?

- An athletic training camp for boys and girls to refine skills in soccer, football, or swimming
- A day camp at a New Hampshire river or lake for youth summer vacations
- A YMCA/YWCA summer residence camp for hiking, fishing, swimming, arts and crafts
- A Boy Scouts of America reservation to develop the scouts' outdoor skills and physical fitness
- A church or youth group camp established as a religious retreat for study or reflection

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If there are questions regarding this page or any other section of the Guidebook, please contact Tim Drew, Administrator, Public Information and Permitting Unit, at tdrew@des.state.nh.us or at (603) 271-3306.

Chapter 3:

Surface Water

2002 Edition

Chapter 3: Surface Water

Introduction

New Hampshire's surface waters are a finite resource, often subject to competing interests and vulnerable to degradation from a variety of means and sources. Surface waters are classified by the New Hampshire Legislature based on their intended uses and water quality goals as either "Class A" (highest quality) or "Class B" (next highest quality), pursuant to RSA 485-A:8 ("Water Pollution and Waste Disposal/Standards for Classification of Surface Waters of the State", http://gencourt.state.nh.us/rsa/html/L/485-A/485-A-8.htm). The DES Watershed Management Bureau was created to address the needs of entire watersheds, rather than to simply deal with each water body separately. It organizes the planning, assessment, and implementation tasks for both "point" (*i.e.*, discharged from a pipe or other discrete conveyance) and "non-point" (*i.e.*, discharged without any confining conveyance) source control programs for each New Hampshire river basin. Its activities, which rely on a mix of voluntary and regulatory programs, are conducted under the authority of RSA 485-A ("Water Pollution and Waste Disposal", http://gencourt.state.nh.us/rsa/html/indexes/485-A.html) and NH CODE ADMIN. RULES Env-Ws 1700 ("Surface Water Quality Regulations", http://www.des.state.nh.us/wmb/Env-Ws1700.pdf, most recently adopted effective December 10, 1999). In 1998, DES and the U. S. Department of Agriculture's Natural Resources Conservation Service prepared the ***Unified Watershed Assessment*** (see http://www.des.state.nh.us/wmb/was/uwa.pdf) in response to the release of the federal ***Clean Water Action Plan***, which was intended to chart a course toward fulfilling the original goal of the federal Clean Water Act (*i.e.*, "fishable and swimmable" waters for all Americans). This assessment categorized the watersheds of New Hampshire into those in need of restoration, those that were currently meeting water quality goals but needed action to maintain water quality, those characterized as pristine or sensitive, those located on lands managed by federal/state/local government, and those with insufficient data to make an assessment. In 1999, the DES Watershed Management Bureau prepared a new, five-year, ***Non-Point Source Management Plan*** (see http://www.des.state.nh.us/wmb/was/npsplan.pdf) to update the original 1989 edition. DES established the Water Quality Standards Advisory Committee in 2000 to help formulate and revise watershed management policy and to solicit public input for drafting new rules and standards (see http://www.des.state.nh.us/wmb/wqsac/wqsac.htm). Based on the goals of the unified assessment and with considerable public input, it was decided that staff time would be focused initially on those watersheds in need of restoration. This approach places equal emphasis on protecting groundwater aquifers, swamps, marshes, bogs, rivers, streams, lakes, ponds, and estuaries, plus the surrounding forests, fields, and other upland areas. It also makes maximum use of limited time and resources. All of these actions set the stage for the current watershed program at DES.

Volunteer Monitoring Programs

The DES Watershed Management Bureau oversees several voluntary programs. These include biomonitoring surveys (see http://www.des.state.nh.us/wmb/biomonitoring/), conducting surveys of exotic species (see http://www.des.state.nh.us/wmb/exoticspecies/) and shellfish (see http://www.des.state.nh.us/wmb/shellfish/), supporting the Volunteer Lake Assessment Program (see http://www.des.state.nh.us/wmb/vlap/info_resources.htm) and the Volunteer River Assessment Program (see http://www.des.state.nh.us/wmb/vrap.htm and http://www.des.state.nh.us/factsheets/wmb/wmb-6.htm). Information obtained by volunteers in these programs provides the basis for evaluating future impacts to watersheds before they occur and provides an early warning for watersheds that may be deteriorating. Annual results from these activities are consolidated into the annual ***Section 305(b) Water Quality Report***, as required by the federal Clean Water Act (see http://www.des.state.nh.us/wmb/2000-305b.pdf).

Regulatory Programs (401 Water Quality Certificates; TMDLs; Public Bathing Facilities)

If a project is planned that will require application for a federal permit or license, and will result in any discharge to surface waters of the state, a Section 401 Water Quality Certificate issued by the DES Watershed Management Bureau may be needed (see NH CODE ADMIN. RULES Env-Ws 451-455, "Water Quality Certification Regulations", http://www.des.state.nh.us/wmb/section401.pdf). For most wetland projects, a generic 401 Water Quality Certificate is incorporated into the final DES Wetlands Bureau permit as a condition of the State Programmatic General Permit with the U. S. Army Corps of Engineers (see http://www.des.state.nh.us/wetlands/nhspgp.htm). The total maximum daily load ("TMDL") assessment is a relatively new tool that is used to characterize the receiving stream's capability to assimilate both existing and future discharges without violating surface water quality standards. Results of TMDL assessments are used when evaluating applications for surface water discharge permits (new or renewal). Finally, the DES Watershed Management Bureau also processes applications for the construction of public bathing facilities (*i.e.*, pools, spas, and other water-oriented attractions) and regulates their on-going operation. Design and operation standards are set for construction approval, followed by DES site inspections at the facility to ensure compliance with the standards of cleanliness and operation specified by the authorization.

Watershed Assistance Program

The Watershed Assistance Program (see http://www.des.state.nh.us/wmb/was/about_was.htm) is intended to create an awareness of Best Management Practices ("BMPs") for non-point source control and to develop and help implement mitigation systems to treat or divert non-point pollutant loads (*i.e.*, contaminated water that is carried to receiving waters outside of any type of pipe or conveyance). The goal is to intercept this direct discharge to watersheds (*e.g.*, sheet runoff from roofs, parking lots, and roads or overland flow from agricultural fields, construction sites, or real estate developments), redirect or treat it as necessary, and then allow it to discharge to receiving waters. Non-point source pollution occurs when rainfall, snowmelt, or irrigation runs over land or through the ground, picks up pollutants, and deposits them into rivers, lakes, and coastal waters, or introduces them into the groundwater. These pollutants may include oil and sand from roadways, agricultural chemicals from farmland, sediments from construction sites, crop pastures, forest lands, and eroding stream banks, and nutrients (*e.g.*, nitrogen and phosphorous compounds) and toxic materials from urban and suburban areas. Effective management of these pollutants in a watershed involves a concerted and long-term effort by land managers and developers as well as federal, state, and local officials through effective laws, policies, and ordinances.

Allied Programs

DES's approach to watershed management also entails contributions from several allied programs (some of which are discussed elsewhere in this *Guidebook*). The DES Laboratory Unit supports the Watershed Bureau and its Limnology Center in the assessment and monitoring phases of surface water protection. The DES Laboratory provides accurate and timely analyses of surface water samples, taken during monitoring or assessment surveys, to aid in both proper management of the resource and in providing the technical basis for devising effective remedial actions as necessary. The DES Dam Bureau manages surface water impoundments to ensure that this public trust resource is equally accessible to multiple interests/multiple uses, according to state statutes and the common law doctrine of "reasonable use". By regulating the flow from impoundments, parameters such as water temperature and dissolved oxygen can be manipulated to support the continued viability of fish populations and water quality in general. A Section 401 Water Quality Certificate is often used as the means to set conditions for surface water monitoring and compliance at new or reconstructed dams. Simply put, the DES Dam Bureau manages surface water quantity, while the DES Watershed Management Bureau manages surface water quality. Both play a vital role in protecting and preserving the relative health of watersheds. The Winnipesaukee River Basin Program, the state's largest regional wastewater treatment facility, was created in 1972 to rein in both treated and untreated point-source and non-point source discharges of fertilizers, failed septic system nutrients, road salt, automobile fluids, and other contaminants being discharged into Lake Winnipesaukee, Lake Winnisquam, and other surface water bodies in New Hampshire's "Lakes Region" (see http://www.des.state.nh.us/winni/). More than $70 million has been spent over the past three decades to expand this regional collection, treatment, and disposal system,

which rescued an entire watershed from the brink of massive eutrophication and returned it to a "fishable and swimmable" condition. This wastewater facility is unique in that it is a State-owned and operated regional facility that serves local member communities.

The DES Land Resources Management Program was created to coordinate the efforts of several existing programs, including the DES Wetlands Bureau, Shoreland Protection Program, Water Quality Engineering Section (Site Specific – Terrain Alteration/Erosion Control), Subsurface Systems Bureau, and Water Supply Engineering Bureau. (See the "Wetlands" chapter and the "Septic Systems/Real Property Subdivision" chapter of this *Guidebook* for a more detailed discussion of the DES wetlands, shoreland protection, and subsurface disposal systems programs; and their interactions.) The DES Wetlands Bureau plays a key role in water quality and quantity management, since wetlands intercept contaminated surface water runoff (*i.e.*, the "quality" aspect) and treat it through natural processes by removing unwanted nutrients and turbidity through plant tissue uptake and physical filtration/attenuation, respectively. Wetlands also intercept flood flows (*i.e.*, the "quantity" aspect) and mitigate the volume and velocity of those flows to protect both surface water quality and the human inhabitants (and their property) who live downstream. The DES Water Quality Engineering Section issues Site Specific Permits to control storm water runoff from sites where the natural slopes and soils are to be disturbed by construction activities or where natural vegetation otherwise will be removed and/or replaced. This permit is designed to reduce the potential for uncontrolled erosion and sedimentation that could negatively impact surface waters at sites where 100,000 square feet or more of contiguous land area is to be altered or re-graded (this threshold is reduced to 50,000 square feet within the protected shoreland zone). The DES Subsurface Systems Bureau regulates subdivisions where on-site wastewater disposal systems ("septic systems") will be used, as well as the design, construction, and operation of individual septic systems. With upwards of 250,000 septic systems currently operating in New Hampshire, there exists a significant potential for surface water quality degradation should these systems fail. As part of its responsibilities for regulating public water systems, the DES Water Supply Engineering Bureau processes Temporary Surface Water Discharge Permit applications to regulate discharges resulting from activities conducted at drinking water well systems, such as those generated by pump tests and rehabilitation or redevelopment of wells, as well as from water storage tank cleaning. However, if a project will involve groundwater remediation, pump-and-treat systems, or petroleum storage tank replacements, the Oil Remediation and Compliance Bureau within the DES Waste Management Division accepts applications, provides the review, and issues the decisions relative to the Temporary Surface Water Discharge Permit. This permit allows short-term, temporary discharges to occur in compliance with conditions designed to protect the quality of the receiving water and the watershed. (Other permits/approvals/certifications relating to drinking water systems are discussed in the "Drinking Water" chapter of this *Guidebook*.)

The U. S. Environmental Protection Agency ("EPA") reviews applications and authorizes National Pollutant Discharge Elimination System ("NPDES") Permits, and DES certifies them in accordance with New Hampshire water quality standards. NPDES Permits set limits and monitoring requirements for cooling water discharges from power plants, industrial discharges, municipal wastewater treatment facility effluents, and storm water runoff to protect the quality of the state's surface waters. EPA issues Multi-Sector Storm Water General Permits (see http://www.epa.gov/region1/topics/water/stormwater.html) for storm water discharges from industrial activity (see http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfr122_main_00.html) and the Construction Federal Storm Water Permit for storm water discharges from construction sites where more than five acres of land (Note: One acre after March 10, 2003) have been disturbed (see http://www.des.state.nh.us/factsheets/wwt/web-8.htm). These permits are discussed in greater detail in the "Wastewater" chapter of this *Guidebook*.)

Summary

The DES Watershed Management Bureau performs the primary role of assessing, monitoring, and protecting water quality in New Hampshire's watersheds (see http://www.des.state.nh.us/wmb/), and processes applications for the Section 401 Water Quality Certificate as part of its responsibilities. The Water Quality Engineering Section within the DES Land Resources Management Program provides the review,

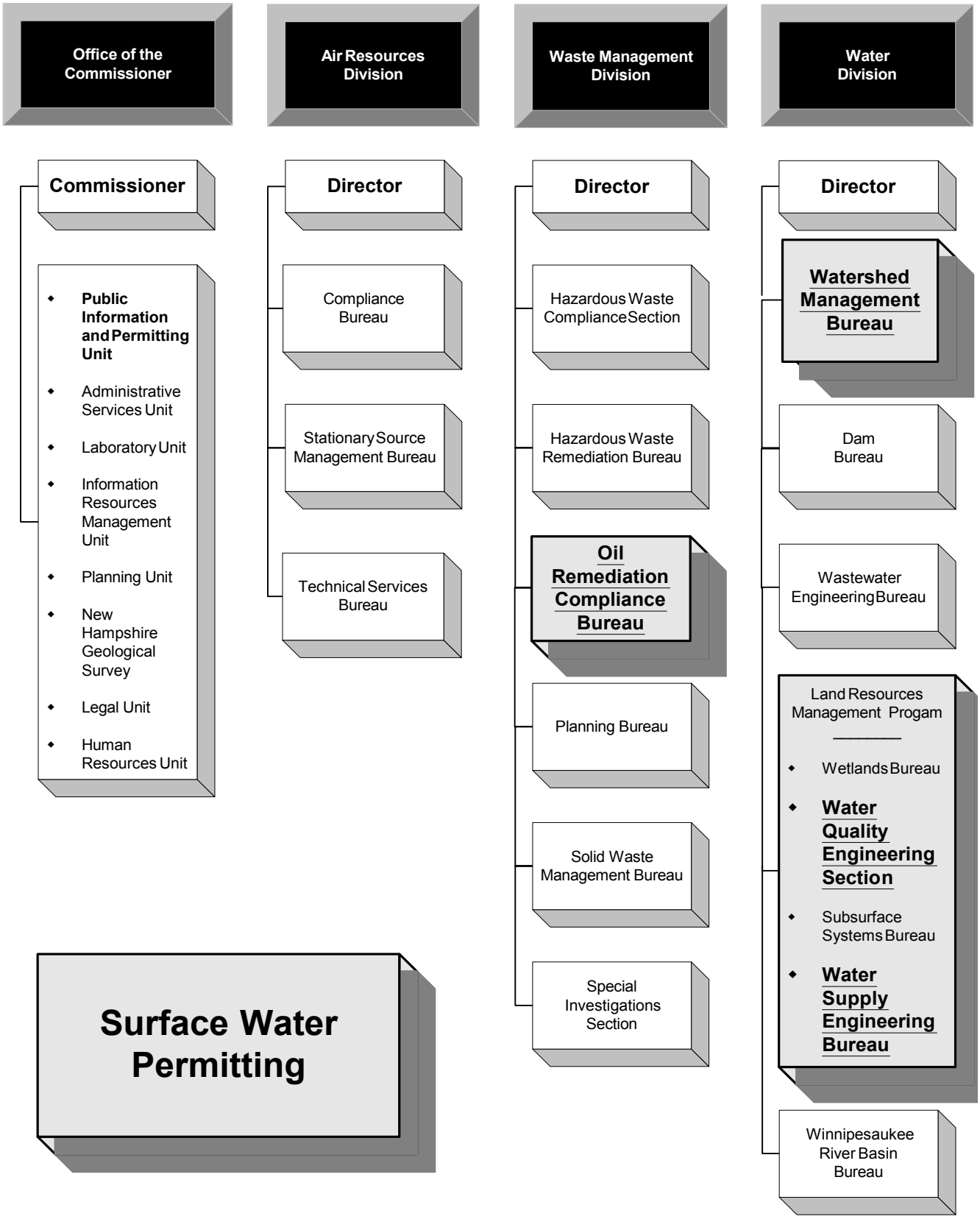
permitting, and enforcement for protection of surface water quality from degradation by erosion, sedimentation, and non-point-source storm water runoff through its Site Specific Permit. The Water Supply Engineering Bureau processes the applications and issues the decisions for the Public Bathing Facility Construction Approval and, if a project involves drinking water well/system rehabilitation, dewatering, or maintenance projects, the Water Supply Engineering Bureau performs the review and issues the decisions for the Temporary Surface Water Discharge Permit. However, if a project will involve groundwater remediation, pump-and-treat systems, or petroleum storage tank replacements, the Oil Remediation and Compliance Bureau within the DES Waste Management Division accepts applications, provides the review, and issues the decisions relative to the Temporary Surface Water Discharge Permit in those cases. Appeals of final decisions concerning these certificates, permits, or other approvals (or of orders issued for violations relating thereto) should be directed to the Water Council (see http://www.des.state.nh.us/councils/#1).

Chapter Contents

- ✓ **Section 401 Water Quality Certificate**
- ✓ **Site Specific Permit**
- ✓ **Temporary Surface Water Discharge Permit**
- ✓ **Public Bathing Facility Construction Approval**

Organizational Chart

New Hampshire Department of Environmental Services



Section 401 Water Quality Certificate

Introduction: The Section 401 Water Quality Certificate ("401 Certificate") was created to implement Section 401 of the federal Clean Water Act (see http://www.epa.gov/r5water/pdf/ecwa_t4.pdf) and to ensure that State Surface Water Quality Standards established in RSA 485-A ("Water Pollution and Waste Disposal", http://gencourt.state.nh.us/rsa/html/indexes/485-A.html) and NH CODE ADMIN. RULES Env-Ws 1700 (see ("Surface Water Quality Regulations", http://www.des.state.nh.us/wmb/Env-Ws1700.pdf) are maintained during construction projects that pose the potential for adversely impacting that resource. Any activity that will cause a discharge to navigable waters (*i.e.*, discharge to rivers, lakes, ponds, and/or marshes) and that requires a federal permit or license pursuant to the federal Clean Water Act or the River and Harbor Act of 1899, as amended (see http://www4.law.cornell.edu/uscode/33/ch12.html) likely will require a 401 Certificate from DES (see NH CODE ADMIN. RULES Env-Ws 451-455, "Water Quality Certification Rules", http://www.des.state.nh.us/wmb/section401.pdf). The DES Water Division, through its Watershed Management Bureau, administers this statewide 401 Certificate program. The U. S. Army Corps of Engineers ("Army Corps", http://www.nae.usace.army.mil/) and the Federal Energy Regulatory Commission ("FERC", see http://www.ferc.gov) are the two primary agencies to be contacted to determine whether a federal permit is necessary, particularly if an Army Corps "individual" permit is to be triggered (*i.e.*, a project that will disturb more than three acres of wetlands or one that may impact federal navigational channels). If a federal permit is necessary, the applicant must comply with Env-Ws 454. The 401 Certificate is a stand-alone document and must be in hand before any work begins, but it cannot be issued until all other relevant state and federal permits are obtained (typically including a DES Standard Dredge and Fill Permit and/or Site Specific Permit). Projects likely to require a 401 Certificate include road construction or pipeline installations with river or stream crossings, construction projects requiring the filling of a wetland or potentially impacting adjacent rivers and streams, and hydroelectric power facilities that require FERC licensing. A 401 Certificate is issued automatically by DES for projects that are included under the State Programmatic General Permit ("SPGP") agreement with the Army Corps. However, it should be noted that a 401 Certificate for a project under the SPGP may be revised relative to the potential water quality impact of that project. Many 401 Certificates are issued with conditions, which may include routine water quality monitoring and reporting requirements to determine whether state surface water quality standards are being met. DES enforcement action may result if it is found that the construction or operation of an authorized project is causing a violation of those standards. Projects that do not require a federal (Army Corps or FERC) permit are exempt from the 401 Certificate process.

Average number of certificates issued annually: 10

Fees: None

Estimated processing time after application is deemed "complete": 60 days, if FERC is not involved; 6-12 months when FERC has licensing jurisdiction

Certificate duration: 6 years, subject to renewal

Certificate transferability: A written notification to DES concerning the proposed transfer is required. A decision will then be made regarding the issuance of a new or revised 401 Certificate.

Certificate modification: If significant changes in the scope of the project occur, application must be made to request a new or revised 401 Certificate.

Certificate renewal: Reapplication for a 401 Certificate shall be made at least 180 prior to expiration of the existing certificate. If the project has not been initiated within 6 years of certificate issuance, application for a new 401 Certificate must be filed.

State statute: RSA 485-A:8, 13 ("Water Pollution and Waste Disposal", http://gencourt.state.nh.us/rsa/html/indexes/485-A.html)

Federal law: Federal Water Pollution Control Act of 1972 (Public Law 92-500, as amended by the Clean Water Act of 1977, http://www.epa.gov/r5water/pdf/ecwa_t4.pdf)

N. H. Code of Administrative Rules: Env-Ws 451-455 ("401 Water Quality Certification Regulations", http://www.des.state.nh.us/wmb/section401.pdf)

Appeals body: Water Council at RSA 21-0:7 ("Department of Environmental Services/Water Council", http://gencourt.state.nh.us/rsa/html/I/21-O/21-O-7.htm; see also http://www.des.state.nh.us/rules/env-wc200.pdf and http://www.des.state.nh.us/councils/#1)

Additional information: N. H. DES, Watershed Management Bureau, (603) 271-2457
U. S. Army Corps of Engineers, (800) 343-4789
U. S. Department of Energy, FERC, (202) 219-2700

Section 401 Water Quality Certificate - *Work Sheet*

Key Qualifier Questions: *Will your project require a federal permit or license to conduct activities which may result in any discharge to surface waters of the state? Does your project (1) require authorization from the U. S. Army Corps of Engineers or the Federal Energy Regulatory Commission for construction and/or operation, and (2) not qualify for inclusion within the DES Wetlands Bureau State Programmatic General Permit process?* (See http://www.des.state.nh.us/wetlands/nhspgp.htm and http://www.epa.gov/r5water/pdf/ecwa_t4.pdf)

What must you do to apply?

- Obtain an *Application for 401 Water Quality Certificate* from the DES Watershed Management Bureau or DES Public Information Center. Note: This form and a copy of the administrative rules for the 401 Water Quality Certificate (see http://www.des.state.nh.us/wmb/section401.pdf) typically are sent to the applicant after DES receives the applicant's *Notice of Intent* from the U.S. Army Corps of Engineers ("Army Corps", http://www.nae.usace.army.mil/) or the Federal Energy Regulatory Commission ("FERC", http://www.ferc.fed.us/).
- Contact the DES Wetlands Bureau at (603) 271-2147 to apply for a Standard Dredge and Fill Permit, and to determine whether the project qualifies for the New Hampshire State Programmatic General Permit.
- Contact the DES Wastewater Engineering Bureau at (603) 271-3908 to apply for a Site Specific Permit if the project will disturb more than 100,000 square feet of upland surface terrain on the same or contiguous properties, or 50,000 square feet within the protected shoreland (see http://www.des.state.nh.us/factsheets/sp/sp-4.htm and http://www.des.state.nh.us/factsheets/sp/sp-6.htm)
- Complete the *Application for 401 Water Quality Certificate*, which must include:
    - Name of and contact information for the applicant and his/her signature
    - Name, location, and description of the proposed project
    - Name of the drainage basin encompassing the proposed project
    - Waterways receiving drainage from the proposed project
    - Schedule for the construction and/or operation of the project
    - Information relative to project discharge
- Attach the following to the *Application for 401 Water Quality Certificate*:
    - An original of a U. S. Geological Survey quadrangle map with project location and its discharge (see http://www.topozone.com)
    - A copy of the complete federal (*i.e.*, Army Corps or FERC) permit application, including federal permit number
    - A copy of the Standard Dredge and Fill Permit from the DES Wetlands Bureau Permit
    - A copy of the Site Specific Permit from the DES Wastewater Engineering Bureau
    - A copy of any other state and local permits and applications required by law (*e.g.*, local conservation/planning commission permits, state septic design approvals, *etc.*)
    - A list of the names and addresses of abutting riparian or littoral landowners
    - A scale plan showing the proposed project, including project boundaries, location, dimensions, and types of any existing and/or proposed structures, and location and extent of water bodies, including wetlands
- Provide any relevant water quality information (*e.g.*, data, reports) from the proposed project area.
- Determine whether the proposed project will affect fourth-order rivers or streams (see http://www.des.state.nh.us/cspa/files/4thorder.pdf), protected by RSA 483-B ("Comprehensive Shoreland Protection Act", http://www.des.state.nh.us/cspa/files/lawrules.pdf).
- Determine whether the proposed project will affect New Hampshire designated rivers protected by special provisions of RSA 483:9 ("New Hampshire Rivers Management and Protection Program/Natural Rivers Protection", http://gencourt.state.nh.us/rsa/html/L/483/483-9.htm; see also http://www.des.state.nh.us/rivers/).

- Submit the application and all supporting materials to: Watershed Management Bureau, Water Division, New Hampshire Department of Environmental Services, 6 Hazen Drive, Concord, NH 03302-0095. Telephone: (603) 271-2457; fax: (603) 271-7894; or online: http://www.des.state.nh.us/wmb/

What types of projects require this certificate?

- Road, highway, or pipeline construction and/or operation near, through, or over rivers and streams
- Golf course construction that will include rivers and streams within project boundaries
- Large-scale housing, municipal, or industrial developments near rivers and streams, including dredging
- Construction, re-licensing, and/or operation of non-federal hydroelectric projects

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If there are questions regarding this page or any other section of the Guidebook, please contact Tim Drew, Administrator, Public Information and Permitting Unit, at tdrew@des.state.nh.us or at (603) 271-3306.

Site Specific Permit

Introduction: Site preparation and land use changes, whether from timber harvesting, terrain alteration, borrow pit excavation, subdivision development, mining, or dredge and fill activities, commonly involve removal of vegetation, re-grading, and other ground surface disruptions. Such disruptions have the potential to create adverse impacts to surface water quality through soil erosion, siltation, sedimentation and overland pollutant transport. The DES Site Specific Permit is designed to ensure that proper erosion and sedimentation controls and measures for attenuation of peak storm water runoff and treatment of runoff from impervious surfaces are included in project plans and are implemented as designed. These preventive measures are required to prevent adverse effects such as storm water impacts to abutting landowners, the smothering of aquatic life in adjacent water bodies, and increases in the costs of treating surface water for human consumption. A Site Specific Permit is required by RSA 485-A:17 ("Water Pollution and Waste Disposal/Terrain Alteration", http://gencourt.state.nh.us/rsa/html/L/485-A/485-A-17.htm) when more than 100,000 square feet of contiguous land area is to be disturbed (50,000 square feet within the protected shoreland as defined by RSA 483-B, the Comprehensive Shoreland Land Protection Act (see http://gencourt.state.nh.us/rsa/html/indexes/483-B.html or http://www.des.state.nh.us/cspa/). Best Management Practices ("BMPs") such as detention/retention ponds, treatment swales, and vegetated buffer strips often are used to mitigate increases in runoff and provide treatment of storm water prior to its release to surface water bodies. For more program information, see http://www.des.state.nh.us/sitespecific/. Local control over excavation projects is governed by RSA 155-E ("Local Regulation Excavations", http://gencourt.state.nh.us/rsa/html/indexes/155-E.html). A useful handbook for addressing such projects entitled, ***RSA 155-E: The Law Governing Earth Excavations – A Handbook for New Hampshire Municipalities***, can be found at http://webster.state.nh.us/osp/library/docs/ExcavationHandbook.pdf). Dimension stone and mineral mining regulation is carried out pursuant to the authority provided by RSA 12-E ("Mining and Reclamation, http://gencourt.state.nh.us/rsa/html/indexes/12-E.html) and is administered by the New Hampshire Department of Resources and Economic Development through its Land Management Bureau within the Division of Forests and Lands. The Bureau can be reached by telephone at (603) 271-2214, fax at (603) 271-2629, or through its Web site at http://www.nhdfl.org/land_mgt_bureau/lm_bureau.htm.

Average number of permits issues annually: 275

Fees: $100 for up to 200,000 square feet of impact; an additional $100 for each additional 100,000 square feet, or portion thereof, of impact

Estimated processing time after application is deemed "complete": 4-6 weeks

Permit duration: 2 years, except for certain excavation projects, for which this permit is permanent (with reporting requirements)

Permit transferability: Within ten days from the change in site ownership, the new owner must notify DES in writing and list the full name and address for the new and former owner, the exact site location, and its permit number. Assuming the site is in compliance, an amended permit will be forwarded by mail to the new owner.

Permit modification: A permit may be modified by submitting revised design plans with all supporting data and documentation (including an in-depth explanation of the need for the changes) at any time during the two-year duration of the existing permit. Any modification must be reviewed and approved by DES.

Permit renewal: All permits (except for certain excavation projects) will expire two years after issuance unless a request for an extension is received within 90 days prior to the expiration date. Excavation facility permits remain valid for the life of the project, provided a status report is submitted every two years and updated plans are received every six years.

State statute: RSA 485-A:17 ("Water Pollution and Waste Disposal/Terrain Alteration", http://gencourt.state.nh.us/rsa/html/L/485-A/485-A-17.htm)

N. H. Code of Administrative Rules: Env-Ws 415 ("Permits for RSA 485-A:17 Activities", http://www.des.state.nh.us/sitespecific/env415.pdf)

Appeals body: Water Council at RSA 21-0:7 ("Department of Environmental Services/Water Council", http://gencourt.state.nh.us/rsa/html/I/21-O/21-O-7.htm; see also http://www.des.state.nh.us/rules/env-wc200.pdf and http://www.des.state.nh.us/councils/#1)

Additional information: N. H. DES, Land Resources Management Program, (603) 271-2303
N. H. DES, Wetlands Bureau (Shoreland Section), (603) 271-7109
N. H. DES, Public Information Center, (603) 271-2975 or (603) 271-8876

Site Specific Permit – *Work Sheet*

Key Qualifier Questions: *Will the proposed project involve dredging, filling, excavating, mining, transporting of forest products, or construction in or on the border of any surface water of the State? Will the proposed project involve earth moving or other terrain alteration that will impact more than 100,000 contiguous square feet of upland or more than 50,000 square feet within the protected shoreland of a public water body?* [1, 2]

What must you do to apply?

- Obtain a copy of the *Site Specific Application* from the DES Water Division or Public Information Center, or access it online at http://www.des.state.nh.us/sitespecific/siteappl.htm.
- Complete the application form and note the exact project location on a U. S. Geological Survey topographical map (see http://www.topozone.com).
- Prepare a project narrative (usually included within the drainage report) that describes the proposed project and existing site conditions.
- If the proposed work is for an excavation facility, prepare a site plan at a scale of 1" = 100' (or less) with contour intervals of five feet or less.
- For all other types of projects, prepare a detailed development plan at a scale of 1" = 50' (or less) with a contour interval of two feet.
- Prepare both pre-development and post-development drainage design plans for the project which bear the seal of a registered professional engineer licensed to practice in the state of New Hampshire.
- Prepare storm drainage calculations for each drainage area, noting the storm frequency used (*e.g.*, 10-year storm) and the method of determining time of concentration ("T_c"), including copies of all reference charts used, worksheets showing the derivation of "CN" or "C" value for each drainage area, and calculations to demonstrate that downstream structures have sufficient capacity for post-development flows.
- Prepare designs and calculations for post-development flood protection measures including detention/retention basins, pre- and post-development flows for each drainage area, methods of decreasing runoff, arrangements for any necessary easements, and typical cross-sections.
- Prepare and submit plans for permanent storm water treatment from impervious surfaces such as roads, parking lots, roofs, *etc.* Include a discussion on controls like vegetated filter strips, grassed swales, extended detention ponds, wet ponds, constructed wetlands, infiltration trenches or basins, and water quality inlets. For reference, obtain a copy of the DES publication number "R-WSPCD-95-3" entitled ***Best Management Practices for Urban Storm Water Runoff*** from the Public Information Center or at http://www.des.state.nh.us/desguid.htm.
- Include in the plans the types of erosion control measures and BMPs to be used, the scheduling, phasing, and coordination of construction activities, design factors used to avoid adverse surface water quality impacts, construction sequence (with limits to the area of disturbance), and temporary erosion control measures.
- Submit a check or money order for the appropriate fee (calculated based on total land surface impacts) made payable to "Treasurer, State of New Hampshire" with the completed application form and all supporting plans, calculations, and other documents to: Land Resources Management Program, Site Specific Section, Water Division, New Hampshire Department of Environmental Services, 6 Hazen Drive, Concord, NH 03302-0095. Telephone: (603) 271-2303; fax: (603) 271-4128; or online: http://www.des.state.nh.us/sitespecific/

What types of projects require this permit?

- ❖ The construction of a subdivision right-of-way that is 50-feet wide and 2,000-feet or more in length, or one that has 1,000 linear feet or more lying within the protected shoreland zone of a public water body

- Site preparation (including building "footprint", access roads, parking lots, *etc*.) for the construction of a residential, commercial, or industrial facility that disturbs more than 100,000 square feet of contiguous area (or more than 50,000 square feet of contiguous area within the protected shoreland)
- The expansion, by 100,000 square feet or more, of an existing "grandfathered" earth removal operation

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Note 1: Local regulation of excavation projects is governed by RSA 155-E ("Local Regulation Excavations", http://gencourt.state.nh.us/rsa/html/indexes/155-E.html). A useful handbook for addressing such projects entitled, ***RSA 155-E: The Law Governing Earth Excavations – A Handbook for New Hampshire Municipalities***, can be found at http://webster.state.nh.us/osp/library/docs/ExcavationHandbook.pdf).

Note 2: Dimension stone and mineral mining regulation is carried out pursuant to the authority provided by RSA 12-E ("Mining and Reclamation, http://gencourt.state.nh.us/rsa/html/indexes/12-E.html) and is administered by the New Hampshire Department of Resources and Economic Development through its Land Management Bureau within the Division of Forests and Lands. The Bureau can be reached by telephone at (603) 271-2214, fax at (603) 271-2629, or through its Web site at http://www.nhdfl.org/land_mgt_bureau/lm_bureau.htm.

If there are any questions regarding this page or any other section of the Guidebook, please contact Tim Drew, Administrator, Public Information and Permitting Unit, at tdrew@des.state.nh.us or at (603) 271-3306.

Temporary Surface Water Discharge Permit

Introduction: RSA 485-A:13, I ("Water Pollution and Waste Disposal/Water Discharge Permits", http://gencourt.state.nh.us/rsa/html/L/485-A/485-A-13.htm) states that *[it] shall be unlawful for any persons or persons to discharge or dispose of any sewage or waste to the surface water or groundwater of the state without first obtaining a written permit from [DES]*. No discharges are allowed into Class A surface water bodies (which often are a source of public drinking water), but a Temporary Surface Water Discharge Permit ("TSWD Permit") can be obtained for certain temporary direct discharges of point source (*i.e.*, "end-of-pipe") pollutants to Class B surface water bodies (see http://www.des.state.nh.us/factsheets/oil/oil-16.htm). A TSWD Permit is not required for activities that require the issuance of a 401 Water Quality Certificate (see NH CODE ADMIN. RULES Env-Ws 451-455, "401 Water Quality Certification Regulations", http://www.des.state.nh.us/wmb/section401.pdf) pursuant to Section 401 of the federal Clean Water Act, such as for longer-term projects that require an "individual permit" from the U. S. Army Corps of Engineers under Section 404 of the Clean Water Act for discharges to wetlands or surface waters, or in conjunction with an NPDES Permit issuance for long-term piped (*i.e.*, confined) discharges to surface waters, or for long-term discharges to publicly-owned treatment works (which must also meet the pretreatment standards specified in NH CODE ADMIN. RULES Env-Ws 904, "Standards for Pretreatment of Industrial Wastewater", http://www.des.state.nh.us/rules/adptd904.pdf). It also does not apply to discharges from construction, storm water runoff, or runoff from construction sites [which cannot go directly to surface waters without treatment and may require an NPDES Permit from the U. S. Environmental Protection Agency ("USEPA")] or storm water discharges which may also require an NPDES Permit from the USEPA (refer to the "Wastewater" chapter elsewhere in this *Guidebook*). To obtain a TSWD Permit, an applicant must submit the original permit application to DES and must submit copies of the completed permit application to the USEPA in Boston to obtain an *NPDES Permit Application-Incident Notification Report* (see http://cfpub1.epa.gov/npdes/), and to the municipal clerk (pursuant to RSA 541-A:39, "Administrative Procedure Act/Notice to Municipalities", http://gencourt.state.nh.us/rsa/html/LV/541-A/541-A-39.htm). DES will not issue a TSWD Permit until a copy of the EPA's NPDES *Permit Application-Incident Notification Report* has been received and a copy of the application has been submitted to the municipal clerk. The TSWD Permit is nonrenewable, requires treatment by best available technology (typically sediment removal followed by granular activated carbon treatment), establishes standards and time limitations for the discharge, and requires laboratory analyses to verify that surface water quality standards have been achieved prior to discharge. Please note: The DES Water Supply Engineering Bureau processes all TSWD Permit applications for projects related to public water systems such as well pump tests, rehabilitation, redevelopment, and storage tank cleaning, while the DES Waste Management Division processes all other TSWD Permit applications.

Average number of permits issued annually: 40

Fees: None

Estimated processing time after application is deemed "complete": 15 days

Permit duration: 4 months, which can be extended if applications for a full NPDES Permit and a DES State Surface Water Discharge Permit are forwarded to the appropriate agencies

Permit transferability: Nontransferable

Permit modification: Nonmodifiable

Permit renewal: Nonrenewable

State statute: RSA 485-A:13, I ("Water Pollution and Waste Disposal/Water Discharge Permits", http://gencourt.state.nh.us/rsa/html/L/485-A/485-A-13.htm)

N. H. Code of Administrative Rules: Env-Ws 400-405 ("Protection of State Surface Waters", http://www.des.state.nh.us/rules/ws400-405.pdf) and Env-Ws 1700 ("Surface Water Quality Regulations", http://www.des.state.nh.us/wmb/env-ws1700.pdf)

Appeals body: Water Council at RSA 21-0:7 ("Department of Environmental Services/Water Council", http://gencourt.state.nh.us/rsa/html/I/21-O/21-O-7.htm; see also http://www.des.state.nh.us/rules/env-wc200.pdf and http://www.des.state.nh.us/councils/#1)

Additional information: N. H. DES, Water Supply Engineering Bureau, (603) 271-2858
N. H. DES, Waste Management Division, (603) 271-3644

Temporary Surface Water Discharge Permit – *Work Sheet*

Key Qualifier Questions: *Will the proposed project result in the discharge to a surface water body of non-domestic wastewater generated as a result of rehabilitation of a public water well or public water system storage tank purge/maintenance activities or from construction (typically, excavation dewatering) at a site with known or potential contamination? Will the proposed project involve the remediation of spills to, or other contamination of, the ground or groundwater, with final disposal in either case to a surface water body?*

What must you do to apply?

- Obtain an *Application for Temporary Surface Water Discharge Permit* from the DES Water Supply Engineering Bureau, DES Hazardous Waste Remediation Bureau, DES Public Information Center, or complete the application online at http://www.des.state.nh.us/orcb/doclist/tmpswapp.pdf.
- Obtain an *NPDES Permit Exclusion Application-Incident Notification Report* from: NPDES Program, Office Ecosystem Protection (Mail Code CPE), U. S. Environmental Protection Agency, JFK Federal Building, One Congress Street, Boston, MA 02203. Telephone: (617) 918-1551; online: http://cfpub1.epa.gov/npdes/
- Prepare a complete description of the project and representative site plan, including all location information related to the facility/project and the names of the owner, operator, and contact person for the facility/project.
- Prepare a locus map derived from a U. S. Geological Survey map (7½-minute series, if available) that clearly identifies the facility or project location and the location of the discharge point to the receiving surface water body (see http://www.topozone.com).
- Prepare a description of the proposed discharge including its purpose (groundwater remediation, well rehabilitation, excavation dewatering, *etc.*), its location and distance to the nearest sanitary sewer, proposed discharge at both intermediary (storm drain inlet; swale) and final (surface water body) locations, proposed discharge rate, proposed discharge duration, identification of the intended receiving water and erosion control measures to be used, plus a certification that site activities either have or have not contributed to phosphorus levels in surface waters (in the case of discharges to a lake or pond) or in the ground or groundwater.
- Describe the proposed treatment, neutralization, or de-chlorination processes to be used, including information on influent quality, effluent quality, sludges or other by-products to be generated, and identify chemicals to be used.
- If applicable, provide a description of the material involved in the spill/release including its location, site information, type of material released, and affected areas (*e.g.*, bodies of water, drinking water wells, vapors in basements, *etc.*)
- Submit a copy of the completed *NPDES Permit Exclusion Application-Incident Notification Report* and a copy of the completed *Temporary Surface Water Discharge Permit Application* with all supporting information to: NPDES Program, Mail Code CPU, Office of Ecosystem Protection, U. S. Environmental Protection Agency, JFK Federal Building, One Congress Street, Suite 1100, Boston, MA 02114-2023 (Telephone: (617) 918-1545; fax: (617) 918-2064; online: http://cfpub1.epa.gov/npdes/) to secure a letter that outlines discharge standards and limitations (to be used until replaced by a *Notice of Intent for General Permit* is available from the USEPA).
- Submit the completed, original *Temporary Surface Water Discharge Permit Application* with all supporting information (including the *NPDES Permit Exclusion Application-Incident Notification Report*) to DES at the address noted below.
- Submit a copy of the complete application to the appropriate municipal clerk, pursuant to RSA 541-A:39 (Administrative Procedure Act/Notice to Municipalities", http://gencourt.state.nh.us/rsa/html/LV/541-A/541-A-39.htm).
- <u>If the project will involve groundwater remediation, pump-and-treat systems, or petroleum storage tank replacements</u>, submit the original permit application to: Site Remediation Programs, Waste Management Division, New Hampshire Department of Environmental Services, 6 Hazen Drive, P. O.

Box 95, Concord, NH 03302-0095. Telephone: (603) 271-3644; fax: (603) 271-2181; or online: http://www.des.state.nh.us/orcb_hwrb.htm

- If the project will involve public water system rehabilitation, dewatering, or maintenance projects, submit the original permit application to: Water Supply Engineering Bureau, Water Division, New Hampshire Department of Environmental Services, 6 Hazen Drive, P. O. Box 95, Concord, NH 03302-0095. Telephone: (603) 271-2858; fax: (603) 271-5171; or online: http://www.des.state.nh.us/dwspp/gwdisch.htm

What types of projects require this permit?

- Groundwater remediation activities at a contaminated site
- Excavation dewatering for construction projects at, or near, a site with known or potential contamination if discharge quality meets permit requirements (*i.e.*, sufficiently treated to comply with ambient groundwater and surface water quality standards prior to release)
- Water supply well pump tests, rehabilitation, or water system maintenance projects (*e.g.*, water storage tank cleaning)

If there are questions regarding this page or any other section of the Guidebook, please contact Tim Drew, Administrator, Public Information and Permitting Unit, at tdrew@des.state.nh.us or at (603) 271-3306.

Public Bathing Facility Construction Approval

Introduction: As the popularity of public pools and spas continues to increase, it is important for DES to remain on the forefront of public health and safety issues related to their use. Diseases such as cryptosporidiosis, giardiasis, legionellosis, dysentery, leptospiroses, and folliculitis can be spread through contact with contaminated natural waters, swimming pools, and spas. Some strains of the bacterium known as *Escherichia coli* also are known to be human pathogens (see http://www.des.state.nh.us/factsheets/bb/bb-14.htm). Pools and spas also can play a role in the transmission of infections of the eye, ear, nose, throat and skin. Because of these concerns, the proper construction, operation, and maintenance of these facilities is regulated by DES pursuant to RSA 485-A:26 ("Water Pollution and Waste Disposal/Swimming Pools and Bathing Places", http://gencourt.state.nh.us/rsa/html/L/485-A/485-A-26.htm) and NH CODE ADMIN. RULES Env-Ws 1101-1105 (*Swimming Pools, Bathing Places, Spas, Water Slides, Juvenile Camps and Special Recreation Pool Rules*, http://www.des.state.nh.us/pools/env1100.pdf). Whether the public bathing facility is located at a motel, hotel, condominium, campground, water park, health club, injury treatment center, school, or a community center, and whether it is used for recreation, physical therapy, or competition, each facility operator must possess a design approval from DES based on plans and specifications that meet or exceed recognized standards (see http://www.des.state.nh.us/factsheets/bb/bb-41.htm). Once a plan receives design approval, construction may begin. Private residential pools are exempt from this program. DES currently monitors conditions at more than 1,200 public bathing facilities across the state. DES has established standards to ensure that construction designs provide for safe use, water quality is sampled and analyzed regularly, and that scheduled maintenance is performed regularly and is recorded by the operator. If any of these standards are violated, DES or the local health officer will work with the facility operator to ensure that sanitary operating conditions are restored to acceptable standards. In some cases, closing the facility until water sampling and analysis confirm the elimination of the unsanitary conditions may be required.

Average number of approvals issued annually: 45

Fee: $100 per application

Estimated processing time after application is deemed "complete": 30 days

Approval duration: Permanent (so long as no changes are made to the design)

Approval transferability: Automatic transfer upon change of ownership. The new owner must submit a written request for a name change to the DES Public Bathing Facility Program.

Approval modification: The owner or authorized representative must submit a written request to the DES Public Bathing Facility Program with new design plans and justification for an amendment. No changes or modifications to any structure and/or circulation and disinfection system component may be made without prior approval from DES. If the proposed changes are extensive, a new application may be requested.

Approval renewal: None

State statute: RSA 485-A:26-28 ("Water Pollution and Waste Disposal/Safety Regulations", http://gencourt.state.nh.us/rsa/html/L/485-A/485-A-26.htm)

N. H. Code of Administrative Rules: Env-Ws 1100 - 1105 ("Swimming Pools, Bathing Places, Spas, Water Slides, Juvenile Camps and Special Recreation Pools", http://www.des.state.nh.us/pools/env1100.pdf)

Appeals body: Water Council at RSA 21-0:7 ("Department of Environmental Services/Water Council", http://gencourt.state.nh.us/rsa/html/I/21-O/21-O-7.htm; see also http://www.des.state.nh.us/rules/env-wc200.pdf and http://www.des.state.nh.us/councils/#1)

Additional information: N. H. DES, Public Bathing Facility Program, (603) 271-7108
N. H. DES, Public Information Center, (603) 271-2975 or (603) 271-8876
N. H. DES, Watershed Management Bureau, (603) 271-2457
National Spa & Pool Institute/American National Standard, (703) 838-0083

Public Bathing Facility Construction Approval – *Work Sheet*

Key Qualifier Question: *Will the proposed project entail the construction and operation of a public bathing facility, such as a pool for swimming, wading, recreation, or therapy, or a spa, hot tub, whirlpool, or water slide, that will be owned by a municipality or private commercial entity? (Privately-owned bathing facilities that are subject to DES jurisdiction include those at hotels, motels, health facilities, water parks, condominium complexes, apartment or other residential complexes, campgrounds, and educational institutions.)* Note: Private, single-family residential pools are exempt from this program.

What must you do to apply?

- Obtain a copy of the *Public Bathing Facility "Pool " and/or "Spa" Application* from the DES Watershed Management Bureau, DES Public Information Center, or access the application online at http://www.des.state.nh.us/pools/poolsapp.htm.
- Complete the *"Pool"* application to gain approval for constructing a swimming pool, wading pool, therapy pool, or receiving pool (for a water slide).
- Complete the *"Spa"* application to gain approval for constructing a spa, hot tub, whirlpool, or Jacuzzi.
- Include a simple layout of buildings, bathing area, rest rooms, showers, and location of water supply.
- Include a scale drawing of the proposed bathing facility showing dimensions, skimmer and inlet locations, the spacing of gutter or deck drains, size, location and material of piping, fill-spout and main drains/suction outlets.
- Include a longitudinal section of entire pool/spa and cross-section at deep end showing depths & slopes.
- Include a detailed schematic of circulation and disinfection piping.
- Include specifications of circulation system components, such as filters, pumps, skimmers, disinfection units, chemical controllers, flow meters, etc.
- Submit a check or money order for the application fee ($100) made payable to "Treasurer, State of New Hampshire" with the application and all enclosures then forward to: Public Bathing Facility Program, Watershed Management Bureau, Water Division, New Hampshire Department of Environmental Services, 6 Hazen Drive, P. O. Box 95, Concord, NH 03302-0095. Telephone: (603) 271-7108; fax: (603) 271-7894; or online: http://www.des.state.nh.us/pools/
- A separate application must be submitted for each pool or spa.

What types of projects require this approval?

- The construction of a competition diving pool for a university
- The construction or installation of a self-contained hot tub for a bed and breakfast inn
- The replacement of an old pool or spa, which requires major structural and/or circulation upgrades
- The construction of an 800 square foot wading pool for a water park

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If there are questions regarding this page or any other section of the Guidebook, please contact Tim Drew, Administrator, Public Information and Permitting Unit, at tdrew@des.state.nh.us or at (603) 271-3306.

Chapter 4:

Wetlands

2002 Edition

Chapter 4: Wetlands

Introduction

Wetlands regulation in New Hampshire focuses on the sustainable use and preservation of the transition zone between dry land and open water (including underwater habitats). Coastal zone wetlands have been regulated since 1967, with the New Hampshire Port Authority exercising initial jurisdiction over work in wetlands along New Hampshire's seacoast. In 1969, the New Hampshire Special Board was established by RSA 483-A to issue permits and to regulate work in or near inland, freshwater wetlands. Its members included representatives from the Water Resources Board, Fish and Game Department, Department of Safety, Water Supply and Pollution Control Commission, Department of Highways, and the Department of Resources and Economic Development. In 1971, the membership of the Special Board was extended by including a second representative from each of the Fish and Game Department and Water Supply and Pollution Control Commission, as well as the Director of the Division of Parks and one representative from the Office of Planning and Research in the Division of Economic Development. After a decade of service, the Special Board was replaced through an amendment to RSA 483-A that established the New Hampshire Wetlands Board, effective on August 22, 1979. The Wetlands Board membership was expanded to include three members from the public appointed by the Governor and confirmed by the Executive Council, including a local conservation commission member, an elected municipal official, and a member of a soil or water conservation district. On January 2, 1987, the New Hampshire Department of Environmental Services ("DES") began operations as the state's first comprehensive environmental agency, which resulted in further administrative changes to the Wetlands Board. Effective January 1, 1990, RSA 483-A was re-codified as RSA 482-A ("Fill and Dredge in Wetlands", http://gencourt.state.nh.us/rsa/html/indexes/482-A.html). Finally, effective August 9, 1996, the Wetlands Board was replaced by a newly-created Wetlands Council, whose role was narrowed to hearing appeals of permit decisions and reviewing the policy, performance, and rulemaking activities of the DES Wetlands Bureau. The authority to render all permitting decisions was transferred to the DES to be implemented through its Wetlands Bureau (see http://www.des.state.nh.us/wetlands/). DES's wetlands program currently operates under RSA 482-A and NH CODE ADMIN. RULES Wt 100-700 ("Wetlands Bureau Code of Administrative Rules", http://www.des.state.nh.us/wetlands/pdf/wt100-700.pdf).

Wetland Functions, Delineation, and Types

Wetlands play a critical natural role in maintaining a healthy environment, enhancing public safety, providing nursery areas for important plant and animal species, and promoting outdoor enjoyment (see http://www.des.state.nh.us/factsheets/wetlands/wb-7.htm). Wetland functions include flood storage and mitigation, natural cleansing of contaminated surface water runoff, shoreline stabilization, erosion control, groundwater recharge, wildlife habitat, and protected spawning areas for important commercial finfish and shellfish; wetlands also provide educational and recreational opportunities.

Wetland boundaries generally are defined by means of the relative presence or absence of poorly and very poorly drained soils (called "hydric soils"), the relative presence or absence of plant species that prefer to grow in water-saturated conditions (termed "hydrophytic vegetation"), and the existence of inundation or water saturation during significant portions of the growing season (termed "hydrology"). These three criteria form the backbone of modern wetlands science, and provide the basis for DES Wetlands Bureau regulation of the resource in New Hampshire. Wetland boundaries are delineated using the United States Army Corps of Engineers' ("Army Corps") manual entitled ***Corps of Engineers Wetlands Delineation Manual, Technical Report Y-87-1*** dated January 1987 (see http://www.wes.army.mil/el/wetlands/pdfs/wlman87.pdf). The manual entitled ***Field Indicators for Identifying Hydric Soils in New England*** (Version 2, July 1998), is published by the New England Interstate Water Pollution Control Commission and provides additional New England-specific guidance for classifying wetland soils (see http://www.neiwpcc.org/field%20indicators%20guide.pdf). A good source of wetland plant information can be found on the U. S. Department of Agriculture's Web page at (see http://plants.usda.gov/).

Different types of wetlands are found in a wide variety of settings across the state where the land meets the water and include drainage swales, hillside seeps, vernal (spring) pools, scrub-shrub swamps, marshes, bogs, fens, wet meadows, and forested wetlands. The U. S. Fish & Wildlife Service's (a.k.a. Cowardin's) ***Classification of Wetlands and Deep Water Habitats of the United States*** provides a useful source of information, data, color slides, and evaluation criteria for determining what type of wetland is under consideration (see http://wetlands.fws.gov/Pubs_Reports/Class_Manual/class_titlepg.htm).

Surface Waters and Other Jurisdictional Areas

RSA 482-A also provides protection for the state's surface waters and the banks adjacent to those surface waters. Jurisdictional surface waters and adjacent areas include intermittent and perennial streams, rivers, lakes, ponds, sand dunes, salt marshes, estuaries, the tidal buffer zone, the Atlantic Ocean, and lands within 100 feet of the highest observable tide line. Surface waters are regulated for environmental reasons and because the state has a responsibility to protect the public trust uses of those areas. Vernal pools and marshes are considered surface waters in addition to being wetlands. Forested wetlands provide vital habitats for both upland and wetland-dependent plant and animal species (see *Clues to Identifying Forested Wetlands*, http://www.des.state.nh.us/factsheets/wetlands/wb-14.htm). However, forested floodplains may or may not be classified as a wetland, and thus may or may not lie within the jurisdiction of either the DES Wetlands Bureau or the Army Corps, depending upon such factors as soils, plant life, and extent/duration of annual inundation. For more discussion on forested floodplains, see Technical Bulletin #15, (***What is a Floodplain Forest***, http://www.state.nh.us/osp/library/docs/forested_floodplains/TB15.pdf), published by the New Hampshire Office of State Planning.

The Army Corps' jurisdiction with wetland matters is governed by Section 404 (of the federal Clean Water Act) "individual permits" for discharges to surface waters of the United States (see http://www.epa.gov/r5water/pdf/ecwa_t4.pdf) or the federal River and Harbor Act of 1899, as amended (see http://www4.law.cornell.edu/uscode/33/ch12.html) for projects that may affect navigation in federal channels. In June 1992, DES signed an agreement with the Army Corps, known as the State Programmatic General Permit (or "NHSPGP", http://www.des.state.nh.us/wetlands/nhspgp.htm), that was designed to shorten the parallel processing times for applications to each agency and tighten the coordination of decisions issued by state and federal wetland permitting authorities. New Hampshire was one of the first states in the nation at that time to sign such an agreement to streamline the dual permitting roles of the Army Corps (see http://www.nae.usace.army.mil/reg/index.htm) and the DES Wetlands Bureau.

Finally, the regulation of swim rafts, swim lines (see Saf-C 404.08), moorings (see Saf-C 408), buoyed slalom courses/water event permits for water skiing contests, boat races, *etc*. (see Saf-C 413), and other similar offshore structures/activities is administered by the New Hampshire Department of Safety through its Division of Safety Services, pursuant to RSA 270 ("Supervision of Navigation; Registration of Boats and Motors; Common Carriers by Water", http://gencourt.state.nh.us/rsa/html/indexes/270.html) and NH CODE ADMIN. RULES Saf-C 400 (see http://www.gencourt.state.nh.us/rules/saf-c400.html). The Division of Safety Services is headquartered at 31 Dock Road in Gilford, New Hampshire 03249-7626. Telephone: (603) 293-0091; fax: (603) 293-0096; or online: http://www.state.nh.us/safety/ss/

Permits Required

The DES Wetlands Bureau application process provides the means for balancing the various interests among the effected parties to a proposal that will impact jurisdictional areas while seeking to protect the overall viability of the wetland resource and public trust interests in surface waters of the state. Any individual or entity (including homeowners, land developers, farmers, foresters, business owners, civic organizations, municipalities, public utilities, or governmental agencies) that wishes to carry out a project that will impact jurisdictional wetlands, surface waters, or adjacent areas in New Hampshire must apply for a permit before commencing work. Examples of such work include the dredging or filling of wetlands; installation of dams,

culverts and bridges; construction of a dock (permanent or non-exempt seasonal); construction of a breakwater or retaining wall; and repair/replacement of existing structures located in a jurisdictional area.

Avoidance/Minimization/Mitigation

A key component of any project design is to seek to avoid wetland impacts whenever and wherever possible. If avoidance is not possible and reasonable alternatives exist, the applicant should minimize alteration of the wetland areas by choosing the least impacting alternative available. For certain projects, the applicant also may be required to mitigate unavoidable impacts by creating or restoring wetlands or by protecting valuable wetland and upland complexes. Mitigation is considered only when project impacts have been shown to be unavoidable and represent the least impacting alternative. Therefore, when designing a project, be sure to follow the hierarchy of avoidance, minimization, and mitigation in justifying the proposed impacts to wetlands. If this is successfully accomplished prior to submittal, it will save valuable time and effort for both the applicant and DES during the processing of the application.

Allied Programs

Other DES programs play a pivotal role in wetlands permitting, and may add time to the process of obtaining a wetlands permit decision. The New Hampshire Lakes Management and Protection Program focuses its attention on proposed wetland projects (and their potential impacts) in or adjacent to New Hampshire's more than 800 lakes and ponds, pursuant to RSA 483-A ("New Hampshire Lakes Management and Protection Program", http://gencourt.state.nh.us/rsa/html/indexes/483-A.html; see also http://www.des.state.nh.us/factsheets/r&l/rl-1.htm). The Comprehensive Shoreland Protection Act, RSA 483-B (see http://gencourt.state.nh.us/rsa/html/indexes/483-B.html; see also http://www.des.state.nh.us/cspa/), requires DES to review proposed projects for compliance with standards that protect the environmental integrity of the protected shoreland zone, which by definition extends 250 feet landward from the water's edge (see http://www.des.state.nh.us/factsheets/sp/sp-5.htm). DES guidance on the Shoreland Protection Program also is available in ***The Critical Edge - Shoreland Protection Reference Guide*** (see http://www.des.state.nh.us/cspa/FILES/Lawrules.pdf). DES's Rivers Management Protection Program (see http://www.des.state.nh.us/rivers/) provides expert advice and review concerning wetland impacts within or close to New Hampshire's river systems pursuant to RSA 483 ("New Hampshire Rivers Management and Protection Program", http://gencourt.state.nh.us/rsa/html/indexes/483.html; see also http://www.des.state.nh.us/factsheets/r&l/rl-2.htm). More information on rivers protected by this program can be found at http://www.des.state.nh.us/rivers/desigriv.htm and http://www.des.state.nh.us/rivers/map-1.htm.

Summary

The Wetlands Bureau in the DES Water Division is charged with the primary administration of the wetlands program (see http://www.des.state.nh.us/wetlands/). Appeals of Wetlands Bureau permit decisions or orders issued for violations of program requirements should be directed to the Wetlands Council (see http://www.des.state.nh.us/councils/#4; see also http://www.des.state.nh.us/factsheets/wtc/wtc-1.htm).

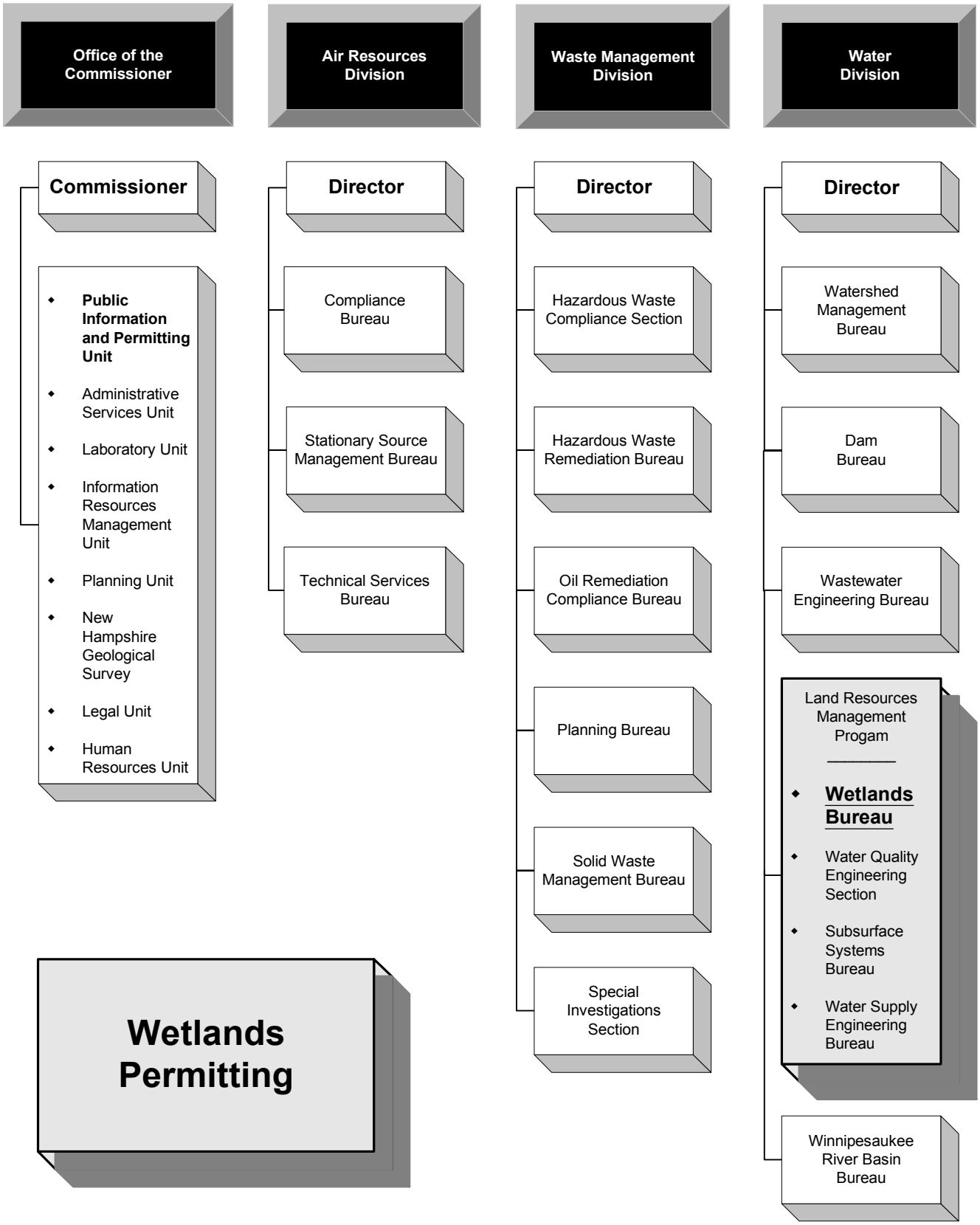
Chapter Contents

- ✓ **Standard Dredge and Fill Permit – Minimum/Minor/Major Impact Projects**
- ✓ **Standard Dredge and Fill Permit – Emergency Authorization**
- ✓ **Minimum Impact Expedited Permit**
- ✓ **Minimum Impact Agricultural Permit**
- ✓ **Recreational Mineral Dredge Permit**

- ✓ **Minimum Impact Forestry Notification**
- ✓ **Seasonal Dock Notification for Lakes and Ponds**
- ✓ **Minimum Impact Trail Development Notification**

Organizational Chart

New Hampshire Department of Environmental Services



Standard Dredge and Fill – Major/Minor/Minimum Impact Projects

Introduction: New Hampshire has regulated tidal wetlands since 1967 and non-tidal wetlands since 1969. Permits are required to dredge, fill, or construct a structure in a wetland, surface water, sand dune area, or upland tidal buffer zone, or adjacent to a municipally-designated prime wetland (see RSA 482-A:15 ("Fill and Dredge in Wetlands/Local Option; Prime Wetlands", http://gencourt.state.nh.us/rsa/html/L/482-A/482-A-15.htm). Wetlands have also been regulated by the U. S. Army Corps of Engineers ("Army Corps") since 1972 under the federal Clean Water Act (see http://www.epa.gov/r5water/pdf/ecwa_t4.pdf). In 1992, the Army Corps issued the first New Hampshire State Programmatic General Permit or "NHSPGP" (see http://www.des.state.nh.us/wetlands/nhspgp.htm). This agreement allows more than 99 percent of the wetland permits issued by DES to serve also as a federal permit. A single application to DES will usually satisfy both state and federal application requirements. If a dock, dam, building, or other structure is to be constructed in or adjacent to the bank or bed of any of the rivers that form New Hampshire's boundary (particularly the Connecticut River), the project applicant also must apply to the Commissioner of the New Hampshire Department of Transportation pursuant to RSA 1:8-10 ("State Boundaries", http://gencourt.state.nh.us/rsa/html/I/1/1-8.htm) for certification and a permit for the boundary work.

All projects that do not qualify for the Minimum Impact Expedited Permit (see description elsewhere in this chapter of the *Guidebook*) and all after-the-fact applications (including after-the-fact applications involving minimum impact projects), require application through the Standard Dredge and Fill Application process. Thus, a Standard Dredge and Fill Application process is required for projects in bogs, marshes, sand dunes, the undeveloped tidal buffer zone, or a publicly-owned water body (tidal waters, "Great Ponds," and impoundments behind State-owned dams); projects in or adjacent to municipally designated prime wetlands; projects that have more than 50 linear feet of cumulative impact (including the channel plus each bank) to a stream or river; most projects exceeding 3,000 square feet of new impact in a forested wetland or a wet meadow; and new structures that exceed the criteria for a standard seasonal dock. Note: Any project that impacts a jurisdictional wetland resource that has been identified as an exemplary natural community, or that provides critical habitat for an endangered or threatened species, is classified as a major project, regardless of the amount of impact or type of resource (see http://www.nhdfl.org/organization/div_nhnhi.htm). Projects located along designated rivers must also comply with RSA 483 ("New Hampshire Rivers Management and Protection Program", http://gencourt.state.nh.us/rsa/html/indexes/483.html). More information on designated rivers and protected river segments is provided at http://www.des.state.nh.us/rivers/desigriv.htm and http://www.des.state.nh.us/rivers/map-1.htm.

The applications for major, minor, and minimum impact projects are quite similar; the primary difference is in the level of documentation required and, frequently, the degree of public scrutiny afforded based on the potential impacts to jurisdictional areas. Applications for all three types of projects require scaled or dimensioned plans, photographs, a 7½-minute U. S. Geological Survey quadrangle map and a tax map showing the location of the project, a detailed description of the project, an "alternatives analysis," and a narrative response to the "20 questions" of NH CODE ADMIN. RULE Wt 302.04, some of which may not apply to all types of projects. The DES Wetlands Bureau is drafting a guidebook specifically to address wetlands permit issues (see http://www.des.state.nh.us/wetlands/Guidebook), which is intended to be an additional resource for applicants. If the project involves a major or minor impact to wetlands, those wetlands must be delineated on the basis of three criteria [presence or absence of hydrophytic vegetation (see http://plants.usda.gov/), hydric soils, and wetlands hydrology in accordance with the Army Corps manual entitled ***Corps of Engineers Wetlands Delineation Manual, Technical Report Y-87-1*** dated January 1987 (see http://www.wes.army.mil/el/wetlands/pdfs/wlman87.pdf) and the manual ***Field Indicators for Identifying Hydric Soils in New England*** (Version 2, July 1998) published by the New England Interstate Water Pollution Control Commission (see http://www.neiwpcc.org/field%20indicators%20guide.pdf). The U. S. Fish and Wildlife Service's (a.k.a., Cowardin's) ***Classification of Wetlands and Deep Water Habitats of the United States*** (available at http://wetlands.fws.gov/Pubs_Reports/Class_Manual/class_titlepg.htm) also can serve as a valuable reference for these projects. Projects that are classified as "minimum impact" (generally less than

3,000 square feet) may be delineated either on the basis of soils or plants alone (see NH CODE ADMIN. RULE Wt 301.01).

Major, minor, and minimum impact applications may differ in the DES review process. All major impact projects are field-inspected by a DES wetland specialist, whereas only selected minor and minimum impact projects are inspected to gauge potential direct and indirect impacts. There also is a greater likelihood that a public hearing will be conducted if the proposed work is classified as a "major impact" project. Under the NHSPGP, minimum impact projects can be assumed to have a federal permit if the Army Corps does not contact the applicant within 30 days following a DES Wetlands Bureau decision on the application; applicants for minor impact projects must either wait 30 days or receive written authorization from the Army Corps (whichever comes first) before starting work in wetlands; and applicants for major impact projects must wait for formal written authorization from the Army Corps (regardless of elapsed time) prior to initiation of work. Additional information about the NHSPGP can be found at http://www.des.state.nh.us/wetlands/nhspgp.htm. Additional information on specific project types, rules, application forms, and fact sheets can be obtained at http://www.des.state.nh.us/wetlands, or paper copies may be obtained from the DES Public Information Center. Specific questions can be directed to the DES Wetlands Bureau at (603) 271-2147 or by E-mail at wetmail@des.state.nh.us. Project officials may request a pre-application meeting with a DES Wetlands Bureau inspector to discuss the details of a proposed project before submitting an application for the work.

Average number of permits issued annually: 900

Fees: $100 per boat slip requested plus $0.04 per square foot of impact requested (not necessarily granted), with a $50 minimum. Example #1) 7,000 sq. ft. of wetland impact: 7,000 x $0.04 = $280. Example #2) 6-foot by 30-foot permanent dock (2 slips @ $100/slip) = $200. Example #3) 300 square feet of tidal marsh: 300 sq. ft. x $0.04 = $12, therefore fee = $50.

Estimated processing time after application is deemed "complete": 60 days. Major impact projects with unusual or unique characteristics, those with considerable public opposition, or projects with unusually complex applications may take longer.

Permit duration: 5 years (10 years for certain public transportation projects)

Permit transferability: Applicants may request a name change by writing to the DES Wetlands Bureau, with a copy to the municipal conservation commission (or board of selectmen if there is no conservation commission); with a request that provides the permit number and the name, address, and telephone number of the new owner. Assuming no outstanding compliance issues exist, an amended permit is typically issued within two weeks.

Permit modification: An amendment may be requested by writing to the DES Wetlands Bureau, with a copy to the municipal conservation commission (or board of selectmen if there is no conservation commission). The request should provide an explanation of the requested amendment and why it is needed. An additional fee and new plans may be necessary. The amendment must be designated for work that is directly related to the purpose of the original permit. A request for permit modification will trigger a reassessment of the federal permit status by the Army Corps.

Permit renewal: Permits may not be renewed.

State statute: RSA 482-A ("Fill and Dredge in Wetlands", http://gencourt.state.nh.us/rsa/html/indexes/482-A.html)

N. H. Code of Administrative Rules: Wt 100-700 ("Wetlands Bureau Code of Administrative Rules", http://www.des.state.nh.us/wetlands/pdf/wt100-700.pdf), Env-C 200 ("Hearing Procedure Rules", http://www.des.state.nh.us/rules/env-c200.pdf), Env-C 608 ("Field Citation Fine Rules",

http://www.des.state.nh.us/wetlands/pdf/608field.pdf), Env-C 614 ("Fines Relating to Wetlands Rules", http://www.des.state.nh.us/wetlands/pdf/env-c614.pdf), and Env-WtC 100-207 ("Wetlands Council Rules", http://www.des.state.nh.us/wetlands/pdf/env-wtc.pdf)

Appeals bodies: Wetlands Bureau under RSA 482-A:10 ("Fill and Dredge in Wetlands/Appeals", http://gencourt.state.nh.us/rsa/html/L/482-A/482-A-10.htm) and NH CODE ADMIN. RULES Wt 200 ("Rules of Practice and Procedure"); then to the Wetlands Council under RSA 21-O:5-a ("Department of Environmental Services/Wetlands Council", http://gencourt.state.nh.us/rsa/html/I/21-O/21-O-5-a.htm, http://www.des.state.nh.us/rules/envwtc200.pdf, (http://www.des.state.nh.us/councils/#4, and http://www.des.state.nh.us/factsheets/wtc/wtc-1.htm); then to the New Hampshire Superior Court in the appropriate county (see http://www.state.nh.us/courts/superior.htm)

Additional information:
N. H. DES, Wetlands Bureau, (603) 271-2147
N. H. DRED, Natural Heritage Inventory, (603) 271-3623
N. H. Fish & Game Department, (603) 271-3421
U. S. Army Corps of Engineers, (800) 343-4789
Council Clerk, Wetlands Council, (603) 271-6072

Standard Dredge and Fill – Major/Minor/Minimum Impact Projects – *Work Sheet*

Key Qualifier Question: *Will your project involve dredging, filling, or construction in wetlands, surface waters, banks adjacent to surface waters, areas adjacent to municipally-designated "prime wetlands", sand dunes, or within 100 feet of the highest observable tide line in coastal areas?*

Note: The *Standard Dredge and Fill Application* (see http://www.des.state.nh.us/wetlands/pdf/stdapp.pdf) is required for all projects that (1) don't qualify for the Minimum Impact Expedited Permit; (2) are filed after-the-fact; or (3) represent a follow-up to an emergency authorization. The *Minimum Impact Expedited Application* may be more appropriate for many smaller projects (see http://www.des.state.nh.us/wetlands/pdf/expedite.pdf).

What must you do to apply? (See http://www.des.state.nh.us/factsheets/wetlands/wb-8.htm)

- Prepare a plan, or set of plans, that locates the project on the property and shows all jurisdictional areas, property boundaries, and proposed impact areas. The plan should include:
    - An indication of the scale used on the plan and a north-pointing arrow to indicate orientation.
    - A legend that clearly indicates all symbols, line types, cross-hatching or shading used on the plan
    - A delineation of the boundaries of all jurisdictional wetlands, in accordance with the 1987 Army Corps manual (see http://www.wes.army.mil/el/wetlands/pdfs/wlman87.pdf) The plan must indicate who did the delineation and the date that it was done.
    - Delineation of any sand dunes or the tidal buffer zone areas that may exist on the property
    - Delineation of the normal high water for all surface waters, and the top of bank adjacent to all surface waters, the direction of stream flow, and for tidal waters, show the high and low tide lines and directions of ebb/flow.
    - Identification and dimensions all existing and proposed shoreline structures. Indicate distance to any Federal Navigation Project (see http://www.nae.usace.army.mil/reg/index.htm), if less than 200 feet away.
    - The location of the 100 year floodplain if applicable
    - The existing and proposed topography, if slope is to be altered or grades are to be changed.
    - Cross-sections through impact site and adjacent areas should be provided.
    - A statement identifying the vertical datum being used if elevations are shown
    - Shaded or hatched areas showing the limits of all temporary and permanent impacts in jurisdiction (color may be used, but all areas must be distinct on a black and white copy by using patterns).
    - A label must be included for each impact area to indicate the size of impact and, if appropriate, its designation (*e.g.* "5,000 square feet", "Temporary Impact Area 1", *etc.*).
    - A narrative "construction sequence" (*i.e.*, relative timing and progression of all work, pre-construction through post-construction)
    - Proposed methods of erosion and siltation control indicated graphically on the plan and supplemented by narrative explanation
    - If the project involves the subdivision of land, provide the information required by NH CODE ADMIN. RULE Wt 304.09 (see http://www.des.state.nh.us/wetlands/pdf/wt100-700.pdf).
    - If the project involves bank stabilization, provide the information required by Wt 404 (see http://www.des.state.nh.us/wetlands/pdf/wt100-700.pdf).
    - The name of the person who prepared the plans, cross-sections, and drawings
- Contact the New Hampshire Department of Resources and Economic Development's Natural Heritage Inventory (see http://www.nhdfl.org/organization/div_nhnhi.htm) to check for the presence or absence of rare, threatened, or endangered species.
- Notify all abutters by certified mail to briefly explain the purpose and need for the proposed project, its relationship to their properties, and to indicate your intent to seek a permit from the DES Wetlands

Bureau to do the work. Jurisdictional impacts within 20 feet of a property boundary require written authorization from the abutter(s).

- Complete a *Standard Dredge and Fill Application* (http://www.des.state.nh.us/wetlands/pdf/stdapp.pdf) for filling, dredging, or constructing structures.
- Attach all postal receipts (or copies) to verify that abutter notifications have been completed.
- Include a U. S. Geological Survey topographical map with the project site clearly indicated on it (see http://www.topozone.com).
- Include a photocopy of the local tax map showing the applicant's lot number, the project's location on that property, and its relationship to the abutters' tax map/lot numbers; label the abutting properties with abutters' names.
- Prepare a brief project description and a statement of purpose and need for the work.
- Indicate the proposed start and end date for the work.
- Identify the contractor or agent (if any) responsible for the work.
- Calculate the total area of requested impact. For projects in or adjacent to surface waters, also provide the linear length of shoreline, bank, or channel impacts.
- For docks, indicate the number of both new and existing boat slips that ultimately will exist on the frontage once the work is completed. Indicate the exact location of any new structures by survey or by triangulation to permanent features on the lot (*e.g.*, house foundation, well head, *etc.*).
- Include original color photographs, mounted on 8½" by 11" sheets of paper, which depict all wetland areas and/or surface water bodies to be impacted by the project.
- Submit a check or money order for the application fee ($100 per boat slip plus $0.04 per square foot of requested impact, with a $50 minimum), made payable to the "Treasurer, State of New Hampshire", with the original and four copies of the completed application form and all supporting documents to the municipal clerk.
- The municipal clerk will sign the copies, certify that all abutter notifications have been made, distribute three copies among the local boards with jurisdiction, retain a fourth copy for municipal records, and forward the original via certified mail to: Wetlands Bureau, Water Division, New Hampshire Department of Environmental Services, 6 Hazen Drive, P. O. Box 95, Concord, NH 03302-0095. Telephone: (603) 271-2147; fax: (603) 271-6588; or online: http://www.des.state.nh.us/wetlands/

What types of wetland projects qualify for a major, minor, or minimum impact review? (The following is a list of common examples, and should not be considered a complete listing of all potential project types.)

Minimum Impact Projects –

- The repair or replacement of a seasonal dock that does not qualify for the Seasonal Dock Notification
- Fill for lot development that impacts less than 3,000 square feet of swamp or wet meadow
- The installation of a 900 square foot perched beach for a single-family home
- A construction project that will disturb 50 linear feet or less of an intermittent stream, with work occurring during low flow periods
- A project to remove nuisance aquatic weeds by cutting roots and harvesting, with no mobilization of bottom sediments
- Repair or replacement of an existing legal structure

Minor Impact Projects -

- The construction or modification of a docking system that will yield no more than four boat slips (new, plus existing) and affects less than 100 linear feet of shoreline
- The construction of a fire pond or recreation pond (with an inlet or outlet) with less than 20,000 square feet of impact to very poorly drained soils ("Hydric A") or impacts to a stream
- Removal of less than 20 cubic yards of rocks, gravel, sand, and/or mud from public waters

- The repair or replacement of a retaining wall that requires work in the water, but results in no change to the wall's height, length, location, or configuration
- The combination of a series of minimum impact projects amounting to less than 20,000 square feet of dredge and/or fill, four boat slips or less, or cumulative impacts of less than 200 linear feet of shoreline or stream bank

Major Impact Projects -

- The filling of more than 20,000 square feet of jurisdictional wetlands
- Placing fill in public waters for the purpose of making land
- Building a new retaining wall that will disturb more than 200 linear feet of a Great Pond's shoreline, constructed lakeward from the natural shoreline and below its natural mean high water level
- The construction of a marina or breakwater in public waters
- Boardwalk construction across sand dunes in the tidal buffer zone to provide beach access
- A combination of new plus prior site work (over the past five years) which exceeds 20,000 square feet of impact
- Any impacts to a wetland designated as a "prime wetland" by the host community (Check with the local municipal offices or access prime wetland information offered by DES at http://www.des.state.nh.us/wetlands/Guidebook/primewet.htm.) See also RSA 482-A:15 ("Fill and Dredge in Wetlands/Local Option; Prime Wetlands", http://gencourt.state.nh.us/rsa/html/L/482-A/482-A-15.htm.

If there are any questions regarding this page or any other section of the Guidebook, please contact Tim Drew, Administrator, Public Information and Permitting Unit, at tdrew@des.state.nh.us or at (603) 271-3306.

Standard Dredge and Fill – Emergency Authorization

Introduction: The DES Wetlands Bureau offers this authorization to allow emergency corrective actions to be performed to stabilize such areas as streambanks, failed culverts, river impoundments, highway bridges, and coastal zone seawalls when storm forces have severely damaged or weakened them (see http://www.des.state.nh.us/factsheets/wetlands/wb-9.htm). An Emergency Wetlands Authorization is initiated by contacting the DES Wetlands Bureau Administrator (or, if the Administrator is not available, the regional DES Wetlands Bureau Inspector) by telephone at **(603) 271-2147** or by E-mail at **wetmail@des.state.nh.us** within five days following the event to report the conditions and secure an emergency approval to temporarily stabilize the site or mitigate an immediate threat to public health and safety. Following approval, the applicant will receive a mailed or faxed copy of the *Emergency Authorization Verification* form, which must be posted on site before any work begins. Once the emergency has subsided, a description of all emergency work performed and an after-the-fact application (if additional permanent repairs or restoration work is needed) must be filed to more fully document the initial repairs and define any additional non-emergency work necessary to stabilize the situation. If the emergency occurs on a weekend or holiday when State offices are closed (and the situation cannot wait), notice must be provided to local officials and sufficient work may be completed to alleviate the immediate problem or prevent a small problem from worsening, followed by a notification to DES on the next normal work day. Examples of emergency situations include a road washout, the collapse of a dike at a wastewater lagoon, the undermining of a highway bridge abutment, a solid waste landfill slump, or the threat of a dam failure.
(See also **http://www.des.state.nh.us/emergency_response.htm**)

Average number of authorizations issued annually: Approximately 35

Fees: Generally, no fee is collected at the time that an Emergency Authorization is issued. However, for those projects that require a follow-up application, fees are established by RSA 482-A:3, I ("Fill and Dredge in Wetlands/Excavating and Dredging Permit; Certain Exemptions", http://gencourt.state.nh.us/rsa/html/L/482-A/482-A-3.htm) at $0.04 per square foot of impact requested impact, with a minimum fee of $50.

Estimated processing time after application is deemed "complete": Immediately following the initial contact with the DES Wetlands Bureau Administrator, a completed *Emergency Authorization Verification* form will be prepared and usually sent by facsimile to the applicant. This authorization allows for emergency work to be completed without further review.

Authorization duration: Expiration date (specified on authorization when issued) is based on expected completion of the approved work in wetlands. Typically, 10 days are allowed to complete emergency repairs. Time extensions are granted at the discretion of the DES Wetlands Bureau Administrator.

Authorization transferability: Non-transferable

Authorization modification: Typically, amendments to emergency authorizations are not necessary due to the nature of the emergency work. Authorizations may be changed only by the DES Wetlands Bureau Administrator or, if the Administrator is not available, by the regional DES Wetlands Inspector.

Authorization renewal: May be extended for short periods, depending on the nature of the emergency.

State statute: RSA 482-A ("Fill and Dredge in Wetlands", http://gencourt.state.nh.us/rsa/html/indexes/482-A.html)

N. H. Code of Administrative Rules: Wt 503 ("Wetlands Bureau Code of Administrative Rules", http://www.des.state.nh.us/wetlands/pdf/wt100-700.pdf), Env-C 608 ("Field Citation Fine Rules", http://www.des.state.nh.us/wetlands/pdf/608field.pdf), Env-C 614 ("Fines Relating to Wetlands Rules", http://www.des.state.nh.us/wetlands/pdf/env-c614.pdf), and Env-WtC 100-207 ("Wetlands Council Rules", http://www.des.state.nh.us/wetlands/pdf/env-wtc.pdf)

Appeals body: None. (*Standard Dredge and Fill Application* may be filed - http://www.des.state.nh.us/wetlands/pdf/stdapp.pdf)

Additional information: N. H. DES, Wetlands Bureau, (603) 271-2147
N. H. DES, Wetlands Bureau (Pease Tradeport Office), (603) 433-6183
N. H. DES, Public Information Center, (603) 271-2975 or (603) 217-8876

Standard Dredge and Fill – Emergency Authorization – *Work Sheet*

Key Qualifier Question: *Has an emergency situation been created (as a result of natural or man-made factors) that poses an immediate and substantial threat to public safety, health, or welfare, or damage to private property that requires immediate work in wetlands or surface waterbodies to regain control of the situation?* (See also **http://www.des.state.nh.us/emergency_response.htm**)

What must you do to apply? (See http://www.des.state.nh.us/factsheets/wetlands/wb-9.htm)

- Contact the DES Wetlands Bureau Administrator or the regional DES Wetlands Inspector in Concord at **(603) 271-2147**, at the Pease Tradeport Office in Newington at (603) 433-6183, or by E-mail at **wetmail@des.state.nh.us** to describe the nature of the emergency work to be performed in wetlands or surface waterbodies.
- Emergency work in wetlands may be authorized immediately, but will be strictly limited to the work needed to stabilize the immediate area. A record of the approval containing a description of the emergency conditions, work to be performed, and schedule of work will be created in cooperation with the applicant and filed at the DES Wetlands Bureau.
- Based on information supplied by the applicant, a written *Emergency Authorization Verification* will be prepared by the DES Wetlands Bureau. A copy of the written authorization will then either be mailed or faxed to the applicant for posting on site.
- After the emergency has subsided, provide a detailed description (in lieu of a Standard Application) of the work performed during the emergency period to the DES Wetlands Bureau.
- Submit a *Standard Dredge and Fill Application* (available from the local conservation commission, DES Wetlands Bureau, or online at http://www.des.state.nh.us/wetlands/pdf/stdapp.pdf) to the DES Wetlands Bureau within the specified timeframe (usually within 10 days) following the event to request permission to retain the authorized work or to make any permanent, non-emergency repairs, restoration, or other work in wetlands.
- Submit the original and four copies of the Standard Application, all supporting documents, and data to the municipal clerk, who will sign them and distribute four copies to local boards (including the clerk's office), and forward the original by certified mail to the DES Wetlands Bureau for processing. The application will be subjected to the standard review procedure.
- **In a true emergency situation, it is possible to obtain an authorization from DES to conduct work prior to receiving a wetlands permit.** DES will issue such permission in situations which threaten public health and safety, or which threaten significant damage to private property, provided that the event which caused the emergency has occurred within the last five days. Examples include the undermining of bridge abutments, weakening of dam structures, or washouts of roadways by flood waters.
- Submit all information and support materials to: Administrator, Wetlands Bureau, Water Division, New Hampshire Department of Environmental Services, 6 Hazen Drive, P. O. Box 95, Concord, NH 03302-0095. Telephone: (603) 271-2147; fax: (603) 271-6588; or online: http://www.des.state.nh.us/wetlands/

What types of projects require this authorization?

- The repair of bridge abutment footings along a major highway that have washed out due to flooding, creating an imminent and substantial danger to the traveling public
- The repair of a wastewater lagoon's toe of slope and discharge pipe at a river's edge that have been undermined during a storm event
- The repair of a closed landfill's side slope that has slumped into a wetland area immediately downslope, exposing the solid waste deposits to the weather, potential vectors, and the public

- Responding to the threat of a dam failure during spring floods, with residences and a primary community roadway situated immediately downstream and within the dam's inundation zone (as delineated by its DES-approved Emergency Action Plan)
- The repair of a breached seawall and adjacent sand dunes damaged by a hurricane's storm surges
- The repair of a public utility pipeline, such as a sewer line or water line, where that failure may cause environmental damage or interrupt critical services necessary for maintaining public health and safety
- The repair of a road washout that occurred as a result of culvert failure

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If there are any questions regarding this page or any other section of the Guidebook, please contact Tim Drew, Administrator, Public Information and Permitting Unit, at tdrew@des.state.nh.us or at (603) 271-3306.

Minimum Impact Expedited Permit

Introduction: Over the past decade, and in response to stakeholder suggestions and legislative action, DES has identified a number of project types that typically impart a minimum impact to jurisdictional wetlands, surface waters, and adjoining areas and do not need the full scrutiny afforded to Standard Dredge and Fill Applications. The Minimum Impact Expedited Permit was created for these situations and is used for such common projects as maintenance, repair or replacement of existing legal structures such as docks, culverts, retaining walls, and tie-off pilings; the installation of a culvert for driveway access to a single-family building lot; dredging and/or filling of 3,000 square feet or less within jurisdictional wetlands, and installation of dry hydrants (see http://www.des.state.nh.us/wetlands/pdf/expedite.pdf). A special expedited application process also is available for seasonal dock projects that meet narrowly-defined criteria (see NH CODE ADMIN. RULE Wt 506 at http://www.des.state.nh.us/wetlands/pdf/wt100-700.pdf). Review the description provided for "Seasonal Dock Notification for Lakes and Ponds" provided elsewhere in this chapter. To qualify for the 30-day expedited review process (for projects other than seasonal docks on lakes and ponds), the completed application must be signed by the municipal conservation commission (see Wt 505). However, the conservation commission is under no obligation to sign. If it doesn't, or the applicant does not wish to obtain the commission's signature, or if the community does not have a conservation commission, the applicant must submit a DES *Standard Dredge and Fill Application* (see http://www.des.state.nh.us/wetlands/pdf/stdapp.pdf) with all supporting materials (see "Standard Dredge and Fill – Major/Minor/Minimum Impact Project" provided elsewhere in this chapter). The completed application (an original and four copies) must be submitted to the municipal clerk for signature and local distribution, with the original sent by certified mail to the DES Wetlands Bureau for processing. The expedited application must be administratively and technically complete on initial submittal to receive the 30-day turnaround time for a decision. By separating the projects that qualify for this streamlined review from those that are more complex and time-consuming, processing efficiency and customer service for all application types has been enhanced without compromising protection of wetland resources.

Average number of permits issued annually: 550

Fee: $50

Estimated processing time after application is deemed "complete": 30 days

Permit duration: 5 years

Permit transferability: Applicants may request a name change by writing to the DES Wetlands Bureau, with a copy to the municipal conservation commission (or board of selectmen if there is no conservation commission), listing the permit number, name, address, and telephone number of the new owner. Assuming that no outstanding compliance issues exist and that the permit is still in effect, an amended permit typically is issued within two weeks.

Permit modification: An amendment may be requested by writing to the DES Wetlands Bureau, with a copy to the municipal conservation commission (or board of selectmen if there is no conservation commission). The request should provide an explanation of the requested amendment and why it is needed. New plans may be necessary. The amendment must be for work that is directly related to the purpose of the original permit. A request for permit modification may trigger a reassessment of the federal permit status by the U. S. Army Corps of Engineers under the State Programmatic General Permit program (see http://www.des.state.nh.us/wetlands/nhspgp.htm).

Permit renewal: Permits may not be renewed.

State statute: RSA 482-A:3 ("Fill and Dredge in Wetlands/Excavating and Dredging Permit; Certain Exemptions", http://gencourt.state.nh.us/rsa/html/L/482-A/482-A-3.htm)

N. H. Wetlands Bureau Code of Administrative Rules: Wt 505 ("Expedited Minimum Impact Permit Rules", http://www.des.state.nh.us/wetlands/pdf/wt100-700.pdf), Env-C 608 ("Field Citation Fine Rules", http://www.des.state.nh.us/wetlands/pdf/608field.pdf), Env-C 614 ("Fines Relating to Wetlands Rules", http://www.des.state.nh.us/wetlands/pdf/env-c614.pdf), and Env-WtC 100-207 ("Wetlands Council Rules", http://www.des.state.nh.us/wetlands/pdf/env-wtc.pdf)

Appeals bodies: Wetlands Bureau under RSA 482-A:10 ("Fill and Dredge in Wetlands/Appeals", http://gencourt.state.nh.us/rsa/html/L/482-A/482-A-10.htm) and NH CODE ADMIN. RULES Wt 200 ("Rules of Practice and Procedure"); then to the Wetlands Council under RSA 21-O:5-a ("Department of Environmental Services/Wetlands Council") http://gencourt.state.nh.us/rsa/html/I/21-O/21-O-5-a.htm; see also http://www.des.state.nh.us/rules/envwtc200.pdf, http://www.des.state.nh.us/councils/#4, and http://www.des.state.nh.us/factsheets/wtc/wtc-1.htm), then to the New Hampshire Superior Court in the appropriate county (see http://www.state.nh.us/courts/superior.htm)

Additional information: N. H. DES, Wetlands Bureau, (603) 271-2147
N. H. DRED, Natural Heritage Inventory, (603) 271-3623

Minimum Impact Expedited Permit – *Work Sheet*

Key Qualifier Question: *Will your project involve the dredging or filling of 3,000 square feet or less within jurisdictional wetlands, the repair/replacement of an existing seasonal dock, or the installation of a driveway culvert, or otherwise result in minimal impacts to jurisdictional wetlands or other surface waters, including no impacts to areas in or adjacent to designated prime wetlands, tidal wetlands or bogs, and no fill for lot development?*

What must you do to apply?

- Obtain a copy of the *Minimum Impact Expedited Application* from the DES Wetlands Bureau, DES Public Information Center, or access it online at http://www.des.state.nh.us/wetlands/pdf/expedite.pdf.
- Provide the name, mailing address, and telephone number of the applicant.
- Provide a copy of the municipal tax map showing the location of the proposed project in relation to abutters, and provide a list of abutters with mailing addresses that is cross-referenced to tax map lots.
- Prepare a U. S. Geological Survey topographical map depicting the location of the property and project (see http://www.topozone.com).
- Prepare a plan drawn to scale or with dimensions clearly marked to document existing site conditions and show the impact of the proposed activity on areas in DES jurisdiction by detailing the precise location of the project.
- Provide original, dated photographs, mounted on 8½" x 11" sheets, annotated to explain impacts.
- Provide the name of the water body or wetland where the work is proposed and identify the type of wetland to be affected (*e.g.*, salt marsh, bog, swamp, wet meadow, seasonal stream, lake, *etc.*)
- Provide a brief description of the project, outlining the scope of the work to be performed.
- For projects located on water bodies, provide the number of linear feet of shoreline frontage (as defined by NH CODE ADMIN. RULES Wt 100-700, http://www.des.state.nh.us/wetlands/pdf/wt100-700.pdf).
- Specify the details of the project, such as the type of seasonal dock construction, the diameter of culverts, construction materials for retaining walls, *etc.*
- Provide a narrative explaining how the alternative selected for the project will create the least impact to the wetland resource.
- Sign a statement certifying that the project meets the criteria for an expedited application review and that all abutters have been duly notified.
- If the project is for repair or replacement of docking structures, the signed statement of minimum impact also must certify that the structures have been in existence in the same location, configuration, and with the dimensions for the past five years, they have not been "abandoned" as that term is defined in the Wetlands rules, and either are considered to be "grandfathered" (*i.e.*, existing legal structures) or have been permitted in the same condition under a prior wetland permit. Please note: A grandfathered structure does not necessarily need to be permitted.
- Have the application signed by the municipal conservation commission certifying that it waives its right to intervene, recommends approval of the application, and believes the application and plan accurately represent the proposed project.
- Submit a check or money order for $50, made payable to "Treasurer, State of New Hampshire", with the original and four copies of the application, maps, plans, certifications, and other supporting materials to the municipal clerk, who will sign the application certifying that abutters have been duly notified, and that five copies of the application and plans have been received. The clerk will distribute three copies to local boards, retain one copy, and forward the original via certified mail to: Wetlands Bureau, Water Division, New Hampshire Department of Environmental Services, 6 Hazen Drive, P. O. Box 95, Concord, NH 03302-0095. Telephone: (603) 271-2147; fax: (603) 271-6588; or online: http://www.des.state.nh.us/wetlands/

What types of projects require this permit?

- A project in previously-developed upland within 100 feet of the highest observable tide line (*i.e.*, upland tidal buffer zone)
- Construction or modification of a seasonal pier or wharf with no more than two slips
- Construction of temporary stream crossings for maintenance of utility pipelines or cables
- Installation of a culvert in a seasonal stream to access a single family building unit

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If there are any questions regarding this page or any other section of the Guidebook, please contact Tim Drew, Administrator, Public Information and Permitting Unit, at tdrew@des.state.nh.us or at (603) 271-3306.

Minimum Impact Agricultural Permit

Introduction: The production of fruits and vegetables and the grazing of livestock are practiced in virtually all New Hampshire counties to varying degrees. Much of the land used for these purposes lies in low areas, near flood plains, or adjacent to streams and rivers where groundwater levels lie at or near the surface for much of the year. Wetlands may be impacted when a new irrigation pond is created or when drainage ditches are dredged. DES has worked with the New Hampshire Department of Agriculture, Markets, and Food (see http://www.state.nh.us/agric/aghome.html) and the county conservation district offices across the state to create the Minimum Impact Agricultural Permit to expedite the review process for such projects while protecting the wetland resource. This minimum impact agricultural application process is reserved solely for impacts to wet meadows (see http://www.des.state.nh.us/factsheets/wetlands/wb-6.htm). For example, if a corn field had been active for the past 50 years and was then left fallow for several years, that cornfield will be considered a wet meadow if it has reverted to a wetland that supports herbaceous or woody species that typically grow in wet areas (see http://plants.usda.gov/). This process limits impacts to no more than 3 acres of wet meadows and no more than 15 percent of the impact area can be underlain by "very poorly drained soils." The application process requires the applicant to enter into a Cooperator Agreement with the local county conservation district to develop a conservation plan, a soils map to locate the area of impact, and to certify that no threatened, endangered, exemplary, or rare communities exist at the site (see http://www.nhdfl.org/organization/div_nhnhi.htm). It also requires the applicant to obtain a copy of, and follow the guidance provided by; the manual entitled ***Best Management Wetlands Practices for Agriculture,*** available from the Rockingham County Conservation District, 110 North Road, Brentwood, NH 03833-6614. Telephone: (603) 679-2790; fax: (603) 679-2860; or from any local county conservation district office

Average number of permits issued annually: 10

Fee: $50

Estimated processing time after application is deemed "complete": 30 days

Permit duration: 5 years

Permit transferability: If there is a change in ownership, applicants may request a name change by writing to the DES Wetlands Bureau, with a copy to the municipal conservation commission, or board of selectmen (if there is no conservation commission), with a request that provides the permit number, and the name, address, and telephone number of the new owner. If no outstanding compliance issues exist and that the permit is still in effect, an amended permit is typically issued within one week.

Permit modification: An amendment may be requested by writing to the DES Wetlands Bureau, with a copy to the municipal conservation commission, county conservation district, or board of selectmen (if there is no conservation commission). The request should provide an explanation of the amendment request and why it is needed. New plans may be necessary. The amendment must be designated for work that is directly related to the purpose of the original permit, cooperator agreement, and conservation plan.

Permit renewal: Permits may not be renewed.

State statute: RSA 482-A ("Fill and Dredge in Wetlands", http://gencourt.state.nh.us/rsa/html/indexes/482-A.html)

N. H. Code of Administrative Rules: Wt 100-700 ("Wetland Bureau Code of Administrative Rules", http://www.des.state.nh.us/wetlands/pdf/wt100-700.pdf), Env-C 608 ("Field Citation Fine Rules", http://www.des.state.nh.us/wetlands/pdf/608field.pdf), Env-C 614 ("Fines Relating to Wetlands Rules", http://www.des.state.nh.us/wetlands/pdf/env-c614.pdf), and Env-WtC 100-207 ("Wetlands Council Rules", http://www.des.state.nh.us/wetlands/pdf/env-wtc.pdf)

Appeals bodies: Wetlands Bureau under RSA 482-A:10 ("Fill and Dredge in Wetlands/Appeals", http://gencourt.state.nh.us/rsa/html/L/482-A/482-A-10.htm) and NH CODE ADMIN. RULES Wt 200 ("Rules of Practice and Procedure"); then to the Wetlands Council under RSA 21-O:5-a ("Department of Environmental Services/Wetlands Council", http://gencourt.state.nh.us/rsa/html/I/21-O/21-O-5-a.htm; see also http://www.des.state.nh.us/rules/envwtc200.pdf, http://www.des.state.nh.us/councils/#4, and http://www.des.state.nh.us/factsheets/wtc/wtc-1.htm), then to the New Hampshire Superior Court in the appropriate county (see http://www.state.nh.us/courts/superior.htm)

Additional information: N. H. DES, Wetlands Bureau, (603) 271-2147
N. H. DRED, Natural Heritage Inventory, (603) 271-3623
USDA-Natural Resources Conservation Service, (603) 868-7581
Local County Conservation District Office

Minimum Impact Agricultural Permit – *Work Sheet*

Key Qualifier Questions: *Will your project involve impacts to less than three acres of a wet meadow, with the project area underlain by less than 15 percent of very poorly drained soils? Does it consist of activities necessary for and/or incidental to a pre-existing and ongoing bona fide agricultural operation?* (See RSA 21:34-a, "Statutory Construction/Farm, Agriculture, Farming", http://gencourt.state.nh.us/rsa/html/I/21/21-34-a.htm)

What must you do to apply?

- Obtain a copy of the *Application for Minimum Impact Agricultural Projects* from the DES Wetlands Bureau, DES Public Information Center, county conservation district, or online at http://www.des.state.nh.us/wetlands/pdf/agricult.pdf.
- Obtain (or access) a copy of the guidance manual entitled ***Best Management Wetlands Practices for Agriculture*** from either the Rockingham County Conservation District (its origin), located at 110 North Road, Brentwood, NH 03833-6614. Telephone: (603) 679-2790; fax: (603) 679-2860; or from any local county conservation district office
- Enter into a Cooperator Agreement with the local county conservation district.
- Develop a conservation plan with an accompanying USDA-Natural Resources Conservation Service soil map showing the property to be impacted (see http://www.nh.nrcs.usda.gov/Soil_Data/). Include a soils legend that identifies poorly drained and very poorly drained map units.
- Prepare a copy of a U. S. Geological Survey topographic map showing the property clearly identified (see http://nh.water.usgs.gov/ or http://www.topozone.com). A list of outlets from which to obtain these USGS maps can also be found at http://www-nmd.usgs.gov/esic/usimage/test/nh.html.
- Notify all abutters by certified mail of the proposed project and its location.
- With the assistance of the New Hampshire Department of Resources and Economic Development's Natural Heritage Inventory (see http://www.nhdfl.org/organization/div_nhnhi.htm) and the New Hampshire Fish and Game Department (see http://wildlife.state.nh.us/nongameendlist.htm), check for the presence or absence of threatened or endangered plant and animal species to certify (through an official letter from each agency) that no threatened, endangered, rare, or exemplary communities exist in the immediate vicinity of the project.
- Sign the application to certify that you agree to the condition that any future change to a non-agricultural land use will require further permitting by DES and to acknowledge that you are required to record the permit with the Registry of Deeds. The applicant's signature also certifies that the application is accurate, that the affected land is (and will remain) cropland or pasture, and that all abutters have received notification of the proposed project.
- Obtain the signature of the county conservation district manager certifying that the proposed project was designed for a legitimate agricultural operation in accordance with the guidelines offered in the ***Best Management Wetlands Practices for Agriculture*** manual.
- Submit a check or money order in the amount of $50, made payable to the "Treasurer, State of New Hampshire," with the original and four copies of the application, the Cooperator Agreement, conservation plan, map, endangered species letter(s), and any other supporting data to the municipal clerk. The clerk will sign the copies, certify that all abutter notifications have been made, distribute three copies among the local boards with jurisdiction, retain a fourth copy for municipal records, and forward the fifth (original) copy via certified mail to: Wetlands Bureau, Water Division, New Hampshire Department of Environmental Services, 6 Hazen Drive, P. O. Box 95, Concord, NH 03302-0095. Telephone: (603) 271-2147; fax: (603) 271-6588; or online: http://www.des.state.nh.us/wetlands/.
- Projects that impact wetlands at agricultural facilities, but do not qualify for this specialty permit, can apply by either completing the *Minimum Impact Expedited Application* (see http://www.des.state.nh.us/wetlands/pdf/expedite.pdf) or the *Standard Dredge and Fill Application* (see http://www.des.state.nh.us/wetlands/pdf/stdapp.pdf).

What types of projects require this permit?

- The creation of a new, two-acre farm pond in a wet meadow for crop irrigation
- Drainage improvements to farm fields

If there are any questions regarding this page or any other section of the Guidebook, please contact Tim Drew, Administrator, Public Information and Permitting Unit, at tdrew@des.state.nh.us or at (603) 271-3306.

Recreational Mineral Dredge Permit

Introduction: The practice of hand panning and small motor dredging to recover minerals (most notably, gold) from New Hampshire stream sediments has become a popular recreational activity for many. Those who engage in hand panning only do not need a permit, but still must comply with all DES Wetlands Bureau administrative rules. The Recreational Mineral Dredge Permit is offered to those who will use powered, portable dredging equipment (rated at less than five horsepower) to extract minerals from streambeds without causing undue damage to streams or rivers, their banks, or water quality. The State holds water rights in trust for the benefit of the public (under the common law Public Trust Doctrine) and so can permit such uses of surface water resources. However, riparian property owners may hold title to the stream bottom. Therefore, landowner permission often is needed before dredging, since the owner's mineral rights may be affected. Several conditions apply to motorized mineral dredging: the wetland impacts from such dredging must be restricted to an area of less than 3,000 square feet; there can be no fuel leaks from the equipment; suction dredges are limited to a four-inch wide intake nozzle; sluice and rocker boxes are limited to ten square feet; use of mercury or chemicals for extraction is prohibited; streams cannot be dammed or altered to improve the recovery process; the owner's permission is required; and work must be confined to the bed of the stream with no disturbance to its banks. Dredging for minerals is prohibited in prime wetlands, marshes, bogs, or areas where threatened or endangered species exist (see http://www.nhdfl.org/organization/div_nhnhi.htm). Submission of the *Recreational Mineral Dredging Application* (see http://www.des.state.nh.us/wetlands/pdf/goldapp.pdf), unlike most wetland projects, is made directly to the DES Wetlands Bureau, rather than to the local community, since these permits are not specific to any particular local jurisdiction. If deemed appropriate and compliance with its applicable conditions is assured, the permit will be issued with the notation "for all towns" and must be posted in the immediate vicinity of the dredging activity. Each person who is 18 years old or older must have his or her own permit (see NH CODE ADMIN. RULE Wt 504.01).

Average number of permits issues annually: 50

Fees: $25 for New Hampshire residents; $50 for non-residents

Estimated processing time after application is deemed "complete": 2-3 weeks

Permit duration: One calendar year (January 1 to December 31). Application for the next calendar year may be made at any time after November 1 of the current year.

Permit transferability: Not transferable

Permit modification: Not modifiable

Permit renewal: A new application must be submitted to DES Wetlands Bureau each calendar year.

State statute: RSA 482-A ("Dredge & Fill in Wetlands", http://gencourt.state.nh.us/rsa/html/indexes/482-A.html)

N. H. Code of Administrative Rules: Wt 101.70, Wt 101.77, Wt 303.04(s), Wt 303.14, and Wt 504.01 ("Wetlands Bureau Code of Administrative Rules", http://www.des.state.nh.us/wetlands/pdf/wt100-700.pdf), Env-C 608 ("Field Citation Fine Rules", http://www.des.state.nh.us/wetlands/pdf/608field.pdf), Env-C 614 ("Fines Relating to Wetlands Rules", http://www.des.state.nh.us/wetlands/pdf/env-c614.pdf), and Env-WtC 100-207 ("Wetlands Council Rules", http://www.des.state.nh.us/wetlands/pdf/env-wtc.pdf)

Appeals bodies: Wetlands Bureau under RSA 482-A:10 ("Fill and Dredge in Wetlands/Appeals", http://gencourt.state.nh.us/rsa/html/L/482-A/482-A-10.htm) and NH CODE ADMIN. RULES Wt 200 ("Rules of Practice and Procedure"); then to the Wetlands Council under RSA 21-O:5-a ("Department of Environmental

Services/Wetlands Council", http://gencourt.state.nh.us/rsa/html/I/21-O/21-O-5-a.htm, http://www.des.state.nh.us/rules/envwtc200.pdf, http://www.des.state.nh.us/councils/#4, and http://www.des.state.nh.us/factsheets/wtc/wtc-1.htm); then to the New Hampshire Superior Court in the appropriate county (see http://www.state.nh.us/courts/superior.htm)

Additional information: N. H. DES, Wetlands Bureau, (603) 271-2147
N. H. DES, Public Information Center, (603) 271-2975 or (603) 271-8876

Recreational Mineral Dredge Permit – *Work Sheet*

Key Qualifier Question: *Will wetland substrates or stream sediments be removed, altered, or processed using small power dredging equipment to recover naturally occurring minerals?*

What must you do to apply?

- Contact each property owner along the reach of stream to be impacted, explain your plans, and obtain permission from each one to operate along the shoreline, especially if the land under the stream is owned privately.
- Obtain a *Recreational Mineral Dredge Permit* application form from the DES Wetlands Bureau, the Public Information Center, or online at http://www.des.state.nh.us/wetlands/pdf/goldapp.pdf.
- If a resident of New Hampshire, provide written proof of residency by including a copy of your Motor Vehicle Operator's License or other valid non-driver identification.
- Each person 18 years and older must have his or her own permit posted on the site. Persons younger than 18 must be accompanied by an adult with a valid permit
- If the river where the dredging will occur has been designated pursuant to RSA 483 ("New Hampshire Rivers Management and Protection Program", http://gencourt.state.nh.us/rsa/html/indexes/483.html), contact the DES Rivers Coordinator at (603) 271-8865 or by E-mail at rivers@des.state.nh.us to ensure that all planned activities will be consistent with the protection measures associated with a specific protected river (or segment thereof) (see http://www.des.state.nh.us/rivers/).
- Before moving to another site or stream, stabilize disturbed areas to prevent scouring and erosion of sediments which create turbidity and siltation problems, and may cause water quality violations and/or damage to the food chain in the stream and to its indigenous populations.
- If small motor mineral dredging activities exceed the limits for this specialized type of minimum impact wetlands permit, a *Standard Dredge and Fill Permit Application* may have to be completed and filed with the local community and the DES Wetlands Bureau. This standard permit must be in hand before any work commences.
- Submit a check or money order for $25 (NH residents), or $50 (non-residents), made payable to the "Treasurer, State of New Hampshire", with a completed application to: Wetlands Bureau, Water Division, New Hampshire Department of Environmental Services, 6 Hazen Drive, P. O. Box 95, Concord, NH 03302-0095. Telephone: (603) 271-2147; fax: (603) 271-6588; or online: http://www.des.state.nh.us/wetlands/

What types of projects require this permit?

- The disturbance of less than 3,000 square feet of stream sediments for washing in a sluice rocker box which is less than ten square feet in surface area while using a suction dredge
- The small power dredging of several sites along an extended stretch of a designated river, as long as river protection measures are undertaken

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If there are any questions regarding this page or any other section of the Guidebook, please contact Tim Drew, Administrator, Public Information and Permitting Unit, at tdrew@des.state.nh.us or at (603) 271-3306.

Minimum Impact Forestry/Timber Harvesting Notification

Introduction: In 1989, the New Hampshire Legislature amended RSA 482-A, "Fill and Dredge in Wetlands" (see RSA 482-A:3, V, (a) through (e) http://gencourt.state.nh.us/rsa/html/L/482-A/482-A-3.htm, "Excavating and Dredging Permit; Certain Exemptions", and RSA 482-A:14-a, "Cease and Desist Orders; Penalty", http://gencourt.state.nh.us/rsa/html/L/482-A/482-A-14-a.htm) to allow the timber industry to use a notification process for minimum impact projects instead of using the DES *Standard Dredge and Fill Application* format (see http://www.des.state.nh.us/wetlands/pdf/stdapp.pdf). This streamlined process was designed to facilitate timber harvesting while still protecting any wetland resources in the harvesting area (see http://www.des.state.nh.us/factsheets/wetlands/wb-2.htm). DES is concerned with how wetland or stream crossings will be installed and whether the crossings represent the best type of construction and the least-impacting alternative. Surface waters and wetlands of particular concern for forestry and logging operations include vernal pools, intermittent/perennial streams, bogs, and swamps, whose characteristics are discussed further in the DES Fact Sheet entitled *Clues to Identifying Forested Wetlands* (see http://www.des.state.nh.us/factsheets/wetlands/wb-14.htm). Forested floodplains may or may not be classified as a wetland, and may or may not lie within the jurisdiction of either the DES Wetlands Bureau or U. S. Army Corps of Engineers. For a more complete discussion of that type of habitat, please review Technical Bulletin 15 entitled ***What is a Floodplain Forest?***, published by the New Hampshire Office of State Planning (see http://www.state.nh.us/osp/library/docs/forested_floodplains/TB15.pdf). The presence or absence of ferns (see http://plants.usda.gov/); thick deposits of muck or peat, and topography also serve to classify a site (see http://www.nhdfl.com/publications/bmp_manual.pdf). The forester or logger must complete and file a *Notice of Intent to Cut Wood or Timber* with the New Hampshire Department of Revenue Administration ("DRA") pursuant to RSA 79:10 ("Forest Conservation and Taxation/Notice of Intent to Cut", http://gencourt.state.nh.us/rsa/html/V/79/79-10.htm) and, at the same time, complete and file a *Notification of Forest Management or Timber Harvest Activities Having Minimum Wetlands Impact* with the DES Wetlands Bureau (see http://www.des.state.nh.us/wetlands/pdf/forestrynotification.pdf). The DES minimum impact wetlands permit is attached to the DRA Intent-to-Cut form and only applies if the following criteria are met: the work is intended for forest management harvest purposes only (land conversion projects require a separate dredge and fill permit), wetland impacts must be less than 3,000 square feet, permanent culverts or rock fords must not exceed 15 feet wide by 50 feet long, stream crossings cannot exceed 10 feet in width, and wetland crossings cannot exceed 50 feet in width. If the forestry notification is complete and the Intent-to-Cut form has been properly filed, work can begin immediately. DES will notify the forester or logger by mail and will enclose a weather-proof posting notice entitled *Confirmation of Complete Forestry Notification*, which must be posted at the site. A note of caution: There are circumstances when an Intent-to-Cut form is not necessary but a forestry/timber harvesting notification is, and vice versa. If in doubt about any aspect of the information provided above, please call the DES Wetlands Bureau at (603) 271-2147.

Average number of notifications issued annually: 650

Fee: $25

Estimated processing time after application is received: 7 work days

Notification duration: Minimum impact forestry notifications issued in accordance with RSA 482-A:3, V ("Fill and Dredge in Wetlands/Excavating and Dredging Permit; Certain Exemptions", http://gencourt.state.nh.us/rsa/html/L/482-A/482-A-3.htm) are valid until June 30 of the current calendar year if issued before April 1, or June 30 of the following calendar year if issued after April 1.

Notification transferability: This notification will be issued to landowners on whose land the project is located or to party(ies) having financial or other legal interest in the property when the permitted project is proposed to be performed after transfer of title or when legal authority has been granted. For projects which have not been completed and when ownership or legal authority is to be changed, DES will transfer the notification after receipt of a written request by the new owner or legal authority, unless there is a pending

enforcement case on the file. If a transfer is approved, the new permittee will be advised of all conditions, limitations, and special considerations pertinent to the approved project.

Notification modification: An amendment request may be submitted to the DES Wetlands Bureau, with a copy forwarded to the municipal conservation commission or board of selectmen (if there is no conservation commission). The request must include an explanation of the amendment and its need. New sketches, plans, and/or map may be necessary if additional crossings are employed. The amendment must be designated for work directly related to that covered by the original notification.

Notification renewal: If the forestry notification is allowed to expire, the applicant must reapply to DES using the notification form (see http://www.des.state.nh.us/wetlands/pdf/forestrynotification.pdf) accompanied by a check or money order for $25, made payable to "Treasurer, State of New Hampshire".

State statute: RSA 482-A:3, V, (a) – (e) ("Fill and Dredge in Wetlands/Excavating and Dredging Permit; Certain Exemptions", http://gencourt.state.nh.us/rsa/html/indexes/482-A.html)

N. H. Code of Administrative Rules: Wt 303.04(e)-(i) ("Wetlands Bureau Code of Administrative Rules", http://www.des.state.nh.us/wetlands/pdf/wt100-700.pdf), Env-C 608 ("Field Citation Fine Rules", http://www.des.state.nh.us/wetlands/pdf/608field.pdf), Env-C 614 ("Fines Relating to Wetlands Rules", http://www.des.state.nh.us/wetlands/pdf/env-c614.pdf), and Env-WtC 100-207 ("Wetlands Council Rules", http://www.des.state.nh.us/wetlands/pdf/env-wtc.pdf)

Appeals bodies: Wetlands Bureau under RSA 482-A:10 ("Fill and Dredge in Wetlands/Appeals", http://gencourt.state.nh.us/rsa/html/L/482-A/482-A-10.htm) and NH CODE ADMIN. RULES Wt 200 ("Rules of Practice and Procedure"); then to the Wetlands Council under RSA 21-O:5-a ("Department of Environmental Services/Wetlands Council", http://gencourt.state.nh.us/rsa/html/I/21-O/21-O-5-a.htm; see also http://www.des.state.nh.us/rules/envwtc200.pdf, http://www.des.state.nh.us/councils/#4, and http://www.des.state.nh.us/factsheets/wtc/wtc-1.htm); then to the New Hampshire Superior Court in the appropriate county (see http://www.state.nh.us/courts/superior.htm)

Additional information:
N. H. DES, Wetlands Bureau, (603) 271-2147
N. H. Department of Revenue Administration, (603) 271-2191
N. H. Department of Resources and Economic Development, (603) 271-2217
N. H. Office of State Planning, (603) 271-2155
N. H. DES Fact Sheet: *Clues to Identifying Forested Wetlands* (http://www.des.state.nh.us/factsheets/wetlands/wb-14.htm)

Minimum Impact Forestry/Timber Harvesting Notification – *Work Sheet*

Key Qualifier Question: *Do you plan to perform forest management or timber harvesting operations on property where minimum impact wetland disturbances, stream crossings, skidder ruts, or other surface water impacts will likely occur?* [1]

Please Note: This DES minimum impact wetlands permit is attached to the DRA Intent-to-Cut form and only applies if the following criteria are met:

- The work is intended for forest management harvest purposes only (land conversion projects require a separate dredge and fill permit),
- Wetland impacts must be less than 3,000 square feet
- Permanent culverts or rock fords must not exceed 15 feet wide by 50 feet long
- Stream crossings cannot exceed 10 feet in width, and
- Wetland crossings cannot exceed 50 feet in width

What must you do to apply?

- Obtain a *Notice of Intent to Cut Wood or Timber* from the New Hampshire Department of Revenue Administration, P. O. Box 457, 45 Chenell Drive, Concord, NH 03302-0457. Telephone: (603) 271-2191; fax: (603) 271-6121; or online: http://webster.state.nh.us/revenue/forms/index.htm (see "Forest Conservation and Taxation/Notice of Intent to Cut", http://gencourt.state.nh.us/rsa/html/V/79/79-10.htm). These forms also are available at the municipal clerk's office in the community where harvesting will occur.
    - Provide the name of the community in which the timber harvesting will occur, and include the tax map and lot numbers for all parcels to be affected (items #1 and 2 on the "Intent-to-Cut" form).
    - Attach a copy of a U. S. Geological Survey topographic map (see http://www.topozone.com) or submit a U. S. Department of Agriculture, Natural Resources Conservation Service soils map (see http://www.nh.nrcs.usda.gov/Soil_Data/) with the type/location of wetlands and water crossing structures clearly indicated.
    - Identify all forested wetlands to be impacted (see the DES Fact Sheet entitled *Clues for Identifying Forested Wetlands*, http://www.des.state.nh.us/factsheets/wetlands/wb-14.htm).
    - Attach a sketch plan for all wetland or surface water crossings. Copies of a sketch(es) taken from the guidance manual entitled ***Best Management Practices for Erosion Control of Timber Harvest Operations in New Hampshire*** may be used if they accurately depict the proposed structure (see http://www.nhdfl.org/info_plan_bureau/fi&p_waterqualitybmps.htm).
    - The landowner must sign the DES Wetlands Bureau application form to certify that all of the information provided is correct, that all logging contractors have been required to conform with the recommendations offered in the ***Best Management Practices for Erosion Control of Timber Harvest Operations in New Hampshire*** manual, and that they have been instructed to install crossings only as indicated on the attached maps and sketches.
    - Prepare a check or money order in the amount of $25, made payable to the "Treasurer, State of New Hampshire", and submit it with the application form and all supporting information to: Wetlands Bureau, Water Division, New Hampshire Department of Environmental Services, 6 Hazen Drive, P. O. Box 95, Concord, NH 03302-0095. Telephone: (603) 271-2147; fax: (603) 271-6588, or online: http://www.des.state.nh.us/wetlands/
- When the "Intent-to-Cut" form is being completed, also obtain a copy of the *Notification of Forest Management or Timber Harvest Activities Having Minimum Wetlands Impact* from the DES Wetlands Bureau or access it online at http://www.des.state.nh.us/wetlands/pdf/forestrynotification.pdf, and file that form with DES. Additional guidance is provided through the DES Fact Sheet entitled, *Forest Management and Wetlands* at http://www.des.state.nh.us/factsheets/wetlands/wb-2.htm.
- Obtain a copy of the manual entitled ***Best Management Practices for Erosion Control on Timber Harvesting Operations in New Hampshire*** from the New Hampshire Department of Resources and

Economic Development, Division of Forests and Lands, 172 Pembroke Road, P. O. Box 1856, Concord, NH 03302-1856. Telephone: (603) 271-2214; fax: (603) 271-2629, or online: http://www.nhdfl.org/info_plan_bureau/fi&p_waterqualitybmps.htm.

What types of projects require this notification?

- Installation of a temporary bridge across a perennial stream
- Installation of temporary pole fords, portable bridges, or stone fords for crossing intermittent streams
- Installation of a corduroy road to provide soil stability for crossing a wet area in a skid trail
- Installation of a culvert in a wetland or stream to access a landing
- Installation of a temporary road during frozen conditions constructed of snow and inverted stumps

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Note 1: Forested floodplains may or may not be classified as a wetland, and may or may not lie within the jurisdiction of either the DES Wetlands Bureau or U. S. Army Corps of Engineers. For a more complete discussion of that type of habitat, please review Technical Bulletin 15 entitled ***What is a Floodplain Forest?***, published by the New Hampshire Office of State Planning (see http://www.state.nh.us/osp/library/docs/forested_floodplains/TB15.pdf).

If there are questions regarding this page or any other section of the Guidebook, please contact Tim Drew, Administrator, Public Information and Permitting Unit, at tdrew@des.state.nh.us or at (603) 271-3306.

Seasonal Dock Notification for Lakes and Ponds

Introduction: The DES Wetlands Bureau instituted a Seasonal Dock Notification for Lakes and Ponds to simplify the application process for installing a new seasonal dock that meets certain criteria (see http://www.des.state.nh.us/wetlands/pdf/seasonaldock_june02.pdf). Seasonal docks are those that are completely removed from the water during the non-boating season, and have been regulated by the DES, or its predecessor, the New Hampshire Wetlands Board, since 1978. They are the preferred method of "wharfing out" in New Hampshire waters, since floating finger piers or pipe docks create less of an impact to public waters than do permanent structures such as piling and crib docks. This notification process applies to property that has 75 linear feet or more of frontage located on a lake or pond and requires that the new seasonal dock be the only docking structure on the frontage. The dock must be capable of being removed (and must actually be removed) during the non-boating season (*i.e.*, a minimum of five months each year) and must be configured as narrow, rectangular, and erected perpendicular to the shoreline. The dock can be no larger than 6 feet wide by 40 feet long on water bodies with a surface area of 1,000 acres or larger; and no larger than 6 feet wide by 30 feet long on water bodies smaller than 1,000 acres. The dock must be located at least 20 feet from the abutting property line (or its imaginary extension over the water) and must be installed in a manner that requires no modification, re-grading, or re-contouring of the shoreline (*e.g.*, no installation of a concrete pad for a hinged dock). The dock installation also must comply with RSA 483-B ("Comprehensive Shoreland Protection Act", http://gencourt.state.nh.us/rsa/html/indexes/483-B.html). If stairs are proposed to access the dock, they must be no more than six feet wide and must be constructed over the bank in a manner that does not require shoreline regrading/recontouring (see http://www.des.state.nh.us/factsheets/wetlands/wb-5.htm). Please note: The State of New Hampshire has fee-simple ownership or flowage rights for Deering Reservoir, Lake Francis (no docks of any kind allowed), Glen Lake (Gregg Falls), Goose Pond (Hanover/Canaan), Lake Horace (also known as Weare Reservoir), and Lake Winnisquam (Lochmere Dam). If your seasonal dock is proposed for one of these water bodies, please contact the DES Land Agent in the Dam Bureau at (603) 271-1960 for more information.

Average number of notifications issued annually: 150

Fees: None

Estimated processing time after application is deemed "complete": Immediately, upon mailing, work may begin

Notification duration: Repair can occur in perpetuity, provided that no changes will be made to dock size, location, or configuration; and no other structures will be added to the frontage.

Notification transferability: If property ownership changes, the new owner has purchased a legal docking structure. However, the Wetlands Bureau should be notified in writing of the "Name Change" or change in ownership if and when a permit is requested for repairs or modifications.

Notification modification: Repairs to existing, previously permitted or "grandfathered" seasonal docks with no change in size, location, or configuration must be pre-approved by issuance of a Wetlands Bureau permit if they will impact jurisdictional areas. A minimum impact expedited application form can be used, unless the structure exceeds minimum impact criteria. In such cases, modifications may be requested using a *Standard Dredge and Fill Application* (see http://www.des.state.nh.us/wetlands/pdf/stdapp.pdf). Repairs to the dock itself that do not alter its dimensions or configuration, and that can be completed on dry land, do not require a permit.

Notification renewal: Permanent

State statute: RSA 482-A ("Fill and Dredge in Wetlands", http://gencourt.state.nh.us/rsa/html/indexes/482-A.html)

N. H. Code of Administrative Rules: Wt 506.02 ("New Hampshire Wetlands Bureau Code of Administrative Rules", http://www.des.state.nh.us/wetlands/pdf/wt100-700.pdf), Env-C 608 ("Field Citation Fine Rules", http://www.des.state.nh.us/wetlands/pdf/608field.pdf), Env-C 614 ("Fines Relating to Wetlands Rules", http://www.des.state.nh.us/wetlands/pdf/env-c614.pdf), and Env-WtC 100-207 ("Wetlands Council Rules", http://www.des.state.nh.us/wetlands/pdf/env-wtc.pdf)

Appeals bodies: Wetlands Bureau under RSA 482-A:10 ("Fill and Dredge in Wetlands/Appeals", http://gencourt.state.nh.us/rsa/html/L/482-A/482-A-10.htm) and NH CODE ADMIN. RULES Wt 200 ("Rules of Practice and Procedure"); then to the Wetlands Council under RSA 21-O:5-a ("Department of Environmental Services/Wetlands Council", http://gencourt.state.nh.us/rsa/html/I/21-O/21-O-5-a.htm, http://www.des.state.nh.us/rules/envwtc200.pdf, http://www.des.state.nh.us/councils/#4, and http://www.des.state.nh.us/factsheets/wtc/wtc-1.htm) then to the New Hampshire Superior Court in the appropriate county (see http://www.state.nh.us/courts/superior.htm)

Additional information: N. H. DES, Wetlands Bureau, (603) 271-2147
N. H. DES, Public Information Center, (603) 271-2975 or (603) 271-8876

Seasonal Dock Notification for Lakes and Ponds - *Work Sheet*

Key Qualifier Question: *Will your proposed dock be located on a fresh water, non-tidal water body, be the only structure on the frontage, be removed during the non-boating season (for a minimum of five months per year), be configured to be narrow, rectangular, and installed perpendicular to the shoreline, measure 6 feet wide by 40 feet long on water bodes with a surface area of 1,000 acres or more (6 feet wide by 30 feet long on water bodies of less than 1,000 acres in size), be installed on at least 75 linear feet of frontage and at least 20 feet from each abutting property line with no impacts to other shoreline wetlands, require no re-contouring or re-grading of the shoreline, and comply with RSA 483-B ("Comprehensive Shoreland Protection Act", http://gencourt.state.nh.us/rsa/html/indexes/483-B.html)?*

What must you do to apply?

- Obtain a copy of the *Seasonal Dock Notification for Lakes and Ponds* form from the municipal clerk, the DES Wetlands Bureau, DES Public Information Center, or at http://www.des.state.nh.us/wetlands/pdf/seasonaldock_june02.pdf.
- Please note: The State of New Hampshire has fee-simple ownership or flowage rights for Deering Reservoir, Lake Francis (no docks of any kind allowed), Glen Lake (Gregg Falls), Goose Pond (Hanover/Canaan), Lake Horace (also known as Weare Reservoir), and Lake Winnisquam (Lochmere Dam). If your seasonal dock is proposed for one of these water bodies, please contact the DES Land Agent in the Dam Bureau at (603) 271-1960 for more information.
- Verify that the proposed seasonal docking structure complies with all pre-determining criteria for the site. If the proposed dock does not meet all of these criteria, obtain and complete a *Minimum Impact Expedited Application* (see http://www.des.state.nh.us/wetlands/pdf/expedite.pdf) or a *Standard Dredge and Fill Application* (see http://www.des.state.nh.us/wetlands/pdf/stdapp.pdf), as appropriate.
- Stairs to the dock may be installed as long as construction will pass over the bank or shoreline land surface in a manner that does not require re-grading or re-contouring of the shoreline (*e.g.*, no concrete pad will be needed for the construction of a hinged dock).
- The owner/applicant must sign the following certification on the application: ***My signature below certifies that my dock will meet all of the required criteria. I understand that completion of this notification does not preclude the department from taking any enforcement action if the department later determines that the notification was incomplete, the facts material to the project were misstated, or that the installed dock does not meet the above criteria. I understand that this notification does not relieve me from obtaining any local permits, which may be required.***
- Submit the completed notification to: Wetlands Bureau, Water Division, New Hampshire Department of Environmental Services, 6 Hazen Drive, P. O. Box 95, Concord, NH 03302-0095. Telephone: (603) 271-2147; fax: (603) 271-6588; or online: http://www.des.state.nh.us/wetlands/

What types of projects require this notification?

- Assuming all seasonal dock criteria are met, the construction of a 6-foot wide by 40-foot long, wooden-decked, seasonal dock installed perpendicular to the shoreline on a parcel having 75 feet or more of frontage along the shoreline of Lake Winnipesaukee (*i.e.*, water body greater than 1,000 acres)
- Assuming all seasonal dock criteria are met, the construction of a 6-foot wide by 30-foot long seasonal floating dock installed perpendicularly to the shoreline of Bow Lake (*i.e.*, water body less than 1,000 acres) on a parcel having 75 feet or more of water frontage

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If there are any questions regarding this page or any other section of the Guidebook, please contact Tim Drew, Administrator, Public Information and Permitting Unit, at tdrew@des.state.nh.us or at (603) 271-3306.

Minimum Impact Trail Development Notification

Introduction: The DES Wetlands Bureau offers this specialized Minimum Impact Trail Development Notification to simplify the application process for governmental agencies, private businesses, sports clubs, civic organizations, and landowners who provide nature walkways, snowmobile and all-terrain vehicle trails, cross-country skiing trails, boardwalks, and educational footpaths. The applicant is required to complete a *Notification of Trail Development Activities Having Minimum Wetlands Impact* and to submit all information to the DES Wetlands Bureau, the New Hampshire Department of Resources and Economic Development ("DRED") at http://www.nhparks.state.nh.us/trbureau.html, and to each community in which the trail work will occur. All work must conform to DRED's trail construction guide entitled ***Best Management Practices for Erosion Control during Trail Maintenance and Construction,*** available from the DRED Trails Bureau at (603) 271-3254. One notification per community may be used to cover multiple wetland or stream crossings along a trail, which may span several communities. Qualified work may include such activities as dredging and/or filling less than 3,000 square feet of wetlands per crossing, corduroy path installation, bridge abutments, and boardwalk construction. Trails must completely avoid bogs, marshes, sand dunes, tidal wetlands, undisturbed tidal buffer zones, municipally-designated prime wetlands, and sensitive habitats for rare, threatened, or endangered species. Work may begin immediately following the proper filing of the notification form with its appropriate support materials. If wetlands impacts exceed these criteria, a *Standard Dredge and Fill Application* may be required to authorize the work (see http://www.des.state.nh.us/wetlands/pdf/stdapp.pdf).

Average number of notifications issued annually: 20

Fee: $25

Estimated processing time after application is deemed "complete": Immediate, based upon receipt of all required information and forms

Notification duration: 5 years

Notification transferability: If the trail project is unfinished and some or all parcels crossed change ownership, the new owner (or agent) is required to submit written notice, written permission from the new owner(s), and a request for a name change to the DES Wetlands Bureau to continue the original trail development and/or maintenance work.

Notification modification: The owner (or agent) must submit a written request to the DES Wetlands Bureau and to each affected community that received an original filing, which must include a map showing all modifications to locations and types of crossings.

Notification renewal: A notification is valid for five years. If work remains unfinished at the end of five years, a new notification must be filed with the DES Wetlands Bureau to complete the planned work.

State statute: RSA 482-A:3, XII ("Fill and Dredge in Wetlands/Excavating and Dredging Permit; Certain Exemptions", http://gencourt.state.nh.us/rsa/html/L/482-A/482-A-3.htm)

N. H. Code of Administrative Rules: Env-303.04(y) ("Wetlands Bureau Code of Administrative Rules", http://www.des.state.nh.us/wetlands/pdf/wt100-700.pdf), Env-C 608 ("Field Citation Fine Rules", http://www.des.state.nh.us/wetlands/pdf/608field.pdf), Env-C 614 ("Fines Relating to Wetlands Rules", http://www.des.state.nh.us/wetlands/pdf/env-c614.pdf), and Env-WtC 100-207 ("Wetlands Council Rules", http://www.des.state.nh.us/wetlands/pdf/env-wtc.pdf)

Appeals bodies: Wetlands Bureau under RSA 482-A:10 ("Fill and Dredge in Wetlands/Appeals", http://gencourt.state.nh.us/rsa/html/L/482-A/482-A-10.htm) and NH CODE ADMIN. RULES Wt 200 ("Rules of

Practice and Procedure"); then to the Wetlands Council under RSA 21-O:5-a ("Department of Environmental Services/Wetlands Council", http://gencourt.state.nh.us/rsa/html/I/21-O/21-O-5-a.htm, http://www.des.state.nh.us/rules/envwtc200.pdf, (http://www.des.state.nh.us/councils/#4, and http://www.des.state.nh.us/factsheets/wtc/wtc-1.htm); then to the New Hampshire Superior Court in the appropriate county (see http://www.state.nh.us/courts/superior.htm)

Additional information: N. H. DES, Wetlands Bureau, (603) 271-2147
N. H. DRED, Trails Bureau, (603) 271-3254
N. H. DRED, Natural Heritage Inventory, (603) 271-3623

Minimum Impact Trail Development Notification – *Work Sheet*

Key Qualifier Question: *During the course of planned trail construction or maintenance, will there be any disruptions to, or crossings of, jurisdictional areas (including wetlands, rivers or intermittent or perennial streams and their banks, swamps, vernal pools, or ponds) that do not rise to the level that a Standard Dredge and Fill Permit is required?*

Note: Qualifying activities may include dredging and/or filling less than 3,000 square feet of wetlands per crossing, corduroy path installation, bridge abutments, and boardwalk construction. Trails must completely avoid bogs, marshes, sand dunes, tidal wetlands, undisturbed tidal buffer zones, municipally-designated prime wetlands, and sensitive habitats for rare, threatened, or endangered species [see NH CODE ADMIN. RULE Wt 303.04(y), http://www.des.state.nh.us/wetlands/pdf/wt100-700.pdf].

What must you do to apply?

- Obtain the form entitled *Notification of Trail Development Activities Having Minimum Wetland Impacts* from the DES Wetlands Bureau, DES Public Information Center or at http://www.des.state.nh.us/wetlands/pdf/trailsap.pdf
- Identify the organization (if any) that is to construct or maintain the trails, and provide the name of a contact person, his/her address, and daytime telephone number.
- List each community's official name (not villages) in which work will occur. One notification is required from each community through which the trail passes.
- Attach a list of names and addresses for all affected property owners, including all tax maps and lot numbers where work will occur.
- Attach written permission forms, easement documentation, or other evidence from all affected property owners to demonstrate the right to access each property where work will occur.
- Prepare a copy of the appropriate U. S. Geological Survey topographic map showing the type and locations of all wetland or stream crossings (see http://www.topozone.com).
- Attach plans with sketches showing the construction design and materials to be used for each wetland or surface water crossing. Examples and approved trail practices are outlined in the New Hampshire Department of Resources and Economic Development ("NHDRED") guidance document entitled ***Best Management Practices for Erosion Control during Trail Maintenance and Construction*** at http://www.nhparks.state.nh.us/trbureau.html, available from the DRED Trails Bureau at (603) 271-3254, or the University of New Hampshire, Cooperative Extension Service, in Durham, NH at (603) 862-1028 or online at http://ceinfo.unh.edu/.
- Submit a cover letter briefly describing the trails project, including a copy of the U. S. Geological Survey map (with the specific quadrangle noted and depicting the exact location of proposed wetland impacts, see http://www.topozone.com) to the Natural Heritage Inventory Section of DRED to check for the presence of any known state- or federally-listed threatened or endangered species. (See http://www.nhdfl.org/organization/div_nhnhi.htm and http://gencourt.state.nh.us/rsa/html/indexes/217-A.html for plants, and the New Hampshire Fish and Game Department for rare, threatened or endangered animals (see http://wildlife.state.nh.us/nongameendlist.htm)
- Provide original color photographs mounted on 8½" by 11" sheets showing the areas to be impacted.
- Sign the notification form to signify that all information is complete and accurate, that all work will conform to accepted practices, and that a copy of the notification has been supplied to each affected community's conservation commission.
- Forward one copy of the application form, maps, and plans to the New Hampshire Department of Resources and Economic Development, Division of Parks and Recreation, Bureau of Trails, 172 Pembroke Road, Box 1856, Concord, NH 03302-1856. Telephone: (603) 271-3254; fax: (603) 271-2629; or online: http://www.nhparks.state.nh.us/trbureau.html
- Submit the original copy of the application with a check or money order for $25, made payable to the "Treasurer, State of New Hampshire", to: Wetlands Bureau, Water Division, New Hampshire

Department of Environmental Services, 6 Hazen Drive, P. O. Box 95, Concord, NH 03302-0095. Telephone: (603) 271-2147; fax: (603) 271-6588; or online: http://www.des.state.nh.us/wetlands/

- If planned trail construction and maintenance exceed the criteria outlined above, a *Standard Dredge and Fill Application* (see http://www.des.state.nh.us/wetlands/pdf/stdapp.pdf) must be completed and submitted to the DES Wetlands Bureau (and a permit obtained) for work in each affected community prior to any work in wetlands being initiated.

What types of projects require this notification?

- Construction of a nature trail that involves the installation of a bridge with less than 3,000 square feet of impact to the stream's banks
- Removal of rocks that may be in wetlands where a trail crossing is (or will be) located
- Construction of a boardwalk in a wet area along the shoreline of a beaver pond that is susceptible to flooding
- Installation of stepping-stones in a stream to allow for dry passage by hikers
- Installation of a corduroy crossing along winter use trails to protect wet areas that are usually frozen, but may soften occasionally during the winter months

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If there are any questions regarding this page or any other section of the Guidebook, please contact Tim Drew, Administrator, DES Public Information and Permitting Unit, at tdrew@des.state.nh.us or at (603) 271-3306.

Chapter 5:

Groundwater

2002 Edition

Chapter 5: Groundwater

Introduction

The New Hampshire Legislature officially declared through RSA 481 ("State Dams, Reservoirs, and Other Water Conservation Projects", http://gencourt.state.nh.us/rsa/html/indexes/481.html) that surface water and groundwater represent an integrated public resource to be conserved, protected, and managed for the public good. Under the Public Trust Doctrine, the State of New Hampshire holds both surface water and groundwater in trust for the benefit of the public. However, the rights of the public are subject to the rights held by owners of properties that are adjacent to surface water or which lie over groundwater to make "reasonable use" of the water. If a property owner's use of this finite natural resource becomes excessive (*i.e.*, unreasonable), lawsuits typically ensue to determine the rights of the various interests to use the resource. In addition to this legal limitation on the amount of water that can be withdrawn, naturally-occurring features also may impose restrictions. Subsurface geology plays a major role in the availability of groundwater. The saturated thickness of subsurface soils and the type of water-bearing (aquifer) material (*e.g.*, gravel, sand, silt) are factors, as are the areal extent of the aquifer, the recharge rate of water into the aquifer from precipitation and nearby surface waters; and the number, size, and interconnectedness of bedrock fractures beneath the overlying soils. Different aspects of groundwater management are regulated by four programs at DES: the Drinking Water Source Protection Program and the Water Supply Engineering Bureau in the DES Water Division, the New Hampshire Geological Survey in the DES Commissioner's Office, and the Hazardous Waste Remediation Bureau in the DES Waste Management Division.

Groundwater Withdrawals

Since 1987, all groundwater withdrawals that average 20,000 gallons per day or more (averaged over any seven-day period) must be registered with what is now the New Hampshire Geological Survey office at DES (see http://www.des.state.nh.us/factsheets/geo/geo-4.htm). Other aspects of groundwater withdrawals are regulated by DES through its Drinking Water Source Protection Program. DES has regulated new groundwater withdrawals for public community water systems since 1991 to ensure that these wells have a sustainable yield and are sited in appropriate places. More recently, in 1998, the New Hampshire Legislature enacted RSA 485-C:21 ("Groundwater Protection Act/Approval for Large Groundwater Withdrawals", http://gencourt.state.nh.us/rsa/html/L/485-C/485-C-21.htm) to direct DES to regulate all new groundwater withdrawals of 57,600 or more gallons in any 24-hour period to prevent adverse impacts to surrounding water resources such as wetlands, streams, rivers, neighboring wells, *etc.* (see http://www.des.state.nh.us/factsheets/ws/ws-22-11.htm). DES has adopted NH CODE ADMIN. RULES Env-Ws 387 ("Minor Groundwater Withdrawal", http://www.des.state.nh.us/dwspp/adopt_387.pdf) and Env-Ws 388 ("Major Groundwater Withdrawal", http://www.des.state.nh.us/dwspp/adopt_388.pdf) to establish the permitting program for these Large Groundwater Withdrawals. Registered groundwater withdrawals within 500 feet of rivers designated for protection under RSA 483 ("New Hampshire Rivers Management and Protection Program", http://gencourt.state.nh.us/rsa/html/indexes/483.html) may be subject to limits during periods of low stream flow (see http://www.des.state.nh.us/rivers/instream/).

Discharges to Groundwater

The Groundwater Discharge Permitting and Registration Program within the DES Water Supply Engineering Bureau processes applications for the Holding Tank Registrations, Non-Domestic Wastewater Discharge Registrations, Underground Injection Control Registrations for Floor Drains, Temporary Groundwater Discharge Permits, and Groundwater Discharge Permits (see http://www.des.state.nh.us/dwspp/gwdisch.htm). This program is concerned with the proper treatment and disposal of wastewater onto (or into) the ground. The focus is to prevent contamination of groundwater by the improper disposal of wastes and wastewaters containing solvents, petroleum products, and other industrial and commercial contaminants. In all cases, the discharge of non-domestic (*i.e.*, commercial and industrial) wastewater containing regulated contaminants at greater than ambient (natural) concentrations is prohibited unless a permit is first obtained. A "regulated

contaminant" is defined by RSA 485-C:2, XIII as *any physical, chemical, biological, or radiological substance or other matter, other than naturally occurring substances at naturally occurring levels, in water which adversely affects human health or the environment* ("Groundwater Protection Act/Definitions", http://gencourt.state.nh.us/rsa/html/L/485-C/485-C-2.htm). Discharges of non-domestic wastewater to lagoons or via land application also require a permit from this program. This program also implements federal regulations pertaining to underground injection control. The Underground Injection Control Registration for Floor Drains is issued to protect groundwater from being contaminated from this common source (see http://www.des.state.nh.us/factsheets/ws/ws-22-9.htm). NH CODE ADMIN. RULE Env-Ws 1503.04(c) ("Groundwater Discharge Permit and Registration", http://www.des.state.nh.us/rules/ws1500.pdf) prohibits floor drains in motor vehicle facilities and also bans large cesspools. Holding tanks that receive flow from floor drains where regulated contaminants are used or stored and those that will receive non-domestic, non-hazardous wastewater, must be registered with DES (see http://www.des.state.nh.us/factsheets/ws/ws-22-8.htm). A Temporary Groundwater Discharge Permit can be obtained to facilitate a one-time, short-term discharge of non-domestic wastewater at a remediation site to the ground or groundwater for up to four months, provided the water quality of the discharge meets DES's Ambient Groundwater Quality Standards (see NH CODE ADMIN. RULE Env-Wm 1403.05, "Groundwater Management and Groundwater Release Detection Permits", http://www.des.state.nh.us/orcb/doclist/wm1403.pdf). A Temporary Groundwater Discharge Permit can be used at a site where discharges from an underground petroleum storage tank de-watering project need to be managed (*Application for Temporary Groundwater Discharge Permit*, http://www.des.state.nh.us/orcb/doclist/temporary.pdf) or for the temporary discharge of drinking water system wastewater (*e.g.*, filter backwash or tank cleaning water). A more long-term release proposed from a water treatment system that will continue to discharge as part of its regular operation must be registered by using the form entitled *Registration and Notification Form for Floor Drains and Discharges to Groundwater* (see http://www.des.state.nh.us/pdf/floorreg.pdf). A Groundwater Discharge Permit represents a more permanent type of authorization to facilitate long-term treatment and discharge of non-domestic wastewater through measured releases to the ground or groundwater, such as at wastewater treatment facilities or large septic systems that receive 20,000 gallons per day or more of wastewater. All of these permits have monitoring components that require surveillance of the impacts to ensure that the groundwater is not being negatively or irreversibly impacted by the process.

Groundwater Remediation

For certain activities that pose a high risk of groundwater contamination or when the groundwater has been negatively impacted and is need of remediation, the DES Waste Management Division's Hazardous Waste Remediation Bureau is charged with reviewing applications for the Groundwater Release Detection Permits and Groundwater Management Permits, respectively (see http://www.des.state.nh.us/hwrb/permits.htm). Groundwater Release Detection Permits are required at hazardous waste disposal facilities, lined solid waste disposal facilities, lined wastewater disposal facilities, and at facilities that process soils contaminated with petroleum products. They also may be required for some facilities located in a "GAA" wellhead protection area (see http://www.des.state.nh.us/factsheets/ws/ws-22-3.htm). Groundwater Release Detection Permits are issued as a preventative measure (*i.e.*, monitoring is required to detect any contaminants that may be released to promptly implement corrective measures) and are not required at sites where a Groundwater Management Permit is in effect. Groundwater Management Permits are required at locations where DES's Ambient Groundwater Standards have been exceeded (see http://www.des.state.nh.us/orcb/doclist/wm1403.pdf). These permits require periodic groundwater quality monitoring and reporting to measure the effectiveness of groundwater remediation (either through active measures or natural attenuation) that also is required by the permit, specify performance standards for remedies, and describe procedures for performing site investigations and implementing remedial action plans (see http://www.des.state.nh.us/orcb/doclist/rcmp.pdf). Depending upon the severity of contamination and the time needed for remediation and monitoring, DES may impose Activity and Use Restrictions ("AURs") on certain properties based on specific site criteria (see http://www.des.state.nh.us/orcb/doclist/aurlist.pdf).

Summary

The regulation of New Hampshire's groundwater is shared by four programs within DES. In general, the planning, extraction, and use of this resource is charged to the Drinking Water Source Protection Program of the DES Water Division and the New Hampshire Geological Survey within the Office of the Commissioner. The protection of groundwater reserves lies with the Groundwater Discharge Permitting and Registration Program of the DES Water Supply Engineering Bureau. Appeals of permit decisions and orders issued for violations of program requirements should be directed to the Water Council (see http://www.des.state.nh.us/councils/#1). The regulation of contaminated groundwater and its remediation is charged to the DES Waste Management Division's Hazardous Waste Remediation Bureau ("HWRB"). Appeals of HWRB permit decisions and orders issued for violations of program requirements should be directed to the Waste Management Council (see http://www.des.state.nh.us/councils/#waste).

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- ✓ **Large Groundwater Withdrawal ("Minor") Permit**
- ✓ **Underground Injection Control Registration for Floor Drains**
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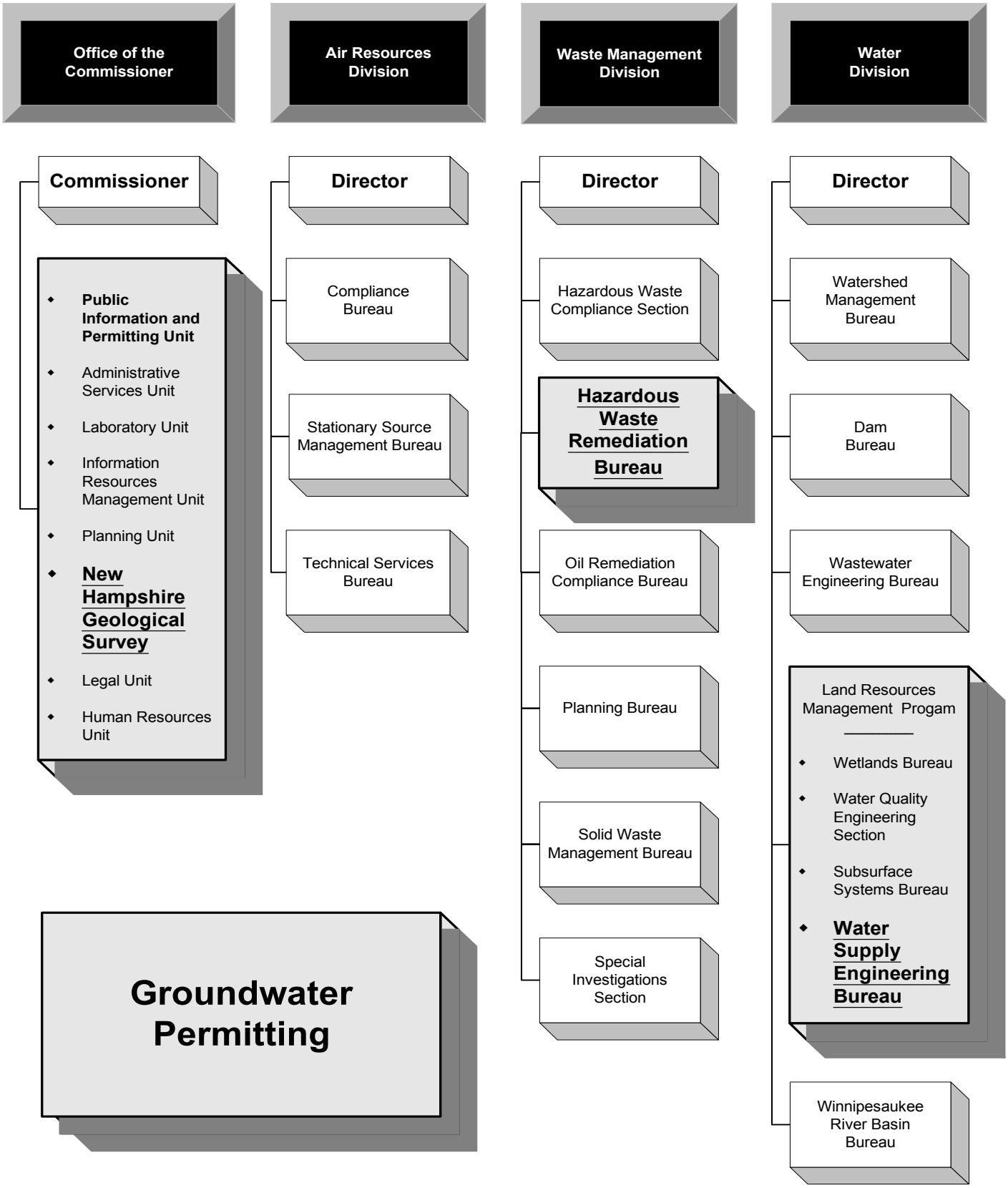
- ✓ **Groundwater Release Detection Permit**
- ✓ **Temporary Groundwater Discharge Permit**
- ✓ **Groundwater Discharge Permit**
- ✓ **Groundwater Management Permit**

Organizational Chart

New Hampshire Department of Environmental Services



Large Groundwater Withdrawal ("Major") Permit

Introduction: The New Hampshire Legislature officially declared through RSA 481 ("State Dams, Reservoirs, and Other Water Conservation Projects", http://gencourt.state.nh.us/rsa/html/indexes/481.html) that surface water and groundwater represent an integrated public resource to be conserved, protected, and managed for the public good. Since 1987, all groundwater withdrawals that exceed 20,000 gallons per day ("gpd") (averaged over a seven day period) have been required to be registered with DES (see http://www.des.state.nh.us/factsheets/geo/geo-4.htm). Since 1991, DES has regulated new groundwater withdrawals for community water systems to ensure their proper siting and long-term sustainable yield. In 1998, the Legislature RSA 485-C:21 ("Groundwater Protection Act/Approval for Large Groundwater Withdrawals", http://gencourt.state.nh.us/rsa/html/L/485-C/485-C-21.htm), which directs DES to regulate all new groundwater withdrawals that exceed 57,600 gallons or more over any 24-hour period to prevent adverse impacts to surrounding water users or water resources. As a result, DES established the Large Groundwater Withdrawal Permit Program, which requires any person proposing a proponent of any new large withdrawal from a production well sited after July 1998 to apply for a permit (see http://www.des.state.nh.us/factsheets/ws/ws-22-11.htm and http://www.des.state.nh.us/dwspp/lgwith.htm). "Large groundwater withdrawals" are classified as either major or minor. DES defines a "major water withdrawal" (NH CODE ADMIN. RULES Env-Ws 388, "Major Groundwater Withdrawal", http://www.des.state.nh.us/dwspp/adopt_388.pdf) as *one that has a maximum average withdrawal rate that exceeds 144,000 gpd or more (averaged over 30 days); or a maximum, 24-hour withdrawal of 57,600 gallons (or more) when DES has either denied, suspended, or revoked a "minor withdrawal" designation for the project pursuant to Env-Ws 387* (see http://www.des.state.nh.us/dwspp/adopt_387.pdf). The applicant must demonstrate that a proposed withdrawal will not adversely impact existing water users or water resources and, if it will, the applicant must develop and implement a mitigation plan. Other permitting requirements include public notification, withdrawal testing, and development of a conservation management plan that demonstrates the need for the proposed withdrawal. Permit holders are required to meter withdrawal volumes and may be required to monitor the water levels of peripheral wells, wetlands, or nearby surface water bodies. Also, any registered groundwater withdrawal within 500 feet of rivers protected under RSA 483 ("Rivers Management and Protection Program", http://www.gencourt.state.nh.us/rsa/html/indexes/483.html) may be subject to limits during periods of low flow conditions (see http://www.des.state.nh.us/rivers/instream/).

Average number of permits issued annually: 5

Fee: None

Estimated processing time after application is deemed "complete": Preliminary Application - 60 days; Final Report - 45 days; Final decision typically reached within 6-12 months (or more, depending upon the complexity of the water resources in the vicinity of the site)

Permit duration: 10 years

Permit transferability: The permit is transferable through a written request to DES. Compliance with the existing permit shall be established prior to ownership transfer. Requests shall identify the person to whom the permit will be transferred, including his/her address and signature of the current permittee.

Permit modification: Permits may be modified through a written request to DES.

Permit renewal: The permit is valid for ten years following its issuance. The permittee shall apply for renewal of this permit at least 90 days prior to its expiration date.

State statutes: RSA 485 ("New Hampshire Safe Drinking Water Act", http://gencourt.state.nh.us/rsa/html/indexes/485.html) and RSA 485-C ("Groundwater Protection Act", http://gencourt.state.nh.us/rsa/html/indexes/485-C.html)

N. H. Code of Administrative Rules: Env-Ws 388 ("Major Groundwater Withdrawal", http://www.des.state.nh.us/dwspp/adopt_388.pdf)

Appeals body: State Supreme Court under RSA 541 ("Rehearings and Appeals in Certain Cases", http://gencourt.state.nh.us/rsa/html/indexes/541.html; see also http://www.state.nh.us/courts/supreme.htm)

Additional information: N. H. DES, Large Groundwater Withdrawal Program Manager, (603) 271-0660
N. H. DES, Water Supply Engineering Bureau, (603) 271-2513
N. H. DES, Public Information Center, (603) 271-2975 or (603) 271-8876

Large Groundwater Withdrawal ("Major") Permit – *Work Sheet*

Key Qualifier Questions: *Will your new production well's maximum average daily withdrawal (averaged over 30 days) exceed 144,000 gallons per day ("gpd")? Will the maximum, 24-hour withdrawal be 57,600 gallons or more over any 24-hour period in a situation where DES has denied, suspended, or revoked a "Minor" withdrawal designation under NH CODE ADMIN. RULES Env-Ws 387* ("Minor Groundwater Withdrawal", http://www.des.state.nh.us/dwspp/adopt_387.pdf)*?*

What must you do to apply?

- Obtain a copy of the NH CODE ADMIN. RULES Env-Ws 388 ("Major Groundwater Withdrawal", http://www.des.state.nh.us/dwspp/adopt_388.pdf)
- Review the DES Fact Sheet entitled *Large Groundwater Withdrawals – Approval and Notification Requirements* (see http://www.des.state.nh.us/factsheets/ws/ws-22-11.htm).
- Demonstrate the need for the withdrawal by completing a conservation management plan and description of need (see Env-Ws 388.05).
- Develop a conceptual hydrologic model of the withdrawal (Env-Ws 388.06).
- Complete a preliminary water resource and use inventory (Env-Ws 388.07).
- Estimate the effects of the withdrawal on water resources and uses (Env-Ws 388.08).
- Design a withdrawal-testing program (Env-Ws 388.09).
- Submit a major withdrawal permit application (Env-Ws 388.10).
- Perform public notification (Env-Ws 388.11).
- If desired, request and attend a pre-testing conference with DES (Env-Ws 388.12).
- Complete withdrawal testing in accordance with Env-Ws 388.13.
- Refine the conceptual hydrologic model and study area for the withdrawal (Env-Ws 388.14).
- Update and revise the inventory of water resources and uses based on testing results (Env Ws 388.15).
- Describe impacts to water resources and uses (Env-Ws 388.16).
- Submit a report completed in accordance with Env-Ws 388.17.
- When observations under operating conditions are necessary to validate test results and verify that adverse impacts will not occur, develop and obtain approval for an impact monitoring and reporting program (Env-Ws 388.20).
- When an adverse impact as identified in Env-Ws 388.18 is anticipated to occur as a result of the withdrawal (*e.g.*, reduction in withdrawal capacity of a public water supply, reduction of surface water levels or flows, a net loss of wetland values, encroachment of contaminated groundwater plumes from a remediation site, *etc.*), complete the following:
    - Reduce the proposed production volume of the withdrawal in accordance with Env-Ws 388.14(b) to a level where no adverse impacts are anticipated, or
    - Design and implement mitigation measures (Env-Ws 388.21).
- When an adverse impact occurs as identified in Env-Ws 388.18 as a result of the withdrawal design, implement mitigation measures (Env-Ws 388.21).
- Submit all correspondence to: Source Water Protection Program, Water Division, New Hampshire Department of Environmental Services, 6 Hazen Drive, P. O. Box 95, Concord, NH 03302-0095. Telephone: (603) 271-0660 or (603) 271-2513; fax: (603) 271-0656; or online: http://www.des.state.nh.us/dwspp/

What types of projects require this permit?

- Drinking water supply wells
- Bottled water companies
- Beverage production facilities

- Golf courses, recreation fields, ski areas, schools
- Agricultural operations
- Manufacturing facilities
- Mining operations
- Electric power generation plants

If there are questions regarding this page or any other section of the Guidebook, please contact Tim Drew, Administrator, Public Information and Permitting Unit, at tdrew@des.state.nh.us or at (603) 271-3306.

Large Groundwater Withdrawal ("Minor") Permit

Introduction: The New Hampshire Legislature officially declared through RSA 481 ("State Dams, Reservoirs, and Other Water Conservation Projects", http://gencourt.state.nh.us/rsa/html/indexes/481.html) that surface water and groundwater represent an integrated public resource to be conserved, protected, and managed for the public good. Since 1987, all groundwater withdrawals of 20,000 gallons or more per day ("gpd") (averaged over a seven day period) have been required to be registered with DES (see http://www.des.state.nh.us/factsheets/geo/geo-4.htm). Since 1991, DES has regulated new groundwater withdrawals for community water systems to ensure their proper siting and long-term sustainable yield. In 1998, the Legislature enacted RSA 485-C:21 ("Groundwater Protection Act/Approval for Large Groundwater Withdrawals", http://gencourt.state.nh.us/rsa/html/L/485-C/485-C-21.htm), which directs DES to regulate all new groundwater withdrawals of 57,600 gpd or more during any 24-hour period to prevent adverse impacts to surrounding water resources. As a result, DES established the Large Groundwater Withdrawal Permit Program, which required a developer of any new withdrawal from a large production well sited after July 1998 to apply for a permit (http://www.des.state.nh.us/factsheets/ws/ws-22-11.htm and http://www.des.state.nh.us/dwspp/lgwith.htm). "Large groundwater withdrawals" are classified as major or minor. DES defines a "minor water withdrawal" (NH CODE ADMIN. RULES Env-Ws 387, "Minor Groundwater Withdrawal", http://www.des.state.nh.us/dwspp/adopt_387.pdf) based on four criteria*: (1) the maximum 24-hour withdrawal will be at least 57,600 gallons, (2) the maximum average-day withdrawal (averaged over a 30-day period) is less than 144,000 gallons per day, (3) available information indicates that the withdrawal will not result in adverse impacts to other wells or water bodies, and (4) the withdrawal is not located in a high-use area as determined by DES.* The applicant must demonstrate that a proposed withdrawal will not adversely impact existing water users or water resources and, if it will, the applicant must develop and implement a mitigation plan. Other permitting requirements include public notification, withdrawal testing, and development of a conservation management plan that demonstrates the need for the proposed withdrawal. Permit holders are required to meter withdrawal volumes, and may be required to monitor the water levels of peripheral wells, wetlands, or nearby surface water bodies. Also, any registered groundwater withdrawal within 500 feet of rivers protected by RSA 483 ("Rivers Management and Protection Program", http://gencourt.state.nh.us/rsa/html/indexes/483.html) may be subject to limits during periods of low flow conditions (see http://www.des.state.nh.us/rivers/instream/).

Average number of permits issued annually: 5

Fee: None

Estimated processing time after application is deemed "complete": Preliminary Application - 60 days; Final Report - 45 days; Final decision typically reached within 6-12 months (or more, depending upon the complexity of the water resources in the vicinity of the site)

Permit duration: 10 years

Permit transferability: The permit is transferable through a written request to DES. Compliance with the existing permit shall be established prior to ownership transfer. Requests shall identify the person to whom the permit will be transferred, including his/her address and signature of the current permittee.

Permit modification: Permits may be modified through a written request to DES.

Permit renewal: The permit is valid for ten years following its issuance. The permittee shall apply for renewal of this permit at least 90 days prior to its expiration date.

State statutes: RSA 485 ("New Hampshire Safe Drinking Water Act", http://gencourt.state.nh.us/rsa/html/indexes/485.html) and RSA 485-C ("Groundwater Protection Act", http://gencourt.state.nh.us/rsa/html/indexes/485-C.html)

N. H. Code of Administrative Rules: Env-Ws 387 ("Minor Groundwater Withdrawal", http://www.des.state.nh.us/dwspp/adopt_387.pdf)

Appeals body: State Supreme Court under RSA 541 ("Rehearings and Appeals in Certain Cases", http://gencourt.state.nh.us/rsa/html/indexes/541.html; see also http://www.state.nh.us/courts/supreme.htm)

Additional information: N. H. DES, Large Groundwater Withdrawal Program Manager, (603) 271-0660
N. H. DES, Water Supply Engineering Bureau, (603) 271-2513
N. H. DES, Public Information Center, (603) 271-2975 or (603) 271-8876

Large Groundwater Withdrawal ("Minor") Permit – *Work Sheet*

Key Qualifier Question: *Will the proposed project involve the installation of a new production well and include the development of a new groundwater withdrawal of 57,600 gallons or more over any 24-hour period which does not qualify as a "Major" withdrawal and which is not associated with site remediation or a temporary short-term use such as construction dewatering?*

What must you do to apply?

- Obtain a copy of the NH CODE ADMIN. RULES Env-Ws 387 ("Minor Groundwater Withdrawal", http://www.des.state.nh.us/dwspp/adopt_387.pdf)
- Review the DES Fact Sheet entitled *Large Groundwater Withdrawals – Approval and Notification Requirements* (see http://www.des.state.nh.us/factsheets/ws/ws-22-11.htm).
- Demonstrate the need for the withdrawal by completing a conservation management plan and description of need (see Env-Ws 387.05).
- Estimate the study area for the withdrawal (Env-Ws 387.06).
- Complete a water resource and use inventory of the study area (Env-Ws 387.07).
- Design a withdrawal-testing program (Env-Ws 387.08).
- Submit a request for minor withdrawal designation (Env-Ws 387.09).
- Perform public notification (Env-Ws 387.10).
- Based on a hydrologic evaluation performed by DES (Env-Ws 387.11), obtain approval for a minor withdrawal designation (Env-Ws 387.12).
- Complete withdrawal testing (Env-Ws 387.13).
- If withdrawal testing verifies a minor withdrawal designation, submit a minor withdrawal permit application completed in accordance with Env-Ws 387.14, to include:
    - Maximum withdrawal volumes being requested
    - Applicant's name, mailing address, and telephone number
    - An update of, and explanation for, any changes in the minor withdrawal designation request
    - A description of public notification activities
    - Withdrawal testing program results
    - Justification of any alternate methods used to estimate the study area or to complete withdrawal testing
    - For new community water supply systems, the final well siting report as specified by Env-Ws 379 ("Site Selection of Large Production Wells for Community Water Systems", http://www.des.state.nh.us/rules/envws379.pdf)
    - For new groundwater sources of bottled water, submit the well siting report specified by Env-Ws 389 ("Groundwater Sources of Bottled Water", http://www.des.state.nh.us/rules/envws389.pdf)
- If withdrawal testing does <u>not</u> verify minor withdrawal designation:
    - Collect and submit additional information that does verify minor withdrawal designation; or
    - Apply for a Large Groundwater Withdrawal ("Major") Permit in accordance with Env-Ws 388 ("Major Groundwater Withdrawal", http://www.des.state.nh.us/dwspp/adopt_388.pdf).
- Submit all correspondence to: Source Water Protection Program, Water Division, New Hampshire Department of Environmental Services, 6 Hazen Drive, P. O. Box 95, Concord, NH 03302-0095. Telephone: (603) 271-0660 or (603) 271-2513; fax: (603) 271-0656; or online: http://www.des.state.nh.us/dwspp/

What types of projects require this permit?

- ❖ Drinking water supply wells
- ❖ Bottled water companies
- ❖ Beverage production facilities
- ❖ Golf courses, recreation fields, ski areas, schools

- Agricultural operations
- Manufacturing facilities
- Mining operations
- Electric power generation plants
- Any other water use that requires greater than 57,600 gallons over any 24-hour period

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If there are questions on this page or any other section of the Guidebook, please contact Tim Drew, Administrator, Public Information and Permitting Unit, at tdrew@des.state.nh.us or at (603) 271-3306.

Underground Injection Control Registration for Floor Drains

Introduction: The Underground Injection Control ("UIC") Registration for Floor Drains is intended to protect groundwater from being contaminated as a result of releases to the environment from commercial and industrial operations. Such discharges have occurred historically and have cost hundreds of thousands of dollars for the remediation of groundwater reserves, the state's primary source of drinking water. Unlike the DES Holding Tank Registration, the UIC Registration for Floor Drains is used where a facility discharges non-domestic, non-hazardous wastewater that contains no "regulated contaminants" or sanitary wastewater onto or into the ground. A "regulated contaminant" is defined by RSA 485-C:2, XIII as *any physical, chemical, biological, radiological substance or other matter, other than naturally occurring substances at naturally occurring levels, in water which adversely affects human health or the environment* (see "Groundwater Protection Act/Definitions", http://gencourt.state.nh.us/rsa/html/L/485-C/485-C-2.htm). The UIC Registration for Floor Drains is administered by the DES Drinking Water Source Protection Program (see http://www.des.state.nh.us/dwspp/gwdisch.htm) under NH CODE ADMIN. RULE Env-Ws 1508 (see http://www.des.state.nh.us/rules/ws1500.pdf). The facility owner must first determine whether the floor drain lies an area where regulated contaminants are used or stored. If regulated contaminants will not be used or stored in the area of the facility containing the floor drains and the floor drains will remain open, the *Floor Drain Registration* must be filed with the DES UIC Program (see http://www.des.state.nh.us/pdf/floorreg.pdf). If regulated contaminants are or will be used or stored in an area of the facility, the floor drains must be sealed, must discharge to a holding tank which also must be registered with DES (see the description for "Holding Tank Registration" provided elsewhere in this chapter), or must discharge to municipal sanitary sewer. If a floor drain is to be sealed, the facility owner must first determine whether a regulated contaminant has ever been discharged through it to the environment. If not, the drain can be sealed with concrete and the DES *Floor Drain Closure Notification* form must be filed with the DES UIC Program certifying that the drain has been permanently closed (see the latter section of the *Floor Drain Registration* form noted above). Examples of discharges authorized through this registration include non-contact cooling water, beauty salon wastewater, kennel wastewater, and discharges from bathroom floor drains (see http://www.des.state.nh.us/factsheets/ws/ws-22-9.htm).

Average number of registrations issued annually: 50-75

Fee: None

Estimated processing time after registration is deemed "complete": 2 weeks

Registration duration: Indefinite, based on continued compliance

Registration transferability: Since the registration is issued to the property owner, he/she must provide written notification of transfer to DES, including the new owner's name and mailing address, within 10 days of the ownership transfer. The new owner must re-register the facility within 30 days of purchase.

Registration modification: A new registration must be submitted to DES that clearly states and provides the rationale for any proposed changes to the quality or quantity of the wastewater.

Registration renewal: None required

State statute: RSA 485:3, X ("New Hampshire Safe Drinking Water Act/Drinking Water Rules", http://gencourt.state.nh.us/rsa/html/L/485/485-3.htm)

N. H. Code of Administrative Rules: Env-Ws 1500 ("Groundwater Discharge Permit and Registration", http://www.des.state.nh.us/rules/ws1500.pdf)

Appeals body: Water Council at RSA 21-0:7 ("Department of Environmental Services/Water Council", http://gencourt.state.nh.us/rsa/html/I/21-O/21-O-7.htm; see also http://www.des.state.nh.us/rules/env-wc200.pdf and http://www.des.state.nh.us/councils/#1)

Additional information: N. H. DES, UIC Program Coordinator, (603) 271-2858
N. H. DES, Water Supply Engineering Bureau, (603) 271-2513
N. H. DES, Public Information Center, (603) 271-2975 or (603) 271-8876

Underground Injection Control Registration for Floor Drains – *Work Sheet*

Key Qualifier Question: *Is non-domestic, non-hazardous wastewater that is free of "regulated contaminants" and human sanitary wastes, and that has been or will be generated as a result of commercial or industrial operations, currently being (or planned to be) discharged from you facility through a floor drain to the ground or ground surface?*

What must you do to apply?

- Obtain a copy of the *Registration and Notification Form for Floor Drains and Discharges to Groundwater* from the DES Underground Injection Control ("UIC") program, DES Public Information Center, or access it online at either http://www.des.state.nh.us/pdf/floorreg.pdf or http://www.des.state.nh.us/factsheets/ws/ws-22-9.htm.
- Provide all facility location information, including the owner's name, address, and telephone number, and those of the contact person and property owner (if different).
- Determine whether the discharge currently is being released to the environment (*e.g*. septic system, drywell, or to the ground surface).
- Determine whether there are any "regulated contaminants" being used or stored in the work area by reviewing the Material Safety Data Sheets ("MSDSs") for all products or reagents being used or stored and comparing the results with the criteria listed by NH CODE ADMIN. RULES Env-Ws 1500 ("Groundwater Discharge Permit and Registration", http://www.des.state.nh.us/rules/ws1500.pdf).
- Prepare an original or color photocopy of a U. S. Geological Survey map (7½-minute series, if available) that clearly identifies the facility's location (see http://www.topozone.com).
- Prepare a site plan that depicts the location of the building and that of the floor drains or other discharge points on the property.
- Provide a description of the anticipated discharge quality, including analytical results (if available), and volume of wastewater to be discharged through the floor drains.
- Draft a plan that describes the disposal method, including how and where the wastewater is proposed to be discharged, and include a sketch of any infiltration structures and/or dimensions of any injection well proposed for this purpose.
- Provide a complete description of the discharge rate, discharge volume, and schedule for periodical discharges.
- If the regulated contaminants are used or stored in the area containing the floor drains, five options are available:
    - Eliminate regulated contaminants from the wastewater (if a floor drain) or eliminate the use and/or storage of regulated contaminants within the area served by the floor drain and submit a *Floor Drain Registration* to DES (see http://www.des.state.nh.us/factsheets/ws/ws-22-9.htm)
    - Permanently seal the floor drain to prevent releases to groundwater (see below)
    - Connect the drain or discharge line to a municipal sanitary sewer in accordance with DES and local regulations
    - Connect the drain or discharge to a Registered Holding Tank that meets DES requirements (see http://www.des.state.nh.us/factsheets/ws/ws-22-8.htm
    - Obtain a DES Groundwater Discharge Permit
- If the floor drain has never released regulated contaminants to the environment and it is to be closed:
    - Provide notice and plans to DES describing the proposed floor drain closure.
    - Describe where the drain previously discharged (surface water, septic system, storm drain, unknown, *etc*.) and submit a *Floor Drain Closure Notification* (see the latter section of the *Floor Drain Registration* form, http://www.des.state.nh.us/pdf/floorreg.pdf) with all supporting materials to DES (see http://www.des.state.nh.us/factsheets/ws/ws-22-9.htm).
    - After drain has been permanently sealed, provide color photographs of the sealed drain accompanied by a copy of the original *Floor Drain Closure Notification* to DES.

- Submit the completed forms and all supporting materials to: Underground Injection Control Program, Water Division, New Hampshire Department of Environmental Services, 6 Hazen Drive, P. O. Box 95, Concord, NH 03302-0095. Telephone: (603) 271-2858 or (603) 271-2513; fax: (603) 271-5171; or online: http://www.des.state.nh.us/dwspp/gwdisch.htm

What types of projects require this registration? [1]

- Beauty salons
- Veterinary clinics
- Kennels/animal boarding facilities
- Non-contact cooling water discharges
- Water treatment system backwash from public water systems

Note 1: The types of discharges listed above are registered to discharge without treatment. DES reviews the Material Safety Data Sheets ("MSDSs") provided with the application on a case-by-case basis to evaluate the potential of a regulated contaminant entering the waste stream from a certain type of facility (*e.g.*, dog kennel, beauty salon, *etc.*). If there is a chance that a regulated contaminant will enter the waste stream from such a facility's operations, then this registration is denied and an application for a Groundwater Discharge Permit (discussed elsewhere in this chapter) is required, which includes conditions for treatment and monitoring.

If there are questions regarding this page or any other section of the Guidebook, please contact Tim Drew, Administrator, Public Information and Permitting Unit, at tdrew@des.state.nh.us or at (603) 271-3306.

Holding Tank Registration

Introduction: The DES Holding Tank Registration is intended as a means to protect groundwater reserves from being contaminated as a result of uncontrolled releases to the environment from commercial and industrial operations. This Registration is designed to regulate the capture of non-domestic wastewaters that typically flow through floor drains or work sinks in an area where a "regulated contaminant" is used or stored. If regulated contaminants are not used or stored in the area, an Underground Injection Control Registration for Floor Drains is required. A "regulated contaminant" is defined by RSA 485-C:2, XIII as *any physical, chemical, biological, radiological substance or other matter, other than naturally occurring substances at naturally occurring levels, in water which adversely affects human health or the environment* (see "Groundwater Protection Act/Definitions", http://gencourt.state.nh.us/rsa/html/L/485-C/485-C-2.htm). Specifically targeted are wastewaters generated from other than human sanitary sources, including those that are mixtures of commercial and/or industrial wastes and human sanitary wastes. The Holding Tank Registration is applied in instances where a service connection to a sanitary sewer is not feasible as a means for proper wastewater disposal. It is administered by the DES Underground Injection Control ("UIC") Program (see http://www.des.state.nh.us/dwspp/gwdisch.htm) and is regulated by NH CODE ADMIN. RULE Env-Ws 1508 (see http://www.des.state.nh.us/rules/ws1500.pdf). To qualify for this registration, the discharge must be characterized as non-domestic and non-hazardous (see http://www.des.state.nh.us/pdf/holdreg.pdf). Holding tanks must have a minimum capacity of 1,000 gallons, be watertight, structurally sound, and have an audio and visual alarm system installed that will indicate when pumping is required (see http://www.des.state.nh.us/factsheets/ws/ws-22-8.htm). Wastewater collected in a registered holding tank must be pumped on a regular schedule (specified by the registration), transported to a wastewater treatment facility for pretreatment (if required), and then finally disposed. Information collected is used to help identify, prevent, or eliminate sources of contamination in both wellhead and source water protection areas (see http://www.des.state.nh.us/factsheets/ws/ws-12-5.htm).

Average number of registrations issued annually: 15

Fee: None

Estimated processing time after application is deemed "complete": 30 days

Registration duration: Indefinite, based on continued need for the holding tank

Registration transferability: Since the registration is issued to the property owner, he/she must provide written notification of transfer to DES, including the new owner's name and mailing address, within 10 days of the ownership transfer. The new owner must also re-register the facility within 30 days of purchase.

Registration modification: If changes are desired, the owner must file a new registration application with DES to clearly provide the design of, and rationale for, the proposed changes to the holding tank, its piping system, or other associated appurtenances. Before any changes may occur, a new registration must be issued.

Registration renewal: None required

State statutes: RSA 485:3, X ("New Hampshire Safe Drinking Water Act/Drinking Water Rules/Underground Injection Control Program", http://gencourt.state.nh.us/rsa/html/L/485/485-3.htm) and RSA 485-A:13 ("Water Pollution and Waste Disposal/Water Discharge Permits", http://gencourt.state.nh.us/rsa/html/L/485-A/485-A-13.htm)

N. H. Code of Administrative Rules: Env-Ws 1500 ("Groundwater Discharge Permit and Registration", http://www.des.state.nh.us/rules/ws1500.pdf)

Appeals body: Water Council at RSA 21-0:7 ("Department of Environmental Services/Water Council", http://gencourt.state.nh.us/rsa/html/I/21-O/21-O-7.htm; see also http://www.des.state.nh.us/rules/env-wc200.pdf and http://www.des.state.nh.us/councils/#1)

Additional information: N. H. DES, UIC Program Coordinator, (603) 271-2858
N. H. DES, Water Supply Engineering Bureau, (603) 271-2513
N. H. DES, Public Information Center, (603) 271-2975 or (603) 271-8876

Holding Tank Registration – *Work Sheet*

Key Qualifier Question: *Will commercial or industrial non-domestic, non-hazardous wastewaters be generated and discharged through a floor drain, work sink, or other similar release point, located in an area where "regulated contaminants" are used or stored?*

What must you do to apply?

- Obtain a copy of the *Holding Tank Registration Form* from the DES Underground Injection Control ("UIC") program, DES Public Information Center, or online at either http://www.des.state.nh.us/pdf/holdreg.pdf or http://www.des.state.nh.us/factsheets/ws/ws-22-8.htm.
- Provide all facility location information, including the owner's name, address, and telephone number, and those of the contact person and property owner (if different).
- Determine whether the discharge currently is being released to the environment (*e.g*. septic system, drywell, or to the ground surface).
- Determine whether there are any "regulated contaminants" being used or stored in the work area by reviewing the Material Safety Data Sheets ("MSDSs") for all products or reagents being used or stored and compare the results with the criteria listed by NH CODE ADMIN. RULES Env-Ws 1500 ("Groundwater Discharge Permit and Registration", http://www.des.state.nh.us/rules/ws1500.pdf).
- Prepare an original or color photocopy of a U. S. Geological Survey map (7½-minute series, if available) that clearly identifies the facility location (see http://www.topozone.com).
- Prepare a site plan that depicts the location of the building and that of the holding tank on the property.
- Provide a description of the anticipated discharge quality, including analytical results (if available), and volume of wastewater to be discharged to the holding tank.
- Prepare a plan that describes the frequency of disposal, method of transport, and the location of final disposal for the collected wastewater, its residual solids, and any other related by-products generated.
- Prepare a complete description of the commercial or industrial facility and types of wastes or wastewaters handled there.
- Prepare design plans which meet the following requirements:
    - Minimum holding tank capacity must be 1,000 gallons
    - Tank and piping system must be watertight and compatible with the liquids or sludges being stored
    - Access for cleaning and inspection must be provided to each tank compartment via removable cover or manhole at least 20 inches in diameter. Manholes must extend to finished grade.
    - Tank must be designed for the expected maximum structural load, with ballast provided to prevent structural damage when tank is emptied
    - Audio and visual alarms must be installed and be set to activate once the fluid reaches 80 percent of the maximum storage capacity
- Submit the completed application and all supporting materials to: Underground Injection Control Program, Water Division, New Hampshire Department of Environmental Services, 6 Hazen Drive, P. O. Box 95, Concord, NH 03302-0095. Telephone: (603) 271-2858 or (603) 271-2513; fax: (603) 271-5171; or online: http://www.des.state.nh.us/dwspp/gwdisch.htm

What types of projects require this registration?

- All motor vehicle service and maintenance facilities, vehicle storage buildings, and auto body/auto painting operations that have floor drains or work sinks
- Drive-through automobile lubrication facilities, "zero-discharge" car washes, and new and/or used auto dealerships where floor drains are proposed
- Industrial unit process discharges that have floor drains or work sinks
- Laboratories that have floor drains or work sinks

If there are questions regarding this page or any other section of the Guidebook, please contact Tim Drew, Administrator, Public Information and Permitting Unit, at tdrew@des.state.nh.us or at (603) 271-3306.

Groundwater Release Detection Permit

Introduction: Groundwater represents the primary source of drinking water for more than 60 percent of the state's households. To protect this valuable underground resource, the DES Groundwater Release Detection Permit was created to serve as an early warning system for detecting the release of contaminants and their movement using monitoring wells and periodic groundwater analyses. Experience has shown that it is far more cost-effective to prevent groundwater contamination than it is to clean up this natural resource once degraded. If properly designed and operated, a series of monitoring wells placed strategically around a site will warn of potential damage to groundwater reserves and will do so before the damage begins. Such an early warning allows time to prepare a response to stem the migration of contaminants, remove the source, and devise a strategy for preventing future contamination. This permit is required for the siting and operation of hazardous waste disposal facilities, lined solid waste landfills, lined wastewater lagoons, and at facilities that store and process soils contaminated with petroleum products. Other types of facilities also may need to obtain this permit if they are located in a Class GAA wellhead protection area (see http://www.des.state.nh.us/factsheets/ws/ws-12-8.htm and http://www.des.state.nh.us/factsheets/ws/ws-22-3.htm), including new solid waste composting facilities and solid waste resource recovery facilities, and certain existing activities, such as road salt storage facilities, snow dumps, and junkyards (which are prohibited as new uses in GAA wellhead protection areas (see RSA 485-C:12, "Groundwater Protection Act/Prohibited Uses", http://gencourt.state.nh.us/rsa/html/L/485-C/485-C-12.htm). More serious contamination sites or activities may require a Groundwater Discharge Permit pursuant to RSA 485-A:13 ("Water Pollution and Waste Disposal/Water Discharge Permits", http://gencourt.state.nh.us/rsa/html/L/485-A/485-A-13.htm). A Groundwater Release Detection Permit is not required for a facility or activity that already possesses a DES Groundwater Discharge Permit or Groundwater Management Permit.

Average number of permits issued annually: Approximately 5

Fee: $1,000 (The application fee is waived for state, county and municipal government.)

Estimated processing time after application is deemed "complete": 90 days

Permit duration: 5 years

Permit transferability: Before ownership transfer, the permit holder must file with DES a written request and summary of all monitoring results to date. A *Groundwater Permit Transfer Application* form may be accessed at http://www.des.state.nh.us/orcb/doclist/transfer.pdf. DES will issue a written decision within 90 days.

Permit modification: The permit holder, or consultant working on his/her behalf, must submit a written request that discusses the modification being requested and the reason(s) for it, and must include a summary of all monitoring results to date. DES will issue a written decision within 90 days.

Permit renewal: If the activity requiring the permit will continue, the permit must be renewed. A renewal application must be filed 90 days in advance of permit expiration. The *Application for Renewal* form can be accessed at http://www.des.state.nh.us/orcb/doclist/renewal_grdp.pdf. Permit renewals are valid for five years.

State statute: RSA 485-C:13 ("Groundwater Protection Act/Groundwater Release Detection Permit", http://gencourt.state.nh.us/rsa/html/L/485-C/485-C-13.htm)

N. H. Code of Administrative Rules: Env-Wm 1403 ("Groundwater Management and Release Detection Permits", http://www.des.state.nh.us/orcb/doclist/wm1403.pdf)

Appeals Body: Waste Management Council at RSA 21-O:9 ("Department of Environmental Services/Waste Management Council", http://gencourt.state.nh.us/rsa/html/I/21-O/21-O-9.htm; see also http://www.des.state.nh.us/rules/env-wmc200.pdf and http://www.des.state.nh.us/councils/#waste)

Additional information: N. H. DES, Groundwater Release Detection Permit Coordinator, (603) 271-2999
N. H. DES, Hazardous Waste Remediation Bureau, (603) 271-3644
N. H. DES, Public Information Center, (603) 271-2975 or (603) 271-8876

Groundwater Release Detection Permit – *Work Sheet*

Key Qualifier Question: *Will the proposed facility or activity include a hazardous waste disposal facility, lined solid waste landfill, lined wastewater lagoon, or a facility for processing soil contaminated with petroleum products; or will the facility or activity (such as a new solid waste composting operation or an existing outdoor storage facility for deicing chemicals, junk/salvage yard, or snow dump) be located in a Class GAA wellhead protection area?*

What must you do to apply?

- Obtain an *Application for a Groundwater Release Detection Permit* from the DES Hazardous Waste Remediation Bureau, DES Public Information Center, or online at http://www.des.state.nh.us/orcb/doclist/reldet.pdf.
- Identify the activity/facility as "proposed" or "existing", and list the facility name, address, tax map/lot number, and deed reference.
- Prepare a U. S. Geological Survey map, 7-1/2 minute series (if available), which clearly identifies the facility location (see http://www.topozone.com).
- Prepare a map of potential receptors within 1,000 feet of the facility (using a tax map as a base) which identifies and locates all streets, adjacent properties (including tax map and lot number), ownership and land use information, physical structures, storage areas, and buildings (including information on building use and existence of basements), surface water bodies and water supply wells (including type of use).
- Provide the name and address of the facility owner (permit applicant), property owner (if different from permit applicant), facility operator (if different from facility owner), and contact person (if different from applicant/owner).
- Prepare a complete description of the facility, its intended capacity, types of wastes or wastewater handled, and description of the process involved in the treatment, storage, or disposal of wastes.
- Prepare a brief description of the precautions to be taken at the facility to prevent potential contamination. Include a description of the facility construction (liner types, diversion ditches, *etc.*) and management practices that will help to prevent potential waste disposal or leakage.
- Prepare an estimated construction timeline and projected start-up date.
- For industries, include all pertinent information, including Standard Industrial Classification ("SIC") Code concerning processes, production, and associated waste treatment techniques.
- Prepare a detailed facility plan showing a title, legend, and true north arrow, drawn to scale (noted on the plan, including a graphic scale bar), with the base plan source noted on the document. The plan must also include the location, elevation, and datum of the benchmark. Depict ground surface spot elevations and contours.
- Prepare a site plan and describe (within 100 feet of the facility) the physical structures, storage areas, and buildings associated with the facility, existing and proposed groundwater monitoring wells, surface water sampling points, groundwater contours, surface water bodies, land surface contours, piezometers used to develop groundwater contours, a table of water level measurements and elevations found in piezometers and monitoring wells, soil borings and test pits, above- and underground storage tanks, underground utilities, and subsurface drains. Also prepare an 8½" x 11" (or 11" x 17") site plan modified to make important items legible at that scale.
- Compile a table summarizing all monitoring results for the last five years from existing monitoring points.
- Prepare a list of reports on land use history, activities, water quality, and hydrogeology for the facility site.
- Provide detailed proposal for a water quality monitoring program, with proposed monitoring schedule, parameters to be analyzed, and monitoring locations with justification for locations, frequency, and parameters selected.

- Provide the test pit and boring log data including textural description, drilling methods, blow counts, and water table observation; and well construction details of existing monitoring wells, top of well casing elevations, and measured depth to water table from top of casing.
- Submit a check or money order for $1,000, made payable to "Treasurer, State of New Hampshire", with the application and all supporting materials as noted above to: Groundwater Release Detection Permit Coordinator, Hazardous Waste Remediation Bureau, Waste Management Division, New Hampshire Department of Environmental Services, 6 Hazen Drive, P. O. Box 95, Concord, NH 03302-0095. Telephone: (603) 271-2999; fax: (603) 271-2181; or online: http://www.des.state.nh.us/orcb/

What types of projects require this permit?

- The siting and operation of a commercial hazardous waste disposal facility in New Hampshire
- The siting and operation of lined wastewater lagoons or lined solid waste landfills
- The siting and operation of a new solid waste composting facility or solid waste resource recovery facility in a Class GAA wellhead protection area
- The operation of an existing junk/auto salvage yard, snow dump, or outdoor storage facility for deicing chemicals in a Class GAA wellhead protection area

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If there are questions regarding this page or any other section of the Guidebook, please contact Tim Drew, Administrator, Public Information and Permitting Unit, at tdrew@des.state.nh.us or at (603) 271-3306.

Temporary Groundwater Discharge Permit

Introduction: The Temporary Groundwater Discharge Permit is a nonrenewable permit issued for the temporary discharge to the ground or groundwater of non-domestic wastewater that has received treatment by best available technology (typically, granular activated carbon) including, but not limited to, the discharge generated from the rehabilitation or redevelopment of a public water supply well or the discharge generated from the dewatering of tank excavations (see http://www.des.state.nh.us/dwspp/gwdisch.htm). No discharge may contain regulated contaminants in a concentration greater than the ambient (natural) groundwater quality standards. A "regulated contaminant" is defined by RSA 485-C:2, XIII as *any physical, chemical, biological, or radiological substance or other matter, other than naturally occurring substances at naturally occurring levels, in water which adversely affects human health or the environment* (see "Groundwater Protection Act/Definitions", http://gencourt.state.nh.us/rsa/html/L/485-C/485-C-2.htm). The permit establishes standards for discharge and requires specific laboratory analyses to verify that adequate treatment has indeed been achieved before release to the ground or groundwater. If issued, this permit remains valid for a period of not more than four months. A Temporary Groundwater Discharge Permit can be used at a site where discharges from an underground petroleum storage tank de-watering project need to be managed (*Application for Temporary Groundwater Discharge Permit*, http://www.des.state.nh.us/orcb/doclist/temporary.pdf) or for the temporary discharge of drinking water system wastewater (*e.g.*, filter backwash or tank cleaning water). A copy of the completed application must be submitted to the town/city clerk of the municipality pursuant to RSA 541-A:39 ("Administrative Procedure Act/Notice to Municipalities", http://gencourt.state.nh.us/rsa/html/LV/541-A/541-A-39.htm) before DES will process and issue a final decision on the application. Please note that a more long-term release proposed from a water treatment system that will continue to discharge as part of its regular operation must be registered by using the form entitled *Registration and Notification Form for Floor Drains and Discharges to Groundwater* (see http://www.des.state.nh.us/pdf/floorreg.pdf).

Average number of permits issues annually: 20

Fee: None

Estimated processing time after application is deemed "complete": 15 days

Permit duration: 120 days

Permit transferability: Not transferable

Permit modification: Not modifiable

Permit renewal: Nonrenewable

State statute: RSA 485-A:13 ("Water Pollution and Waste Disposal/Water Discharge Permits", http://gencourt.state.nh.us/rsa/html/L/485-A/485-A-13.htm)

N. H. Code of Administrative Rules: Env-Ws 1505 (Groundwater Discharge Permit and Registration", http://www.des.state.nh.us/rules/ws1500.pdf)

Appeals body: Water Council at RSA 21-0:7 ("Department of Environmental Services/Water Council", http://gencourt.state.nh.us/rsa/html/I/21-O/21-O-7.htm; see also http://www.des.state.nh.us/rules/env-wc200.pdf and http://www.des.state.nh.us/councils/#1)

Additional information: N. H. DES, Groundwater Discharge Permits Coordinator, (603) 271-2858
N. H. DES, Water Supply Engineering Bureau, (603) 271-2513
N. H. DES, Public Information Center, (603) 271-2975 or (603) 271-8876

Temporary Groundwater Discharge Permit – *Work Sheet*

Key Qualifier Questions: *(1) Will the discharge originate from non-domestic (i.e., commercial/industrial) sources and last less than 120 days, with final disposal to the groundwater via infiltration? (2) Will the discharge represent the product of drinking water well rehabilitation, groundwater remediation activities, or site dewatering?*

What must you do to apply?

- Obtain a copy of the *Application for Temporary Groundwater Discharge Permit* from the DES Water Supply Engineering Bureau, the DES Public Information Center, or online at http://www.des.state.nh.us/orcb/doclist/temporary.pdf.
- Prepare a complete description of the project and representative site plan, including all location information related to the facility, including identification of the facility's owner and operator.
- Prepare a description of the proposed discharge including the purpose of the discharge, location of the closest sanitary sewer, proposed discharge rate, and starting date for the discharge.
- Prepare a U. S. Geological Survey map (7½ minute series, if available) that clearly identifies the facility or site location (see http://www.topozone.com) and the location of the nearest sanitary sewer.
- Prepare a description of the type of treatment proposed, including a description of the wastewater type and information on the influent and effluent water quality, sludge, and other by-products generated.
- Determine what erosion control measures are to be used and determine whether a DES Site Specific Permit, Dam Permit, or other associated DES authorizations may be needed for the facility.
- Identify any wastewater treatment, neutralization, or de-chlorination processes to be used.
- Identify any chemicals to be used.
- Prepare a table that summarizes all monitoring results to date from existing monitoring points.
- Certify that the applicant agrees not to discharge until receiving written permission from DES.
- Provide certification to the host municipality (through a copy of the application materials) notifying local officials of the proposed facility and its operation pursuant to RSA 541-A:39 ("Administrative Procedure Act/Notice to Municipalities", http://gencourt.state.nh.us/rsa/html/LV/541-A/541-A-39.htm).
- Submit the *Temporary Groundwater Discharge Permit Application* and all supporting information as noted above to: Water Supply Engineering Bureau, Water Division, New Hampshire Department of Environmental Services, 6 Hazen Drive, P. O. Box 95, Concord, NH 03302-0095. Telephone: (603) 271-2513; fax: (603) 271-5171; or online: http://www.des.state.nh.us/dwspp/gwdisch.htm
- If the application is approved, the Temporary Groundwater Discharge Permit will be issued for not longer than four months.
- Note: As part of the permit's conditions, a soils analysis will be required following cessation of the temporary discharge.

What types of projects require this permit and registration?

- ❖ Drinking water well rehabilitation projects
- ❖ Groundwater remediation sites
- ❖ Soil or dredged spoil dewatering projects
- ❖ Pump tests of contaminated groundwater

If there are any questions regarding this page or any other section of the Guidebook, please contact Tim Drew, Administrator, Public Information and Permitting Unit, at tdrew@des.state.nh.us or at (603) 271-3306.

Groundwater Discharge Permit

Introduction: The DES Water Supply Engineering Bureau administers the Groundwater Discharge Permit program and is concerned with the proper treatment and disposal of wastewater onto or into the ground (see http://www.des.state.nh.us/dwspp/gwdisch.htm). The focus is to prevent contamination of groundwater by the improper or uncontrolled disposal of wastes and/or wastewater. This permit is issued for the discharge of domestic wastewater (*e.g.*, from large septic systems) of 20,000 gallons per day or more and/or for any domestic discharges that do not meet defined nitrate setbacks. (Nitrate setback requirements define how far back from property lines the disposal area should be to enable ambient (*i.e.*, natural) groundwater limits to be achieved at the property boundary). The permit also applies to non-domestic wastewater discharges that contain one or more regulated contaminants and receive treatment by best available technology (typically, granular activated carbon). A "regulated contaminant" is defined by RSA 485-C:2, XIII as *any physical, chemical, biological, or radiological substance or other matter, other than naturally occurring substances at naturally occurring levels, in water which adversely affects human health or the environment* (see "Groundwater Protection Act/Definitions", http://gencourt.state.nh.us/rsa/html/L/485-C/485-C-2.htm). Permit holders are required to sample groundwater according to a defined schedule and to perform specific laboratory analyses to assure that groundwater quality is maintained. In all instances, DES rules prohibit any discharge of non-domestic wastewater containing regulated contaminants above ambient (natural) groundwater standards without a permit. Typical facilities that require this permit include unlined septage and sludge lagoons, spray irrigation sites for treated wastewater, rapid infiltration basins, and large septic systems.

Average number of permits issued annually: 10

Fee: $1,000

Estimated processing time after application is deemed "complete": 60 days

Permit duration: 5 years, and is subject to renewal

Permit transferability: Compliance with the existing permit shall be established prior to ownership transfer. Written transfer requests shall include the name and address of the person to whom the permit transfer is requested, signature of the current permittee, and a summary of all monitoring results.

Permit modification (or termination): Permits may be modified or terminated through a written request to DES with justification and a table summarizing all monitoring results to date from existing monitoring points.

Permit renewal: The permit holder must apply for renewal of this permit at least 90 days prior to its expiration date. The permittee shall continue to comply with all permit conditions until the permit is renewed or the facility is properly closed, regardless of whether a renewal application has been filed.

State statutes: RSA 485-3, X ("New Hampshire Safe Drinking Water Act/Drinking Water Rules", http://gencourt.state.nh.us/rsa/html/indexes/485.html), 485-A:1 and 13 ("Water Pollution and Waste Disposal", http://gencourt.state.nh.us/rsa/html/indexes/485-A.html) and RSA 485-C:6 and13 ("Groundwater Protection Act", http://gencourt.state.nh.us/rsa/html/indexes/485-C.html)

N. H. Code of Administrative Rules: Env-Ws 1500 ("Groundwater Discharge Permit and Registration", http://www.des.state.nh.us/rules/ws1500.pdf)

Appeals body: Water Council at RSA 21-0:7 ("Department of Environmental Services/Water Council", http://gencourt.state.nh.us/rsa/html/I/21-O/21-O-7.htm; see also http://www.des.state.nh.us/rules/env-wc200.pdf and http://www.des.state.nh.us/councils/#1)

Additional information: Groundwater Discharge Permits Coordinator, (603) 271-2858
N. H. DES, Water Supply Engineering Bureau, (603) 271-2513

N. H. DES, Public Information Center, (603) 271-2975 or (603) 271-8876

Groundwater Discharge Permit – *Work Sheet*

Key Qualifier Questions: *(1) Is there a discharge of domestic wastewater to a sub-surface disposal system with a design flow which is equal to or greater than 20,000 gallons per day ("gpd")? (2) Is there a discharge of domestic wastewater to a subsurface disposal system(s) with combined design flow equal to or greater than 1,000 gpd for a single lot, which fails to meet the minimum nitrate setback distances to the property lines? (3) Does the applicant plan to construct or operate a rapid infiltration basin or an unlined wastewater, septage or sludge lagoon? (4) Does the discharge contain a regulated contaminant that has received treatment by best available technology before discharge to the ground or groundwater? (5) Is land to be used for the treatment of the wastewater (i.e., slow-rate spray irrigation)?*

What must you do to apply?

- Obtain a copy of the *Application for Groundwater Discharge Permit* from the DES Water Supply Engineering Bureau, DES Public Information Center, or at http://www.des.state.nh.us/pdf/gwpermit.pdf.
- Prepare descriptive information for wastewater conveyance, pretreatment, treatment, storage, and disposal.
- Obtain a U. S. Geological Survey map (7½-minute series, if available) and clearly identify the facility's location on it (see http://www.topozone.com).
- For discharges of domestic wastewater, prepare a groundwater discharge zone map (using a tax map as a base) which identifies and locates such items as the groundwater discharge zone boundary, deeded easements which restrict the use of groundwater, properties, surface water bodies, drinking water supply sources, and source water protection areas within 1,000 feet of the groundwater discharge zone.
- Prepare a detailed and scaled facility plan (including a copy scaled to fit an 8½" by 11" or 11" by 17" sheet), stamped by a registered professional engineer licensed to practice in the state of New Hampshire.
- Prepare a table that summarizes all monitoring results to date from existing monitoring points.
- Prepare a list of reports on land use history, activities, water quality, and hydrogeology associated with the property on which the facility is located.
- Prepare a detailed proposal for a groundwater and surface water quality monitoring program, including such items as a proposed monitoring schedule, parameters to be analyzed, and justifiable monitoring locations.
- Provide notice to the community pursuant to RSA 541-A:39 ("Administrative Procedure Act/Notice to Municipalities", http://gencourt.state.nh.us/rsa/html/LV/541-A/541-A-39.htm) and obtain proof that the notice was provided.
- Prepare an estimate of the construction time and the projected start-up date.
- Prepare a nitrate or contaminant movement study.
- For new sites, prepare a site-specific soil map and a description of the site's geology.
- Contact the Natural Heritage Inventory Section of the New Hampshire Department of Resources and Economic Development to verify that no endangered or threatened plant species exist onsite (see http://www.nhdfl.org/organization/div_nhnhi.htm; also see New Hampshire Fish and Game Department for rare, threatened, or endangered animal species at http://wildlife.state.nh.us/nongameendlist.htm or http://www.wildlife.state.nh.us/nongame_page.htm)
- Obtain test pit/boring log data with textural description, drilling methods, blow counts, and water table observations.
- Document that easement ownership rights (filed with the Registry of Deeds) will restrict the use of groundwater for drinking in the discharge zone.
- Provide the status of the DES Water Supply Engineering Bureau's design plan approval and operations manual for the wastewater treatment system.
- Provide a copy of, or application for (if permit not yet issued), other DES approvals required for the project (*i.e.*, Site Specific Permit, Septage Facility Permit, Dam Permit, Wastewater Treatment Plant Operator License, *etc.*).

- Submit a completed application, a check or money order for $1,000 made payable to "Treasurer, State of New Hampshire", and all maps, plans, tables, proposed schedules, certification of notice, and any other supporting materials to: Water Supply Engineering Bureau, Water Division, New Hampshire Department of Environmental Services, 6 Hazen Drive, P. O. Box 95, Concord, NH 03302-0095. Telephone: (603) 271-2858; fax: (603) 271-5171; or online: http://www.des.state.nh.us/dwspp/gwdisch.htm

What types of projects require this permit?

- Rapid infiltration basins or unlined septage and sludge lagoons
- Discharge of domestic wastewater from a septic system designed for 20,000 gallons per day or more
- Land application (by spray irrigation or other means) of treated domestic wastewater onto a dedicated parcel
- Land application of septage derived from domestic wastewater or registered non-domestic wastewater
- Leaching wastewater lagoons or non-domestic wastewater treated with Best Available Technology ("BAT")

If there are questions regarding this page or any other section of the Guidebook, please contact Tim Drew, Administrator, Public Information and Permitting Unit, at tdrew@des.state.nh.us or at (603) 271-3306.

Groundwater Management Permit

Introduction: The DES Groundwater Management Permit was created to manage the long-term monitoring of sites where the state groundwater quality standards have been violated (see http://www.des.state.nh.us/orcb/doclist/wm1403.pdf). This permit is required for sites where uncontrolled releases to the environment have occurred through past disposal practices, floor drains, dry wells, leaking drums, leachate migration from unlined landfills, and leaking underground storage tanks. The permit calls for periodic groundwater quality monitoring and reporting to measure the effectiveness of groundwater remediation that also is required by the permit (through active measures or natural attenuation, see http://www.des.state.nh.us/orcb/doclist/na-gw.pdf / http://www.des.state.nh.us/hwrb/hwrblink.htm#remediation), specifies performance standards or remedies, and describes procedures for performing site investigations and implementing remedial action plans. Background guidance for these activities can be found in DES's ***Risk Characterization and Management Policy*** provided at http://www.des.state.nh.us/orcb/doclist/rcmp.pdf. More than 200 unlined landfills (mostly municipal) have been closed over the past decade in New Hampshire (see http://www.des.state.nh.us/sw/swclosure.htm), and virtually every closure process has included the characterization of existing groundwater quality (both natural and degraded), its subsurface spatial orientation and movement, and the development of a post-closure, long-term groundwater monitoring program (see http://www.des.state.nh.us/sw/swpostclosure.htm). The groundwater assessment and remediation process begins with a site characterization and investigation report, followed by the delineation of a groundwater management zone map and the creation of a remedial action plan. The outcome of the remedial action plan process (see http://www.des.state.nh.us/hwrb/explanat.htm) can be either a *Certificate of Completion*, issued after the plan's active components have been completed and specified performance standards have been achieved, or a *Certificate of No Further Action*, when the site no longer requires further oversight by DES, the remedial action plan has been completed, and the Groundwater Management Permit has been terminated for the site (see http://www.des.state.nh.us/hwrb/versus.htm).

Average number of permits issued annually: 15

Fee: $1,000 (State and local government, including counties and other political subdivisions, are exempt from this fee.)

Estimated processing time after application is deemed "complete": 90 days

Permit duration: 5 years, and is subject to renewal

Permit transferability: Prior to the site ownership transfer, the permit holder must file with DES a written request and summary of all monitoring results to date. A *Groundwater Permit Transfer Application* may be accessed at http://www.des.state.nh.us/orcb/doclist/transfer.pdf. DES will issue a written decision in 90 days.

Permit modification: The permit holder, or consultant working on the permit holder's behalf, must submit a written request that discusses the modification being requested and the reason(s) for it, and must include a summary of all monitoring results to date. DES will issue a written decision within 90 days.

Permit renewal: If the activity requiring the permit will continue, the permit must be renewed (see http://www.des.state.nh.us/orcb/doclist/renewal.pdf). A renewal application must be filed 90 days in advance of permit expiration. Permit renewals are valid for five years.

State statute: RSA 485-C:6-a ("Groundwater Protection Act/Groundwater Management Zones", http://gencourt.state.nh.us/rsa/html/L/485-C/485-C-6-a.htm)

N. H. Code of Administrative Rules: Env-Wm 1403 ("Groundwater Management and Groundwater Release Detection Permits", http://www.des.state.nh.us/orcb/doclist/wm1403.pdf) (**Note**: These Env-Wm 1403 rules are in the formal rulemaking process to delete the groundwater management permit sections from Env-Wm 1403 and move them to Env-Wm 1600, effective late 2002 or early 2003.)

Appeals Body: Waste Management Council at RSA 21-O:9 ("Department of Environmental Services/Waste Management Council", http://gencourt.state.nh.us/rsa/html/I/21-O/21-O-9.htm; see also http://www.des.state.nh.us/rules/env-wmc200.pdf and http://www.des.state.nh.us/councils/#waste)

Additional information: N. H. DES, Groundwater Management Permit Coordinator, (603) 271-2755 or (603) 271-0686
N. H. DES, Hazardous Waste Remediation Bureau, (603) 271-3644
N. H. DES, Oil Remediation and Compliance Bureau, (603) 271-2935
N. H. DES, Public Information Center, (603) 271-2975 or (603) 271-8876

Groundwater Management Permit – *Work Sheet*

Key Qualifier Question: *Will your project involve the investigation, characterization, assessment, and remediation of a site where the state's ambient (natural) groundwater quality standards have been violated?*

What must you do to apply?

- Obtain a copy of the *Application for Groundwater Management Permit* from the DES Groundwater Management Permit Coordinator, DES Public Information Center, or access it online at http://www.des.state.nh.us/orcb/doclist/gmp.pdf.
- Provide the name and address of the site owner (permit applicant), property owner (if different from permit applicant), facility operator (if different from site owner), and contact person (if different from applicant/owner). Also provide a list of properties located within the groundwater management zone.
- Prepare a summary of the site investigation report.
- Prepare a summary of the remedial action plan and status of the remedial action performed to date.
- Prepare a groundwater management zone map (using a tax map as a base) which identifies and locates to the extent ascertainable the groundwater management zone boundary, any deeded easements which restrict the use of the groundwater within the zone, any streets and properties (including tax map/lot number) within 1,000 feet of the site, and any surface water bodies and lots with water supply wells (including type of use) within 500 feet of the groundwater management zone.
- Prepare a site plan in accordance with NH CODE ADMIN. RULE Env-Wm 1403.07(d)(5) (see http://www.des.state.nh.us/orcb/doclist/wm1403.pdf) and include the existing/proposed groundwater monitoring wells and drinking water wells to be monitored, and surface water sampling points. Prepare an 8½" x 11" (or 11" x 17") site plan that legibly depicts specific features required by Env-Wm 1403.07 and 1403.13. (**Note**: These Env-Wm 1403 rules are in the formal rulemaking process to delete the groundwater management permit sections from Env-Wm 1403 and move them to Env-Wm 1600, effective late 2002 or early 2003.)
- Prepare a table of current water level measurements in piezometers and monitoring wells used to create the groundwater contours.
- Prepare a table that summarizes all monitoring results for the last five years.
- Prepare an updated list of reports of investigation pertinent to the site.
- Prepare a detailed groundwater quality monitoring program with schedule/locations/sampling frequency.
- Prepare construction details for monitoring wells and top-of-casing elevations.
- Prepare a certification that application has been made to obtain all other local, state, and federal permits, and that notice to the municipality has been made pursuant to RSA 541-A:39 ("Administrative Procedure Act/Notice to Municipalities", http://gencourt.state.nh.us/rsa/html/LV/541-A/541-A-39.htm).
- Obtain documentation that site access rights have been obtained to conduct the remedial action.
- Obtain documentation that easement ownership rights have been acquired to restrict the use of water wells within the groundwater management zone.
- Within 60 days following DES approval of a remedial action plan, or within 60 days of a request by DES to submit an application, submit the completed application, a check for $1,000 made payable to "Treasurer, State of New Hampshire", and all supporting information as noted above to: Groundwater Management Permit Coordinator, Site Remediation Programs, Waste Management Division, New Hampshire Department of Environmental Services, 6 Hazen Drive, P. O. Box 95, Concord, NH 03302-0095. Telephone: (603) 271-2755 or (603) 271-0680; fax: (603) 271-2181; or online: http://www.des.state.nh.us/orcb/

What types of projects require this permit?

- The remediation of a former uncontrolled chemical disposal site or underground fuel tank site
- The long-term, post-closure monitoring of a formerly active, municipal unlined landfill or lagoon

- The cleanup of an industrial groundwater plume beneath an active manufacturing facility

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If there are questions regarding this page or any other section of the Guidebook, please contact Tim Drew, Administrator, Public Information and Permitting Unit, at tdrew@des.state.nh.us or at (603) 271-3306.

Chapter 6:

Dam Safety

2002 Edition

Chapter 6: Dam Safety

Introduction

New Hampshire is blessed with an abundance of high-quality rivers and streams. New Hampshire is also the fastest growing state in the northeastern United States, which creates keen competition for use of those flowing waters for flood control, recreation, irrigation, hydropower, fisheries, *etc*. Failure to adequately address these competing interests could create long-term difficulties for both the state's economy and its natural environment. DES, through its Dam Bureau, regulates the repair, reconstruction, maintenance, and operation of existing dams, and reviews design plans and issues decisions for the construction, operation, and maintenance of new dams. The DES Dam Bureau also is responsible for regulating the retention or release of stored water to support a variety of uses (*e.g.*, hydropower generation, autumn lake drawdowns to make room for spring runoff, flood flow management and mitigation, fisheries and water quality protection) for both public and private purposes, which may often be in direct conflict with one another.

"Balancing" Multiple Uses of Water

Access to New Hampshire's surface waters is controlled by the common law doctrine of "reasonable use". Those who live near rivers and streams use the water in concert with their *riparian* rights, while those who live near the state's lakes and ponds use it in accordance with their *littoral* rights. The DES Dam Bureau attempts to ensure that the multiple interests in using surface waters for boating, fishing, power generation, wastewater assimilation, aesthetics, irrigation, and water supply do not exhaust the availability of the resource, or create an imbalance in favor of one use over the others. By reviewing applications for constructing and reconstructing dams in New Hampshire, the DES Dam Bureau serves a pivotal role in balancing the interests of all parties between preservation/protection of the natural resource and stimulation/sustenance of New Hampshire's vibrant economy.

Legal Authority

DES Dam Bureau activities are governed by RSA 482 ("Dams, Mills, and Flowage", http://gencourt.state.nh.us/rsa/html/indexes/482.html and NH CODE ADMIN. RULES Env-Wr 100-800 ("Dam Safety Rules", http://www.des.state.nh.us/dam/env-wr100-800.html). Most of the bureau's actions also are affected by RSA 482-A ("Fill and Dredge in Wetlands", http://gencourt.state.nh.us/rsa/html/indexes/482-A.html) and NH CODE ADMIN. RULES Wt 100-700 ("Wetlands Bureau Code of Administrative Rules", http://www.des.state.nh.us/wetlands/pdf/wt100-700.pdf). The U. S. Army Corps of Engineers (see http://www.nae.usace.army.mil/) is involved with DES Dam Bureau decisions relative to permitting hydropower dams, removing existing dams, and coordinates with the DES Dam Bureau when writing "individual permits" for discharges to surface waters of the United States under Section 404 of the federal Clean Water Act (see http://www.epa.gov/r5water/pdf/ecwa_t4.pdf) or the federal River and Harbor Act of 1899, as amended (see http://www4.law.cornell.edu/uscode/33/ch12.html) for projects that may affect navigation in federal channels. The Army Corps also coordinates its activities through its partnership with the DES Wetlands Bureau in the State Programmatic General Permit ("SPGP") process (see http://www.des.state.nh.us/wetlands/nhspgp.htm).

Definition of a Dam

Jurisdictional dams in New Hampshire are defined by RSA 482:2, II ("Dams, Mills, and Flowage/Definitions", http://gencourt.state.nh.us/rsa/html/L/482/482-2.htm) as *any artificial barrier, including appurtenant works, which impounds or diverts water, and which has a height of 4 feet or more, or a storage capacity of 2 acre-feet or more, or is located at the outlet of a great pond. A roadway culvert shall not be considered a dam if its invert is at the natural bed of the water course, it has adequate discharge capacity, and it does not impound water under normal circumstances. Artificial barriers which create surface impoundments for liquid industrial or liquid commercial wastes or municipal sewage, regardless of height or storage capacity, shall be considered dams*

(see http://www.des.state.nh.us/dam/damburweb.pdf). A number of different types of dams are common to New Hampshire, and are divided into two main categories: embankment dams and gravity dams (see http://www.des.state.nh.us/factsheets/dam/db-2.htm). Examples of embankment dams include an earth fill dam, a zone embankment dam (used in most modern dams), and timber crib dam. Examples of gravity dams include a concrete dam, a masonry dam, and a rubble dam.

Dams are assigned to one of four classes based on their potential for damage to property or threat to public safety if they were to fail (see http://www.des.state.nh.us/factsheets/dam/db-15.htm). Class AA dams are those dams that would pose no real danger to life or property were they to fail, such as a small storm water retention pond dam in a residential subdivision. They comprise about 74 percent of all dams in New Hampshire, and are inspected by DES dam safety engineers in response to a request from the public, or on an as-needed basis in light of structural deterioration or a change in the development of the downstream area. Class A dams are considered to pose a low hazard potential in the event of failure, such as a low- to medium-sized dam on a major water course within a large floodplain area. They comprise about 17 percent of all dams registered in the State Dam Inventory and are inspected every six years or at the request of the dam owner or the public. Class B dams represent a significant hazard potential should they fail. They comprise about six percent of all registered dams in the state, and are inspected by DES every four years. An example of a Class B dam would be one that impounds the drinking water supply for a community. Dams that pose a high hazard potential because of size and location are designated as Class C dams, and represent only three percent of all dams registered; they are inspected every two years. Failure of a Class C dam would pose a substantial threat of extensive damage to property and highways, with probable loss of life. Once issued, the permit for a dam in any class is recorded by the DES Dam Bureau in the appropriate county Registry of Deeds so as to run with the land. A hydropower dam, designed and constructed to provide mechanical or electrical power, may be classed in any hazard category. The U. S. Department of Energy's Federal Energy Regulatory Commission ("FERC") plays a significant role in the decision-making process for hydropower dams (see http://www.ferc.fed.us/hydro/hydro2.htm)

Emergency Action Plans

In 1983, the New Hampshire Legislature amended RSA 482 at 482:2, VI and RSA 482:12 (see http://gencourt.state.nh.us/rsa/html/L/482/482-2.htm and http://gencourt.state.nh.us/rsa/html/L/482/482-12.htm) to require dam owners to prepare a contingency plan in the event of a dam failure. These plans are called *Emergency Action Plans* ("EAPs") and are required for all dams in the state that pose a menace to public safety if they were to fail; particularly those with a significant (Class B dam) or high (Class C dam) hazard potential. All EAPs must address the monitoring, evaluation, preventive action, and warning aspects of managing a dam failure, including delineation of the inundation zone. The approved EAP must be kept on file with the response agencies of the local community, local Emergency Management Director, the State Police and Emergency Management Divisions of the New Hampshire Department of Safety, and DES. The dam owner is required to work with the local community(ies) to develop an effective EAP and must periodically review and update the EAP. Annual testing of the emergency communications network also is required. Dam owners are responsible for training the operations personnel who must be prepared to act promptly and efficiently if a dam begins to show signs of failure. Early identification of hazardous conditions at the dam will prompt the implementation of emergency procedures outlined in the approved EAP. It is important for the dam owner or operator to be familiar with operating the structure under both normal and emergency conditions and to be capable of recognizing specific types of failure modes such as over-topping and piping.

Dam Removal Process

DES has created a dam removal process that combines the dam safety program with the wetlands program to identify, evaluate, and (when warranted) remove unwanted or unneeded dams along New Hampshire's rivers and streams (see http://www.des.state.nh.us/factsheets/dam/db-18.htm). The reasons for removal of dams range from relieving the owner of liability for a dam in disrepair that poses a threat to public safety (see http://www.des.state.nh.us/factsheets/dam/db-10.htm) to restoration of anadromous fish

migrations. The DES evaluative process examines a dam's current benefits and contrasts those with anticipated losses upon removal. Benefits may be environmental, social, economic, or cultural in nature. Losses may include the draining (*i.e.*, promotion of groundwater discharge) of wetlands or wells near the river's edge, loss of irrigation sources or real estate value, and flood control. The dam removal process is a collaborative effort between the dam owner, the local community, DES, and others parties with riparian interests.

Summary

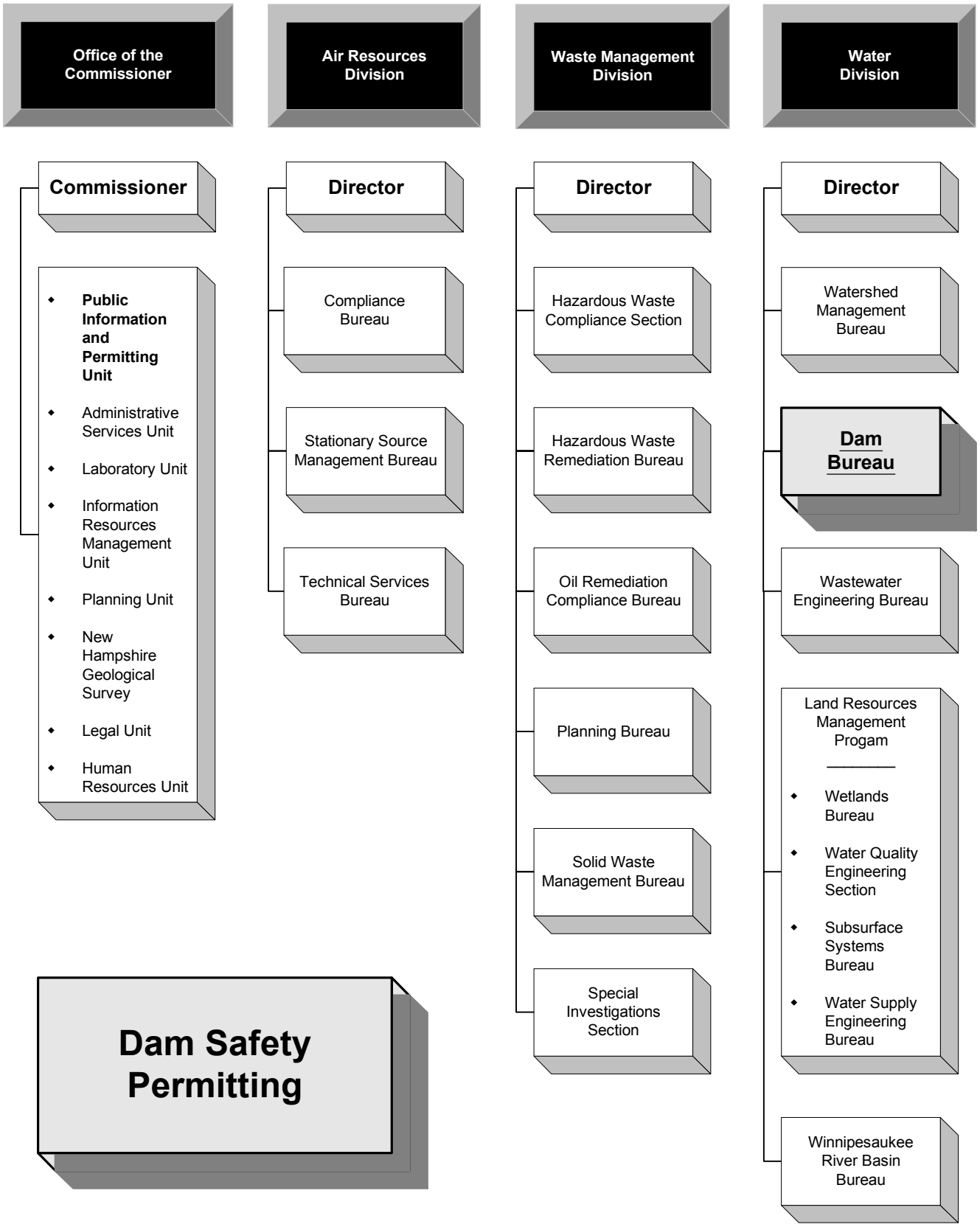
The Dam Bureau within the DES Water Division is charged with the primary administration of the dam safety program (see http://www.des.state.nh.us/dam/). Appeals of permit decisions or orders issued for violations of program requirements should be directed to the Water Council (see http://www.des.state.nh.us/councils/#1).

Chapter Contents

- ✓ **Class AA Dam Permit (Non-Hazard Potential)**
- ✓ **Class A Dam Permit (Low Hazard Potential)**
- ✓ **Class B Dam Permit (Significant Hazard Potential)**
- ✓ **Class C Dam Permit (High Hazard Potential)**
- ✓ **Hydropower Dam Permit (All Hazard Classifications)**

Organizational Chart

New Hampshire Department of Environmental Services



Class AA Dam Permit (Non-Hazard Potential)

Introduction: There is a statewide need to conserve and control surface water flowage to accommodate multiple (and sometime conflicting) uses of our water resources, while still protecting public health and safety. Such uses include fire ponds, flood control, hydropower, irrigation and recreation. A "dam" is defined by RSA 482:2, II ("Dams, Mills, and Flowage/Definitions", http://gencourt.state.nh.us/rsa/html/L/482/482-2.htm) as *any artificial barrier, including appurtenant works, which impounds or diverts water, and which has a height of 4 feet or more, or a storage capacity of 2 acre-feet or more, or is located at the outlet of a great pond. A roadway culvert shall not be considered a dam if its invert is at the natural bed of the water course, it has adequate discharge capacity, and it does not impound water under normal circumstances. Artificial barriers which create surface impoundments for liquid industrial or liquid commercial wastes or municipal sewage, regardless of height or storage capacity, shall be considered dams* (see http://www.des.state.nh.us/dam/damburweb.pdf). Under certain circumstances a road culvert can also be defined as a dam (see NH CODE ADMIN. RULE Env-Wr 301.01, http://www.des.state.nh.us/dam/env-wr100-800.html). DES's Dam Bureau regulates the construction of new dams and the reconstruction of existing dams. For purposes of permitting, "reconstruction" is defined as changing the height, length, or discharge capacity of the structure; restoring a breached dam or one in ruins; modifying flashboards to either increase their height or increase the headwater elevation at which the boards will fail; or changing the structural configuration of a dam (see http://www.des.state.nh.us/factsheets/dam/db-3.htm). After receiving an application, a site visit will be conducted by a DES Dam Bureau engineer/inspector to assign a hazard classification and a State Dam Inventory number. Notice also will be provided to the municipality in which the dam is located. Any dams to be constructed on Great Ponds must first be approved by the State Legislature. Applicants for dams to be constructed on the Connecticut River must also apply for a certification and permit from the Commissioner of the New Hampshire Department of Transportation pursuant to RSA 1:8-10 ("State Boundaries", http://gencourt.state.nh.us/rsa/html/I/1/1-8.htm). Any previously unregistered dam must be registered with DES, including notice to the municipality, and must be classified in its proper hazard category (see http://www.des.state.nh.us/dam/exist_damapp.pdf). Of New Hampshire's active dams, 74 percent are registered as "Class AA", or non-hazard, dams (see http://www.des.state.nh.us/factsheets/dam/db-15.htm). A Class AA dam is one which, if it were to fail, would not threaten human life or property and also meets the following criteria: (a) is not greater than six feet high with a storage capacity greater than 50 acre-feet or (b) is not greater than 25 feet high with a storage capacity greater than 15 acre-feet (see http://www.des.state.nh.us/factsheets/dam/db-15.htm). Class AA dams will be inspected at the public's request or on an as-needed basis in light of structural deterioration or a change in the development of the downstream area. If the potential exists for increased personal injury or property damage, a Class AA dam may be reclassified to reflect the change in hazard potential. Class AA Dam Permits are recorded by the DES Dam Bureau at the appropriate county Registry of Deeds so as to run with the land and then are forwarded to the dam owner.

Average number of permits issued annually: 30

Fees: $250 application fee. (Class AA dams are <u>not</u> subject to an annual dam registration fee to support the State Dam Inspection Program.)

Estimate processing time after application is deemed "complete": 2-3 weeks

Permit duration: 2 years to complete construction

Permit transferability: Current dam owner is required to notify DES if property is sold. Notification must include new owner's name and address.

Permit modification: Current dam owner is required to submit a written request to DES describing any changes to the project as originally designed. Upon review of additional plans and specifications, DES may require that the permit be modified.

Permit renewal: If dam construction has not been completed within two years, the owner is required to submit a written request for a 2-year permit extension, which must be received prior to the expiration of the original permit or a new application will be required.

State statute: RSA 482 ("Dams, Mills, and Flowage", http://gencourt.state.nh.us/rsa/html/indexes/482.html)

N. H. Code of Administrative Rules: Env-Wr 100-800 ("Dam Safety Rules", http://www.des.state.nh.us/dam/env-wr100-800.html)

Appeals body: Water Council at RSA 21-O:7 ("Department of Environmental Services/Water Council", http://gencourt.state.nh.us/rsa/html/I/21-O/21-O-7.htm; see also http://www.des.state.nh.us/rules/env-wc200.pdf and http://www.des.state.nh.us/councils/#1)

Additional information: N. H. DES, Dam Bureau, (603) 271-3406
N. H. DES, Wetlands Bureau, (603) 271-2147
N. H. DES, Public Information Center, (603) 271-2975 or (603) 271-8876

Class AA Dam Permit (Non-Hazard Potential) – *Work Sheet*

Key Qualifier Question: *Will the proposed dam be constructed (or reconstructed) to qualify as a Class AA dam which, if it were to fail, would not threaten life or property and (a) is not greater than 6 feet high with a storage capacity greater than 50 acre-feet or (b) is not greater than 25 feet high with a storage capacity greater than 15 acre-feet?*

What must you do to apply?

- Obtain a copy of the *Application to Construct or Reconstruct a Dam* from the DES Dam Bureau, DES Public Information Center, or online at http://www.des.state.nh.us/dam/damapp.pdf.
- Review the DES Fact Sheets entitled *Basic Nomenclature of a Dam* http://www.des.state.nh.us/factsheets/dam/db-1.htm and *Dam Construction and Reconstruction – How to Proceed* at http://www.des.state.nh.us/factsheets/dam/db-3.htm.
- Provide the name, address, and telephone number of the applicant.
- Define the height and length of the dam.
- Locate the dam on a U. S. Geological Survey map to clearly identify the dam's location (see http://www.topozone.com). This location map should be drawn in sufficient detail to enable a DES inspector to locate the proposed construction site.
- Provide the municipal tax map number and lot number for the property upon which the dam will sit.
- Calculate the drainage area, pond area, and storage capacity of the dam.
- Define the type and describe the purpose of the dam.
- Describe and specify the type of foundation material to be used for the dam.
- Provide the design storm frequency and inflow, and the dam's discharge capacity.
- Prepare a brief description of downstream structures that could be impacted by the dam's failure.
- Identify the name of the stream, river, or water body to be affected.
- Submit a plan and cross section of the proposed dam through the outlet.
- If this project is for reconstructing an existing dam, provide a description of the proposed reconstruction.
- Submit a written operational procedure plan and a construction inspection plan.
- Submit the results of subsurface explorations.
- Submit the results of hydrologic and hydraulic calculations.
- Submit calculations that demonstrate the dam has sufficient discharge capacity to pass the 50-year, 24-hour precipitation storm with one foot of freeboard without manual operations.
- Incorporate a pond drain (although a pond drain is not required, it is recommended).
- Submit construction plans and specifications that comply with NH CODE ADMIN. RULES Env-Wr 100-800 (see http://www.des.state.nh.us/dam/env-wr100-800.html).
- Submit gradation specifications of embankment materials.
- Submit a statement which demonstrates that the applicant has flowage rights on all lands which will be temporarily or permanently flooded.
- Show 2.5:1 side slopes as a minimum on any earth portion of the dam (3:1 side slopes are preferred) with a minimum top width of 6 feet. (Although this is recommended, it is not required.)
- Submit the application, a check for $250 made payable to the "Treasurer, State of New Hampshire", and all supporting materials to: Dam Bureau, Water Division, New Hampshire Department of Environmental Services, 6 Hazen Drive, P. O. Box 95, Concord, NH 03302-0095. Telephone: (603) 271-3406; fax: (603) 271-7894; or online: http://www.des.state.nh.us/dam/
- The site's hazard potential will be evaluated by DES Dam Bureau staff relative to such factors as the presence of downstream structures, roadways, and topography. The hazard class of a dam is based on the potential for adverse consequences to human life and property caused by a dam failure. The DES Dam Bureau will assess all impacts of dam failure when assigning a hazard classification (see http://www.des.state.nh.us/factsheets/dam/db-15.htm). If the assessment confirms the Class AA designation, no further fees will be required.

What types of projects require this permit?

- Small farm ponds
- Storm water retentions ponds for subdivisions
- Remote dams with little or no downstream development

If there are questions regarding this page or any other section of the Guidebook, please contact Tim Drew, Administrator, Public Information and Permitting Unit, at tdrew@des.state.nh.us or at (603) 271-3306.

Class A Dam Permit (Low Hazard Potential)

Introduction: There is a statewide need to conserve and control surface water flowage to accommodate multiple (and sometime conflicting) uses of our water resources, while still protecting public health and safety. Such uses include fire ponds, flood control, hydropower, irrigation and recreation. A "dam" is defined by RSA 482:2, II ("Dams, Mills, and Flowage/Definitions", http://gencourt.state.nh.us/rsa/html/L/482/482-2.htm) as *any artificial barrier, including appurtenant works, which impounds or diverts water, and which has a height of 4 feet or more, or a storage capacity of 2 acre-feet or more, or is located at the outlet of a great pond. A roadway culvert shall not be considered a dam if its invert is at the natural bed of the water course, it has adequate discharge capacity, and it does not impound water under normal circumstances. Artificial barriers which create surface impoundments for liquid industrial or liquid commercial wastes or municipal sewage, regardless of height or storage capacity, shall be considered dams. any artificial barrier that impounds or diverts water and either measures at least four feet high on the downstream face, or stores two acre-feet of water, or both* (see http://www.des.state.nh.us/dam/damburweb.pdf). Under certain circumstances a road culvert can also be defined as a dam (see NH CODE ADMIN. RULE Env-Wr 301.01, http://www.des.state.nh.us/dam/env-wr100-800.html). DES's Dam Bureau regulates the construction of new dams and the reconstruction of existing dams. For purposes of permitting, "reconstruction" is defined as changing the height, length, or discharge capacity of the structure; restoring a breached dam or one in ruins; modifying flashboards to either increase their height or increase the headwater elevation at which the boards will fail; or changing the structural configuration of a dam (see http://www.des.state.nh.us/factsheets/dam/db-3.htm). Subsequent to the receipt of each application, a site visit will be conducted by a DES Dam Bureau engineer/inspector to assign a hazard classification and a State Dam Inventory number. DES also will provide notice of this determination to the municipality in which the dam is located. Any previously unregistered dam must be registered with DES, including notice to the municipality, and must be classified in its proper hazard category (see http://www.des.state.nh.us/dam/exist_damapp.pdf). Any dams to be constructed on Great Ponds must first be approved by the State Legislature. In addition, if a dock, dam, building, or other structure is to be constructed in or adjacent to the bank or bed of any of the rivers that form New Hampshire's boundary (particularly the Connecticut River), the project applicant must also apply to the Commissioner of the New Hampshire Department of Transportation pursuant to RSA 1:8-10 ("State Boundaries", http://gencourt.state.nh.us/rsa/html/I/1/1-8.htm) for certification and a permit for the boundary work. Of New Hampshire's active dams, 17 percent are registered as "Class A" in the low hazard category (see http://www.des.state.nh.us/factsheets/dam/db-14.htm). A Class A dam is one which, if it were to fail, would result in any of the following: no possible loss of life, minimal economic loss, major damage to town and city roads, minor damage to Class I or II state highways, or the release of liquid industrial, agricultural, or commercial wastes or municipal sewage if the storage capacity is less than two acre-feet and is located more than 300 feet from a water body or water course (see http://www.des.state.nh.us/factsheets/dam/db-15.htm). Class A dams will be inspected every six years or at the request of the dam owner or the public, with an eye toward structural deterioration or a change in the development downstream. If a change in the potential for personal injury or property damage occurs, a Class A dam may be reclassified to reflect the change in hazard potential. Class A Dam Permits are recorded by the DES Dam Bureau at the appropriate county Registry of Deeds so as to run with the land and then are forwarded to the dam owner.

Average number of permits issued annually: 5

Fees: $250 application fee, plus a $250 classification fee. Class A dams are subject to an annual dam registration fee of $100 to support the State Dam Inspection Program.

Estimate processing time after application is deemed "complete": 4-5 weeks

Permit duration: 2 years to complete construction

Permit transferability: Current dam owner is required to notify DES if property is sold. Notification must include new owner's name and address.

Permit modification: Current dam owner is required to submit written request to DES describing any changes to the project as originally designed. With review of additional plans/specifications, DES may require that the permit be modified.

Permit renewal: If dam construction has not been completed within two years, the owner is required to submit a written request for a 2-year permit extension, which must be received prior to the expiration of the original permit or a new application will be required.

State statute: RSA 482 ("Dams, Mills, and Flowage", http://gencourt.state.nh.us/rsa/html/indexes/482.html)

N. H. Code of Administrative Rules: Env-Wr 100-800 ("Dam Safety Rules", http://www.des.state.nh.us/dam/env-wr100-800.html)

Appeals body: Water Council at RSA 21-O:7 ("Department of Environmental Services/Water Council", http://gencourt.state.nh.us/rsa/html/I/21-O/21-O-7.htm; see also http://www.des.state.nh.us/rules/env-wc200.pdf and http://www.des.state.nh.us/councils/#1)

Additional information: N. H. DES, Dam Bureau, (603) 271-3406
N. H. DES, Wetlands Bureau, (603) 271-2147
N. H. DES, Public Information Center, (603) 271-2975 or (603) 271-8876

Class A Dam Permit (Low Hazard Potential) – *Work Sheet*

Key Qualifier Question: *Will the proposed dam be constructed (or reconstructed) to qualify as a Class A dam which, if it were to fail, would result in any of the following: no possible loss of life, minimal economic loss, major damage to town and city roads, minor damage to Class I and Class II state highways, or the release of liquid industrial, agricultural, or commercial wastes or municipal sewage if the storage capacity is less than two acre-feet and is located more than 300 feet from a water body or water course?*

What must you do to apply?

- Obtain a copy of the *Application to Construct or Reconstruct a Dam* from the DES Dam Bureau, DES Public Information Center, or online at http://www.des.state.nh.us/dam/damapp.pdf.
- Review the DES Fact Sheets entitled *Basic Nomenclature of a Dam* http://www.des.state.nh.us/factsheets/dam/db-1.htm and *Dam Construction and Reconstruction – How to Proceed* at http://www.des.state.nh.us/factsheets/dam/db-3.htm.
- Provide the name, address, and telephone number of the applicant and define the height and length of the dam.
- Submit a copy of a U. S. Geological Survey map depicting the dam's location (see http://www.topozone.com). This location map should be drawn in sufficient detail to enable a DES inspector to locate the proposed construction site.
- Provide the municipal tax map number and lot number for the property upon which the dam will sit.
- Calculate the drainage area, pond area, and storage capacity of the dam.
- Define the type and describe the purpose of the dam.
- Describe and specify the type of foundation material to be used for the dam.
- Provide the design storm frequency and inflow, and the dam's discharge capacity.
- Prepare a brief description of downstream structures that could be impacted by the dam's failure.
- Identify the name of the stream, river, or water body to be affected.
- Submit a plan and cross section of the proposed dam.
- If this project is for reconstructing an existing dam, provide a description of the proposed reconstruction.
- Submit a written operational procedure plan and a construction inspection plan.
- Submit the results of subsurface explorations.
- Submit the results of hydrologic and hydraulic calculations.
- Demonstrate the dam has sufficient discharge capacity to pass the 100-year, 24-hour precipitation storm, or 0.3 of the probable maximum precipitation event ("PMP"), with one foot of freeboard without manual operations.
- Incorporate a pond drain.
- Submit a signed statement indicating that the applicant has flowage rights on all lands that will be temporarily or permanently flooded.
- Submit construction plans and specifications that comply with NH CODE ADMIN. RULES Env-Wr 100-800 (see http://www.des.state.nh.us/dam/env-wr100-800.html).
- Submit gradation specifications of embankment materials, plus results of a stability analysis for overturning, sliding, and slope failure (see http://www.des.state.nh.us/factsheets/dam/db-4.htm).
- Show 2.5:1 side slopes as a minimum on any earth portion of the dam (3:1 side slopes are preferred) with a minimum top width of 6 feet.
- A registered professional engineer licensed to practice in the state of New Hampshire must stamp the design plans (see http://www.state.nh.us/jtboard/pe.htm).
- Submit the application, a check for $250 made payable to the "Treasurer, State of New Hampshire", and all supporting materials to: Dam Bureau, Water Division, New Hampshire Department of Environmental Services, 6 Hazen Drive, P. O. Box 95, Concord, NH 03302-0095. Telephone: (603) 271-3406; fax: (603) 271-7894; or online: http://www.des.state.nh.us/dam/

- The site's hazard potential will be evaluated by DES Dam Bureau staff relative to such factors as the presence of downstream structures, roadways, and topography. The hazard class of a dam is based on the potential for adverse consequences to human life and property caused by a dam failure. The DES Dam Bureau will assess all impacts of dam failure when assigning a hazard classification (see http://www.des.state.nh.us/factsheets/dam/db-15.htm). Note: If the assessment confirms that the dam is a Class A structure, an additional payment of $250 will be required.

What types of projects require this permit?

- Low dams in semi-urban areas or low to medium dams on major water courses in large floodplain areas
- Dams greater than 6 feet high which impound more than 50 acre-feet of storage or dams which are greater than 25 feet high and impound more than 15 acre-feet of storage

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If there are questions regarding this page or any other section of the Guidebook, please contact Tim Drew, Administrator, Public Information and Permitting Unit, at tdrew@des.state.nh.us or at (603) 271-3306.

Class B Dam Permit (Significant Hazard Potential)

Introduction: There is a statewide need to conserve and control surface water flowage to accommodate multiple (and sometime conflicting) uses of our water resources, while still protecting public health and safety. Such uses include fire ponds, flood control, hydropower, irrigation and recreation. A "dam" is defined by RSA 482:2, II ("Dams, Mills, and Flowage/Definitions", http://gencourt.state.nh.us/rsa/html/L/482/482-2.htm) as *any artificial barrier, including appurtenant works, which impounds or diverts water, and which has a height of 4 feet or more, or a storage capacity of 2 acre-feet or more, or is located at the outlet of a great pond. A roadway culvert shall not be considered a dam if its invert is at the natural bed of the water course, it has adequate discharge capacity, and it does not impound water under normal circumstances. Artificial barriers which create surface impoundments for liquid industrial or liquid commercial wastes or municipal sewage, regardless of height or storage capacity, shall be considered dams* (see http://www.des.state.nh.us/dam/damburweb.pdf. DES's Dam Bureau regulates the construction of new dams and the reconstruction of existing dams. For purposes of permitting, "reconstruction" is defined as changing the height, length, or discharge capacity of the structure; restoring a breached dam or one in ruins; modifying flashboards to either increase their height or increase the headwater elevation at which the boards will fail; or changing the structural configuration of a dam (see http://www.des.state.nh.us/factsheets/dam/db-3.htm). After receiving an application, a site visit will be conducted by a DES Dam Bureau engineer/inspector to assign a hazard classification and a State Dam Inventory number. DES will also provide notice of this determination to the municipality in which the dam is located. Pursuant to RSA 482:9, V ("Dams, Mills, and Flowage/Preliminary Filing of Information", http://gencourt.state.nh.us/rsa/html/L/482/482-9.htm), DES will not issue a permit for Class B or Class C dams unless the dam provides a public benefit of water supply; flood control; storage or treatment of industrial, agricultural, commercial or municipal wastes; hydropower; recreation; or preservation of historic or cultural resources; or unless the reconstruction is ordered by DES to correct a deficiency. Any previously unregistered dam must be registered with DES, including notice to the municipality, and must be classified in its proper hazard category (see http://www.des.state.nh.us/dam/exist_damapp.pdf). The State Legislature must first approve dams to be constructed on Great Ponds. In addition, if a dock, dam, building, or other structure is to be constructed in or adjacent to the bank or bed or any of the rivers that form New Hampshire's boundary (particularly the Connecticut River), the project applicant must also apply to the Commissioner of the New Hampshire Department of Transportation pursuant to RSA 1:8-10 ("State Boundaries", http://gencourt.state.nh.us/rsa/html/I/1/1-8.htm) for certification and a permit for the boundary work. Of New Hampshire's active dams, six percent are registered as "Class B" in the significant hazard category (see http://www.des.state.nh.us/factsheets/dam/db-14.htm). A Class B dam is one which, if it were to fail, would result in any of the following: possible loss of life, significant economic loss, major damage to Class I or II state highways, minor damage to interstate highways, loss of a municipal water supply reservoir which constitutes more than 50 percent of a community's source, or the release of liquid industrial, agricultural, or commercial wastes or municipal sewage if the storage capacity is at least two acre-feet and lies 300 feet or less from a water body or water course (see http://www.des.state.nh.us/factsheets/dam/db-15.htm). Due to the significant potential for property damage and loss of life, Class B dam owners are required by RSA 482:2, VI (see http://gencourt.state.nh.us/rsa/html/L/482/482-2.htm) and 482:12 ("Dams, Mills, and Flowage/Inspecting Dams, Repairs, Emergency Action Plans", http://gencourt.state.nh.us/rsa/html/L/482/482-12.htm) to prepare an Emergency Action Plan (see http://www.des.state.nh.us/factsheets/dam/db-11.htm). Class B dams will be inspected every four years, with an eye toward structural deterioration or a change in development downstream. If a change in the potential for personal injury or property damage occurs, a Class B dam may be reclassified to reflect the change in hazard potential. Class B Dam Permits are recorded by the DES Dam Bureau at the county Registry of Deeds so as to run with the land and then are forwarded to the dam owner.

Average number of permits issued annually: 2

Fees: $250 application fee, plus a $750 classification fee. Class B dams are subject to an annual dam registration fee of $300 to support the State Dam Inspection Program.

Estimate processing time after application is deemed "complete": 6-8 weeks

Permit duration: 2 years to complete construction

Permit transferability: Current dam owner is required to notify DES if property is sold. Notification must include new owner's name and address.

Permit modification: Current dam owner is required to submit written request to DES describing any changes to the project as originally designed. With review of additional plans/specifications, DES may require that the permit be modified.

Permit renewal: If dam construction has not been completed within two years, the owner is required to submit a written request for a 2-year permit extension, which must be received prior to the expiration of the original permit or a new application will be required.

State statute: RSA 482 ("Dams, Mills, and Flowage", http://gencourt.state.nh.us/rsa/html/indexes/482.html)

N. H. Code of Administrative Rules: Env-Wr 100-800 ("Dam Safety Rules", http://www.des.state.nh.us/dam/env-wr100-800.html)

Appeals body: Water Council at RSA 21-O:7 ("Department of Environmental Services/Water Council", http://gencourt.state.nh.us/rsa/html/I/21-O/21-O-7.htm; see also http://www.des.state.nh.us/rules/env-wc200.pdf and http://www.des.state.nh.us/councils/#1)

Additional information: N. H. DES, Dam Bureau, (603) 271-3406
N. H. DES, Wetlands Bureau, (603) 271-2147
N. H. DES, Public Information Center, (603) 271-2975 or (603) 271-8876

Class B Dam Permit (Significant Hazard Potential) – *Work Sheet*

Key Qualifier Questions: *Will the dam be constructed (or reconstructed) to qualify as a Class B dam which, if it were to fail, would result in any of the following: possible loss of life, significant economic loss, major damage to Class I and II state highways, minor damage to interstate highways, loss of more than 50 percent of a municipal water supply, endangerment of public health, or the release of liquid industrial, agricultural, or commercial wastes or municipal sewage if the storage capacity is at least two acre-feet and is located 300 feet or less from a water body or water course? Will the dam provide a public benefit, or has reconstruction been ordered by DES to correct a deficiency?* (See RSA 482:9, V (a) and (b), respectively, "Dams, Mills, and Flowage/Preliminary Filing of Information", http://gencourt.state.nh.us/rsa/html/L/482/482-9.htm)

What must you do to apply?

- Obtain a copy of the *Application to Construct or Reconstruct a Dam* from the DES Dam Bureau, DES Public Information Center, or online at http://www.des.state.nh.us/dam/damapp.pdf.
- Review the DES Fact Sheets entitled *Basic Nomenclature of a Dam* http://www.des.state.nh.us/factsheets/dam/db-1.htm and *Dam Construction and Reconstruction – How to Proceed* at http://www.des.state.nh.us/factsheets/dam/db-3.htm.
- Provide the name, address, and telephone number of the applicant and define the height and length of the dam.
- Provide a copy of a U. S. Geological Survey map depicting the dam's location (see http://www.topozone.com). This location map should be drawn in sufficient detail to enable a DES inspector to locate the proposed construction site.
- Provide the municipal tax map number and lot number for the property upon which the dam will sit.
- Calculate the drainage area, pond area, and storage capacity of the dam.
- Define the type and describe the purpose of the dam.
- Describe and specify the type of foundation material to be used for the dam.
- Provide the design storm frequency and inflow, and the dam's discharge capacity.
- Prepare a brief description of downstream structures that could be impacted by the dam's failure.
- Identify the name of the stream, river, or water body to be affected.
- Submit a plan and cross section of the proposed dam.
- If this project is for reconstructing an existing dam, provide a description of the proposed reconstruction.
- Submit a written operational procedure plan and construction inspection plan.
- Submit the results of subsurface explorations.
- Submit the results of hydrologic and hydraulic calculations.
- Submit calculations that demonstrate the dam has sufficient discharge capacity to pass 0.5 of the probable maximum precipitation event ("PMP"), with one foot of freeboard without manual operations.
- Incorporate a pond drain.
- Submit a signed statement indicating that the dam owner has flowage rights on all land that will be temporarily or permanently flooded.
- Submit construction plans and specifications that comply with NH CODE ADMIN. RULES Env-Wr 100-800 (see http://www.des.state.nh.us/dam/env-wr100-800.html).
- Submit gradation specifications of embankment materials plus results of a stability analysis for overturning, sliding, and slope failure (see http://www.des.state.nh.us/factsheets/dam/db-4.htm).
- Show 2.5:1 side slopes as a minimum on any earth portion of the dam (3:1 side slopes are preferred) with a minimum top width of 6 feet.
- Draft an Emergency Action Plan with a breach analysis (see http://www.des.state.nh.us/factsheets/dam/db-11.htm).
- Employ a registered professional engineer licensed to practice in the state of New Hampshire for design and construction of dams (see http://www.state.nh.us/jtboard/pe.htm).

- Submit the application, a check for $250 made payable to the "Treasurer, State of New Hampshire", and all supporting materials to: Dam Bureau, Water Division, New Hampshire Department of Environmental Services, 6 Hazen Drive, P. O. Box 95, Concord, NH 03302-0095. Telephone: (603) 271-3406; fax: (603) 271-7894; or online: http://www.des.state.nh.us/dam/
- The site's hazard potential will be evaluated by DES Dam Bureau staff relative to such factors as the presence of downstream structures, roadways, and topography. The hazard class of a dam is based on the potential for adverse consequences to human life and property caused by a dam failure. The DES Dam Bureau will assess all impacts of dam failure when assigning a hazard classification (see http://www.des.state.nh.us/factsheets/dam/db-15.htm). Note: If the assessment confirms a Class B designation, an additional filing fee of $750 will be required.

What types of projects require this permit?

- Dams that impound drinking water supply reservoirs or wastewater treatment lagoons
- Dams that pose an appreciable threat to property and highways, and possible loss of life downstream

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If there are questions regarding this page or any other section of the Guidebook, please contact Tim Drew, Administrator, Public Information and Permitting Unit, at tdrew@des.state.nh.us or at (603) 271-3306.

Class C Dam Permit (High Hazard Potential)

Introduction: There is a statewide need to conserve and control surface water flowage to accommodate multiple (and sometime conflicting) uses of our water resources, while still protecting public health and safety. Such uses include fire ponds, flood control, hydropower, irrigation and recreation. A "dam" is defined by RSA 482:2, II ("Dams, Mills, and Flowage/Definitions", http://gencourt.state.nh.us/rsa/html/L/482/482-2.htm) as *any artificial barrier, including appurtenant works, which impounds or diverts water, and which has a height of 4 feet or more, or a storage capacity of 2 acre-feet or more, or is located at the outlet of a great pond. A roadway culvert shall not be considered a dam if its invert is at the natural bed of the water course, it has adequate discharge capacity, and it does not impound water under normal circumstances. Artificial barriers which create surface impoundments for liquid industrial or liquid commercial wastes or municipal sewage, regardless of height or storage capacity, shall be considered dams* (see http://www.des.state.nh.us/dam/damburweb.pdf. DES's Dam Bureau regulates the construction of new dams and the reconstruction of existing dams. For purposes of permitting, "reconstruction" is defined as changing the height, length, or discharge capacity of the structure; restoring a breached dam or one in ruins; modifying flashboards to either increase their height or increase the headwater elevation at which the boards will fail; or changing the structural configuration of a dam (see http://www.des.state.nh.us/factsheets/dam/db-3.htm). After receipt of an application, a site visit will be conducted by a DES Dam Bureau engineer/inspector to assign a hazard classification and a State Dam Inventory number. DES also will provide notice of this determination to municipal officials in the host community. Pursuant to RSA 482:9, V ("Dams, Mills, and Flowage/Preliminary Filing of Information", http://gencourt.state.nh.us/rsa/html/L/482/482-9.htm), DES will not issue a permit for Class B or Class C dams unless the dam provides a public benefit of water supply; flood control; storage or treatment of industrial, agricultural, commercial or municipal wastes; hydropower; recreation; or preservation of historic or cultural resources; or unless the reconstruction is ordered by DES to correct a deficiency. Any previously unregistered dam must be registered with DES, including notice to the municipality, and must be classified in its proper hazard category (see http://www.des.state.nh.us/dam/exist_damapp.pdf). The State Legislature must first approve dams to be constructed on Great Ponds. In addition, if a dock, dam, building, or other structure is to be constructed in or adjacent to the bank or bed or any of the rivers that form New Hampshire's boundary (particularly the Connecticut River), the project applicant must also apply to the Commissioner of the New Hampshire Department of Transportation pursuant to RSA 1:8-10 ("State Boundaries", http://gencourt.state.nh.us/rsa/html/I/1/1-8.htm) for certification and a permit for the boundary work. Of New Hampshire's active dams, three percent are registered as "Class C" in the high hazard category (see http://www.des.state.nh.us/factsheets/dam/db-14.htm). A Class C dam is one that, if it were to fail, would result in the probable loss of life or major damage inflicted to interstate highways (see http://www.des.state.nh.us/factsheets/dam/db-15.htm). Due to the high potential for loss of life or major damage to interstate highways, owners of Class C dams are required by RSA 482:2, VI ("Dams, Mills, and Flowage/Definitions", http://gencourt.state.nh.us/rsa/html/L/482/482-2.htm) and RSA 482:12 ("Dams, Mills, and Flowage/Inspecting Dams, Repairs, Emergency Action Plans", http://gencourt.state.nh.us/rsa/html/L/482/482-12.htm) to prepare an Emergency Action Plan (see http://www.des.state.nh.us/factsheets/dam/db-11.htm). Class C dams will be inspected every two years, with an eye toward structural deterioration and a change in downstream development. If the potential for personal injury or property damage has decreased, a Class C dam may be reclassified to reflect the change in hazard potential. Class C Dam Permits are recorded by the DES Dam Bureau at the appropriate county Registry of Deeds so as to run with the land and then are forwarded to the dam owner.

Average number of permits issued annually: 1

Fees: $250 application fee, plus a $1,000 classification fee. Class C dams are subject to an annual dam registration fee of $600 to support the State Dam Inspection Program.

Estimate processing time after application is deemed "complete": 10-12 weeks

Permit duration: 2 years to complete construction

Permit transferability: Current dam owner is required to notify DES if property is sold. Notification must include new owner's name and address.

Permit modification: Current dam owner is required to submit written request to DES describing any changes to the project as originally designed. With review of additional plans/specifications, DES may require that the permit be modified.

Permit renewal: If dam construction has not been completed within two years, the owner is required to submit a written request for a 2-year permit extension, which must be received prior to the expiration of the original permit or a new application will be required.

State statute: RSA 482 ("Dams, Mills, and Flowage", http://gencourt.state.nh.us/rsa/html/indexes/482.html)

N. H. Code of Administrative Rules: Env-Wr 100-800 ("Dam Safety Rules", http://www.des.state.nh.us/dam/env-wr100-800.html)

Appeals body: Water Council at RSA 21-O:7 ("Department of Environmental Services/Water Council", http://gencourt.state.nh.us/rsa/html/I/21-O/21-O-7.htm; see also http://www.des.state.nh.us/rules/env-wc200.pdf and http://www.des.state.nh.us/councils/#1)

Additional information: N. H. DES, Dam Bureau, (603) 271-3406
N. H. DES, Wetlands Bureau, (603) 271-2147
N. H. DES, Public Information Center, (603) 271-2975 or (603) 271-8876

Class C Dam Permit (High Hazard Potential) – *Work Sheet*

Key Qualifier Questions: *Will the proposed dam be constructed (or reconstructed) to qualify as a Class C dam which, if it were to fail, would result in probable loss of life or major damage to interstate highways? Will the dam provide a public benefit, or has reconstruction been ordered by DES to correct a deficiency?* (See RSA 482:9, V (a) and (b), respectively, "Dams, Mills, and Flowage/Preliminary Filing of Information", http://gencourt.state.nh.us/rsa/html/L/482/482-9.htm)

What must you do to apply?

- Obtain a copy of the *Application to Construct or Reconstruct a Dam* from the DES Dam Bureau, DES Public Information Center, or online at http://www.des.state.nh.us/dam/damapp.pdf.
- Review the DES Fact Sheets entitled *Basic Nomenclature of a Dam* http://www.des.state.nh.us/factsheets/dam/db-1.htm and *Dam Construction and Reconstruction – How to Proceed* at http://www.des.state.nh.us/factsheets/dam/db-3.htm.
- Provide the name, address, and telephone number of the applicant and define the height and length of the dam.
- Submit a copy of a U. S. Geological Survey map depicting the dam's location (see http://www.topozone.com). This location map should be drawn in sufficient detail to enable a DES inspector to locate the proposed construction site.
- Provide the municipal tax map number and lot number for the property upon which the dam will sit.
- Calculate the drainage area, pond area, and storage capacity of the dam.
- Define the type and describe the purpose of the dam.
- Describe and specify the type of foundation material to be used for the dam.
- Provide the design storm frequency and inflow, and the dam's discharge capacity.
- Prepare a brief description of downstream structures that could be impacted by the dam's failure.
- Identify the name of the stream, river, or water body to be affected.
- Submit a plan and cross section of the proposed dam.
- If this project is for reconstructing an existing dam, provide a description of the proposed reconstruction.
- Submit a written operational procedure plan and construction inspection plan.
- Submit the results of subsurface explorations.
- Submit the results of hydrologic and hydraulic calculations.
- Submit calculations that demonstrate the dam has sufficient discharge capacity to pass the probable maximum precipitation ("PMP") event, with one foot of freeboard without manual operations.
- Incorporate a pond drain.
- Submit a signed statement indicating that the dam owner has flowage rights on all land that will be temporarily or permanently flooded.
- Submit construction plans and specifications that comply with NH CODE ADMIN. RULES Env-Wr 100-800 (See http://www.des.state.nh.us/dam/env-wr100-800.html).
- Submit gradation specifications of embankment materials plus results of a stability analysis for overturning, sliding, and slope failure (see http://www.des.state.nh.us/factsheets/dam/db-4.htm).
- Show 2.5:1 side slopes as a minimum on any earth portion of the dam (3:1 side slopes are preferred) with a minimum top width of 6 feet.
- Draft an Emergency Action Plan with a breach analysis (see http://www.des.state.nh.us/factsheets/dam/db-11.htm).
- Employ a registered professional engineer licensed to practice in the state of New Hampshire in dam design and construction standards and practices to ensure compliance with approved plans and specifications (see http://www.state.nh.us/jtboard/pe.htm).
- Submit the application, a check or money order for $250 made payable to the "Treasurer, State of New Hampshire", and all supporting materials to: Dam Bureau, Water Division, New Hampshire Department

of Environmental Services, 6 Hazen Drive, P. O. Box 95, Concord, NH 03302-0095. Telephone: (603) 271-3406; fax: (603) 271-7894; or online: http://www.des.state.nh.us/dam/

- The site's hazard potential will be evaluated by DES Dam Bureau staff relative to such factors as the presence of structures, roadways, and topography. The hazard class of a dam is based on the potential for adverse consequences to human life and property caused by a dam failure. The DES Dam Bureau will assess all impacts of dam failure when assigning a hazard classification (see http://www.des.state.nh.us/factsheets/dam/db-15.htm). Note: If the assessment confirms a Class C designation, an additional filing fee of $1,000 will be required.

What types of projects require this permit?

- Medium to high dams located upstream from developed areas (downstream subdivisions, roads, and utilities)
- Dams that pose an extensive threat to property and highways and probable loss of life downstream

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If there are questions regarding this page or any other section of the Guidebook, please contact Tim Drew, Administrator, Public Information and Permitting Unit, at tdrew@des.state.nh.us or at (603) 271-3306.

Hydropower Dam Permit (All Hazard Classifications)

Introduction: There is a statewide need to conserve and control surface water flowage to accommodate multiple, and sometime conflicting, uses of our water resources, while still protecting public health and safety. Such uses include fire ponds, flood control, hydropower, irrigation and recreation. A "dam" is defined by RSA 482:2, II ("Dams, Mills, and Flowage/Definitions", http://gencourt.state.nh.us/rsa/html/L/482/482-2.htm) as *any artificial barrier, including appurtenant works, which impounds or diverts water, and which has a height of 4 feet or more, or a storage capacity of 2 acre-feet or more, or is located at the outlet of a great pond. A roadway culvert shall not be considered a dam if its invert is at the natural bed of the water course, it has adequate discharge capacity, and it does not impound water under normal circumstances. Artificial barriers which create surface impoundments for liquid industrial or liquid commercial wastes or municipal sewage, regardless of height or storage capacity, shall be considered dams* (see http://www.des.state.nh.us/dam/damburweb.pdf). DES's Dam Bureau regulates the construction and reconstruction of hydropower dams, which may encompass any hazard category (AA, A, B, or C) (see http://www.des.state.nh.us/factsheets/dam/db-15.htm). At the time of application, each proposed dam will be classified by a DES Dam Bureau engineer/inspector in accordance with NH CODE ADMIN. RULES Env-Wr 100-800 (see http://www.des.state.nh.us/dam/env-wr100-800.html) and then provided with a State Dam Inventory registration number, with notice provided by DES to municipal officials in the host community. Any dams to be constructed on Great Ponds must first be approved by the State Legislature. In addition, if a dock, dam, building, or other structure is to be constructed in or adjacent to the bank or bed of any of the rivers that form New Hampshire's boundary (particularly the Connecticut River), the project applicant must also apply to the Commissioner of the New Hampshire Department of Transportation pursuant to RSA 1:8-10 ("State Boundaries", http://gencourt.state.nh.us/rsa/html/I/1/1-8.htm) for certification and a permit for the boundary work. Hydropower or milldams are structures that capture the flowing water's energy and convert it to electrical or mechanical power for use at manufacturing operations, electric power generation facilities, or for the operation of unit processes at mills or public utilities. Developers of hydroelectric facilities must demonstrate that the construction and operation of such dams will result in measurable public benefits such as recreation, flood control, or wildlife habitat, since their presence may impact the public's "reasonable use" of surface water for private gains pursuant to RSA 482:9, V (a) and (b), respectively ("Dams, Mills, and Flowage/Preliminary Filing of Information", http://gencourt.state.nh.us/rsa/html/L/482/482-9.htm). If the proposed hydroelectric dam falls within the jurisdiction of the Federal Energy Regulatory Commission ("FERC"), the owner must also secure a federal order granting a license to operate the facility in the public's interest (see http://www.ferc.gov/documents/forms/forms.htm#HYDROPOWER). The DES Dam Bureau works in close cooperation with the FERC on proposals that incorporate issues on navigation, recreation, and commerce.

Average number of permits issued annually: Few, varies from year-to-year

Fees: $250 application fee, plus a fee corresponding to the assigned hazard classification. An additional $100 initial deposit must be submitted with the application to cover costs associated with a public hearing. Additional monies may be required depending on the final cost of the process. An annual dam registration fee, to support the State Dam Inspection Program, may be required depending upon the resulting hazard classification.

Estimate processing time after application is deemed "complete": 6-12 months for DES Dam Permit, and up to three years for a new FERC license

Permit duration: Two years for facility construction, or as provided by the FERC license

Permit transferability: Current dam owner is required to notify DES if property is sold. Notification must include new owner's name and address, and respond to pertinent FERC requirements.

Permit modification: Current dam owner is required to submit a written request to DES describing any changes to project as originally designed. Upon review of additional plans and specifications, DES may

require that the permit be modified. Owner must also address FERC requirements for modifying the facility in accordance with its regulations.

Permit renewal: If dam construction has not been completed within two years, the owner is required to submit a written request for a two-year permit extension and be consistent with the FERC requirements when the facility lies within its jurisdiction. This request must be received prior to the original permit's expiration, or a new application will be required.

State statute: RSA 482 ("Dams, Mills, and Flowage", http://gencourt.state.nh.us/rsa/html/indexes/482.html)
Federal law: 16 U.S.C. § 791a *et seq.* ("Federal Power Act", http://www.ferc.gov/informational/acts/fpa.htm)

N. H. Code of Administrative Rules: Env-Wr 100-800 ("Dam Safety Rules", http://www.des.state.nh.us/dam/env-wr100-800.html)
Code of Federal Regulations: CFR Title 18, PARTS 1-399 ("Conservation of Power", http://www.ferc.gov/legal/stats&regs/statsandregs.htm)

Appeals body: Water Council at RSA 21-O:7 ("Department of Environmental Services/Water Council", http://gencourt.state.nh.us/rsa/html/I/21-O/21-O-7.htm; see also http://www.des.state.nh.us/rules/env-wc200.pdf, http://www.des.state.nh.us/councils/#1); and/or FERC hydropower requirements, (http://www.ferc.fed.us/hydro/hydro2.htm)

Additional Information; N. H. DES, Dam Bureau, (603) 271-3406
N. H. DES, Rivers Management and Protection Program, (603) 271-8865
N. H. DES, Public Information Center, (603) 271-2975 or (603) 271-8876
U. S. DOE, Federal Energy Regulatory Commission, (212) 273-5900

Hydropower Dam Permit (All Hazard Classifications) – *Work Sheet*

Key Qualifier Questions: *Does the project involve the construction of a dam for the primary purpose of capturing energy for conversion to mechanical or electrical power for use at manufacturing facilities, for the generation of renewable electrical power, or for the operation of mills or public utilities? If the dam's hazard classification is likely to be Class B or Class C, will the dam provide a public benefit, or has reconstruction been ordered by DES to correct a deficiency?* (See RSA 482:9, V (a) and (b), respectively, "Dams, Mills, and Flowage/Preliminary Filing of Information", http://gencourt.state.nh.us/rsa/html/L/482/482-9.htm)

What must you do to apply?

- Obtain a copy of the *Application to Construct or Reconstruct a Dam for Hydropower* from the DES Dam Bureau, DES Public Information Center, or online at http://www.des.state.nh.us/dam/damapp.pdf.
- Review the DES Fact Sheets entitled *Basic Nomenclature of a Dam* http://www.des.state.nh.us/factsheets/dam/db-1.htm and *Dam Construction and Reconstruction – How to Proceed* at http://www.des.state.nh.us/factsheets/dam/db-3.htm.
- Provide the name, address, and telephone number of the applicant and define the height and length of the dam.
- Submit a copy of a U. S. Geological Survey map depicting the dam's location (see http://www.topozone.com). This location map should be drawn in sufficient detail to enable a DES inspector to locate the proposed construction site.
- Provide the municipal tax map number and lot number for the property upon which the dam will sit.
- Calculate the drainage area, pond area, and storage capacity of the dam and define its type and purpose.
- Describe and specify the type of foundation material to be used for the dam.
- Provide the design storm frequency and inflow, and the dam's discharge capacity.
- Prepare a brief description of downstream structures that could be impacted by the dam's failure.
- Identify the name of the stream, river, or water body to be affected.
- Submit a plan and cross section of the proposed dam.
- Incorporate a pond drain.
- If this project is for reconstructing an existing dam, provide a description of the proposed reconstruction.
- Submit a written operational procedure plan and construction inspection plan.
- Submit the results of subsurface explorations.
- Submit the results of hydrologic and hydraulic calculations.
- Submit calculations that demonstrate the dam has sufficient discharge capacity to pass the appropriate design storm without manual operations.
- Submit construction plans and specifications that comply with NH CODE ADMIN. RULES Env-Wr 100-800 (see http://www.des.state.nh.us/dam/env-wr100-800.html).
- Submit gradation specifications of embankment materials and, if the dam is classified as either A, B, or C, submit the results of a stability analysis for overturning, sliding, and slope failure (see http://www.des.state.nh.us/factsheets/dam/db-4.htm).
- Show 2.5:1 side slopes as a minimum on any earth portion of the dam (3:1 side slopes are preferred) with a minimum top width of 6 feet.
- Submit a signed statement indicating that the dam owner has flowage rights on all land that will be temporarily or permanently flooded.
- Draft an Emergency Action Plan with a breach analysis (see http://www.des.state.nh.us/factsheets/dam/db-11.htm), if the dam's hazard classification is Class B or Class C.
- Employ a registered professional engineer licensed to practice in the state of New Hampshire for design and construction (see http://www.state.nh.us/jtboard/pe.htm), if the dam's hazard classification is Class A, Class B, or Class C.

- Submit the application, a check for $350 made payable to the "Treasurer, State of New Hampshire", with all supporting materials to: Dam Bureau, Water Division, New Hampshire Department of Environmental Services, 6 Hazen Drive, P. O. Box 95, Concord, NH 03302-0095. Telephone: (603) 271-3406; fax: (603) 271-7894; or online: http://www.des.state.nh.us/dam/ (See also http://www.ferc.fed.us/hydro/hydro2.htm)
- The site's hazard potential will be evaluated by DES Dam Bureau staff relative to such factors as the presence of structures, roadways, and topography. The hazard class of a dam is based on the potential for adverse consequences to human life and property caused by a dam failure (see http://www.des.state.nh.us/factsheets/dam/db-10.htm). The DES Dam Bureau will assess all impacts of dam failure when assigning hazard classifications (see http://www.des.state.nh.us/factsheets/dam/db-15.htm). Note: Depending on the classification of the structure, an additional filing fee may be necessary.

What types of projects require this permit?

- A project proposed to generate mechanical power for operating a textile mill
- A small-scale hydroelectric project for local distribution
- A large public utility project to generate electrical power on a major New Hampshire river

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If there are questions regarding this page or any other section of the Guidebook, please contact Tim Drew, Administrator, Public Information and Permitting Unit, at tdrew@des.state.nh.us or at (603) 271-3306.

Chapter 7:

Septic Systems/Real Property Subdivision

2002 Edition

Chapter 7: Septic Systems/Real Property Subdivision

Introduction

A wastewater disposal system is required for any structure to which a water supply is or will be connected. Subsurface sewage disposal ("septic systems") must be designed, installed, operated, and maintained properly to ensure adequate protection of public health and the environment. DES licenses septic system designers and installers, reviews plans and specifications for proposed systems, and inspects systems after they have been installed but before they are covered and put into use. The subdivision of real property (*i.e.*, land and/or buildings) also requires a review by DES to ensure that each resulting parcel or unit has the appropriate infrastructure to support its intended uses without posing a threat to public health or the environment. DES implements this program under RSA 485-A:29-44 ("Water Pollution and Waste Disposal/Sewage Disposal Systems", http://gencourt.state.nh.us/rsa/html/indexes/485-A.html) and NH CODE ADMIN. RULES Env-Ws 1000 (*Subdivision and Individual Sewage Disposal System Design Rules*, http://www.des.state.nh.us/rules/envws1000.pdf.

Designers and Installers Licenses

As noted, DES, through its Subsurface Systems Bureau (part of the DES Land Resources Management Program), licenses septic system designers and installers (see http://www.des.state.nh.us/factsheets/ssb/ssb-4.htm). To obtain a designer's license, an individual must take a written examination and a field exam; to obtain an installer's license, an individual must take a written exam. The examinations are intended to ensure that designers can design appropriate systems for a variety of site and use conditions, and that installers can install the designed system.

Septic System Approval for Construction/Operation

The DES Subsurface Systems Bureau reviews the design plans and specifications for proposed septic systems to ensure the proper construction and operation of the systems. Proper design, construction, and operation rely heavily on the proper siting of such systems on a building lot. Proper siting depends on depth to seasonal high water table, presence or absence of ledge outcrops, slope, the presence or absence of subsurface soil characteristics and layering that will be conducive to downward percolation This includes consideration of depth to seasonal high water table, presence or absence of ledge outcrops, slope, the presence or absence of subsurface soil characteristics and layering that will be conducive to downward percolation of the wastewater for treatment, and proper setbacks from property lines, drinking water wells, wetlands, surface waters, and structures. The development of many new, innovative designs and techniques for septic systems have allowed lots that were once viewed as "unbuildable" to be reclassified to support some types of limited development without causing undue harm the environment (see http://www.des.state.nh.us/factsheets/ssb/ssb-12.htm). Once a septic system has been properly sited on a parcel of land and the design plans have been approved by DES and, if required, the municipality (see www.des.state.nh.us/ssb/townapproval.htm), DES will issue an Approval for Septic System Construction. The septic system must be installed by an individual permitted to do so by DES, unless an individual homeowner does the work for his/her own home. Once the septic system is installed, DES will inspect the newly-constructed system within seven business days after receipt of a written request for inspection from the installer or owner (see http://gencourt.state.nh.us/rsa/html/L/485-A/485-A-29.htm and http://www.des.state.nh.us/factsheets/ssb/ssb-8.htm). The inspections are conducted to ensure that the proper materials were used in constructing the system and that the design intent has been met. The DES inspector also will evaluate the system to ensure that setbacks to seasonal high water, wetlands, and surface waters have been met. Once the inspector has determined that the system meets all applicable requirements, a written Approval for Septic System Operation will be completed, with a copy provided to the owner, municipality, and DES. Requests for field inspections can be made by telephoning the appropriate DES Subsurface Systems Bureau field offices (located statewide), but should be followed by a written request for

inspection. Pursuant to RSA 485-A:38 ("Water Pollution and Waste Disposal/Approval to Increase Load on a Sewage Disposal System", http://gencourt.state.nh.us/rsa/html/L/485-A/485-A-38.htm), an Approval for Septic System Construction also must be obtained prior to commencing any modifications, additions, or replacements of any structure which would result in an increase in the load on the existing septic system and prior to converting a structure to full-time occupancy. Under certain conditions, septic systems can be repaired and/or system components can be replaced without obtaining a new Approval for Septic System Construction. See Env-Ws 1003.10 and http://www.des.state.nh.us/factsheets/ssb/ssb-9.htm for criteria, limits, and conditions.

Real Property Subdivision

The proposed subdivision of real property, and proposed conversion of existing buildings to condominiums where septic systems will be used, must be based on a consistent, statewide set of criteria and performance standards. DES's goal in reviewing proposed subdivisions is to balance the protection of property rights and support of economic development with preservation of natural resources and protection of public health and the environment. Plans submitted to DES for subdivision approval must show all lots and must identify and depict ledge, slope topography, soil types, location of drinking water wells (including protective well radii, see http://www.des.state.nh.us/ssb/wellradi.pdf), existing or planned waterlines, and location of proposed septic system areas. Structures from which wastewater will be discharged may not be built, other land development activity specific to the proposed subdivision may not commence, and subdivided lots or units may not be sold, leased or rented until DES issues an Approval for Subdivision. DES's review is intended to prevent the creation of lots that may not support the long-term wastewater assimilation needs of future inhabitants without causing environmental damage, overload, or a public health risk. Subdivision approval is required for both residential and commercial developments, including light industrial parks, manufactured housing parks, recreational campgrounds, and residential housing lots.

Major Land or Condominium Subdivisions

In addition to requiring DES review, proposals for subdivisions which might, at any time, include more than 15 lots must be registered with and reviewed by the Consumer Protection and Antitrust Bureau of the New Hampshire Department of Justice ("NHDOJ") (see http://webster.state.nh.us/nhdoj/Consumer/cpb.html), pursuant to RSA 356-A ("Land Sales Full Disclosure Act", http://gencourt.state.nh.us/rsa/html/indexes/356-A.html) and NH CODE ADMIN. RULES Jus 1300 ("Land Sales Full Disclosure Rules", http://webster.state.nh.us/nhdoj/Consumer/Land%20Sale%20Rules.pdf). A similar registration and review by the NHDOJ must occur when more than 10 condominium units are to be established or sold; these reviews are conducted pursuant to RSA 356-B ("Condominium Act", http://gencourt.state.nh.us/rsa/html/indexes/356-B.html) and NH CODE ADMIN. RULES Jus 1400 ("Condominium Rules", http://webster.state.nh.us/nhdoj/Consumer/condorules.pdf). For important zoning information, please contact your local municipal officials.

Local Subdivision Requirements

Many municipalities also have local subdivision requirements that must be met in addition to the State requirements. For information on such requirements, please contact your local municipal officials. Related guidance is available in ***Requirements for Soils and Wetlands Data in Subdivision and Site Plan Review Regulations*** (see http://webster.state.nh.us/osp/library/docs/RequirementsForSoilsAndWetlandsData.pdf), ***Data Requirements for Site Review: Guidance for Planning Boards*** (see http://www.state.nh.us/osp/library/docs/SiteReview.pdf), and in the ***Subdivision and Site Plan Review Handbook*** (see http://webster.state.nh.us/osp/library/docs/SubdivisionAndSitePlanReviewHandbook.pdf) offered by the New Hampshire Office of State Planning. Telephone: (603) 271-2155; fax: (603) 271-1728; or online: http://www.state.nh.us/osp/index.html

Allied Programs

For work near lakes, ponds, and rivers, plans must be certified to meet or exceed the development standards set forth by RSA 483-B ("Comprehensive Shoreland Protection Act", http://gencourt.state.nh.us/rsa/html/indexes/483-B.html). It is recommended that applicants review the DES publication entitled, ***The Critical Edge - Shoreland Protection Reference Guide*** (see http://www.des.state.nh.us/cspa/FILES/Lawrules.pdf) for assistance with those requirements. The New Hampshire Lakes Management and Protection Program focuses its attention on proposed projects (and their potential impacts) in or adjacent to New Hampshire's more than 800 lakes and ponds, pursuant to RSA 483-A ("New Hampshire Lakes Management & Protection Program", http://gencourt.state.nh.us/rsa/html/indexes/483-A.html; see also http://www.des.state.nh.us/factsheets/r&l/rl-1.htm). Staff of the Rivers Management and Protection Program provide expert advice and review concerning impacts within (or in close proximity to) New Hampshire's major river systems, pursuant to RSA 483 ("New Hampshire Rivers Management & Protection Program", http://gencourt.state.nh.us/rsa/html/indexes/483.html; see also http://www.des.state.nh.us/factsheets/r&l/rl-2.htm and http://www.des.state.nh.us/rivers/). Finally, most municipalities have local subdivision requirements that must be met in addition to the State requirements.

Summary

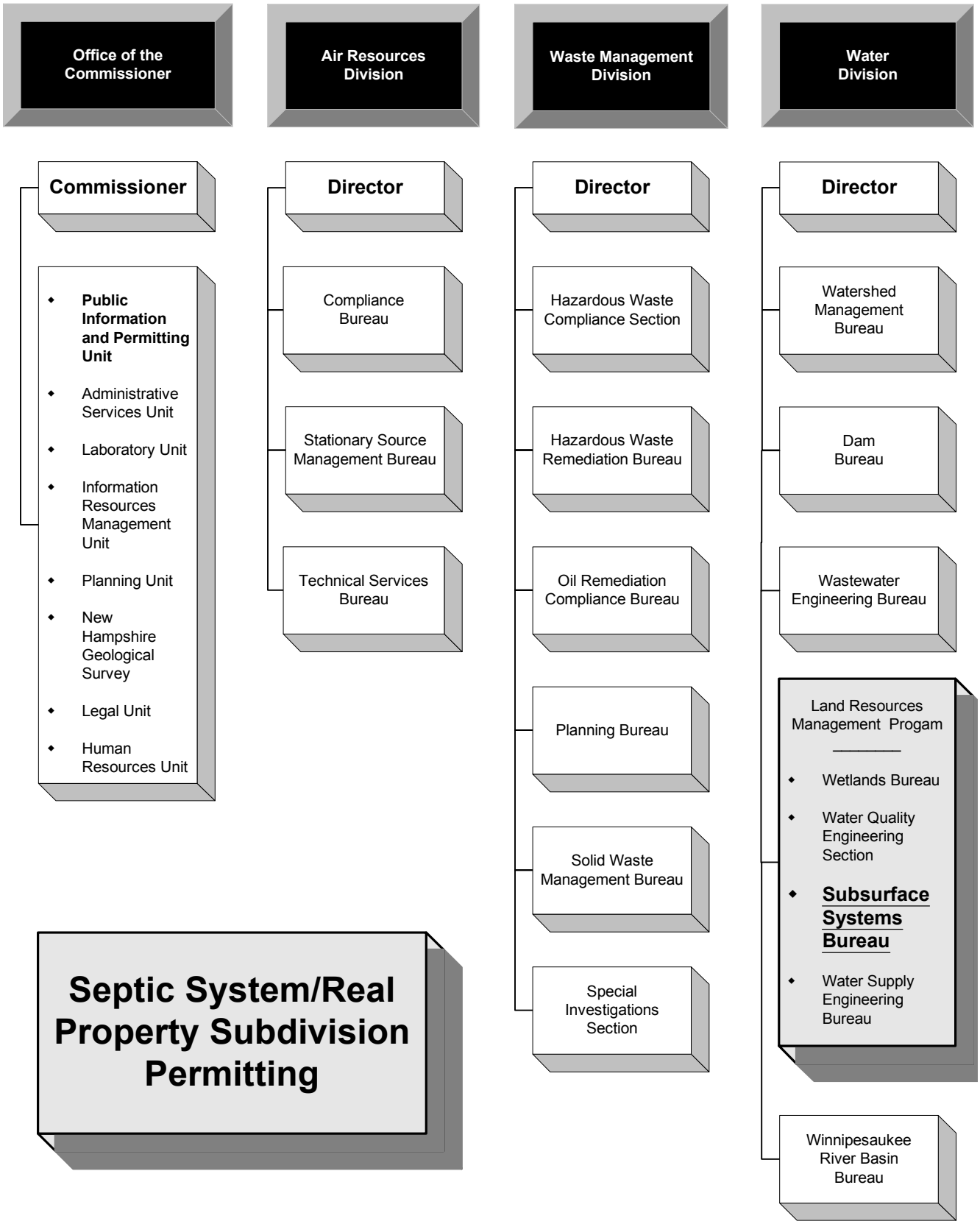
The DES Water Division, Subsurface Systems Bureau, implements the Subsurface Systems/Real Property Subdivision Program (see http://www.des.state.nh.us/ssb/). Decisions on plans and specifications are subject to the reconsideration and appeal provisions of RSA 485-A:40 ("Water Pollution and Waste Disposal/Reconsideration and Appeal Procedure", http://gencourt.state.nh.us/rsa/html/L/485-A/485-A-40.htm). Appeals of orders issued for violations of RSA 485-A:29-44 or Env-Ws 1000 should be directed to the Water Council (see http://www.des.state.nh.us/councils/#1).

Chapter Contents

- ✓ **Approval for Septic System Construction/Operation**
- ✓ **Approval for Real Property Subdivision**
- ✓ **Designer of Subsurface Disposal Systems License**
- ✓ **Installer of Subsurface Disposal Systems License**

Organizational Chart

New Hampshire Department of Environmental Services



Approval for Septic System Construction/Operation

Introduction: Approximately 75 percent of the homes and businesses in New Hampshire are served by on-site septic systems. In response to development pressure and more stringent siting requirements, new technologies have been applied to septic system design, thereby allowing use of many real estate parcels which were previously considered non-buildable due to ledge, steep slopes, small lot size, high groundwater, or setback requirements from wetlands and the protected shoreland. What was once considered a "non-buildable lot" may now be capable of supporting a residence, by using a chambered system, an upslope pump system, a raised leach field, a pressure distribution network, or another form of effluent disposal system (see http://www.des.state.nh.us/factsheets/ssb/ssb-12.htm). As the field of septic system design has progressively become more technical and specialized, DES's approvals for the construction and operation of these (sometimes innovative) onsite wastewater treatment systems has similarly evolved to the process described here. Two separate approvals are needed for these septic systems: an Approval to Construct and an Approval to Operate. The first approval is required prior to constructing of a septic system or for any building from which wastewater will discharge; the second is required for actual use of the septic system (see http://www.des.state.nh.us/factsheets/ssb/ssb-8.htm). The intent is to ensure that septic systems are designed, constructed, operated, and maintained to prevent nuisance conditions from being created, by efficiently removing or treating contaminants in the household wastewater before its eventual release back into the natural environment. Pursuant to RSA 485-A:38 ("Water Pollution and Waste Disposal/Approval to Increase Load on a Sewage Disposal System", http://gencourt.state.nh.us/rsa/html/L/485-A/485-A-38.htm), construction approval also must be obtained prior to commencing any modifications, additions, or replacements of any structure which would result in an increase in the load on the existing septic system and prior to converting a structure to full-time occupancy. Septic systems with an aggregate flow capacity of 20,000 gallons per day or more must also obtain a DES Groundwater Discharge Permit. Lots located in close proximity to a municipal sewer interceptor must connect to a municipal sewer system for off-site wastewater treatment and disposal, pursuant to RSA 147:8 ("Nuisances; Toilets; Drains; Expectoration; Rubbish and Waste/Toilets; Drains", http://gencourt.state.nh.us/rsa/html/X/147/147-8.htm and http://www.des.state.nh.us/factsheets/wwt/web-1.htm). Finally, some communities require local review and approval of septic design plans before they are submitted to DES. Review the most recent list of these communities at http://www.des.state.nh.us/ssb/townapproval.htm.

Number of approvals issued in calendar year 2001: 8,339 (construction)/5,981 (operation)

Fee: $90 per septic system submission

Estimated processing time after application is deemed "complete": 15 work days

Approval duration: 90 days for failed system replacement (see http://www.des.state.nh.us/factsheets/ssb/ssb-1.htm), and 4 years for all other construction approvals. DES may extend the expiration date under certain circumstances, and upon written request from the owner/applicant. There is no expiration date for operation approvals.

Approval transferability: Approval for Construction may be transferred by requesting an *Application for Transfer* at http://www.des.state.nh.us/ssb/transfer.pdf, filling out, and returning it to DES for processing.

Approval modification: If significant changes to the design plans occur, or the project cannot be constructed as approved, application for a new Approval for Construction must be made to DES (see http://www.des.state.nh.us/factsheets/ssb/ssb-3.htm).

Approval renewal: If construction has not been initiated within four years from the date of issuance, the Approval for Construction is deemed to have expired and a new Approval for Construction must be obtained.

State statute: RSA 485-A: 1, 2, and 29 - 44 ("Water Pollution and Waste Disposal/Sewage Disposal Systems", http://gencourt.state.nh.us/rsa/html/indexes/485-A.html)

N. H. Code of Administrative Rules: Env-Ws 1000 ("Subdivision and Individual Sewage Disposal System Design Rules", http://www.des.state.nh.us/rules/envws1000.pdf)

Appeals body: Water Council at RSA 21-0:7 ("Department of Environmental Services/Water Council", http://gencourt.state.nh.us/rsa/html/I/21-O/21-O-7.htm; see also http://www.des.state.nh.us/rules/env-wc200.pdf and http://www.des.state.nh.us/councils/#1)

Additional information: N. H. DES, Subsurface Systems Bureau, at (603) 271-3501
N. H. DES, Public Information Center, at (603) 271-2975 or (603) 271-8876
U. S. Dept. of Agriculture, NRCS, at (603) 223-6023 or (603) 868-7581
(For additional soils information, see http://www.nh.nrcs.usda.gov/Soil_Data/)

Approval for Septic System Construction/Operation - *Work Sheet*

Key Qualifier Questions: *Will the building/structure discharge domestic wastewater discharging to an on-site subsurface waste disposal system ("septic system")? Are you proposing to modify or replace any structure which would result in an increase in the load on the existing septic system? Are you proposing to convert an existing structure served by a septic system to full-time occupancy? Do you need to repair or replace an existing septic system that serves a commercial building, or whose effluent disposal portion is within 75 feet of surface water or water supply wells, or within 24 inches of the seasonal high water table?* (See RSA 485-A:2, IV, "Water Pollution and Waste Disposal/Definitions", http://gencourt.state.nh.us/rsa/html/L/485-A/485-A-2.htm and http://www.des.state.nh.us/factsheets/ssb/ssb-1.htm).

What must you do to apply?

- Obtain and review an *Application for Individual Sewage Disposal System Approval* from the DES Subsurface Systems Bureau, the DES Public Information Center, or access online at http://www.des.state.nh.us/ssb/protect.pdf.
- Retain a DES-licensed septic system designer (see http://www.des.state.nh.us/ssb/des-inst.htm) to supervise the digging of test pits and to prepare the records for soil horizon depths, descriptions, colors, structure, compaction, estimated seasonal high water table, and other relevant site characteristics (see http://www.nh.nrcs.usda.gov/Soil_Data/).
- Plans for small disposal systems must be prepared by a permitted designer, except for a single family residence where the owner may prepare the design for his or her own domicile (see http://www.des.state.nh.us/factsheets/ssb/ssb-9.htm).
- Have the permitted designer conduct a percolation test and record the results at the proposed septic system site (see http://www.des.state.nh.us/factsheets/ssb/ssb-7.htm).
- Check with local officials (*i.e.*, Health Officer, Building Inspector, *etc.*) to find out whether or not the municipality has any more stringent design requirements for septic systems (*e.g.*, more restrictive setback distances) and whether or not the municipality is one of the approximately 80 New Hampshire communities that require local review and approval of the plans and application before they are submitted to DES (see http://www.des.state.nh.us/ssb/townapproval.htm).
- Have the septic system designer prepare detailed plans for the proposed septic system according to NH CODE ADMIN. RULES Env-Ws 1000 (*Subdivision and Individual Sewage Disposal System Design Rules*, http://www.des.state.nh.us/rules/envws1000.pdf) and any more stringent local requirements.
- Plans for disposal systems with a flow greater than 2,500 gallons per day, <u>or</u> for systems with flows greater than 600 gallons per day on ledge lots, shall be designed by, and bear the stamp of, a permitted designer who is also a civil or sanitary engineer registered to practice in the state of New Hampshire (see http://www.state.nh.us/jtboard/pe.htm)
- Plans must show all existing and proposed ground surface contours at two-foot intervals at least 75 feet from the building and system on the plans. Contour elevations must be established from a secure benchmark.
- Plans must show the distance and location of the nearest surface water or wetland in relation to the proposed effluent disposal system or, if the nearest surface water is greater than 75 feet away, a statement must be included in the application to that effect.
- Plans must show all lot dimensions, location of existing and proposed buildings, wells and their protective radii (see http://www.des.state.nh.us/ssb/wellradi.pdf). If all radii setbacks cannot be achieved, include with the plans a completed copy of the DES *Release Form for Protective Well Radii* (see http://www.des.state.nh.us/ssb/release.pdf), pursuant to RSA 485-A:30-b ("Water Pollution and Waste Disposal/Sewage Disposal Systems/Protective Well Radii", http://gencourt.state.nh.us/rsa/html/L/485-A/485-A-30-b.htm). This form will be recorded at the appropriate Registry of Deeds so as to run with the land.
- Show benchmarks and tie points to landmarks or established referenced points within 100 feet of the system.

- Show all areas of exposed ledge or boulders greater than 6 feet in diameter within 75 feet of the proposed system.
- Show all invert elevations at house foundation wall, septic tank, distribution box, leach lines and bed bottom elevation of effluent disposal area. Invert elevations shall be referenced to the benchmark.
- Show on the plans the make, type, model and capacity of sewage pump, pump well, and discharge line; make, type and model of pump controls; and elevations of control switches.
- Show on the plan the cross section, profile view, and layout of proposed effluent disposal system (with dimensions).
- Submit **three** (3) **complete sets** of plans showing the designer's stamp, professional engineer's stamp (if applicable) and town stamp (if applicable), a completed *Application for Individual Sewage Disposal System Approval* form, and a check or money order for $90 per system made payable to "Treasurer, State of New Hampshire" to: Subsurface Systems Bureau, Water Division, New Hampshire Department of Environmental Services, 6 Hazen Drive, P. O. Box 95, Concord, NH 03302-0095. Telephone: (603) 271-3501; fax: (603) 271-6683; or online: http://www.des.state.nh.us/ssb/
- **Note**: The Approval for Construction satisfies the first requirement of a **two-step approval process** - it allows the owner to **construct** the septic system (only) in accordance with the approved plans. The second requirement is to obtain the Approval for Operation to actually **operate** the system as designed, which should bear the same approval number as shown on the Approval for Construction.
- Once the owner has had an approved system installed by a DES-permitted installer (**or** a homeowner has done so for his or her own domicile) **and** DES has inspected it, only then is an Approval for Operation granted for its use (see http://www.des.state.nh.us/factsheets/ssb/ssb-8.htm).

What types of projects require these approvals?

- Residential homes, apartments, condominiums, and manufactured housing parks
- Beds & breakfasts, hotels, and motels
- Churches, schools, and recreational campgrounds
- Restaurants and diners
- Conversions of summer cottages to year-round dwellings
- Renovations to an existing structure that will increase the load on the existing septic system (*e.g.*, addition of bedrooms to a residence, conversion of a residential structure to a commercial use, *etc.*)

If there are any questions regarding this page or any other section of the Guidebook, please contact Tim Drew, Administrator, Public Information and Permitting Unit, at tdrew@des.state.nh.us or at (603) 271-3306.

Approval for Real Property Subdivision

Introduction: Pursuant to RSA 485-A:29, I ("Water Pollution and Waste Disposal/Submission and Approval of Plans and Specifications", http://gencourt.state.nh.us/rsa/html/L/485-A/485-A-29.htm), DES regulates the subdivision of land into two or more lots if the proposed lots will not be served by municipal sewers (see http://www.des.state.nh.us/factsheets/wwt/web-1.htm) and one (or more) of the proposed lots is less than five acres, or if one or more of the proposed lots lie within the 250-foot shoreland protection zone (see http://www.des.state.nh.us/factsheets/sp/sp-6.htm). Subdivision approval must also be obtained for proposed conversion of existing buildings to condominiums where septic systems are, or will be, used. Any person seeking subdivision approval must file an application and plans with DES for review and approval. The intent of this approval is to ensure that development is based on a consistent, statewide set of design criteria and performance standards. DES seeks to balance the protection of property rights and support of economic development with preservation of natural resources and the protection of public health and safety. Plans submitted to DES for subdivision approval must show all lots and must identify and depict ledge, slope topography, soils types, location of drinking water wells (including protective well radii, see http://www.des.state.nh.us/ssb/wellradi.pdf), existing or planned waterlines, and location of proposed septic system areas. Structures from which wastewater will be discharged may not be built and other site alteration activity specific to the proposed subdivision may not commence, and subdivided lots or units may not be sold, leased or rented until DES issues an Approval for Subdivision. For work near lakes, ponds, and rivers, plans must be certified to meet or exceed the development standards set forth by RSA 483-B ("Comprehensive Shoreland Protection Act", http://gencourt.state.nh.us/rsa/html/indexes/483-B.html). Proposals for subdivisions which might, at any time, include more than 15 lots must be registered with, and approved by, the Consumer Protection and Antitrust Bureau of the New Hampshire Department of Justice ("NHDOJ", see http://webster.state.nh.us/nhdoj/Consumer/cpb.html), pursuant to RSA 356-A ("Land Sales Full Disclosure Act", http://gencourt.state.nh.us/rsa/html/indexes/356-A.html) and NH CODE ADMIN. RULES Jus 1300 ("Land Sales Full Disclosure Rules", http://webster.state.nh.us/nhdoj/Consumer/Land%20Sale%20Rules.pdf). A similar registration and review by the NHDOJ must occur when more than 10 condominium units are to be established or sold. These reviews are accomplished pursuant to RSA 356-B ("Condominium Act", http://gencourt.state.nh.us/rsa/html/indexes/356-B.html) and NH CODE ADMIN. RULES Jus 1400 ("Condominium Rules", http://webster.state.nh.us/nhdoj/Consumer/condorules.pdf). Many municipalities also have local subdivision requirements that must be met in addition to the State requirements. For information on such requirements, please contact your local municipal officials. Related guidance is provided in ***Requirements for Soils and Wetlands Data in Subdivision and Site Plan Review Regulations*** (see http://webster.state.nh.us/osp/library/docs/RequirementsForSoilsAndWetlandsData.pdf), in the document entitled ***Data Requirements for Site Review: Guidance for Planning Boards*** (see http://www.state.nh.us/osp/library/docs/SiteReview.pdf), and in ***Subdivision and Site Plan Review Handbook*** (see http://webster.state.nh.us/osp/library/docs/SubdivisionAndSitePlanReviewHandbook.pdf) offered by the New Hampshire Office of State Planning. Telephone: (603) 271-2155; fax: (603) 271-1728; or online: http://www.state.nh.us/osp/index.html

Number of lots/units approved in calendar year 2001: 3,175

Fees: $80/lot or unit

Estimated processing time after application is deemed "complete": 30 calendar days

Approval duration: No expiration limit

Approval transferability: Although not required, requesting an *Application for Transfer* form at http://www.des.state.nh.us/ssb/transfer.pdf, filling it out and returning it to DES for processing will serve to properly transfer the Approval for Subdivision to another party.

Approval modification: If significant changes in the scope or design of the project occur after approval has been issued, application must be made to request a new Approval for Subdivision.

Approval renewal: No expiration limit

State statute: RSA 485-A: 1, 2, and 29 - 44 ("Water Pollution and Waste Disposal/Sewage Disposal Systems", http://gencourt.state.nh.us/rsa/html/indexes/485-A.html)

N. H. Code of Administrative Rules: Env-Ws 1000 ("Subdivision and Individual Sewage Disposal System Design Rules", http://www.des.state.nh.us/rules/envws1000.pdf)

Appeals body: Water Council at RSA 21-0:7 ("Department of Environmental Services/Water Council", http://gencourt.state.nh.us/rsa/html/I/21-O/21-O-7.htm; see also http://www.des.state.nh.us/rules/env-wc200.pdf and http://www.des.state.nh.us/councils/#1)

Additional information: N. H. DES, Subsurface Systems Bureau, (603) 271-3501
N. H. DES, Public Information Center, (603) 271-2975 or (603) 271-8876
N. H. DOJ, Consumer Protection and Antitrust Bureau, (603) 271-3641

Approval for Real Property Subdivision - *Work Sheet*

Key Qualifier Question: *Will this project depend on individual septic systems for on-site waste disposal and create lots of less than five acres in size; or create lots of more than five acres in size, but be located within the protected shoreland; or represent a conversion or expansion of an existing subdivision, a proposed condominium, a proposed recreational campground, or a proposed manufactured housing park?* [1, 2, 3]

Note 1**:** If all lots and units in a subdivision will be served by a municipal sewer system, then you do not need an Approval for Subdivision from DES.

What must you do to apply?

- Retain the services of a land surveyor, licensed to do work in the State of New Hampshire (see http://www.state.nh.us/jtboard/ls.htm), to survey the perimeter property boundary lines, prepare a plan to show their delineation, and establish the lot size.
- Obtain an *Application for Subdivision Approval* from the DES Subsurface Systems Bureau, DES Public Information Center, or online at http://www.des.state.nh.us/ssb/subaprov.pdf.
- On the plans, show all existing easements and rights-of-way granted to the property owner and other parties.
- Show all existing topographic contours at five-foot intervals.
- Provide a location map with sufficient detail to enable the DES reviewer to locate the property.
- Retain the services of a DES-licensed septic system designer (see http://www.des.state.nh.us/ssb/des-inst.htm) to supervise the digging of test pits, prepare the excavation logs, and record soil horizon descriptions, colors, degree of compaction, structure, and depth to groundwater on each lot or proposed on-site wastewater disposal site.
- Have the permitted designer conduct a percolation test and record the results for each lot or proposed onsite wastewater disposal site.
- Show the acreage for each proposed lot and indicate the lot number designations.
- Show all areas within the proposed subdivision, or within 75 feet from the perimeter of the property, that are unsuitable for in-site wastewater disposal, such as ledge outcrops, steep slopes, seasonal wet areas, streams, brooks, rivers and wetlands.
- Show all existing or proposed waterlines and wells, as well as the protective well radii (see http://www.des.state.nh.us/ssb/wellradi.pdf).
- Show all existing and proposed drainage structures, including inlets, culverts and swales.
- Show all proposed dredge and fill areas.
- Show all soil mapping delineations. See county soils information at the U. S. Department of Agriculture's Natural Resources Conservation Service at http://www.nh.nrcs.usda.gov/Soil_Data/.
- If applicable to the subdivision proposal, submit copies of the following associated DES authorizations:
    - Site Specific Permit (RSA 485-A:17) (see http://www.des.state.nh.us/sitespecific/)
    - Groundwater Discharge Permit (NH CODE ADMIN. RULES Env-Ws 1500) (see http://www.des.state.nh.us/dwspp/gwdisch.htm)
    - Standard Dredge and Fill Permit (RSA 482-A) (see http://www.des.state.nh.us/wetlands/)
    - Drinking Water Supply Approval (RSA 485:8) (see http://www.des.state.nh.us/wseb/)
- Submit the completed application, two copies of the plans (stamped by the land surveyor) with the soils data (stamped by the permitted septic system designer), and a check or money order for $80 per lot or unit made payable to "Treasurer, State of New Hampshire" to: Subsurface Systems Bureau, Water Division, New Hampshire Department of Environmental Services, 6 Hazen Drive, P. O. Box 95, Concord, NH 03302-0095. Telephone: (603) 271-3501; fax: (603) 271-6683; or online: http://www.des.state.nh.us/ssb/

What types of projects require this approval?

- Condominium conversions of apartments, cabins, campgrounds, hotels, and marinas
- Light industrial parks
- Manufactured housing parks
- Recreational campgrounds
- Residential housing lots
- Proposals when more than 10 condominium units are to be established or sold (see RSA 356-B, "Condominium Act", http://gencourt.state.nh.us/rsa/html/indexes/356-B.html) and NH CODE ADMIN. RULES Jus 1400 ("Condominium Rules", http://webster.state.nh.us/nhdoj/Consumer/condorules.pdf)
- Proposals for subdivisions which might, at any time, include more than 15 lots (see RSA 356-A, "Land Sales Full Disclosure Act", http://gencourt.state.nh.us/rsa/html/indexes/356-A.html) and NH CODE ADMIN. RULES Jus 1300 ("Land Sales Full Disclosure Rules", http://webster.state.nh.us/nhdoj/Consumer/Land%20Sale%20Rules.pdf)

Note 2: Some communities require local approval of individual septic systems prior to DES's review pursuant to RSA 485-A:32, I and II ("Water Pollution and Waste Disposal/Prior Approval; Permits", http://gencourt.state.nh.us/rsa/html/L/485-A/485-A-32.htm). A list of these communities is available at http://www.des.state.nh.us/ssb/townapproval.htm.

Note 3: Many municipalities also have local subdivision requirements that must be met in addition to the State requirements. For information on such requirements, please contact your local municipal officials. Further, related guidance is provided in the document entitled ***Requirements for Soils and Wetlands Data in Subdivision and Site Plan Review Regulations*** (see http://webster.state.nh.us/osp/library/docs/RequirementsForSoilsAndWetlandsData.pdf), the document entitled ***Data Requirements for Site Review: Guidance for Planning Boards*** (see http://www.state.nh.us/osp/library/docs/SiteReview.pdf), and in the ***Subdivision and Site Plan Review Handbook*** (see http://webster.state.nh.us/osp/library/docs/SubdivisionAndSitePlanReviewHandbook.pdf). These documents are offered by the New Hampshire Office of State Planning. Telephone: (603) 271-2155; fax: (603) 271-1728; or online: http://www.state.nh.us/osp/index.html

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If there are any questions regarding this page or any other section of the Guidebook, please contact Tim Drew, Administrator, Public Information and Permitting Unit, at tdrew@des.state.nh.us or at (603) 271-3306.

Designer of Subsurface Disposal Systems License

Introduction: In 1979, the New Hampshire Legislature enacted RSA 149-E:3, X (effective January 1, 1980) to require all subsurface wastewater disposal ("septic system") designers to be licensed by the State of New Hampshire (see http://www.des.state.nh.us/factsheets/ssb/ssb-4.htm), except for homeowners who design a septic system for their own single-family residences (see http://www.des.state.nh.us/factsheets/ssb/ssb-9.htm and http://www.des.state.nh.us/ssb/repair1.pdf). RSA 149-E:3, X was re-codified effective January 1, 1990 as RSA 485-A:35 ("Water Pollution and Waste Disposal/Permit Eligibility; Exemption", http://gencourt.state.nh.us/rsa/html/L/485-A/485-A-35.htm). To ensure that disposal systems are properly designed, DES administers examinations twice per year (spring and fall), through which designer candidates can demonstrate the extent of their knowledge and skill in this field based on prior education, familiarity with the legal requirements, and past experience in the field (see application form at http://www.des.state.nh.us/ssb/designer.pdf). The designer's exam consists of three written portions and a field test for soil interpretation. There is a fee of $40 to take the exam, and an annual renewal fee of $40, due by December 31. If a designer pays his or her annual renewal fee on time, it is not necessary to retake the examination (see http://www.des.state.nh.us/ssb/des2.pdf).

Number of active designer licenses in New Hampshire: 900

Fees: $40 per exam; $40 per renewal

Estimated processing time for licensing decision after exam is passed: 5 days

License duration: All permits expire annually on December 31

License transferability: Not transferable

License modification: Not applicable

License renewal: Annually

State statute: RSA 485-A:35 ("Water Pollution and Waste Disposal Act/Permit Eligibility; Exemption", http://gencourt.state.nh.us/rsa/html/L/485-A/485-A-35.htm)

N. H. Code of Administrative Rules: Env-Ws 1000 ("Subdivision and Individual Sewage Disposal System Design Rules", http://www.des.state.nh.us/rules/envws1000.pdf)

Appeals body: Water Council at RSA 21-0:7 ("Department of Environmental Services/Water Council", http://gencourt.state.nh.us/rsa/html/I/21-O/21-O-7.htm; see also http://www.des.state.nh.us/rules/env-wc200.pdf and http://www.des.state.nh.us/councils/#1)

Additional contacts: N. H. DES, Subsurface Systems Bureau, (603) 271-3501
N. H. DES, Public Information Center, (603) 271-2975 or (603) 271-8876
(See also http://www.des.state.nh.us:1522/des/ONESTOP.SSWT_MENU.show)

Designer of Subsurface Disposal Systems License – *Work Sheet*

Key Qualifier Question: *Do you wish to design residential or commercial on-site subsurface waste disposal ("septic systems") in New Hampshire?*

What must you do to apply?

- Obtain and review a copy of the DES Fact Sheet No. WD-SSB-4 entitled *Permitting of Installers and Designers of Subsurface Sewage Disposal Systems* from the DES Subsurface Systems Bureau, DES Public Information Center, or online at http://www.des.state.nh.us/factsheets/ssb/ssb-4.htm.
- Obtain, fill out and submit an *Application for Permit - Designer of Subsurface Disposal System*. This application also can be obtained from the DES Subsurface Systems Bureau, DES Public Information Center, or online at http://www.des.state.nh.us/ssb/designer.pdf.
- Include a recent photograph of yourself with the application.
- Have the application notarized prior to submittal.
- Obtain a copy of the most recent examination schedule for designers from the DES Subsurface Systems Bureau or DES Public Information Center.
- You may wish to purchase the following documents from the DES Public Information Center to help you prepare for this examination:
    - ***Subdivision and Individual Sewage Disposal System Design Rules*** ($10)
    - ***Soil Manual for Site Evaluation in New Hampshire*** ($15)
    - Make checks or money orders payable to "Treasurer, State of New Hampshire".
- Study these materials in preparation for the written examination and the "practical" soils examination (to be held in the field).
- Submit the application, a check or money order for $40 made payable to the "Treasurer, State of New Hampshire", and all supporting materials to: Subsurface Systems Bureau, Water Division, New Hampshire Department of Environmental Services, 6 Hazen Drive, P. O. Box 95, Concord, NH 03302-0095. Telephone: (603) 271-3501; fax: (603) 271-6683; or online: http://www.des.state.nh.us/ssb/
- If the designer's examination needs to be retaken, complete and submit the *Application to Retake Designer's Exam* (http://www.des.state.nh.us/ssb/des2.pdf) with a check or money order for $40 to the DES Subsurface Systems Bureau for scheduling.

What types of projects require the services of a licensed septic system designer?

Design of new septic systems, replacement systems for all commercial buildings, and any expansion or conversion of an existing building which would result in an increase in sewage loading (see NH CODE ADMIN. RULE Env-Ws 1003.10) will require the services of a DES-licensed designer. Examples include:

- Additional seating capacity in bars, lounges, churches, hairdressers, restaurants, and town halls requires a new design and installation
- Additional bedrooms in apartments, houses, rooming houses, hotels, and nursing homes are considered to be an increase in sewage loading and require a new design and installation
- The conversion of a seasonal residence to year-round occupancy is considered to be an increase in sewage loading and requires a new design and installation
- For a more complete listing of the various categories of changes and how to calculate the sewage loading for each one, refer to Table 1008-1, found on page 58 (of 111) entitled "Unit Design Flow Figures", in Env-Ws 1000 ("Subdivision and Individual Sewage Disposal System Design Rules", http://www.des.state.nh.us/rules/envws1000.pdf).

If there are any questions regarding this page or any other section of the Guidebook, please contact Tim Drew, Administrator, Public Information and Permitting Unit, at tdrew@des.state.nh.us or at (603) 271-3306.

Installer of Subsurface Disposal Systems License

Introduction: In 1979, the New Hampshire Legislature enacted RSA 149-E:3-a (effective January 1, 1980) to require all subsurface wastewater disposal ("septic system") installers to be licensed by the State of New Hampshire, except for homeowners who install a septic system for their own single-family primary residences (see http://www.des.state.nh.us/factsheets/ssb/ssb-9.htm and http://www.des.state.nh.us/ssb/repair1.pdf). RSA 149-E:3-a was re-codified effective January 1, 1990 as RSA 485-A:36 ("Water Pollution and Waste Disposal/System Installer Permit", http://gencourt.state.nh.us/rsa/html/L/485-A/485-A-36.htm and http://www.des.state.nh.us/factsheets/ssb/ssb-4.htm). To ensure that disposal systems are properly installed, DES administers examinations twice per year (spring and fall) through which installer candidates can demonstrate the extent of their knowledge and skill in this field based on prior education, familiarity with the legal requirements, and past experience in the field (see application form at http://www.des.state.nh.us/ssb/installer.pdf). The installers must pass a two-part written examination only. There is a fee of $40 to take the examination, and an annual renewal fee of $40, due by December 31. If an installer pays his/her annual renewal fee on time, it is not necessary to retake the examination (see http://www.des.state.nh.us/ssb/ins2.pdf).

Number of active installer licenses in New Hampshire: 2,060

Fees: $40 per exam; $40 per renewal

Estimated processing time for licensing decision after exam is passed: 5 days

License duration: All licenses expire annually on December 31

License transferability: Not transferable.

License modification: Not applicable

License renewal: Annually

State statute: RSA 485-A:36 ("Water Pollution and Waste Disposal/Sewage Disposal Systems/System Installer Permit", http://gencourt.state.nh.us/rsa/html/L/485-A/485-A-36.htm)

N. H. Code of Administrative Rules: Env-Ws 1000 ("Subdivision and Individual Sewage Disposal System Design Rules", http://www.des.state.nh.us/rules/envws1000.pdf)

Appeals body: Water Council at RSA 21-0:7 ("Department of Environmental Services/Water Council", http://gencourt.state.nh.us/rsa/html/I/21-O/21-O-7.htm; see also http://www.des.state.nh.us/rules/env-wc200.pdf and http://www.des.state.nh.us/councils/#1)

Additional contacts: N. H. DES, Subsurface Systems Bureau, (603) 271-3501
N. H. DES, Public Information Center, (603) 271-2975 or (603) 271-8876
(See also http://www.des.state.nh.us:1522/des/ONESTOP.SSWT_MENU.show)

Installer of Subsurface Disposal Systems License – *Work Sheet*

Key Qualifier Question: *Do you wish to install residential or commercial on-site subsurface waste disposal ("septic systems") in New Hampshire?*

What must you do to apply?

- Obtain and review a copy of the DES Fact Sheet No. WD-SSB-4 entitled *Permitting of Installers and Designers of Subsurface Sewage Disposal Systems* from the DES Subsurface Systems Bureau, DES Public Information Center, or online at http://www.des.state.nh.us/factsheets/ssb/ssb-4.htm.
- Obtain, fill out and submit an *Application for Permit - Installer of Subsurface Disposal System*. This application also can be obtained from the DES Subsurface Systems Bureau, DES Public Information Center, or online at http://www.des.state.nh.us/ssb/installer.pdf.
- Include a recent photograph of your self with the application.
- Have the application notarized prior to submittal.
- Obtain a copy of the most recent Designer/Installer Examination Schedule from the DES Subsurface Systems Bureau or the DES Public Information Center.
- You may wish to purchase the pertinent rules entitled ***Subdivision and Individual Sewage Disposal System Design Rules*** ($10) from the DES Public Information Center. Make checks or money orders payable to "Treasurer, State of New Hampshire".
- Study the rules in detail in preparation for the two-part written examination.
- Submit the application and all supporting documents before the deadline date, as indicated on the schedule.
- Submit the application, a check or money order for $40 made payable to the "Treasurer, State of New Hampshire", and all supporting materials to: Subsurface Systems Bureau, Water Division, New Hampshire Department of Environmental Services, 6 Hazen Drive, P. O. Box 95, Concord, NH 03302-0095. Telephone: (603) 271-3501; fax: (603) 271-6683; or online: http://www.des.state.nh.us/ssb/
- If the installer's examination needs to be retaken, complete and submit the *Application to Retake Installer's Exam* (http://www.des.state.nh.us/ssb/ins2.pdf) with a check or money order for $40 to the DES Subsurface Systems Bureau for scheduling.

What types of projects require the services of a licensed septic system installer?

Installation of new septic systems, replacement systems for all commercial buildings, and any expansion or conversion of an existing building which would result in an increase in sewage loading (see NH CODE ADMIN. RULE Env-Ws 1003.10) will require the services of a DES-licensed installer. Examples include:

- Additional seating capacity in bars, lounges, churches, hairdressers, restaurants, and town halls requires a new design and installation
- Additional bedrooms in apartments, houses, rooming houses, hotels, and nursing homes are considered to be an increase in sewage loading and require a new design and installation
- The conversion of a seasonal residence to year-round occupancy is considered to be an increase in sewage loading and requires a new design and installation
- For a more complete listing of the various categories of changes and how to calculate the sewage loading for each one, refer to Table 1008-1, found on page 58 (of 111) entitled "Unit Design Flow Figures", in Env-Ws 1000 ("Subdivision and Individual Sewage Disposal System Design Rules", http://www.des.state.nh.us/rules/envws1000.pdf).

If there are any questions regarding this page or any other section of the Guidebook, please contact Tim Drew, Administrator, Public Information and Permitting Unit, at tdrew@des.state.nh.us or at (603) 271-3306.

Chapter 8:

Wastewater

2002 Edition

Chapter 8: Wastewater

Introduction

As the Industrial Revolution unfolded in New Hampshire around the turn of the 20th century, industries developed that generated varying volumes and strengths of industrial wastewater. As those industries prospered, the population density increased in the more urbanized areas of the state and, as a direct consequence, so did the volume of wastewater being generated. During those early days, sewerage infrastructure to collect and treat the increasing waste volumes was either non-existent or minimal at best. Communities and business owners oftentimes turned to the cheapest and most available method of disposal - direct discharge to a nearby river or stream. The commonly accepted notions at that time were that the "solution to pollution was dilution" and "out of sight, out of mind". Flowing surface waters were essentially used as inexpensive sewers, with little regard to long-term effects. As the economy grew and the density of both businesses and population increased, the receiving waters began to show signs of severe damage, witnessed by foul odors, lack of dissolved oxygen, fish kills, human disease outbreaks, and a general collapse of the aquatic ecosystem, rendering it unavailable for any other use. It was not until the 1940s and 1950s that public and private officials alike sounded the alarm and decided that old practices must change for the benefit of the current and future public health and natural environment of New Hampshire.

Primary/Secondary/Tertiary Wastewater Treatment

In 1948, the federal government enacted the first "Federal Water Pollution Control Act" (now known as the "Clean Water Act", (see http://www4.law.cornell.edu/uscode/33/ch26.html). The New Hampshire Legislature enacted its first water pollution control legislation in 1949 and created the Water Pollution Commission. While modest gains were made during the ensuing decades in controlling the discharge of untreated wastes into rivers and streams, it was not until the U. S. Environmental Protection Agency ("EPA") was created in 1970 and the Federal Water Pollution Control Act Amendments of 1972 were enacted that significant strides were realized in the design, construction, and operation of centralized wastewater treatment facilities to collect and treat these wastes before discharge. Over the next three decades, the federal Clean Water Act was amended and improved to address such issues as better treatment facility design and technology, construction and operation, standards and procedures for procurement of professional services, enhanced pretreatment requirements prior to discharge, sludge and septage management (including beneficial reuse of these materials), and certification requirements for wastewater treatment facility operators. Early facilities, those designed and constructed in the 1940s and 1950s, relied mostly on "primary" treatment (*i.e.*, solids removal by sedimentation or floatation) before releasing the resulting effluent to the environment. As technology advanced and discharge limits tightened throughout the 1960s and 1970s, the Federal Water Pollution Control Act Amendments of 1972 required that wastewater treatment facilities install "secondary" treatment (including the removal of suspended solids and reduction of biological oxygen demand) before release to receiving waters. New systems such as "activated sludge" digesters, oxidation ditches, and rotating biological contactors ("RBCs") began to be widely selected as viable treatment systems for community and industrial wastewaters. Secondary treatment systems now represent the most widely used method of treating domestic and industrial wastewater in New Hampshire. In selected cases, due largely to restrictive receiving water limits, some municipal and private facilities have installed "tertiary" treatment systems (*i.e.*, nutrient removal) to protect the water quality and sensitive indigenous populations in a receiving stream or river. Techniques such as reverse osmosis and spray irrigation of secondarily-treated wastewater onto upland forest or field sites for "polishing" (*i.e.*, phosphorous and nitrate removal) also have been successfully used in New Hampshire.

Surface Water Classification

The former Water Supply and Pollution Control Commission (one of the two predecessor agencies to the current DES Water Division) has been dealing with wastewater treatment since the 1950s. New

Hampshire's surface waters were classified by the state legislature as either "Class A" (highest quality, drinkable after disinfection) or "Class B" (second highest quality, fishable/swimmable, and drinkable after treatment), pursuant to RSA 485-A:8 ("Water Pollution and Waste Disposal/Standards for Classification of Surface Waters of the State", http://gencourt.state.nh.us/rsa/html/L/485-A/485-A-8.htm), in accordance with their intended uses and water quality goals. During the 1960s and 1970s, the water quality in some rivers and streams was so poor that they were classified by the former RSA 149:3 ("Water Pollution and Disposal of Wastes") as "Class C" (third highest quality, non-contact recreational use, industrial use after treatment) and "Class D" (lowest quality, industrial use, power, and navigation only) classifications which no longer exist thanks to the proliferation of modern wastewater treatment systems in New Hampshire. All surface waters in New Hampshire are now designated as either "Class A" or "Class B" waters. According to the ***2000 305(b) Water Quality Report*** (see http://www.des.state.nh.us/wmb/2000-305b.pdf), prepared by DES for submittal to EPA, 2,677.4 miles (or 24.6 percent) of the 10,881 miles of rivers and streams in New Hampshire have been assessed to determine whether they met the classification of "fishable/swimmable" (Class B). Of that total, 2,233 miles (or 83.4 percent) were found to fully support all uses. The remaining 444 miles either partially support the uses or need further attention to attain those standards. Once again, much of this measured improvement is a result of the success of wastewater treatment facilities across the state.

Financial Assistance Programs

Financial assistance to municipalities from federal and state programs has played a significant role in achieving those successes. What began as an EPA Construction Grants Program in early 1970s has now evolved in 1989 into the DES *Clean Water State Revolving Loan Fund* (see http://www.des.state.nh.us/factsheets/wwt/web-6.htm). Since the 1970s, the EPA and DES have provided more than a billion dollars in grants and loans to 92 eligible municipal wastewater treatment systems. This included money to build and upgrade treatment facilities, design and construct new pump stations (and upgrade old ones), install new interceptors to expand service areas, and assist with other eligible needs. For a more complete explanation and accounting of DES's efforts to assist communities with grants and loans, please review the brochure entitled ***Grants and Loans from the New Hampshire Department of Environmental Services***, or access the information online at http://www.des.state.nh.us/grants_loans.htm.

Petition for Tax Exemption for Water Pollution Control Facilities

RSA 72:12-a ("Persons and Property Liable to Taxation/Property Taxes/Water and Air Pollution Control Facilities", http://gencourt.state.nh.us/rsa/html/V/72/72-12-a.htm) provides that *[a]ny person, firm or corporation which builds, constructs, installs, or places in use in this state any treatment facility, device, appliance, or installation wholly or partly for the purpose of reducing, controlling, or eliminating any source of air or water pollution shall be entitled to have the value of said facility and any real estate necessary therefore, or a percentage thereof determined in accordance with this section* [*i.e.*, RSA 72:12-a]*, exempted from the taxes levied under this chapter* [*i.e.*, RSA 72] *for the period of years in which the facility, device, appliance, or installation is used in accordance with the provisions of this section*. Application for a tax exemption for water pollution control facilities must be made to the DES Commissioner in letter form and should include the following:

- An adequate description of the water pollution control facilities, including plans, property assessment record cards, photographs, a list of equipment subject to the request, and property descriptions
- A description of the function or functions of the water pollution control facilities
- The applicant's total investment in the water pollution control facilities and the portion allocable to each function

It is DES's responsibility to determine whether the purpose of the facility for which an exemption is sought is solely or only partially for pollution control. If the purpose of the facility is only partially for pollution control, DES must determine the percentage used to control pollution, based on the applicant's total investment

therein. Applications for this exemption for water pollution control facilities should be directed to: Commissioner, New Hampshire Department of Environmental Services, P. O. Box 95, 6 Hazen Drive, Concord, NH 03302-0095. Telephone: (603) 271-3449 or fax: (603) 271-2867

Wastewater Engineering Bureau

The DES Water Division's Wastewater Engineering Bureau represents the primary entity within DES that deals with the myriad of issues related to effective wastewater management in New Hampshire. Its mission is to ensure that the design, construction, and operation of wastewater treatment facilities are carried out in accordance with all applicable federal laws, state statutes, local by-laws and ordinances, and to assure the appropriate removal, transportation, and disposal (or beneficial use) of associated residuals. Specifically, its role is to:

- Ensure that wastewater treatment facilities are designed and constructed in accordance with state standards.
- Ensure that wastewater treatment facilities are operated in accordance with the facilities' discharge permits (and effluent limits) by providing compliance inspections, technical assistance, and operator training and certification.
- Provide financial assistance in the form of grants and low-interest loans for eligible projects.
- Issue permits to ensure that the wastewater treatment facilities' discharges do not violate the state's surface water quality rules, which include water quality standards.
- Ensure that industrial discharges to municipal wastewater treatment facilities do not adversely impact their operation or cause the treatment facilities to violate state surface water quality rules or standards.
- Ensure that all septage and sludge management activities are permitted and performed in accordance with state standards.

NPDES Permits/Surface Water Discharge Permits

EPA administers the National Pollutant Discharge Elimination System ("NPDES") Permitting Program for New Hampshire and issues the federal NPDES Permit under Section 402 of the federal Clean Water Act (see http://www4.law.cornell.edu/uscode/33/ch26.html. NPDES permits set limits on what amounts of what kind of pollutants can be contained in direct discharges of wastewater to a surface waters of the state. The Permits and Compliance Section of the DES Wastewater Engineering Bureau reviews the draft federal permit to ensure that the proposed discharge will not violate any state statute or rule, including the State's water quality standards. If the draft permit contains conditions that satisfy these requirements, DES will certify the EPA's NPDES Permit and will issue a State Surface Water Discharge Permit under RSA 485-A:13 ("Water Pollution and Waste Disposal/Water Discharge Permits", http://gencourt.state.nh.us/rsa/html/L/485-A/485-A-13.htm), which usually is identical to the federal permit. NPDES permits (and the corresponding State permit) are primarily issued to municipal and industrial wastewater treatment plants. Under Clean Water Act authority, EPA also issues general permits, such as the Construction Dewatering General Permit for temporary discharges of excavation water or dewatering well water at construction sites; the Water Treatment Plant General Permit for treated discharges of pre-sedimentation underflow, underflow from coagulation/settling using aluminum sulfate or polymers, or filter backwash (see http://www.des.state.nh.us/factsheets/ws/ws-22-14.htm); the Non-Contact Cooling Water General Permit for cooling water piped continuously from a water source through equipment to be cooled to the discharge point, with no chemicals added except for non-toxic pH neutralization chemicals; the Construction Federal Storm Water Permit to control the collection and treatment of construction activities where more than five acres (or, after March 10, 2003, more than one acre) have been altered; and the Multi-Sector Storm Water General Permit for storm water discharges associated with industrial activity. DES also inspects facilities that have received NPDES/State permits and reviews monthly discharge monitoring reports to ensure that these permitted facilities are in compliance with all applicable federal and state permit conditions.

Wastewater Pretreatment Program

DES implements, through its Wastewater Engineering Bureau, a Pretreatment Program to ensure that industrial facilities which discharge to a municipal collection system pre-treat their wastewaters as necessary prior to discharge. This measure ensures that the industrial wastes will not pose a threat to human health or the environment, and also will not pose toxicity risks, in either strength or volume, to the beneficial organisms that actually break down the wastes during the treatment process at the wastewater treatment facility. Industrial facilities must obtain an Indirect Discharge Permit prior to discharging into a municipal collection system. This is accomplished by submitting an Industrial Pretreatment Discharge Permit Request, via the municipality in which the industrial facility is located, to the DES Pretreatment Coordinator (see http://www.des.state.nh.us/factsheets/wwt/web-7.htm, or E-mail at gcarlson@des.state.nh.us). A Discharge Permit Request is required prior to any wastewater being released from a new industry, or prior to a change in wastewater characteristics (including an increase in flow) at an existing industry. The Discharge Permit Request and appropriate fee must be submitted to and approved by the municipality and the plans and specifications that accompany the Discharge Permit Request must be signed by a civil, sanitary, or chemical engineer registered to practice in the State of New Hampshire. Plans and specifications are required for such pretreatment systems as those prepared in-house by industry, package systems (single or multiple function), integration of "off the shelf" units, and custom pretreatment systems designed by a consultant. The Discharge Permit Request must be signed and authorized by the municipal official who is responsible for the operation and physical condition of the municipal wastewater treatment plant (including its sewers and pumping stations). This step provides assurances that the information submitted by the industry has been evaluated locally and found to be compatible with the wastewater treatment system and worker safety and that the discharge will not interfere with the facility's continued operation or pass through to cause violations of water quality standards in the receiving water. The municipality's sewer use ordinance is also evaluated to ensure that the municipality has sufficient authority to permit the discharge and enforce violations against industrial dischargers. Subsequent inspections are performed both at the industrial facility to ensure compliance with the permit and at the municipal wastewater treatment facility to check for proper tracking of the discharge and to ensure that adequate records are being maintained.

Combined Sewer Overflows

Combined sewer overflows ("CSOs") are pipes that collect both storm water and municipal wastewater (sewage). During dry weather, combined sewers convey wastewater to the municipal wastewater treatment facility where it is treated before being discharged to a receiving water. During rainstorms, however, large volumes of storm water may enter the combined sewer and rapidly fill the pipes. If the capacity of the combined sewer or wastewater treatment facility is exceeded, the combined sewer will overflow directly to surface waters and threaten public health and the environment. To address these issues, EPA issued a ***CSO Control Policy*** in 1994. This strategy consists of a two-step process. The first step is to determine the volume and strength of the combined sewer overflow discharge and its impact on the water quality of the receiving streams. If it is determined that the combined sewer overflows violate applicable state requirements, then the community is required to determine the most cost-effective solution to abate this pollution source. Berlin, Portsmouth, Lebanon, Manchester, and Nashua, and Exeter are currently in the process of addressing their CSOs. Solutions to the problem may include separating the flows so that sewage goes to the wastewater treatment facility and storm water goes to receiving streams, installing swirl concentrators with disinfection, or some other cost-effective method.

Design Review

The Design Review Section of the DES Wastewater Engineering Bureau is responsible for reviewing plans and specifications for all public and private wastewater collection and domestic sewage treatment

systems (see http://www.des.state.nh.us/wwe/review2.htm). This section also reviews and issues permits for major new users of municipal treatment plants, assists small communities to assess wastewater treatment needs, and prepares environmental assessments for projects that are funded by the Clean Water Act's State Revolving Loan Fund. Additional responsibilities include reviewing of wastewater planning studies, municipal sewer use ordinances, user charge systems (see http://www.des.state.nh.us/wwe/survey.htm), and inter-municipal agreements. The Design Review Section has also prepared a "Standard Front End" package (see http://www.des.state.nh.us/wwe/revforms.htm) for use in preparing the bidding documents for the Clean Water State Revolving Loan Fund and State Aid Grant projects (see http://www.des.state.nh.us/wwe/grants.htm).

Consulting Engineer Pre-Qualification

Any consulting engineering firm that intends to compete for engineering contracts for municipal water supply or wastewater projects that will receive federal or state funding assistance must be pre-qualified by DES (see http://www.des.state.nh.us/wwe/engineer.htm). The intent of this pre-qualification program is to ensure that engineering firms that vie for such municipal water or wastewater projects have the experience and capability to satisfactorily complete those contracts (see http://www.des.state.nh.us/wwe/st5700.htm). Pre-qualification requirements apply to all consulting engineering firms that wish to become pre-qualified and listed on the roster of pre-qualified consulting engineering firms (see http://www.des.state.nh.us/wwe/roster.htm). This list is maintained by DES for use by all municipalities who wish to solicit proposals for engineering services for water or wastewater projects that will use state or federal financial assistance.

Wastewater Treatment Facility Operations

The Wastewater Operations Section of the DES Wastewater Engineering Bureau offers both technical assistance and operator training to support state-of-the-art wastewater treatment systems in New Hampshire. Wastewater treatment plant operators provide the hands-on work needed to manage microbiological processes and operate mechanical equipment at such facilities. They maintain pumps, pipes, valves, and processing equipment to move wastewater through collection systems and through various treatment processes. In addition to reading and interpreting meters and gauges and making operational adjustments as needed, they operate chemical-feeding devices, perform laboratory analyses, and maintain records of the operations. They must be familiar with electricity, electronics, mechanics, chemistry, microbiology, hydraulics, personal safety, and a host of other disciplines. Technical assistance is provided by DES in the following ways:

- Regular visits to the facilities are conducted to inspect and offer "one-on-one" training in all areas of plant operations and maintenance.
- Specific process control training and assistance is provided to enable a facility to return to, or maintain compliance with, the conditions of an NPDES/State Discharge Permit.
- Information-sharing is initiated among operators through the use of roundtable discussions, a wastewater newsletter, an annual trade fair, and through close involvement with the New Hampshire Water Pollution Control Association.
- Operator certification and training is provided in state-of-the-art techniques and practices.

Wastewater Treatment Operator Training (See http://www.des.state.nh.us/wwe/opcert.htm)

RSA 485-A:5-a ("Water Pollution and Waste Disposal/Operator Certification Required", http://gencourt.state.nh.us/rsa/html/L/485-A/485-A-5-a.htm) requires wastewater treatment facilities to be operated only by operators who have been certified by DES pursuant to RSA 485-A:7-a through 7-d (see http://gencourt.state.nh.us/rsa/html/L/485-A/485-A-7-a.htm) and NH CODE ADMIN. RULES Env-Ws 901 ("Certification of Wastewater Treatment Plant Operators", http://www.des.state.nh.us/rules/env900.pdf). There are different levels of operator certification which have different education and experience requirements. Which level is required depends on factors such as the type and size of the facility and whether the operator

will be "in responsible charge" of the facility. The operator in responsible charge ("chief operator") oversees the daily operation of the wastewater treatment facility and is held accountable for all plant operational duties, record keeping, and reporting. Each facility also must also designate and have a certified backup operator in responsible charge who will take over in the absence of the chief operator. To become certified, individuals must apply and either take an examination or request a reciprocal license based on being licensed in another state. Applications for reciprocity are reviewed by the five-member Certification Committee, which will evaluate the operator's current out-of-state license that state's certification requirements.

Sludge/Biosolids/Sludge Quality Certification

The term "sludge" is used to describe the solid, semisolid, and liquid mixture of material residues produced as a result of water and wastewater treatment processes. As defined in RSA 485-A:2, XI-a ("Water Pollution and Waste Disposal/Definitions", http://gencourt.state.nh.us/rsa/html/L/485-A/485-A-2.htm), it includes industrial sludge and sludge mixtures, but does not include domestic septage or sludge disposed at solid waste management facilities. The term "biosolids" is defined in RSA 485-A:2, XXII as *any sludge derived from a municipal wastewater treatment facility that meets the standards for beneficial reuse specified by the department*. DES has developed a Sludge Quality Certification program, which requires sludge to be treated to reduce pathogens and other harmful constituents to levels at or below the established standards. If the sludge generator successfully obtains this certification, it will clear the way for the resulting biosolids to be land-applied as a beneficial reuse alternative to disposal at permitted solid waste landfill or combustion facilities (producing an ash residue that must be land-disposed), which consumes expensive (and limited) final disposal capacity. DES regulates the removal, transportation, and disposal (or beneficial reuse of) sludge and biosolids under RSA 485-A:4, XVI-b ("Water Pollution and Waste Disposal/Duties of Department", http://gencourt.state.nh.us/rsa/html/L/485-A/485-A-4.htm) and NH CODE ADMIN. RULES Env-Ws 800 ("Sludge Management Rules", http://www.des.state.nh.us/rules/envws800.pdf). Some aspects of sludge management are also regulated by the EPA pursuant to 33 U. S. C. 1251 *et seq*. ("Clean Water Act", http://www4.law.cornell.edu/uscode/33/ch26.html) and 40 CFR Part 122, Part 257, and Part 503 ("Environmental Protection Agency Regulations", http://www.epa.gov/docs/epacfr40/chapt-I.info/subch-O.htm).

Sludge/Biosolids Transport/Disposal

With the exception of Class A biosolids (which are not regulated as to end use), DES regulates the entire scope of (*i.e.*, "cradle-to-grave") processing, transportation, disposal, and beneficial use of sludge and biosolids to ensure that these materials are used or disposed in an environmentally sound manner. Whenever possible, recycling through the regulated beneficial use of biosolids for land application, or composting for nutrient value and soil conditioning, is promoted by DES. If land application of Class B biosolids is proposed, DES will conduct a site visit prior to permit issuance to assess site suitability, including setbacks to surface waters, residences, drinking water wells, and other sensitive receptors. If a permit is issued, DES inspectors will review biosolid management activities during random site visits and in response to complaints. Vehicles that carry sludge must be registered with DES and are subject to routine inspection for cleanliness, water-tightness, and roadworthiness. There are four different types of permits/certification that are required to manage sludge properly in New Hampshire: Sludge Quality Certification, Sludge Hauler Permit, Sludge Facility Permit, and/or the Sludge Site Permit.

Septage

The term "septage" is used to describe the liquids and solids that are pumped from a septic tank or cesspool. The term also applies to the waste pumped out of holding tanks, boat toilets and other portable toilets. DES regulates the removal, transportation, and disposal (including beneficial use) of septage in New Hampshire pursuant to RSA 485-A:4, XVI-a ("Water Pollution and Waste Disposal Act/Duties of Department", http://gencourt.state.nh.us/rsa/html/L/485-A/485-A-4.htm) and NH CODE ADMIN. RULES Env-Ws 1600 ("Septage Management Rules", http://www.des.state.nh.us/rules/envws1600.pdf). The EPA also regulates septage under

33 U. S. C. Section 1251 *et seq*. (1977) ("Clean Water Act", http://www4.law.cornell.edu/uscode/33/ch26.html) and 40 CFR Parts 122, 257, and 503 ("Environmental Protection Agency Regulations", http://www.epa.gov/epacfr40/chapt-I.info/chi-toc.htm).

Septage Transport/Disposal

DES regulates the removal, transportation, and disposal of septage to ensure that the material is used or disposed in an environmentally sound manner. Whenever possible, recycling through the beneficial use of septage by land application is promoted by DES. Disposal of septage at a publicly-owned wastewater treatment facility adds significantly to the volume of resulting sludge generated, a residual that also must also be dealt with by being land-applied, burned at an incinerator (with subsequent ash residue disposal), or disposed at a permitted solid waste landfill. Septage lagoons serve only as a temporary solution, since the accumulated solids must eventually be excavated and properly disposed or beneficially reused. Land application practices adhere to accepted agronomic guidelines and make use of nutrients that may have otherwise been discarded. There are four different types of permits or registrations that are required for the proper management of septage in New Hampshire: Septage Hauler Permit, Septage Holding Tank Registration, Septage Storage Facility Permit, and a Septage Site Permit.

Summary

The DES Wastewater Engineering Bureau is charged with the primary responsibility for regulating the design, construction, operation, and maintenance of wastewater treatment systems and the removal, transportation, and disposal (or beneficial use) of associated residuals across New Hampshire (see http://www.des.state.nh.us/wwe/). Appeals of permit decisions or orders issued for violations of program requirements should be directed to the Water Council (see www.des.state.nh.us/councils/#1).

Chapter Contents

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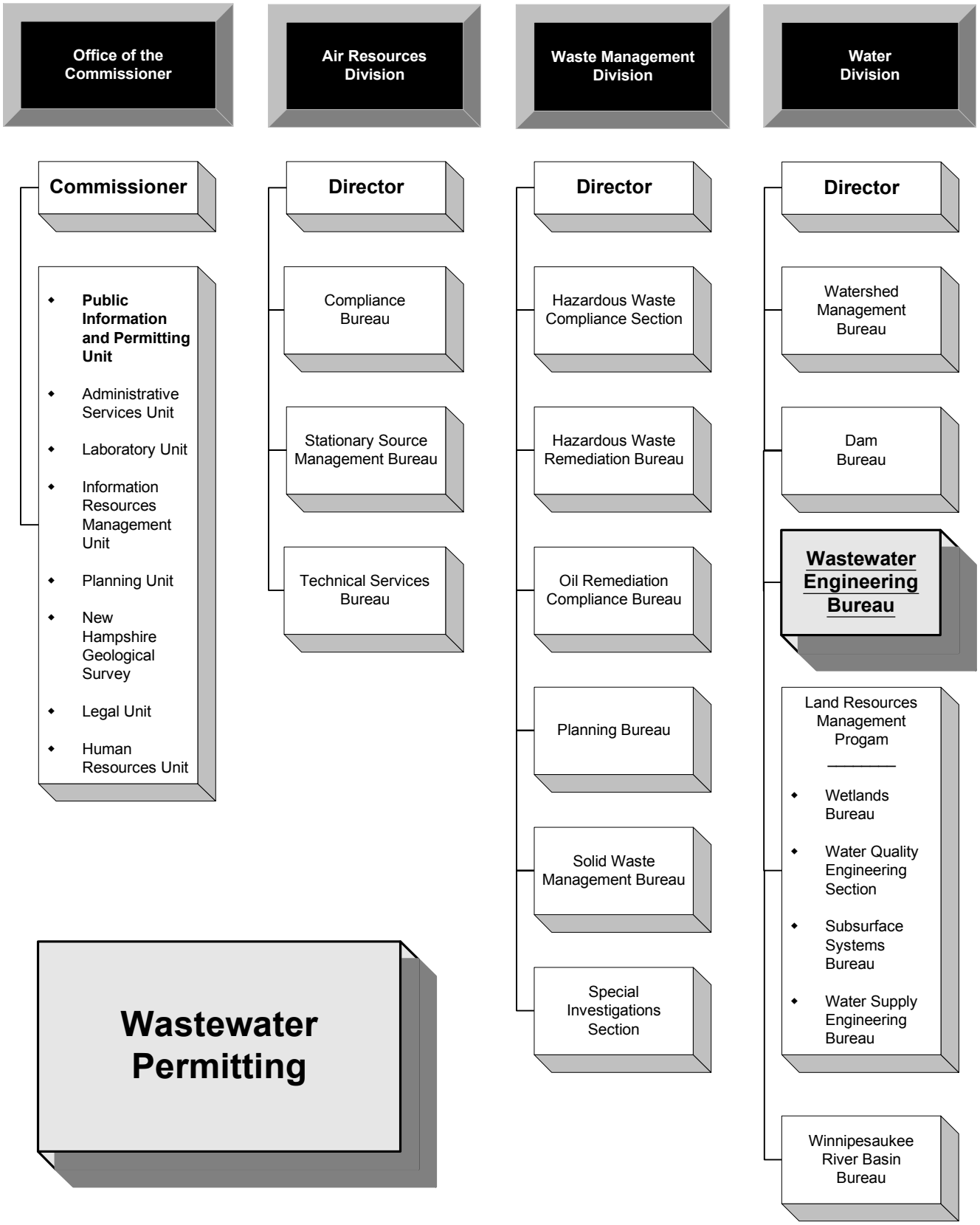
- ✓ **Septage Facility Permit**

Organizational Chart

New Hampshire Department of Environmental Services



Sewer Connection Permit

Introduction: Any proposed connection and discharge of domestic wastewater to a municipal sewer in excess of 5,000 gallons per day is subject to prior review and approval by DES. This measure protects public health and the environment by helping to ensure that municipal sewers and sewage treatment plants do not exceed their design hydraulic and treatment capacities. This review process also lessens the likelihood of future treatment facility disruptions (*e.g.*, sludge bulking, excessive flows, *etc.*), National Pollutant Discharge Elimination System ("NPDES") Permit violations, and receiving water degradation. An applicant must obtain a copy of the DES *Application for Sewer Connection Permit* (see http://www.des.state.nh.us/wwe/dprapp.pdf) to request DES authorization to connect and discharge the proposed domestic wastewater source to a municipal sewer system. Note that the application must be signed by an authorized municipal official (typically the City Engineer, Board of Selectmen, or Public Works Director) to verify local approval. Applications need not be submitted for domestic connections smaller than 5,000 gallons per day provided that no new sewerage construction is proposed. A separate Industrial Wastewater Discharge Permit Request is required for industrial waste contributions, regardless of quantity or quality (see http://www.des.state.nh.us/wwe/dprapp.pdf).

Average number of permits issued annually: 100

Fees: $50 application fee. Fee payment is not required for connection requests by state agencies, county or municipal governments, sewer districts, or school districts.

Estimated processing time after application is deemed "complete": 1-3 weeks

Permit duration: The approved Sewer Connection Permit must be exercised within two years from the date of issuance.

Permit transferability: The approved Sewer Connection Permit is transferable upon written request, subject to local concurrence.

Permit modification: Minor revisions to the Sewer Connection Permit may be considered upon written request to DES, subject to local concurrence.

Permit renewal: The Sewer Connection Permit is eligible for a one-time extension for one additional year upon written request with explanation to DES, subject to local concurrence.

State statute: RSA 485-A:4, VI, IX, and IX-a through IX-c ("Water Pollution and Waste Disposal/Duties of Department", http://gencourt.state.nh.us/rsa/html/indexes/485-A.html)

N. H. Code of Administrative Rules: Env-Ws 700 ("Standards of Design and Construction for Sewerage and Wastewater Treatment Facilities", http://www.des.state.nh.us/rules/env700.pdf)

Appeals body: Water Council at RSA 21-O:7 ("Department of Environmental Services", http://gencourt.state.nh.us/rsa/html/I/21-O/21-O-7.htm; see also http://www.des.state.nh.us/rules/env-wc200.pdf and http://www.des.state.nh.us/councils/#1)

Additional information: N. H. DES, Wastewater Engineering Bureau, (603) 271-3908
N. H. DES, Public Information Center, (603) 271-2975 and (603) 271-8876

Sewer Connection Permit – *Work Sheet*

Key Qualifier Question: *Will this project result in the connection of a discharge of 5,000 gallons per day (or more) of domestic wastewater to the municipal collection and treatment system? Will the project include new sewerage construction (for any volume of discharge)?*

Note: Municipal wastewater collection and treatment facilities are designed, constructed, and operated to accommodate a specified maximum wastewater flow rate. Accordingly, such facilities have limited capacity to accept new wastewater contributions without disrupting system function and/or efficiency. To protect public health and the environment, major new wastewater contributions must first be reviewed and approved by DES. Any wastewater contribution of 5,000 gallons per day or more (average daily flow) is considered to be a major contribution, and therefore subject to DES review and approval.

What must you do to apply?

- Obtain a copy of the *Application for Sewer Connection Permit* from the DES Wastewater Engineering Bureau, DES Public Information Center, or online at http://www.des.state.nh.us/wwe/dprapp.pdf
- Provide all pertinent project information or design calculations that will assist DES in its review.
- Have an authorized municipal official sign the Sewer Connection Permit Application.
- Submit a check or money order for $50 made payable to "Treasurer, State of New Hampshire" along with the application form, fee, and all supporting materials to: Wastewater Engineering Bureau, Water Division, New Hampshire Department of Environmental Services, 6 Hazen Drive, P. O. Box 95, Concord, NH 03302-0095. Telephone: (603) 271-3908; fax: (603) 271-4128; or online: at http://www.des.state.nh.us/wwe/review2.htm

What types of projects require this permit?

- A proposed restaurant or other commercial establishment that is expected to contribute domestic wastewater to the municipal collection system in an amount of 5,000 gallons/day or more
- An existing restaurant or other commercial establishment that proposes to expand its operation, increasing its average daily wastewater discharge by 5,000 gallons/day or more
- Any other proposed wastewater connection or discharge in excess of 5,000 gallons per day
- Any proposed wastewater connection or other discharge to a wastewater treatment facility operating in excess of 80 percent of its design flow capacity
- Any proposed connection or other discharge of industrial wastewater, regardless of its quality or quantity
- Any project which will involve construction of new sewerage, regardless of the volume of wastewater to be discharged

If there are questions regarding this page or any other section of the Guidebook, please contact Tim Drew, Administrator, Public Information and Permitting Unit, at tdrew@des.state.nh.us or at (603) 271-3306.

Sewerage Design Review/Letter of Approval

Introduction: Under New Hampshire law, DES is required to review and approve (prior to installation) the engineering design plans and specifications for all proposed sewerage facilities and wastewater treatment facilities including sanitary sewers, pumping stations and treatment plants, whether publicly or privately owned (see http://www.des.state.nh.us/factsheets/wwt/web-3.htm). The intent of this approval is to protect the environment and public health by ensuring the proper design, construction, and operation of wastewater collection and treatment facilities in the state. Designs must be submitted at least 30 days prior to construction; DES then reviews the plans for compliance with minimum State standards of design and construction. Sewerage designs submitted to DES for review are subject to fees that are derived as a function of design wastewater flow.

Average number of letters of approval issued annually: 150

Fees: Review fee is based on the project's estimated wastewater flow rate; currently assessed at $0.10 per gallon/day for average daily flows up to 10,000 gallons/day, with an additional $0.05 per gallon/day for any flow in excess thereof. State agencies, county or municipal governments, school districts or sewer districts are not required to pay the fee, but still must submit design plans for review (see http://www.des.state.nh.us/factsheets/wwt/web-4.htm).

Estimated processing time after application is deemed "complete": Average 2-4 weeks (Longer for large and/or more complex sewerage projects.)

Letter of Approval duration: Construction/installation of the approved sewerage must commence within two years of the date of DES design approval.

Letter of Approval transferability: Design approval is transferable upon written request to DES, subject to local concurrence.

Letter of Approval modification: Modified design sheets must be submitted to DES for review/approval prior to any installation. Municipal notification and concurrence may be required for major modifications. Gross or multiple design modifications may subject the design to re-submittal as a new project.

Letter of Approval renewal: Letter of Approval remains effective for a period of two years, and is eligible upon written request for a one-time extension for one additional year, subject to local concurrence.

State statutes: RSA 485:8, V ("New Hampshire Safe Drinking Water Act/Approval of Construction Plans", http://gencourt.state.nh.us/rsa/html/L/485/485-8.htm) and RSA 485-A:4, VI, IX, and IX-a through IX-c; ("Water Pollution and Waste Disposal/Duties of Department", http://gencourt.state.nh.us/rsa/html/indexes/485-A.html)

N. H. Code of Administrative Rules: Env-Ws 700 ("Standards of Design and Construction for Sewerage and Wastewater Treatment Facilities", http://www.des.state.nh.us/rules/env700.pdf)

Appeals body: Water Council at RSA 21-O:7 ("Department of Environmental Services/Water Council", http://gencourt.state.nh.us/rsa/html/I/21-O/21-O-7.htm; see also http://www.des.state.nh.us/rules/env-wc200.pdf and http://www.des.state.nh.us/councils/#1)

Additional information: N. H. DES, Wastewater Engineering Bureau, (603) 271-3908
N. H. DES, Public Information Center, (603) 271-2975 or (603) 271-8876

Sewerage Design Review/Letter of Approval – *Work Sheet*

Key Qualifier Question: *Does your project include the construction or installation of wastewater collection, conveyance, or treatment facilities such as sanitary sewers, pumping stations, or treatment/disposal facilities?*

What must you do to apply?

- Prepare two sets of sewerage design drawings and technical specifications, stamped by a registered professional engineer licensed to practice in New Hampshire. Follow the detailed guidance provided in NH CODE ADMIN. RULES Env-Ws 700 ("Standards of Design and Construction for Sewerage and Wastewater Treatment Facilities", http://www.des.state.nh.us/rules/env700.pdf).

- Obtain a copy of the *Application for Sewer Connection Permit* from the DES Wastewater Engineering Bureau, DES Public Information Center or online at http://www.des.state.nh.us/wwe/dprapp.pdf, complete it, and have it signed by an authorized municipal official.

- Calculate the appropriate review fee and prepare a check or money order made payable to "Treasurer, State of New Hampshire". The review fee is calculated as a function of project wastewater flow rate, and is currently assessed at a rate of $0.10 per gallon/day for average daily wastewater flows up to 10,000 gallons/day, and an additional $0.05 per gallon/day for any flow in excess thereof.

- Provide and explain any pertinent design calculations and their rationale, such as population/flow estimates, sizing calculations, system curves, catalog cuts, *etc*. and any other information that may assist DES in assessing the plan's compliance with state minimum design standards.

- Submit the application, appropriate fee, design plans/specifications, and other supporting materials to: Wastewater Engineering Bureau, Water Division, New Hampshire Department of Environmental Services, 6 Hazen Drive, P. O. Box 95, Concord, NH 03302-0095. Telephone: (603) 271-3908; fax: (603) 271-4128; or online: http://www.des.state.nh.us/wwe/review2.htm

What types of projects require this letter of approval?

- Proposed sanitary sewers serving a new office park or a new housing/condominium development
- A pumping facility or sewer line serving two or more occupied buildings not under same ownership
- An extension of the municipal sewer to serve additional homes
- The on-site sewers of a shopping mall or office park, which collect service lines

(Note: An individual service line extending from a building to the street sewer is not considered a sanitary sewer subject to review/approval under this section (see http://www.des.state.nh.us/factsheets/wwt/web-1.htm).

If there are questions on this page or any other section of the Guidebook, please contact Tim Drew, Administrator, Public Information and Permitting Unit, at tdrew@des.state.nh.us or at (603) 271-3306.

Industrial Wastewater Discharge Permit Request/Approval

Introduction: Over the past three decades, New Hampshire's wastewater treatment facilities have operated with ever-increasing efficiency due, in part, to the early review of new discharges before they join the overall waste stream. In many cases, this means the removal (by pretreatment) of potentially toxic components from incoming flows that could damage or destroy the microorganisms responsible for the efficient breakdown of waterborne wastes at a wastewater treatment facility. Prior to discharging wastewater into a municipal sewer, all industries and commercial enterprises must ensure that their discharge volume and pollutant characteristics are such that they will not endanger the health and safety of workers, interfere with the operation of the sewer system or wastewater treatment facilities, cause the municipal system to violate its discharge permit requirements, or cause a degradation of the sludge produced so that it cannot be reclaimed or otherwise safely disposed. The entity proposing a new discharge initiates the evaluation process by requesting a review by the municipality (see http://www.des.state.nh.us/wwe/dprapp.pdf), typically the local sewer commission or municipal engineer's office, which then collaborates with DES. The submittal, review, and approval process for an Industrial Wastewater Discharge Permit Request ("DPR") serves as the mechanism for assuring compliance with the requirements specified in NH CODE ADMIN. RULES Env-Ws 904 (see http://www.des.state.nh.us/rules/adptd904.pdf). Review and characterization of a proposed new (or revised) industrial discharge is completed for both effluent quality and quantity. If the proposed wastewater discharge does not meet applicable local, state, or federal discharge limits in an untreated condition and the process cannot be modified such that the untreated discharge does meet the requirements, the design and installation of an onsite pretreatment system will be necessary. The wastewater pretreatment system design must be prepared and certified by a professional engineer licensed to practice in the state of New Hampshire, and then be submitted for approval along with the DPR. Upon approval by DES, the municipality will issue a discharge permit that provides the legal authority for the discharge, sets flow and pollutant limits, and imposes monitoring and reporting requirements on the facility's operators. Each company that requests a DPR must already have, or simultaneously request a DES Sewer Connection Permit (see http://www.des.state.nh.us/wwe/review2.htm).

Average number of requests approved annually: 50

Fees: $1,000 when plans and specifications are submitted relative to the installation of a wastewater pretreatment facility; $50 when plans and specifications are not required

Estimated processing time after application is deemed "complete": 2-4 weeks

Approval duration: Unlimited, until or unless superseded by approval of a new application, necessitated by an increase in either flow volume (quantity) or types of pollutants (quality).

Approval transferability: The DPR Approval is transferable upon notification to the municipality and DES.

Approval modification: Not applicable. Facility must reapply.

Approval renewal: Not applicable. (Local discharge permits must be renewed with municipality as specified by local requirements.)

State statute: RSA 485-A:4, VI, IX, and IX-a through IX-c; ("Water Pollution and Waste Disposal/Duties of Department", http://gencourt.state.nh.us/rsa/html/L/485-A/485-A-4.htm)

N. H. Code of Administrative Rules: Env-Ws 904 ("Standards for Pretreatment of Industrial Wastewater Rules", http://www.des.state.nh.us/rules/adptd904.pdf)

Appeals body: Water Council at RSA 21-O:7 ("Department of Environmental Services/Water Council", http://gencourt.state.nh.us/rsa/html/I/21-O/21-O-7.htm; see also http://www.des.state.nh.us/rules/env-wc200.pdf and http://www.des.state.nh.us/councils/#1)

Additional Information: N. H. DES, Wastewater Engineering Bureau, (603) 271-2052
N. H. DES, Hazardous Waste Compliance Section, (603) 271-2942

Industrial Wastewater Discharge Permit Request/Approval - *Work Sheet*

Key Qualifier Questions: *If the answer is "yes" to any of the following questions, you will be required to file a DPR or take other actions indicated below.*

- ✓ *Do you plan to discharge process wastewater that is new, or changed in quality or quantity, to a municipal sewer or wastewater treatment plant?*
- ✓ *Will the process discharge contain materials such as oils, greases, heavy metals, volatile organic compounds, suspended solids, solvents, biocides or pesticides known to be toxic or hazardous to human/plant/animal life or aquatic habitats?*
- ✓ *Does your industry fall under the requirements of the National Categorical Pretreatment Standards?*
- ✓ *See* http://www.epa.gov/docs/epacfr40/chapt-I.info/subch-N.htm.
- ✓ *Will the discharge require an engineered wastewater pretreatment system to meet the discharge limits set by the municipal sewer use ordinance or federal categorical standards?*
- ✓ *Will the discharge exhibit characteristics such as a pH of less than 2.0 or greater than 12.5, corrosivity, fume or odor production, high temperature, high biological or chemical oxygen demand, or resistance to biodegradation? If the answer is "yes", you will be required to obtain a DPR and possibly other permits such as a Hazardous Waste Limited Permit.* See the "Hazardous Waste" chapter of this *Guidebook* for more details.

What must you do to apply?

- Contact the municipal wastewater superintendent or pretreatment coordinator (see local directory), and the DES Industrial Pretreatment Supervisor at (603) 271-2052.
- Obtain a copy of the *Industrial Wastewater Discharge Permit Request* (DPR) *Application* from the community, DES Industrial Pretreatment Supervisor, DES Public Information Center, or online at http://www.des.state.nh.us/wwe/dprapp.pdf and follow the instructions on the back of the form.
- Provide the name of the municipality where the facility will discharge, prior/new/total flow volume discharges, and approval of the discharge by signature of an authorized municipal official.
- Provide the industry name and identify the personnel authorized to respond to questions regarding the request.
- Provide the Standard Industrial Classification ("SIC") Code, the national categorical standards to which the company may be subject (see http://www.epa.gov/docs/epacfr40/chapt-I.info/subch-N.htm), average flows of domestic wastes and process discharges and the timing and duration of same, and a schematic of any proposed treatment process.
- Prepare plans, specifications, and operation and maintenance procedures, signed by a registered professional engineer licensed to practice in the state of New Hampshire, which show new or modified treatment operations at the site that may impact, or existing treatment works designed to redirect the discharge to, the local wastewater treatment facility.
- Provide a schematic of the production process, origin and analyses of each waste stream, toxicity and treatability information, a location map showing the industry and its relationship to the local wastewater treatment facility, a list of all chemicals used at the industrial facility, a description and location diagram of all sampling locations at the industrial facility, a narrative on efforts to reduce water use and implement pollution prevention techniques, and a list of environmental permits held by the facility.
- Submit the form and the appropriate fee to DES (**through the municipality**): Industrial Pretreatment Supervisor, Wastewater Engineering Bureau, Water Division, New Hampshire Department of Environmental Services, 6 Hazen Drive, P. O. Box 95, Concord, NH 03302-0095. Telephone: (603) 271-2052; fax: (603) 271-4128; or email: gcarlson@des.state.nh.us.

What types of projects require this approval?

- A business or industry that will discharge process or "industrial" waste to the municipal sewer system (*i.e.*, wastes other than lavatory or sanitary wastes)
- An existing manufacturer planning to change a manufacturing process such that the discharge to the municipal sewer will have different chemicals, additional pollutant concentration, or increased volume
- Addition of a new, or modification of an existing, process wastewater treatment system having a discharge to the municipal sewer
- The introduction of a new process waste stream to the pretreatment system, or directly to the municipal sewer

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If there are questions regarding this page or any other section of the Guidebook, please contact Tim Drew, Administrator, Public Information and Permitting Unit, at tdrew@des.state.nh.us or at (603) 271-3306.

National Pollutant Discharge Elimination System/State Surface Water Discharge Permit

Introduction: Each receiving water (*e.g.*, river, stream, estuary, or ocean) in the state possesses unique, finite limits as to the volume and strength of wastewater it can assimilate over time. Once the limits are surpassed, the receiving water will no longer meet surface water quality standards, thereby posing a danger to human health and safety and the habitat of aquatic plants, fish, and water-dependent birds and animals. Point source discharges to surface waters are regulated by the National Pollutant Discharge Elimination System ("NPDES") Permits issued pursuant to Section 402 of the federal Clean Water Act (see http://www4.law.cornell.edu/uscode/33/ch26.html) and by State Surface Water Discharge Permits issued pursuant to RSA 483-A:13, I ("Water Pollution and Waste Disposal/Water Discharge Permits", http://gencourt.state.nh.us/rsa/html/L/485-A/485-A-13.htm). Any discharge of wastewater through pipes, ditches, conduits, or other conveyances to surface waters of the state requires a joint federal/state permit to assure that water quality standards are not violated and to prevent degradation by releases of sediments, nutrients, elevated temperature, toxic metals, microorganisms, inorganic and organic chemical compounds. The U. S. Environmental Protection Agency ("EPA") issues NPDES permits, since New Hampshire does not have primacy to administer this program. DES's role in the NPDES process is to certify that the limitations and conditions contained in the federal permit will not violate any State requirements. DES also issues a State Surface Water Discharge Permit that usually is identical to the federal permit. The federal and state permits typically are issued concurrently. Evaluation of the applications for these permits includes a check for consistency with state and federal antidegradation provisions and surface water quality standards specified in NH CODE ADMIN. RULES Env-Ws 1700 (see http://www.des.state.nh.us/wmb/env-ws1700.pdf). Both permits contain specific conditions and limitations on the quality and quantity of proposed municipal and industrial discharges to the state's surface waters (see http://www.epa.gov/docs/epacfr40/chapt-I.info/subch-N.htm). The total maximum daily load ("TMDL") has become a useful tool in setting limits on discharges to several receiving across the state. The owner/operator of a drinking water system, where wastewater generated as a result of the collection, distribution, or treatment of drinking water is to be discharged directly to surface waters, also must first obtain an NPDES Permit from EPA and a State Surface Water Discharge Permit from DES (see http://www.des.state.nh.us/factsheets/ws/ws-22-14.htm). Discharge of treated pre-sedimentation underflow, treated underflow from the coagulation/settling processes using aluminum compounds or polymers as coagulants, and treated filter backwash water can only be discharged to surface waters in accordance with the conditions and limits of an NPDES Permit that is DES-certified. Some types of water system wastewaters can be managed by first obtaining an EPA NPDES Permit Exclusion coupled with a DES Temporary Surface Water Discharge Permit. NPDES Permits also are now required for the discharge of storm water from certain commercial, industrial, and municipal facilities and for construction dewatering at certain sites. EPA has issued "General Permits" that many facilities can be covered by with notice to EPA rather than having to apply for (and obtain) site-specific or facility-specific NPDES permits (see http://www.des.state.nh.us/factsheets/wwt/web-8.htm).

Average number of permits issued annually: Approximately 15

Fees: None

Estimated processing time after application is deemed "complete." 12-18 months for individual permits; 2 months for general permits; less than one month for storm water or construction dewatering general permits

Permit duration: 5 years (State Surface Water Discharge Permits run concurrently with federal permits and both expire simultaneously, in accordance with 40 CFR Part 122.46.)
See http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfr122_main_00.html.

Permit transferability: **Minimum** of 30 days' written notice to EPA (with a copy to DES)

Permit modification: Submit a letter of request to EPA, with a copy to DES (40 CFR Part 122.62). See http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfr122_main_00.html.

Permit renewal: Submit federal and state applications to EPA and DES at least 180 days before the existing permit expires [40 CFR Part 122.21(d) and Env-Ws 404.02] see http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfr122_main_00.html and http://www.des.state.nh.us/rules/ws400-405.pdf

State statute: RSA 485-A:13 ("Water Pollution and Waste Disposal/Water Discharge Permits", http://gencourt.state.nh.us/rsa/html/indexes/485-A.html)
Federal law: 33 U. S. C. 1251 *et seq.* ("Clean Water Act of 1987, as amended", http://www4.law.cornell.edu/uscode/33/ch26.html)

N.H. Code of Administrative Rules: Env-Ws 401-405 ("Surface Water Discharge Permit Regulations", http://www.des.state.nh.us/rules/ws400-405.pdf) and Env-Ws 1700 ("Surface Water Quality Regulations", http://www.des.state.nh.us/wmb/env-ws1700.pdf)
U. S. Code of Federal Regulations: 40 CFR Part 122, Chapter I ("Environmental Protection Agency Regulations", http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfr122_main_00.html)

Appeals body: Water Council at RSA 21-O:7 ("Department of Environmental Services/Water Council", http://gencourt.state.nh.us/rsa/html/I/21-O/21-O-7.htm; see also http://www.des.state.nh.us/rules/env-wc200.pdf and http://www.des.state.nh.us/councils/#1)

Additional Information: N. H. DES, Wastewater Engineering Bureau, (603) 271-2984
U. S. EPA, Municipal Assistance Unit, (617) 918-1545
U. S. EPA, Storm Water Program, (617) 918-1615

National Pollutant Discharge Elimination System/State Surface Water Discharge Permit – *Work Sheet*

Key Qualifier Question: *Will the proposed project require a discharge of wastewater, storm water associated with industrial activity, storm water from a construction site, or groundwater or cooling water from commercial, industrial or municipal (domestic) sources through a point-source (pipe, ditch, channel, tunnel, etc.) to a surface water (river, lake, ocean, marsh, wetland, intermittent stream, etc.)?*

What are the first steps that you should take?

- Determine whether a General NPDES Permit or a DES Temporary Surface Water Discharge Permit ("TSWDP") is appropriate. The TSWDP and the available General NPDES Permits are described on the next page.

- If a general permit is appropriate, send a notice of intent ("NOI") letter application to EPA. For storm water general permits, the NOI forms must be sent to the address on the form. With the exception of the NOI for the general storm water permits, send a copy of all NOIs to the DES Wastewater Engineering Bureau, New Hampshire Department of Environmental Services, 6 Hazen Drive, P. O. Box 95, Concord, NH 03302-0095. Telephone: (603) 271-2984; fax: (603) 271-4128; or online: http://www.des.state.nh.us/wwe/.

- If a Temporary Surface Water Discharge Permit ("TSWDP") is appropriate, obtain an application at the following Web address: http://www.des.state.nh.us/orcb/doclist/tmpswapp.pdf or contact the DES TSWDP Coordinator by telephone at (603) 271-3644.

    - If the project will involve groundwater remediation, pump-and-treat systems, or petroleum storage tank replacements, submit the original TSWDP permit application to: Site Remediation Programs, Waste Management Division, New Hampshire Department of Environmental Services, 6 Hazen Drive, P. O. Box 95, Concord, NH 03302-0095. Telephone: (603) 271-3644; fax: (603) 271-2181; or online: http://www.des.state.nh.us/orcb_hwrb.htm
    - If the project will involve drinking water well/system rehabilitation, dewatering, or maintenance projects, submit the original TSWDP permit application to: Water Supply Engineering Bureau, Water Division, New Hampshire Department of Environmental Services, 6 Hazen Drive, P. O. Box 95, Concord, NH 03302-0095. Telephone: (603) 271-2858; fax: (603) 271-5171; or online: http://www.des.state.nh.us/dwspp/gwdisch.htm
    - Refer also to the description of the Temporary Surface Water Discharge Permit in the "Surface Water" chapter of this *Guidebook*.

What must I do to apply for an individual permit?

- If coverage under a TSWDP or general permit is not appropriate, then an individual NPDES permit is necessary. For an individual permit, contact EPA in Boston at (617) 918-1545 to obtain a copy of the appropriate application (see http://cfpub1.epa.gov/npdes/permitissuance/apptool.cfm?program_id=1).

- Send the completed federal application forms to EPA at the following address: Municipal Assistance Unit, Office of Ecosystem Protection (Mail Code CMU), One Congress Street, Suite 1100, Boston, MA 02114-2023.

- Send a copy of the federal application forms and copies of any supplemental information requested by EPA to DES at: Wastewater Engineering Bureau, Water Division, New Hampshire Department of Environmental Services, 6 Hazen Drive, P. O. Box 95, Concord, NH 03302-0095.

- Contact DES at (603) 271-3908 to obtain an application for the State Surface Water Discharge Permit. The applications requirements are specified in Env-Ws 405.01(b) ("Surface Water Discharge Permit Regulations", http://www.des.state.nh.us/rules/ws400-405.pdf).

- New dischargers may be required to supply DES with in-stream water quality information pursuant to Env-Ws 405.01(e) and Env-Ws 1708 (Antidegradation). (See Env-Ws 1700, "Surface Water Quality Regulations", http://www.des.state.nh.us/wmb/env-ws1700.pdf). Contact DES if a new discharge of industrial or domestic wastewater is proposed.

What types of projects require this permit? (http://www.epa.gov/docs/epacfr40/chapt-I.info/subch-N.htm)

- o A new industrial facility that is built on 10 acres of land and will have a manufacturing process that will require wastewater disposal. Both a general storm water permit (construction greater than 5 acres, one acre after March 10, 2003) and an individual NPDES permit are necessary.
- o An existing commercial facility that installs a closed-loop cooling system for a new process located partly outdoors. Although no permit is required for the cooling water, the applicant must file an NOI for the Multi-Sector General NPDES Permit if the new process is listed as an "industrial activity" in 40 CFR Part 122.26(b) (14).
  See http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfr122_main_00.html.
- o A leaking underground petroleum storage tank located at a town highway garage is to be removed and the excavation must be dewatered before a new tank can be installed. Application for a TSWDP must be made, rather than using the construction dewatering general permits.

What types of projects qualify for TSWDP or general NPDES permit coverage?

(Note: Use the link http://www.epa.gov/fedrgstr/ to find the specific reference and text of the Federal Register needed. Once you reach the date desired, simply select "HTML" or "PDF" to view the specific federal regulations. For your convenience, the direct links to specific pages have already been provided below by this method.)

- ❖ A TSWDP must be obtained for any treated discharges of groundwater contaminated with petroleum products. An *NPDES Permit Application-Incident Notification Report* to obtain a "temporary exclusion", or a letter from an EPA "On Scene Coordinator" waiving the requirement to obtain an NPDES permit, must be obtained before DES will grant a TSWDP. To obtain such a waiver, contact the EPA at: NPDES Program, Office of Ecosystem Protection (Mail Code CPE), U. S. Environmental Protection Agency, JFK Federal Building, Boston, MA 02203, call EPA at (617) 918-1551, or contact online at http://cfpub1.epa.gov/npdes/. (See also http://www.des.state.nh.us/factsheets/ws/ws-22-14.htm).

- ❖ Construction (groundwater) Dewatering General Permit for temporary discharges of excavation water or dewatering well water at construction sites. See pages 19284 through 19295 of Federal Register dated May 1, 1996 (see http://www.epa.gov/docs/fedrgstr/EPAFR-CONTENTS/1996/May/Day-01/). Notice of intent application (NOI) requirements can be found on page 19286.

- ❖ Water Treatment Plant General Permits for treated discharges of pre-sedimentation underflow, underflow from coagulation/settling using aluminum or polymers, and filter backwash. See

pages 69000 through 69013 of Federal Register dated November 15, 2000 http://www.epa.gov/fedrgstr/EPAFR-CONTENTS/2000/November/Day-15/contents.htm. NOI requirements are found on page 69006. (See also http://www.des.state.nh.us/factsheets/ws/ws-22-14.htm)

- Non-Contact Cooling Water (NCCW) General Permit for cooling water piped continuously from a water source, through equipment to be cooled, to the discharge point, and with no chemical additives except for non-toxic pH neutralization chemicals (NaOH, H_2SO_4). An individual permit should be sought if the above conditions are not met, or if the 68 degrees Fahrenheit or 83 degrees Fahrenheit temperature limits for cold and warm water fisheries, respectively, (as determined by the NH Fish and Game Department) cannot be met. See pages 24195 through 24211 of Federal Register dated April 25, 2000 (see http://www.epa.gov/fedrgstr/EPAFR-CONTENTS/2000/April/Day-25/contents.htm). NOI requirements are found on page 24204.

- Multi-Sector Storm Water General Permit (MSGP) for storm water discharges associated with industrial activity, as defined by 40 CFR Part 122.26(b)(14), which can be found at http://www.epa.gov/fedrgstr/ in the Federal Register, dated October 30, 2000, on pages 64745 through 64880 (see http://www.epa.gov/fedrgstr/EPAFR-CONTENTS/2000/October/Day-30/contents.htm. The NOI form can be found on page 64873. For further information, please see the DES fact sheet entitled *Federal Storm Water Permits* at http://www.des.state.nh.us/factsheets/wwt/web-8.htm.

- Construction Federal General Storm Water Permit for storm water discharges from construction sites disturbing five or more acres of land (1 acre after March 10, 2003). The permit can be found at http://www.epa.gov/fedrgstr/ in the Federal Register dated February 17, 1998 on pages 7857 through 8014 (see http://www.epa.gov/fedrgstr/EPAFR-CONTENTS/1998/February/Day-17/. NOI requirements and the *Notice of Intent (NOI) for Storm Water Discharges Associated with Industrial Activity under a NPDES General Permit* form can be found on page 8010. For further information, please see the DES fact sheet entitled *Federal Storm Water Permits* at http://www.des.state.nh.us/factsheets/wwt/web-8.htm.

- Municipal Separate General Storm Sewer System ("MS4") Permits will be required for non-private owners of separate storm sewer systems located in urbanized areas beginning March 10, 2003. Call (603) 271-2984 for more information. For further information, please see the DES fact sheet entitled *Federal Storm Water Permits* at http://www.des.state.nh.us/factsheets/wwt/web-8.htm.

If there are questions regarding this page or any other section of the Guidebook, please contact Tim Drew, Administrator, Public Information and Permitting Unit, at tdrew@des.state.nh.us, or at (603) 271-3306.

Wastewater Treatment Facility Operator Certificate

Introduction: RSA 485-A:5-a ("Water Pollution and Waste Disposal/Operator Certification Required", http://gencourt.state.nh.us/rsa/html/L/485-A/485-A-5-a.htm) requires all wastewater treatment plants in New Hampshire to be operated only by individuals who have been certified by DES. The DES Certification Program is designed to ensure that operators have accumulated the appropriate skills and training to carry out their duties and effectively treat the wastewater that is received at the treatment plant they operate (see http://www.des.state.nh.us/factsheets/wwt/web-2.htm). There are four levels (or grades) of proficiency starting with Grade I (Operator-in-Training) and continuing through Grade IV. Wastewater treatment facility operators operate mechanical equipment and maintain pumps, pipes, valves, and processing equipment to move the wastewater through collection systems and various treatment processes. They also operate chemical feeding devices, perform laboratory analyses, and maintain records of their work. Operators must be familiar with electricity, mechanics, chemistry, microbiology, and hydraulics. To ensure that operators possess the requisite skills, DES offers an operator-training program with courses in the spring and fall of each year at its training facility on the grounds of the Winnipesaukee River Basin wastewater treatment facility in Franklin, New Hampshire (see http://www.des.state.nh.us/wwe/training.htm). These courses help operators prepare for operator certification examinations. Registration for courses is on a first come/first served basis. Certification examinations are held annually in June and December, and applications to take the examination must be submitted to DES at least 45 days prior to the examination date (see http://www.des.state.nh.us/wwe/examnotc.htm). If a candidate has been certified by another state, application may be made for certification based on reciprocity pursuant to NH CODE ADMIN. RULES Env-Ws 901.07(h)-(j) (see http://www.des.state.nh.us/rules/env900.pdf). DES provides a summary of the Certification Committee rules, including education and experience requirements, at http://www.des.state.nh.us/wwe/certcomm.pdf.

Number of certificates issued or renewed annually: 250

Fees: $30 per day for courses, $50 for the examination, and $50 for certificate renewal

Estimated processing time after examination is deemed passed: 1-2 months, depending upon grade level of the exam

Certificate duration: 2 years, subject to renewal

Certificate transferability: Not transferable

Certificate modification: Not applicable

Certificate renewal: Renewal is required every two years. For Grade II licenses or higher, 20 continuing education contact hours (2 CEUs) are required every two years to qualify for renewal. Continuing education credits may be lab course class work; hands-on workshops, computer courses, *etc*. (see http://www.des.state.nh.us/wwe/renewapp.pdf)

State statutes: RSA 485-A:5-a and 7-a through 7-d ("Water Pollution and Waste Disposal/Operator Certification Required/Application; Special Fund, http://gencourt.state.nh.us/rsa/html/L/485-A/485-A-5-a.htm, http://gencourt.state.nh.us/rsa/html/L/485-A/485-A-7-a.htm, http://gencourt.state.nh.us/rsa/html/L/485-A/485-A-7-b.htm, http://gencourt.state.nh.us/rsa/html/L/485-A/485-A-7-c.htm, http://gencourt.state.nh.us/rsa/html/L/485-A/485-A-7-d.htm) and RSA 486:9 ("Aid to Municipalities for Water Pollution Control/Operator Certification", http://gencourt.state.nh.us/rsa/html/L/486/486-9.htm)

N. H. Code of Administrative Rules: Env-Ws 901 ("Certification of Wastewater Treatment Plant Operators", http://www.des.state.nh.us/rules/env900.pdf)

Appeals body: Operator Certification Committee, then the Water Council at RSA 21-O:7 ("Department of Environmental Services/Water Council", http://gencourt.state.nh.us/rsa/html/I/21-O/21-O-7.htm; see also http://www.des.state.nh.us/rules/env-wc200.pdf and www.des.state.nh.us/councils/#1)

Additional information: To register for a course or examination, call the DES Wastewater Engineering Bureau, Operations Section, (603) 271-2586 or (603) 271-3503.
N. H. DES, Public Information Center, (603) 271-2975 or (603) 271-8876

Wastewater Treatment Facility Operator Certificate – *Work Sheet*

Key Qualifier Questions:

1. *Do* you *work or want to work as a wastewater treatment plant operator or are you responsible for management of a treatment plant or the backup operator "in responsible charge"?*
   a. If yes, continue to Question #2 below.
   b. If no, you do not need to obtain this certification.
2. *Do you currently hold a Wastewater Treatment Facility Operator certification?*
   a. If no, you should contact DES to register for the Grade I, Operator-in-Training ("OIT") examination. (Note: If you meet the qualifications for a higher grade license, you may apply for that license without first obtaining the Grade I/OIT license.)
   b. If yes, you may want to try for a higher grade of certification. The grades, required education and experience levels are as follows:

Grade	Education (years)	Experience (years)
Grade I-OIT	12 (High School)	0
Grade I	12 (High School)	1
Grade II-OIT *or* II-OIT	12 (High School & 13 Wastewater school)	1 0
Grade II	12 (High School)	3
Grade III-OIT	14 (High School & 2 years of relevant education)	2
Grade III	14 (High School & 2 years of relevant education)	4
Grade IV-OIT	14 (High School & 2 years of relevant education)	4
Grade IV	14 (High School & 2 years of relevant education)	6

What must you do to apply?

- Obtain a copy of the *Application for Certification – Wastewater Treatment Operator* from the DES Wastewater Engineering Bureau's Operations Section, DES Public Information Center, or online at http://www.des.state.nh.us/wwe/certapp.pdf.
- Provide the applicant's name, address, daytime telephone number, and date of birth.
- For each current wastewater operator certification held by the applicant, identify the state(s) in which certification is held, grade(s) of the certificate(s), number(s) of certificate(s), date certificate(s) received, and state whether or not the certificate was achieved by examination.
- Specify whether the applicant is seeking a New Hampshire license based on reciprocity with another state.
- Indicate the level of certification sought (Grades I-IV).
- List and describe the applicant's educational background including years of high school (or GED), years of post-high school education, and additional education to be applied toward this requirement, and provide proof of post-high school education through transcripts and/or certificates of course completion.
- (See http://www.des.state.nh.us/wwe/certcomm.pdf and http://www.des.state.nh.us/wwe/ceusheet.pdf).
- Specify whether or not the applicant is requesting any education and/or experience substitutions [see Env-Ws 901.04(c)(2) and (d)(6) at http://www.des.state.nh.us/rules/env900.pdf].

- The applicant must attest to the following statement on the application**:** ***I hereby certify the information given by me is true and complete to the best of my knowledge, not only for the issuance of the certificate, but also for the retention of the certificate. I further agree to abide by the provisions of Env-Ws 901.***
- Submit a check or money order for $50 made payable to the "Treasurer, State of New Hampshire" and the application, transcripts, fee, and all other supporting materials to: Wastewater Operations Section, Water Division, New Hampshire Department of Environmental Services, 6 Hazen Drive, P. O. Box 95, Concord, NH 03302-0095. Telephone: (603) 271-2586; fax: (603) 271-4128; or online: http://www.des.state.nh.us/wwe/

If there are questions regarding this page or any other section of the Guidebook, please contact Tim Drew, Administrator, Public Information and Permitting Unit, at tdrew@des.state.nh.us or at (603) 271-3306.

Pre-Qualification of Consulting Engineering Firms/Approval

Introduction: Consulting engineering firms that are interested in providing engineering services to a municipality for a water supply or wastewater treatment project where federal or state funding assistance will be used must be listed on DES's *Roster of Pre-Qualified Consulting Engineers* (see http://www.des.state.nh.us/wwe/roster.htm). The intent of the pre-qualification program is to ensure that consulting engineering firms that vie for municipal water or wastewater treatment works contracts that involve federal or state funding have the experience and capability to satisfactorily complete the projects. Consulting engineering firms can apply in one or more of the following four categories relative to their interest and/or experience. The categories are (see http://www.des.state.nh.us/wwe/Preqapp.doc):

Category 1 – expertise in water supply engineering, including water treatment
Category 2 – expertise in water pollution control engineering, including wastewater treatment
Category 3 – expertise in water or wastewater piping systems, including pumping.
Category 4 – expertise in all categories 1, 2, and 3 (above).

The Federal Water Pollution Control Act ("FWPCA"), enacted by the U. S. Congress in 1972 (see http://www4.law.cornell.edu/uscode/33/ch26.html), made it necessary for the State of New Hampshire to require engineering firms to meet certain experience and capability standards when participating in the federal/state construction grants program. This requirement has been carried over into the State Aid Grant and State Revolving Fund loan programs. Pre-qualification essentially eliminates the need, during the procurement process, for a municipality to issue a request for qualification ("RFQ") prior to issuing a request for proposals ("RFP"). To obtain a roster of Pre-Qualified Consulting Engineering Firms, please contact DES at (603) 271-2001 or check online at http://www.des.state.nh.us/wwe/roster.htm. To check on the status of these firms, call the New Hampshire Secretary of State, Corporate Division (see http://webster.state.nh.us/sos/corporate/) or the Joint Board of Licensure and Certification (see http://www.state.nh.us/jtboard/pe.htm).

Average number of letters of approval issued annually: Approximately 5 new and 60 renewals

Fees: $200 initial application fee; $50 annual renewal fee

Estimated processing time after application is deemed "complete": 20-30 days

Letter of Approval duration: One year, subject to renewal

Letter of Approval transferability: Pre-qualification is transferable only if the firm (as originally approved) changes its ownership or name, but in all other respects remains the same.

Letter of Approval modification: The pre-qualified consulting engineering firm can provide modifications by submitting and updated application form.

Letter of Approval renewal: The pre-qualified consulting engineering firm must renew annually in order to remain on the roster of Pre-qualified Consulting Engineering Firms.

State statute: RSA 485-A:4, XIII ("Water Pollution and Waste Disposal/Duties of Department", http://gencourt.state.nh.us/rsa/html/L/485-A/485-A-4.htm)

N. H. Code of Administrative Rules: Env-Ws 600 ("Selection of Consulting Engineering Firms", http://www.des.state.nh.us/rules/env600.pdf)

Appeals body: Water Council at RSA 21-O:7 ("Department of Environmental Services/Water Council", http://gencourt.state.nh.us/rsa/html/I/21-O/21-O-7.htm; see also http://www.des.state.nh.us/rules/env-wc200.pdf and http://www.des.state.nh.us/councils/#1)

Additional information: N. H. DES, Wastewater Engineering Bureau, (603) 271-2001
N. H. DES, Public Information Center, (603) 271-2975 or (603) 271-8876
N. H. Secretary of State, Corporate Division, (603) 271-3244
N. H. Joint Board of Licensure & Certification, (603) 271-2219

Pre-Qualification of Consulting Engineering Firms/Approval – *Work Sheet*

Key Qualifier Question: *Do you represent a consulting engineering firm that is interested in providing engineering services for a New Hampshire municipality for a water supply or wastewater treatment project for which the municipality will be receiving federal or state funding assistance?*

What must you do to apply?

- Obtain a copy of the *Application for Pre-Qualification* from the DES Wastewater Engineering Bureau, DES Public Information Center, or online at http://www.des.state.nh.us/wwe/Preqapp.doc.
- Complete, sign, and submit six copies of the application form.
- Complete, sign, and submit six copies of the *Engineers' Pre-Qualification Form* (see http://www.des.state.nh.us/wwe/Pre_qual.doc).
- Submit one copy of a *Certificate of Existence* issued by the New Hampshire Secretary of State, Corporate Division, for in-state corporations (http://webster.state.nh.us/sos/corporate/corpforms.htm), or a *Certificate of Authorization* (http://webster.state.nh.us/sos/corporate/corpform2.htm) for "foreign" (out-of-state) corporations, as proof of "good standing" which permits the firm to transact business in New Hampshire. (Be sure to use the term "good standing" when requesting these documents from the Secretary of State's Office at http://webster.state.nh.us/sos/corporate/)
- Submit one copy of the *Certificate of Authorization for the Practice of Professional Engineering* (see http://www.state.nh.us/jtboard/engcorp.pdf for the application form and RSA 310-A:20 ("Professional Engineers, Architects, Land Surveyors, Professional Geologists, and Natural Scientists/Engineering Certificates for Business Organizations", http://gencourt.state.nh.us/rsa/html/XXX/310-A/310-A-20.htm), issued by the New Hampshire Joint Board of Licensure and Certification, permitting the firm to practice professional engineering in New Hampshire (see http://www.state.nh.us/jtboard/pe.htm).
- Submit one set of plans, specifications and/or reports related to a successfully completed project in the category for which the application is being made.
- The applicant must sign the statement on the application form stating: ***I hereby certify the information given by me is true and complete to the best of my knowledge. I further agree to abide by the provisions of Env-Ws 600, Selection of Consulting Engineering Firms.***
- Submit a check or money order for $200 made payable to "Treasurer, State of New Hampshire", along with the application and all supporting materials to: Wastewater Engineering Bureau, Water Division, New Hampshire Department of Environmental Services, 6 Hazen Drive, P. O. Box 95, Concord, NH 03302-0095. Telephone: (603) 271-2001; fax: (603) 271-4128; or online: http://www.des.state.nh.us/wwe/

What must you do to renew?

- Complete, sign, and submit one copy of an updated *Engineers' Pre-Qualification Form* (see http://www.des.state.nh.us/wwe/Pre_qual.doc).
- When specifically requested in the renewal notice issued by DES, submit one copy of a *Certificate of Existence* issued by the New Hampshire Secretary of State, Corporate Division, for in-state corporations (http://webster.state.nh.us/sos/corporate/corpforms.htm), or for "foreign" (out-of-state) corporations, a *Certificate of Authorization* (http://webster.state.nh.us/sos/corporate/corpform2.htm), as proof of "good standing".
- When specifically requested in the renewal notice issued by DES, submit one copy of the *Certificate of Authorization for the Practice of Professional Engineering,* issued by the New Hampshire Joint Board of Licensure and Certification (see http://www.state.nh.us/jtboard/engcorp.pdf for RSA 310-A:20 and the application form) to reaffirm that the company is permitted to practice professional engineering in the state of New Hampshire.
- Enclose a check for $50 for the renewal fee, made payable to "Treasurer, State of New Hampshire".

- Note: To remain on the roster, pre-qualified consulting engineering firms must submit all items required for renewal by October 31 of each year. Any submittals received after October 31 will result in removal of the company's name from the roster and the requirement to complete the new application process to be reinstated.

If there are any questions on this page or any other section of the Guidebook, please contact Tim Drew, Administrator, Public Information and Permitting Unit, at tdrew@des.state.nh.us or at (603) 271-3306.

Sludge Quality Certification

Introduction: Sludge and sludge mixtures generated from municipal or industrial wastewater treatment facilities cannot be stockpiled, land applied, distributed for land application, sold, or given away in bulk without first being certified as acceptable for such uses in New Hampshire. This requirement applies to sludge generated from in-state sources as well as sludge brought into New Hampshire for final use or disposal. Sludge that cannot be certified must be disposed at a permitted landfill or incineration facility, permitted under RSA 149-M ("Solid Waste Management", http://gencourt.state.nh.us/rsa/html/indexes/149-M.html) and NH CODE ADMIN. RULES Env-Wm 100-300, 2100 *et seq*. ("Solid Waste Rules", http://www.des.state.nh.us/hwrb/swrules.pdf). Sludge characterized as "hazardous waste" under RSA 147-A ("Hazardous Waste Management", http://gencourt.state.nh.us/rsa/html/indexes/147-A.html) and NH CODE ADMIN. RULES Env-Wm 100-1000 ("Hazardous Waste Rules", http://www.des.state.nh.us/hwrb/hwrules.pdf), is not eligible to receive this certification. A Sludge Quality Certification is not required for sludge or biosolids that are produced at a facility where each constituent of the sludge already possesses such a certification or that is being disposed in a permitted landfill or incinerator. Any public or private treatment facility that generates sludge destined for beneficial reuse by land application, including short paper fiber from paper mills, must apply for this certification (see http://www.des.state.nh.us/factsheets/wwt/web-12.htm). Sludge is certified to determine its quality and variability prior to recycling, and to establish its compliance with Env-Ws 807 (see http://www.des.state.nh.us/rules/envws800.pdf) and with federal requirements listed in 40 CFR Part 503 (see http://www.epa.gov/docs/epacfr40/chapt-I.info/subch-O.htm). Sludge Quality Certification assures that the material is safe to be placed on ground surfaces for beneficial reuse, a recycling technique known as "land application". Material comprised of municipal sludge is referred to as "biosolids" once it has been certified. Short paper fiber (a residual from mills that manufacture paper) may also be certified if it meets DES requirements. Land application of biosolids and short paper fiber takes advantage of the nutrients and organic matter in the material to reclaim land, grow crops, and enhance forestry. The analysis that must be done to obtain a Sludge Quality Certification includes tests for 67 volatile organic compounds, 61 semi-volatile compounds, 14 metals, 17 pesticides, 7 polychlorinated biphenyls, dioxins, total cyanides, 6 nutrients, pH and percent solids. Enteric virus tests are performed on Class B biosolids to be used for land reclamation. Representative sampling protocols/frequencies are defined, and DES verifies the results though an independent laboratory.

Average number of permits issued annually: 4-5

Fee: $1,000 per application (In-state municipal wastewater treatment facilities are exempt from this fee.)

Estimated processing time after application is deemed "complete": 2-4 weeks

Certification duration: Five years, subject to renewal

Certificate transferability: Not transferable

Certificate modification: Not applicable

Certificate renewal: To ensure that certification does not lapse, a new application should be filed at least 120 days prior to the expiration of the existing certificate.

State statute: RSA 485-A:4, XVI-b ("Water Pollution and Waste Disposal/Duties of Department", http://gencourt.state.nh.us/rsa/html/L/485-A/485-A-4.htm)
Federal law: 33 U.S.C. 1251 *et seq*. (1977) ("Clean Water Act", http://www4.law.cornell.edu/uscode/33/ch26.html)

N. H. Code of Administrative Rules: Env-Ws 800 ("Sludge Management", http://www.des.state.nh.us/rules/envws800.pdf)
U. S. Code of Federal Regulations: 40 CFR Part 122; 40 CFR Part 257; 40 CFR Part 503 ("Environmental Protection Agency", http://www.epa.gov/epacfr40/chapt-I.info/chi-toc.htm)

Appeals body: Water Council at RSA 21-0:7 ("Department of Environmental Services/Water Council", http://gencourt.state.nh.us/rsa/html/I/21-O/21-O-7.htm; see also http://www.des.state.nh.us/rules/env-wc200.pdf and http://www.des.state.nh.us/councils/#1)

Additional information: N. H. DES, Wastewater Engineering Bureau, (603) 271-3908
N. H. DES, Hazardous Waste Compliance Section, (603) 271-2942
N. H. DES, Solid Waste Management Bureau, (603) 271-2925
N. H. DES, Public Information Center, (603) 271-2975 or (603) 271-8876

Sludge Quality Certification – *Work Sheet*

Key Qualifier Question: *Will the municipal or industrial wastewater sludge generated at your facility be stockpiled, land applied, distributed for land application, sold, or given away in bulk in the state of New Hampshire?*

What must you do to apply? (See http://www.des.state.nh.us/factsheets/wwt/web-12.htm)

- Obtain a copy of the *Sludge Quality Certification Application* from the DES Water Division, Sludge and Septage Section, DES Public Information Center, or access it online at http://www.des.state.nh.us/wwe/septslud/sludgecert_app.pdf.
- Provide the name and address of the wastewater treatment facility or other facility that has generated or will generate the sludge.
- List the name, title, and telephone number of the operator of the facility that will be treating or stockpiling the sludge.
- If the sludge will be generated by a publicly-owned wastewater treatment facility, provide a list and brief description of all industrial permittees and the permittees' limits, including a table containing the estimated quantity, physical, and chemical characteristics of each discharge and the specific concentration limits in the permit for parameters reasonably expected to be present. (This is the same information that is required to be maintained by the facility for industrial discharges pursuant to NH CODE ADMIN. RULE Env-Ws 405.04(c) (see http://www.des.state.nh.us/rules/ws400-405.pdf)
- For sludge generated by an industrial wastewater treatment facility, provide the name and quantity of all chemicals being discharged to the facility. For those facilities holding a National Pollutant Discharge Elimination System ("NPDES") Permit, submit a copy of the most recent NPDES permit application with a statement that the information is current.
- Provide the quantity of sludge, in wet tons, generated monthly by the treatment facility for the past two years.
- If the sludge is generated outside New Hampshire, provide certification that the sludge meets the chemical standards for land application in the state of origin.
- If the sludge contains human waste, provide a description of the process to achieve Class A or Class B pathogen reduction requirements and vector attraction reduction requirements, including the applicable 40 CFR Part 503 citations at (see http://www.epa.gov/docs/epacfr40/chapt-I.info/subch-O.htm and http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfr122_00.html).
- Prepare a sludge quality report which includes the following:
    - A description of the treatment facility and sludge treatment process
    - A chronological summary of analytical data from the previous three years (if available) for each detected chemical
    - Data presented in tabular form and categorically for all metals, volatile organic compounds, semi-volatile organic compounds, dioxins, and pesticides/herbicides
    - Results of testing required by Env-Ws 807.05(d), including laboratory reports, presented categorically as with the data summary (above)
- Submit a check or money order for $1,000 (Municipalities are exempt from this fee.) made payable to "Treasurer, State of New Hampshire", along with two copies of the application and all supporting materials to: Sludge and Septage Section, Wastewater Engineering Bureau, Water Division, New Hampshire Department of Environmental Services, 6 Hazen Drive, P. O. Box 95, Concord, NH 03302-0095. Telephone: (603) 271-3908; fax: (603) 271-4128; or online: http://www.des.state.nh.us/wwe/septslud.htm.

What types of projects require this certification?

- ❖ Sludge from a municipal wastewater treatment facility destined to be distributed for land application

- Mixed sludge from an industrial wastewater treatment facility destined to be stockpiled prior to land application
- Sludge to be prepared for sale or provided free of charge in bulk

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If there are questions regarding this page or any other section of the Guidebook, please contact Tim Drew, Administrator, Public Information and Permitting Unit, at tdrew@des.state.nh.us or at (603) 271-3306.

Sludge Hauler Permit

Introduction: The term "sludge" is used to describe the solid and semisolid material produced by water and wastewater treatment processes; it includes industrial sludge and sludge mixtures, but does not include domestic septage or sludge disposed at solid waste facilities. DES regulates the processing, transportation, and disposal/reuse of sludge and biosolids pursuant to RSA 485-A:4, XVI-b ("Water Pollution and Waste Disposal/Duties of Department", http://gencourt.state.nh.us/rsa/html/L/485-A/485-A-4.htm) and NH CODE ADMIN. RULES Env-Ws 800 (see http://www.des.state.nh.us/rules/envws800.pdf) to ensure that these materials are managed in an environmentally sound manner. A sludge hauler is defined in NH CODE ADMIN. RULES Env-Ws 802.16 *as any person engaged in the removal or transportation of sludge*, where "person" includes political subdivisions, business entities, and individuals. A Sludge Hauler Permit is required for each vehicle that will be used to transport, over public roads, any sludge generated in or destined for New Hampshire which does not meet Class A criteria as specified in Env-Ws 802.06 (see http://www.des.state.nh.us/factsheets/wwt/web-10.htm). This provides DES with a mechanism for "cradle-to-grave" tracking to regulate the movement and final disposition of sludge for the protection of public health and the environment. A Sludge Hauler Permit is not required for the interstate hauling of sludge that does not originate from, nor is disposed in New Hampshire.

Average number of permits issued annually: 15

Fees: $100 per transport vehicle (Municipalities that transport their own sludge are exempt from this fee.)

Estimated processing time after application is deemed "complete": 1 week

Permit duration: 2 years. Sludge Hauler Permits expire on January 31 of the odd-numbered year following the date of issuance.

Permit transferability: Sludge Hauler Permits are not transferable unless approved by DES.

Permit modification: Not applicable

Permit renewal: A new application should be filed at least 30 days prior to the expiration date of the existing Sludge Hauler Permit. DES will send renewal forms to all permitted haulers.

State statute: RSA 485-A:4, XVI-b ("Water Pollution and Waste Disposal/Duties of Department", http://gencourt.state.nh.us/rsa/html/L/485-A/485-A-4.htm)
Federal law: 33 U. S. C. 1251 *et seq*. (1977) ("Clean Water Act", http://www4.law.cornell.edu/uscode/33/ch26.html)

N. H. Code of Administrative Rules: Env-Ws 800 ("Sludge Management", http://www.des.state.nh.us/rules/envws800.pdf)
U. S. Code of Federal Regulations: (Not applicable)

Appeals body: Water Council at RSA 21-0:7 ("Department of Environmental Services/Water Council", http://gencourt.state.nh.us/rsa/html/I/21-O/21-O-7.htm; see also http://www.des.state.nh.us/rules/env-wc200.pdf and http://www.des.state.nh.us/councils/#1)

Additional information: N. H. DES, Wastewater Engineering Bureau, (603) 271-3908
N. H. DES, Public Information Center, (603) 271-2975 or (603) 271-8876

Sludge Hauler Permit – *Work Sheet*

Key Qualifier Question: *Do you plan to transport sludge that does not meet the criteria of "Class A Sludge" over public roads?*

What must you do to apply?

- Obtain a copy of the *Sludge Hauler Application* form from the DES Water Division, Sludge and Septage Section, DES Public Information Center, or access it online at http://www.des.state.nh.us/wwe/septslud/sludgehauler_app.pdf.
- Provide the name, address, and home telephone number of the applicant and owner, if an individual.
- Provide the name, address, and telephone number of the applicant's business and contact person.
- Provide any telephone numbers to be used in case of an emergency.
- Provide the vehicle identification number and license plate number for each vehicle that will be used to transport the containers carrying sludge.
- Provide the name, principal place of business, and telephone number of the sludge hauler or sludge transporting company that will appear on both sides of the vehicle that will be used to transport the container(s) carrying the sludge.
- Provide evidence as to whether the applicant or owner has been convicted of a misdemeanor under any statute administered by DES with the five years prior to the date of this application, or a felony in any state or federal court during the ten years prior to the date of this application.
- Provide written certification that upon issuance of the permit, the applicant will assume complete responsibility for ensuring that all persons who will be transporting sludge with the applicant's vehicle(s) are familiar with the requirements of NH CODE ADMIN. RULES Env-Ws 800 ("Sludge Management", http://www.des.state.nh.us/rules/envws800.pdf).
- Include a written statement signed by the applicant stating that all vehicles and container(s) to be used for transporting sludge have met all applicable federal and state motor vehicle requirements for sludge transportation.
- Prepare a check or money order in the amount of $100 for each transport vehicle made payable to "Treasurer, State of New Hampshire" and submit the application and all supporting materials to: Sludge and Septage Section, Wastewater Engineering Bureau, Water Division, New Hampshire Department of Environmental Services, 6 Hazen Drive, P. O. Box 95, Concord, NH 03302-0095. Telephone: (603) 271-3908; fax: (603) 271-4128; or online: http://www.des.state.nh.us/wwe/septslud.htm Note: Municipalities are exempt from the application fees but must still obtain the permit.

What types of projects require this permit?

- Commercial removal and transport over public roads of sludge from a wastewater treatment facility
- Commercial removal and transport over public roads of mixtures including human waste derived sludge
- Commercial removal and transport over public roads of water treatment facility sludge
- A municipal vehicle that removes and transports that community's sludge from its storage lagoons to a sludge management facility for composting, processing, treatment, and/or final disposal

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If there are questions regarding this page or any other section of the Guidebook, please contact Tim Drew, Administrator, Public Information and Permitting Unit, at tdrew@des.state.nh.us or at (603) 271-3306.

Sludge Site Permit

Introduction: The term "sludge" is used to describe the solid and semisolid material produced by water and wastewater treatment processes. It includes industrial sludge and sludge mixtures, but does not include domestic septage or sludge disposed at solid waste facilities. The term "biosolids" means any sludge derived from a municipal wastewater treatment facility that meets DES standards for beneficial reuse. DES regulates the processing, transportation, and disposal/reuse of sludge and biosolids pursuant to RSA 485-A:4, XVI-b ("Water Pollution and Waste Disposal/Duties of Department", http://gencourt.state.nh.us/rsa/html/L/485-A/485-A-4.htm) and NH CODE ADMIN. RULES Env-Ws 800 ("Sludge Management Rules", http://www.des.state.nh.us/rules/envws800.pdf) to ensure that these materials are beneficially used or disposed in an environmentally sound manner. DES authorizes the recycling of these materials through land application or composting for incorporation into topsoils at permitted sites, thus making use of their nutrient value and soil conditioning characteristics. These practices also preserve valuable solid waste landfill capacity and extend useful design life. Land application of sludge that has been certified in accordance with Env-Ws 807, represents an acceptable final beneficial reuse option, as long as all public health and environmental concerns are met. It recycles beneficial constituents (nutrients and organic matter) into the soil and provides added water retention capacity needed for plant growth. Prior to using any site for land application or stockpiling (for less than eight months), a Sludge Site Permit must be obtained. To obtain this permit, the applicant must prepare and submit a detailed site plan, a management plan, a groundwater monitoring plan (for reclamation sites), and detailed information on soil types and analyses. The applicant must notify abutters, the host community, and DES when filing an application. If issued, the Sludge Site Permit will contain testing requirements and minimum operating standards (including setbacks from homes, wells, water bodies, and water table, plus slope restrictions). The permit holder also must publish a public notice describing his/her intent to land-apply biosolids each year. An annual report must be filed with DES that documents the quantities of biosolids applied and demonstrates compliance with DES administrative rules.

Average number of permits issued annually: 5

Fees: $100 for sites with less than 5 acres, $150 for sites with 5-10 acres, and $300 for sites greater than 10 acres (All municipalities are exempt from these fees.)

Estimated processing time after application is deemed "complete": 2-3 months

Permit duration: Five years, subject to renewal

Permit transferability: Not transferable unless prior approval has been obtained from DES

Permit modification: Prior to implementing any changes, permit holders must notify DES in writing in accordance with Env-Ws 804.04 concerning proposed changes to a Sludge Site Permit and file a revised site plan and management plan highlighting the changes, coupled with an explanation justifying the need for the modifications. Include a list of abutters who were not notified at the time of the original application. (See http://www.des.state.nh.us/wwe/septslud/sludgemod_app.pdf)

Permit renewal: An application must be submitted to DES no later than 120 days prior to the expiration date of the existing permit. The applicant must submit information in Env-Ws 804.08(c) which is similar to that required for a permit modification.

State statute: RSA 485-A:4, XVI-b ("Water Pollution and Waste Disposal/Duties of Department", http://gencourt.state.nh.us/rsa/html/L/485-A/485-A-4.htm)
Federal law: 33 U. S. C. 1251 *et seq*. (1977) ("Clean Water Act", http://www4.law.cornell.edu/uscode/33/ch26.html)

N. H. Code of Administrative Rules: Env-Ws 800 ("Sludge Management", http://www.des.state.nh.us/rules/envws800.pdf)

U. S. Code of Federal Regulations: 40 CFR Part 122; 40 CFR Part 257; 40 CFR Part 503 ("Environmental Protection Agency", http://www.epa.gov/docs/epacfr40/chapt-I.info/subch-O.htm)

Appeals body: Water Council at RSA 21-0:7 ("Department of Environmental Services Act/Water Council", http://gencourt.state.nh.us/rsa/html/I/21-O/21-O-7.htm; see also http://www.des.state.nh.us/rules/env-wc200.pdf and http://www.des.state.nh.us/councils/#1)

Additional information: N. H. DES, Wastewater Engineering Bureau, (603) 271-7888
N. H. DES, Public Information Center, (603) 271-2975 or (603) 271-8876

Sludge Site Permit – *Work Sheet*

Key Qualifier Question: *Do you wish to apply certified biosolids to the land surface to provide nutrients, organic matter, and water to the soils for reclamation, stabilization, or other beneficial purposes?*

What must you do to apply?

- Obtain a copy of the *Sludge Site Permit Application* from the DES Wastewater Engineering Bureau, DES Public Information Center, or access it online at http://www.des.state.nh.us/wwe/septslud/sludgesite_app.pdf.
- Provide the name, place of business, and telephone number of the applicant's business, or home telephone number (if an individual applicant), including a 24-hour emergency contact.
- Provide the location of the proposed facility, including street address, tax map and lot number, current deed reference, as well as the facility owner's name and the current (or proposed) operators.
- Describe the types of activities proposed for the site (*e.g.*, agricultural, forest, land reclamation, stockpiling, *etc.*).
- Provide a description of how the site has been used, including agricultural operations and crops grown on each field (if applicable), for the five years prior to submission of the application.
- Provide a written statement that indicates whether the applicant has been convicted of a misdemeanor under any statute administered by DES within five years prior to the date of this application, or of a felony in any state or federal court during the ten years prior to this date of application.
- Prepare a site plan in accordance with NH CODE ADMIN. RULES Env-Ws 806.06 ("Sludge Management Rules", http://www.des.state.nh.us/rules/envws800.pdf) that has been reduced to a size of 8½" by 11" or 11" by 14", a management plan in accordance with Env-Ws 806.07 and, if land reclamation is proposed, prepare a groundwater monitoring plan as required by Env-Ws 809.02.
- Prepare a signed statement certifying that:
    - Notification concerning the proposal has been provided to DES, abutters, the host community, and landowners within 500 feet of the site where land application will occur
    - The site operator has been instructed on the requirements of Env-Ws 800 prior to working there
    - A copy of the application has been provided to the host community and it is accurate
- Include a copy of the U. S. Department of Agriculture's Natural Resource Conservation Service ("NRCS") county soils map, or portion thereof, showing the areas of proposed activity clearly delineated, including a description of each type of soil found at the site (see http://www.nh.nrcs.usda.gov/Soil_Data/).
- Submit a description of soil profile characteristics for each soil test pit or auger boring, including a description of the soil profile characteristics, depth to seasonal high water table, and depth to bedrock/other restrictive layer.
- Provide a U. S. Geological Survey map (largest scale available) depicting site boundaries with its latitude/longitude specified (see http://www.topozone.com).
- Submit the results of "background" soil analyses conducted in accordance with Env-Ws 806.10 including such parameters as heavy metals, soil acidity pH, buffer pH, texture, phosphorus, and organic matter.
- Provide written verification from the New Hampshire Department of Resources and Economic Development's Natural Heritage Inventory Section that indicates whether any threatened or endangered species exist on the site (see http://www.nhdfl.org/organization/div_nhnhi.htm).
- For land reclamation and forest application sites, submit a site-specific map or survey according to the Society of Soil Scientists of Northern New England's ***Site-Specific Soil Mapping Standards for New Hampshire and Vermont*** (see next "bullet").
- (See http://www.nh.nrcs.usda.gov/Soil_Data/Publications/NH%20VT%20Soil%20Mapping%20Standards.pdf)
- Prepare a list of all other state permits required for the site, and provide proof of application and status.
- Identify a local public repository where all information concerning the application can be reviewed.

- If the applicant is not the owner, submit a written statement that authorizes the applicant to engage in the proposed activities at the specified site and further authorizes DES to enter for purposes of site inspections and investigations.
- If the applicant is not the generator of the sludge(s), include a written statement signed by the generator certifying that the generator is ultimately responsible for the proper disposal of sludges at the site.
- Submit a check or money order for $300 (if site exceeds 10 acres), $150 (if site is 5-10 acres) or $100 (if site is 5 acres or less), made payable to "Treasurer, State of New Hampshire", along with two copies of the application and all supporting information to: Wastewater Engineering Bureau, New Hampshire Department of Environmental Services, 6 Hazen Drive, P. O. Box 95, Concord, NH 03302-0095. Telephone: (603) 271-7888; fax: (603) 271-4128; or online: http://www.des.state.nh.us/wwe/septslud.htm Sites owned and operated by New Hampshire municipalities are exempt from the fees but must still obtain the permit.

What types of projects require this permit?

- The development of a land application site for agricultural purposes
- The development of a land application site for forestry improvement activities
- The development of a land application site for gravel pit reclamation
- The development of a land application site for the stockpiling of sludge

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If there are questions regarding this page or any other section of the Guidebook, please contact Tim Drew, Administrator, Public Information and Permitting Unit, at tdrew@des.state.nh.us, or at (603) 271-3306.

Sludge Facility Permit

Introduction: The term "sludge" is used to describe the solid and semisolid material produced by water and wastewater treatment processes. As defined in RSA 485-A:2, XI-a ("Water Pollution and Waste Disposal/Definitions", http://gencourt.state.nh.us/rsa/html/L/485-A/485-A-2.htm), it includes industrial sludge and sludge mixtures, but does not include domestic septage or sludge disposed at solid waste facilities. The term "biosolids" is defined in RSA 485-A:2, XXII as *any sludge derived from a municipal wastewater treatment facility that meets the standards for beneficial reuse specified by DES*, where the standards are specified in NH CODE ADMIN. RULES Env-Ws 807. DES regulates the processing, transportation, and disposal/reuse of sludge and biosolids pursuant to RSA 485-A:4, XVI-b (see http://gencourt.state.nh.us/rsa/html/L/485-A/485-A-4.htm) and NH CODE ADMIN. RULES Env-Ws 800 (see http://www.des.state.nh.us/rules/envws800.pdf), to ensure that these materials are beneficially used or disposed in an environmentally sound manner. Any facility that is designed to manage, process, store, treat, or dispose of sludge (including sludge storage facilities and transfer stations where sludge is collected before transport to another site or facility), other than at a permitted sludge land application site or a permitted solid waste facility under RSA 149-M ("Solid Waste Management", http://gencourt.state.nh.us/rsa/html/indexes/149-M.html), must obtain a Sludge Facility Permit before beginning operations. An applicant must notify abutters, the host community, and DES concerning the plans for such a facility, and must provide a facility plan, a management plan that may include hydrogeologic studies, a groundwater monitoring plan (if required), and an odor control plan. If the application is approved, permit conditions will be included as needed to minimize impacts from facility operations on abutters and the surrounding community, and to protect public health and the environment.

Average number of permits issued annually: 5

Fees: Sludge composting facilities require a $500 application fee, while all other types of sludge management facilities require a $1,000 fee. (All municipalities are exempt from these fees.) The fee differential was established to encourage the development of composting operations, where possible.

Estimated processing time after application is deemed "complete": 3-4 months

Permit duration: Five years, subject to renewal

Permit transferability: Not transferable unless prior approval is obtained from DES

Permit modification: Prior to implementing any changes, the permit holder must notify DES in writing in accordance with Env-Ws 804.08 concerning proposed changes to a Sludge Facility Permit and must file a revised site plan and management plan highlighting the changes, coupled with an explanation justifying the need for the modifications. Include a list of abutters who were not notified at the time of the original application (see http://www.des.state.nh.us/wwe/septslud/sludgemod_app.pdf)

Permit renewal: An application for renewal must be submitted to DES no later than 180 days prior to the expiration date of the existing permit. The applicant must submit the information specified in Env-Ws 804.08(c), which is similar to that required for a permit modification.

State statute: RSA 485-A:4, XVI-b ("Water Pollution and Waste Disposal/Duties of the Department", http://gencourt.state.nh.us/rsa/html/L/485-A/485-A-4.htm)
Federal law: 33 U. S. C. 1251 *et seq*. (1977) ("Clean Water Act", http://www4.law.cornell.edu/uscode/33/ch26.html)

N. H. Code of Administrative Rules: Env-Ws 800 ("Sludge Management", http://www.des.state.nh.us/rules/envws800.pdf)

U. S. Code of Federal Regulations: 40 CFR Part 122; 40 CFR Part 257; 40 CFR Part 503 ("Environmental Protection Agency", http://www.epa.gov/epacfr40/chapt-I.info/chi-toc.htm)

Appeals body: Water Council at RSA 21-0:7 ("Department of Environmental Services/Water Council", http://gencourt.state.nh.us/rsa/html/I/21-O/21-O-7.htm; see also http://www.des.state.nh.us/rules/env-wc200.pdf and http://www.des.state.nh.us/councils/#1)

Additional information: N. H. DES, Wastewater Engineering Bureau, (603) 271-7888
N. H. DES, Public Information Center, (603) 271-2975 or (603) 271-8876

Sludge Facility Permit – *Work Sheet*

Key Qualifier Questions: *Do you plan to design and construct a facility where sludge will be mixed, treated, processed, or disposed (but not land applied), composted for biosolids production, stored or stockpiled for more than eight months? Do you plan to design and construct a sludge lagoon or monofill, a sludge transfer station, or a mixing site to prepare sludge for offsite use?*

What must you do to apply?

- Obtain a copy of the *Sludge Facility Permit Application* from the DES Wastewater Engineering Bureau, DES Public Information Center, or access it online at http://www.des.state.nh.us/wwe/septslud/sludgefacility_app.pdf
- Provide the name, place of business, and telephone number of the applicant's business, or home telephone number (if an individual applicant), including a 24-hour emergency contact.
- Provide the location of the proposed facility, including street address, tax map and lot number, current deed reference, as well as the facility owner's name and the current (or proposed) operator.
- Describe the type of sludge management activities proposed for the site (*e.g.*, composting, storing, treating, *etc.*).
- Provide an estimate of the facility's intended capacity and its projected design life.
- Provide a description of how the land where the facility is proposed was used for the five years prior to the date of application.
- Indicate intended use of the sludge generated (*e.g.*, land application) and whether sludge quality certification will be sought (only required if sludge or biosolids are destined for land application).
- Submit the following documents, prepared and stamped by a registered professional engineer licensed to practice in the state of New Hampshire (see http://www.state.nh.us/jtboard/pe.htm), pursuant to NH CODE ADMIN. RULES Env-Ws 800 (http://www.des.state.nh.us/rules/envws800.pdf):
    - Facility plan and construction specifications in accordance with Env-Ws 808.06.
    - Management plan in accordance with Env-Ws 808.07.
    - Closure plan in accordance with Env-Ws 808.09.
    - Groundwater monitoring plan (if required) in accordance with Env-Ws 809.
- Provide a signed statement certifying that:
    - Notice concerning the proposal has been provided to DES and all abutters, the host community, and all landowners located within 500 feet of the facility.
    - The operator of the facility has been (or will be) instructed on the requirements of Env-Ws 800 before operating the facility.
    - A copy of the facility application has been provided to the host community and the information is accurate.
- Include a copy of the U. S. Department of Agriculture's Natural Resource Conservation Service county soils map, or portion thereof, showing the areas of proposed activity clearly delineated, including a description of each type of soil found at the site (see http://www.nh.nrcs.usda.gov/Soil_Data/).
- Submit a description of the soil profile characteristics for each soil test pit or auger boring, including a description of the soil profile characteristics, depth to seasonal high water table, and depth to bedrock/other restrictive layer.
- Provide a U. S. Geological Survey map (largest scale available) depicting facility boundaries with its latitude/longitude specified (see http://www.topozone.com).
- Provide written verification from the New Hampshire Department of Resources and Economic Development's Natural Heritage Inventory Section that indicates whether any threatened or endangered species exist on the site (see http://www.nhdfl.org/organization/div_nhnhi.htm).
- For sludge monofills, provide financial assurance pursuant to NH CODE ADMIN. RULES Env-Wm 3100 ("Solid Waste Rules/Financial Assurance", http://www.des.state.nh.us/rules/swrules.pdf).
- Prepare a list of all other state permits required for the site, and provide proof of application and status.

- Identify a local public repository where all information concerning the application can be reviewed.
- Provide a written statement that indicates whether or not the applicant has been convicted of a misdemeanor under any statute administered by DES within five years prior to the date of this application, or of a felony in any state or federal court during the ten years prior to this date of application.
- If the applicant is not the owner, submit a written statement that authorizes the applicant to construct and operate the proposed sludge facility on the specified site and further authorizes DES to enter for site inspections and investigations.
- If the applicant is not the generator of the sludge(s), include a written statement signed by the generator certifying that the generator is ultimately responsible for the proper disposal of sludge at the site.
- Submit a check or money order for $500 if a compost facility or $1,000 for all other types (Municipal facilities are exempt from these fees), made payable to "Treasurer, State of New Hampshire", with two copies of all information to: Sludge and Septage Management Section, Wastewater Engineering Bureau, New Hampshire Department of Environmental Services, 6 Hazen Drive, P. O. Box 95, Concord, NH 03302-0095. Telephone: (603) 271-7888; fax: (603) 271-4128; or online: http://www.des.state.nh.us/wwe/septslud.htm

What types of projects require this permit?

- The development of a sludge or biosolids storage facility, such as a stockpile area, where materials will be stored for more than eight months
- The development of a compost facility for biosolids
- The development of a mixing facility to blend biosolids, short paper fiber, and sand
- The reclamation of gravel pits with biosolids and/or short paper fiber
- The development of a sludge lagoon or monofill

If there are questions regarding this page or any other section of the Guidebook, please contact Tim Drew, Administrator, Public Information and Permitting Unit, at tdrew@des.state.nh.us, or at (603) 271-3306.

Septage Holding Tank Registration

Introduction: The term "septage" is generally used to describe the liquids, semi-solids, and solids that are pumped from septic tanks, cesspools, holding tanks, boat toilets, and other portable toilets. DES regulates the removal, transportation, and disposal of septage pursuant to RSA 485-A:4, XVI-a ("Water Pollution and Waste Disposal/Duties of Department", http://gencourt.state.nh.us/rsa/html/L/485-A/485-A-4.htm) and NH CODE ADMIN. RULES Env-Ws 1600 ("Septage Management", http://www.des.state.nh.us/rules/envws1600.pdf) to ensure that it is used or disposed in an environmentally compatible manner. Septage holding tanks are used by permitted septage haulers for the temporary storage of septage for seven consecutive days or less. Septage holding tanks allow haulers to respond to emergency situations, such as septic system failure outside normal business hours when a treatment facility or land application site is not open to receive the wastes; to accumulate septage to be land-applied later; or to facilitate pH adjustment prior to the initiation of land application activity. Septage holding tanks must be registered with DES. The tank and all of its appurtenances must be watertight, accessible, and capable of being cleaned on a regular basis; the inlet and outlet connections must be designed and constructed to prevent leaks, spills, or other releases from the tank; the tank installation must comply with required setbacks from abutters, water bodies, wells, and other sensitive receptors; and the aggregate volume of the septage holding tank(s) at any one facility, land application site, or permitted hauler's property must not exceed 10,000 gallons. The successful applicant will receive a confirmation letter from DES upon approval.

Average number of registrations issued annually: 6

Fee: None

Estimated processing time after application is deemed "complete": 1-2 weeks

Registration duration: Indefinite

Registration transferability: Not transferable unless approved by DES

Registration modification: Registration-holders must notify DES if septage holding tanks are to be replaced or upgraded. An inspection will be scheduled to verify setback distances and tank integrity.

Registration renewal: Not applicable, since duration is "indefinite" (see above)

State statute: RSA 485-A:4, XVI-a ("Water Pollution and Waste Disposal Act/Duties of Department", http://gencourt.state.nh.us/rsa/html/L/485-A/485-A-4.htm)

Federal law: 33 U. S. C. §1251 *et seq*. (1977) ("Clean Water Act", http://www4.law.cornell.edu/uscode/33/ch26.html)

N. H. Code of Administrative Rules: Env-Ws 1600 ("Septage Management Rules", http://www.des.state.nh.us/rules/envws1600.pdf)

U. S. Code of Federal Regulations: (Not applicable)

Appeals body: Water Council at RSA 21-0:7 ("Department of Environmental Services/Water Council", http://gencourt.state.nh.us/rsa/html/I/21-O/21-O-7.htm; see also http://www.des.state.nh.us/rules/env-wc200.pdf and http://www.des.state.nh.us/councils/#1)

Additional information: N. H. DES, Wastewater Engineering Bureau, (603) 271-7888
N. H. DES, Public Information Center, (603) 271-2975 or (603) 271-8876

Septage Holding Tank Registration – *Work Sheet*

Key Qualifier Question: *As a permitted septage hauler or septage site permit holder, will you have the need to store septage in on-site tanks, vessels, or any other container (other than the permitted hauling vehicle) for a period of seven days or less?*

What must you do to apply?

- Obtain a copy of the *Septage Holding Tank Registration* application from the DES Water Division, Septage and Sludge Section, DES Public Information Center, or access it online at http://www.des.state.nh.us/wwe/septslud/holdingtank_registration.pdf
- Any permitted hauler who wishes to install or use a septage holding tank must provide the following:
    - Name, address, and home telephone of the applicant
    - Name, address, and telephone number of applicant's business
    - The septage hauler permit number
    - Location of the proposed septage holding tank, including street address, tax map and lot number, and current deed reference
    - The landowner's name, address, and telephone number
    - The capacity and age of the holding tank
- Prepare plans for the holding tank, including the following:
    - A locus map which identifies the proposed holding tank location
    - The identification of all access roads and access control measures to be employed
    - The identification of all roads, property boundary lines, structures within 200 feet of the holding tank location, structures on the property, any easements or rights-of-way which exist on the property, and the buffer zones specified in Table 1608-II, "Buffer Distances for Storage" (NH CODE ADMIN. RULE Env-Ws 1608.08(h), http://www.des.state.nh.us/rules/envws1600.pdf)
    - The identification of surrounding land use within 200 feet of the property on which the holding tank is proposed to be located
    - Septage holding tank specifications, including details of tank and piping design
- Prepare the specifications for tank design including:
    - Tank must be watertight
    - All piping, valves, and connections must also be watertight, accessible, and capable of being cleaned
    - All inlet and outlet connections must be constructed so that no leaks or spills exit the tank
    - Except for existing registered septage storage tanks, no new tank can be located within the buffer distances identified in Table 1608-II (see above)
    - The aggregate volume of the septage holding tank(s) located at a site, facility, or on a permitted hauler's property cannot exceed 10,000 gallons.
- Submit the application for registration, including all supporting materials, to: Sludge and Septage Management Section, Wastewater Engineering Bureau, New Hampshire Department of Environmental Services, 6 Hazen Drive, P. O. Box 95, Concord, NH 03302-0095. Telephone: (603) 271-7888; fax: (603) 271-4128; or online: http://www.des.state.nh.us/wwe/septslud.htm

What types of projects require this registration?

- The planned installation of a septage holding tank on the property of a permitted septage hauler
- The addition of a new holding tank at a permitted septage land application site
- The installation of a septage holding tank at a permitted facility to facilitate pH adjustment

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If there are questions regarding this page or any other section of the Guidebook, please contact Tim Drew, Administrator, Public Information and Permitting Unit, at tdrew@des.state.nh.us or at (603) 271-3306.

Septage Hauler Permit

Introduction: A septage hauler in New Hampshire is defined in NH CODE ADMIN. RULES Env-Ws 1600 as *any person or entity engaged in the removal or transportation of septage*, where "person" includes political subdivisions, business entities, and individuals (see http://www.des.state.nh.us/factsheets/wwt/web-11.htm). The term "septage" is generally used to describe the liquids, semi-solids, and solids that are pumped from septic tanks, cesspools, holding tanks, boat toilets, and other portable toilets, but excludes sewage sludge from public treatment works, industrial wastes, or other similar sludges. Septage includes material from septage lagoons. DES regulates the removal, transportation, and disposal of septage pursuant to RSA 485-A:4, XVI-a ("Water Pollution and Waste Disposal/Duties of Department", http://gencourt.state.nh.us/rsa/html/L/485-A/485-A-4.htm) and Env-Ws 1600 ("Septage Management", http://www.des.state.nh.us/rules/envws1600.pdf) to ensure that it is used or disposed in an environmentally compatible manner. A septic tank is a key component of a properly-operating, residential subsurface waste disposal system, and proper maintenance of the tank involves the removal of accumulated materials at a frequency of every two to three years. The septage removed is then transported to either a disposal facility, lagoon, or permitted land application site for beneficial use as a fertilizer or soil conditioner. All septage haulers must receive and maintain a valid permit from DES to remove (by pumping) and transport septage. This provides a system for "cradle-to-grave" tracking of the septage from the time of removal to final disposal. This oversight is needed to protect the public health and environment, due to this waste's typically low dissolved oxygen concentration and potentially high levels of pathogens, nutrients, and suspended solids, and the putrescible nature of its organic matter. Permit applications require the signature of a responsible official to authorize the hauler to dispose of the septage at a permitted septage treatment, storage, transfer, or disposal facility or approved land application site. Haulers are required to record the origin of every load and the permitted facility or site at which it is finally disposed. Approximately 30 percent of the septage collected is land-applied, stored in lagoons, or sent to alternate treatment facilities, 45 percent goes to publicly-owned treatment facilities in New Hampshire, and the remaining 25 percent is disposed at publicly-owned treatment facilities in other states.

Average number of permits issued biennially: 300

Fees: $100 for each vehicle tank, plus $5 for each new permit plate (All municipalities are exempt from these fees.)

Estimated processing time after application is deemed "complete": 1 week

Permit duration: 2 years. Permits expire on January 31 of the odd-numbered year following the date of issuance

Permit transferability: Permits are not transferable unless approved by DES

Permit modification: Not applicable

Permit renewal: A new application must be filed with DES, including an update on all original information submitted, not less than 15 days prior to the expiration date of the existing permit.

State statute: RSA 485-A:4, XVI-a ("Water Pollution and Waste Disposal/Duties of Department", http://gencourt.state.nh.us/rsa/html/L/485-A/485-A-4.htm)

Federal law: 33 U. S. C. §1251 *et seq*. (1977) ("Clean Water Act", http://www4.law.cornell.edu/uscode/33/ch26.html)

N. H. Code of Administrative Rules: Env-Ws 1600 ("Septage Management", http://www.des.state.nh.us/rules/envws1600.pdf)

U. S. Code of Federal Regulations: (Not applicable)

Appeals body: Water Council at RSA 21-0:7 ("Department of Environmental Services/Water Council", http://gencourt.state.nh.us/rsa/html/I/21-O/21-O-7.htm; see also http://www.des.state.nh.us/rules/env-wc200.pdf and http://www.des.state.nh.us/councils/#1)

Additional information: N. H. DES, Wastewater Engineering Bureau, (603) 271-3908
N. H. DES, Public Information Center, (603) 271-2975 or (603) 271-8876

Septage Hauler Permit – *Work Sheet*

Key Qualifier Question: *Do you plan to engage in the removal and/or transportation of septage (including portable toilet waste) within the state of New Hampshire?*

What must you do to apply? (See http://www.des.state.nh.us/factsheets/wwt/web-11.htm)

- Obtain a copy of the *2001-2003 Septage Hauler Application* from the DES Water Division, Sludge and Septage Section, DES Public Information Center, or access it online at http://www.des.state.nh.us/wwe/septslud/septagehauler_app.pdf.
- Provide the name, address, and home telephone number of the applicant and owner, if an individual.
- Provide the name, address, and telephone number of the applicant's business and contact person.
- Provide any telephone numbers to be used in case of an emergency.
- Provide the vehicle identification number and license plate number for the vehicle(s) that will be used to transport the tanks.
- Provide the tank identification number(s), if applicable.
- Provide the name, principal place of business, and telephone number of the septage hauler or septage transporting company that will appear on both sides of the vehicle or tank that will be used to transport the septage.
- Describe the anticipated service area(s).
- Identify the location of each land application site, septage facility, or wastewater treatment plant to which septage is proposed to be taken.
- Provide evidence as to whether the applicant or owner has been convicted of a misdemeanor under any statute administered by DES with the five years prior to the date of application, or a felony in any state or federal court during the ten years prior to the date of application.
- Prepare a written statement signed by the owner or authorized agent of each land application site, septage facility, or wastewater treatment plant to which the applicant proposes to transport septage, which acknowledges the applicant's intent to beneficially use or dispose of septage there and authorizes that activity to proceed.
- Provide written certification that upon issuance of the permit, the applicant will assume complete responsibility for ensuring that all persons who will be transporting septage with the applicant's vehicle(s) are familiar with the requirements of NH CODE ADMIN. RULES Env-Ws 1600 ("Septage Management", http://www.des.state.nh.us/rules/envws1600.pdf).
- Include a written statement signed by the applicant stating that all vehicles and tanks to be used for transporting septage have met all applicable federal and state motor vehicle requirements for septage transportation.
- Submit a check or money order in the amount of $100 (plus $5 for each tank needing a new or replacement plate) made payable to "Treasurer, State of New Hampshire" along with the application and all supporting materials to: Sludge and Septage Section, Wastewater Engineering Bureau, Water Division, New Hampshire Department of Environmental Services, 6 Hazen Drive, P. O. Box 95, Concord, NH 03302-0095. Telephone: (603) 271-3908; fax: (603) 271-4128; or online: http://www.des.state.nh.us/wwe/septslud.htm Note: Municipalities are exempt from paying the fees but must still apply for the permit.

What types of projects require this permit?

- A contractor who plans to offer septic tank pump-out services to area homeowners
- A company offering septage transport services to a commercial septage facility or land disposal site
- A town that removes and transports residents' septage to municipal lagoons for temporary storage

If there are questions regarding this page or any other section of the Guidebook, please contact Tim Drew, Administrator, Public Information and Permitting Unit, at tdrew@des.state.nh.us or at (603) 271-3306.

Septage Site Permit

Introduction: The term "septage" is used to describe the liquids, semi-solids, and solids that are pumped from a septic tank, cesspool, holding tanks, boat toilets, and other portable toilets. DES regulates the removal, transportation, and disposal of septage pursuant to RSA 485-A:4, XVI-a ("Water Pollution and Waste Disposal/Duties of Department", http://gencourt.state.nh.us/rsa/html/L/485-A/485-A-4.htm) and NH CODE ADMIN. RULES Env-Ws 1600 ("Septage Management", http://www.des.state.nh.us/rules/envws1600.pdf) to ensure that it is used or disposed in an environmentally compatible manner. DES also promotes the recycling of septage through its incorporation into soils at permitted land application sites, where soil microorganisms break down its components. Disposal of septage at a wastewater treatment facility can significantly increase the volume of sludge produced by the facility, which itself must be finally disposed at a landfill or incinerator, or beneficially used by land application. Septage lagoons are a temporary measure only, as they eventually reach capacity and the accumulated solids must then be removed and disposed. The land application of septage is an acceptable practice if all environmental and public health issues are addressed. Land application recycles beneficial constituents (nutrients and organic matter) into the soil and provides water needed for plant growth (septage is normally composed of at least 95 percent water). A Septage Site Permit must be obtained prior to using any site for land application. The application for a Septage Site Permit must include detailed site and management plans, soil testing results, and minimum design and operating standards (*e.g.,* setbacks from houses, wells, slopes, soil types) (see http://www.des.state.nh.us/factsheets/wwt/web-14.htm). An applicant must notify all abutters, the appropriate host community officials, and DES regarding plans to prepare a site for land application of septage. If the permit is issued, the permit holder is required to notify the public each year before septage is applied to the site. An annual report must be prepared which documents quantities applied and certifies the site's compliance with DES administrative rules and permit conditions.

Average number of permits issued annually: 5

Fees: $100 for sites with less than 5 acres, $150 for those with 5-10 acres, and $300 for sites greater than 10 acres in size. (All municipalities are exempt from these fees.)

Estimated processing time after application is deemed "complete": 3-4 months

Permit duration: 5 years, subject to renewal

Permit transferability: A Septage Site Permit can be transferred to another person with prior DES approval.

Permit modification: Permit holders must notify DES in writing describing the proposed changes to a permit to obtain review and approval prior to implementing any changes. A revised site plan and facility management plan, highlighting the proposed changes, are required along with an explanation of need and a list of abutters originally notified (see http://www.des.state.nh.us/wwe/septslud/septagemod_app.pdf)

Permit renewal: An application for renewal must be submitted to DES no later than 120 days prior to the expiration date of the existing permit, including an update of information contained in the original application.

State statute: RSA 485-A:4, XVI-a ("Water Pollution and Waste Disposal/Duties of Department", http://gencourt.state.nh.us/rsa/html/L/485-A/485-A-4.htm)

Federal law: 33 U. S. C. §1251 *et seq*. (1977) ("Clean Water Act", http://www4.law.cornell.edu/uscode/33/ch26.html)

N. H. Code of Administrative Rules: Env-Ws 1600 ("Septage Management", http://www.des.state.nh.us/rules/envws1600.pdf)

U. S. Code of Federal Regulations: 40 CFR Part 122; 40 CFR Part 257; 40 CFR Part 503 ("Environmental Protection Agency", http://www.epa.gov/epacfr40/chapt-I.info/chi-toc.htm)

Appeals body: Water Council at RSA 21-0:7 ("Department of Environmental Services/Water Council", http://gencourt.state.nh.us/rsa/html/I/21-O/21-O-7.htm; see also http://www.des.state.nh.us/rules/env-wc200.pdf and http://www.des.state.nh.us/councils/#1)

Additional information: N. H. DES, Wastewater Engineering Bureau, (603) 271-3908
N. H. DES, Public Information Center, (603) 271-2975 or (603) 271-8876

Septage Site Permit – *Work Sheet*

Key Qualifier Question: *Do you wish to apply septage to land for the purpose of providing nutrients, organic matter, and water?*

What must you do to apply? (See http://www.des.state.nh.us/factsheets/wwt/web-14.htm)

- Obtain a copy of the *Septage Site Permit Application* from the DES Wastewater Engineering Bureau, DES Public Information Center, or access it online at http://www.des.state.nh.us/wwe/septslud/septagesite_app.pdf.
- Provide the name, place of business, and telephone number of the applicant's business, or home telephone number (if an individual applicant), including a 24-hour emergency contact.
- Provide the location of the proposed facility, including street address, tax map and lot number, current deed reference, as well as the facility owner's name and the current (or proposed) operator.
- Describe the types of activities proposed for the site (*e.g.*, agricultural, forest, land reclamation, stockpiling, *etc.*).
- Provide a description of how the site has been used, including agricultural operations and crops grown on each field (if applicable), for the five years prior to submission of the application.
- Provide a written statement that indicates whether the applicant has been convicted of a misdemeanor under any statute administered by DES within five years prior to the date of application, or of a felony in any state or federal court during the ten years prior to the date of application.
- Prepare a site plan in accordance with NH CODE ADMIN. RULES Env-Ws 1607.06 (see http://www.des.state.nh.us/rules/envws1600.pdf)
- Prepare a management plan in accordance with Env-Ws 1607.07
- If land reclamation is proposed, prepare a groundwater monitoring plan as required by Env-Ws 1609.
- Prepare a signed statement certifying that:
    - Notice has been provided to DES, all abutters, the host community, and all landowners within 500 feet of the site where land application will occur
    - The site operator has been (or will be) instructed on the requirements of Env-Ws 1600 prior to working there
    - A copy of the application has been provided to the host community and it is accurate
- Include a copy of the U. S. Department of Agriculture's Natural Resource Conservation Service ("NRCS") county soils map, or portion thereof, that clearly delineates the areas of proposed activity and includes a description of each type of soil found at the site (see http://www.nh.nrcs.usda.gov/Soil_Data/).
- Submit a description of soil profile characteristics for each soil test pit or auger boring, including a description of the soil profile characteristics, depth to seasonal high water table, and depth to bedrock/other restrictive layer.
- Provide a U. S. Geological Survey map (largest scale available) depicting site boundaries with its latitude/longitude specified (see http://www.topozone.com).
- Submit the results of "background" soil analyses conducted in accordance with Env-Ws 1607.11(e) and (f) including such parameters as heavy metals, soil acidity pH, buffer pH, texture, phosphorus, and organic matter.
- Provide written verification from the New Hampshire Department of Resources and Economic Development's Natural Heritage Inventory Section that indicates whether any threatened or endangered species exist on the site (see http://www.nhdfl.org/organization/div_nhnhi.htm).
- For land reclamation and forest application sites, submit a site-specific map or survey according to the Society of Soil Scientists of Northern New England's ***Site-Specific Soil Mapping Standards for New Hampshire and Vermont*** (see next "bullet")
- See http://www.nh.nrcs.usda.gov/Soil_Data/Publications/NH%20VT%20Soil%20Mapping%20Standards.pdf
- Prepare a list of all other state permits required for the site, and provide proof of application and status.

- Identify a local public repository where all information concerning the application can be reviewed.
- If the applicant is not the owner, submit a written statement that authorizes the applicant to land-apply septage on the specified site and further authorizes DES to enter for purposes of site inspection and investigation.
- Submit a check or money order for $300 (if site exceeds 10 acres), $150 (if site is 5-10 acres) or $100 (if site is 5 acres or less) (municipal and currently permitted septage facilities are exempt from these fees), made payable to "Treasurer, State of New Hampshire", along with two copies of all information to: Sludge and Septage Management Section, Wastewater Engineering Bureau, New Hampshire Department of Environmental Services, 6 Hazen Drive, P. O. Box 95, Concord, NH 03302-0095. Telephone: (603) 271-3908; fax: (603) 271-4128; or online: http://www.des.state.nh.us/wwe/septslud.htm

What types of projects require this permit?

- A municipal site that will be used to land-apply the septage removed from residential septic tanks in the community
- A private forested parcel that will incorporate septage on a commercial basis for timber management activities

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If there are questions regarding this page or any other section of the Guidebook, please contact Tim Drew, Administrator, Public Information and Permitting Unit, at tdrew@des.state.nh.us or at (603) 271-3306.

Septage Facility Permit

Introduction: The term "septage" is used to describe the liquids, semi-solids, and solids that are pumped from septic tanks, cesspools, holding tanks, boat toilets, and other portable toilets. Pursuant to RSA 485-A:4, XVI-a ("Water Pollution and Waste Disposal/Duties of Department", http://gencourt.state.nh.us/rsa/html/L/485-A/485-A-4.htm) and NH CODE ADMIN. RULES Env-Ws 1600 ("Septage Management", http://www.des.state.nh.us/rules/envws1600.pdf), DES regulates the removal, transportation, and disposal (including beneficial use) of septage to ensure that it is used or disposed in an environmentally compatible manner. DES also promotes the recycling of septage through incorporation into soils at permitted land application sites, where soil microorganisms break down its components. Disposal of septage at a wastewater treatment facility can significantly increase the volume of sludge produced by the facility, which itself must be finally disposed at a landfill or incinerator, or beneficially used by land application. Septage lagoons are a temporary measure only, as they eventually reach capacity and the accumulated solids must then be removed and disposed. To address the need for cost-effective septage management options, DES has created the Septage Facility Permit to regulate any facility that is created to manage, process, store, treat, or dispose of septage, including facilities where septage is collected and/or stored before being transported to another site or facility (see http://www.des.state.nh.us/factsheets/wwt/web-13.htm). This permit does not apply to land application sites or facilities regulated by RSA 149-M ("Solid Waste Management", http://gencourt.state.nh.us/rsa/html/indexes/149-M.html). An applicant must notify abutters, host community officials, and DES concerning the plans for such a facility and must provide a facility plan, management plan, closure plan, odor control plan, and groundwater monitoring plan (where appropriate). If strict adherence to the standards cannot be achieved, the applicant may apply for a waiver (see http://www.des.state.nh.us/wwe/septslud/septage_waiver.pdf). A waiver will be granted if the proposed alternative is at least equivalent to the requirements contained in the rules, is sufficient to ensure compliance with RSA 485-A and RSA 485-C ("Groundwater Protection Act", http://gencourt.state.nh.us/rsa/html/indexes/485-C.html), and will be protective of human health and safety, and the environment. Permit conditions are included to minimize the impact of the facility on the abutters, the host community, and the surrounding environment. These requirements also apply to septage storage facilities and transfer stations where it is collected before being transported to another site or facility.

Average number of permits issued annually: 5

Fee: $1,000, unless applicant is exempt (All municipalities are exempt from these fees.)

Estimated processing time after application is deemed "complete": 3-4 months

Permit duration: 5 years, subject to renewal

Permit transferability: A permit can be transferred to another person with prior approval from DES.

Permit modification: Permit holders must notify DES in writing describing the proposed changes to a permit to obtain review and approval prior to implementing any changes. A revised site plan and facility management plan, highlighting the proposed changes, are required along with an explanation of need and a list of current abutters to whom the notice was not provided at the time of the original application (see http://www.des.state.nh.us/wwe/septslud/septagemod_app.pdf).

Permit renewal: An application for renewal (including an update of information contained in the original application) must be submitted to DES no later than 120 days prior to the expiration date of the existing permit.

State statute: RSA 485-A:4, XVI-a ("Water Pollution and Waste Disposal/Duties of Department", http://gencourt.state.nh.us/rsa/html/L/485-A/485-A-4.htm)

Federal law: 33 U. S. C. §1251 *et seq*. (1977) ("Clean Water Act", http://www4.law.cornell.edu/uscode/33/ch26.html)

N. H. Code of Administrative Rules: Env-Ws 1600 ("Septage Management", http://www.des.state.nh.us/rules/envws1600.pdf)

U. S. Code of Federal Regulations: 40 CFR Part 122; 40 CFR Part 257; 40 CFR Part 503 ("Environmental Protection Agency", http://www.epa.gov/epacfr40/chapt-I.info/chi-toc.htm)

Appeals body: Water Council at RSA 21-0:7 ("Department of Environmental Services/Water Council", http://gencourt.state.nh.us/rsa/html/I/21-O/21-O-7.htm; see also http://www.des.state.nh.us/rules/env-wc200.pdf and http://www.des.state.nh.us/councils/#1)

Additional information: N. H. DES, Wastewater Engineering Bureau, (603) 271-3908
N. H. DES, Public Information Center, (603) 271-2975 or (603) 271-8876

Septage Facility Permit – *Work Sheet*

Key Qualifier Question: *Will your project include the development of a site to host a septage facility that may include storage lagoons, treatment facilities, transfer stations, a site where septage is to be mixed prior to offsite shipment, and/or a location where a septage storage tank will be placed?*

What must you do to apply? (See http://www.des.state.nh.us/factsheets/wwt/web-13.htm)

- Obtain a copy of the *Septage Facility Permit Application* from the DES Wastewater Engineering Bureau, DES Public Information Center, or access it online at http://www.des.state.nh.us/wwe/septslud/septagefacility_app.pdf.
- Provide the name, place of business, and telephone number of the applicant's business, or home telephone number (if an individual applicant), including a 24-hour emergency contact.
- Provide the location of the proposed facility, including street address, tax map and lot number, current deed reference, the name(s) of the facility owner, and the current (or proposed) operator.
- Describe the type of septage management activities proposed for the site (*e.g.*, processing, storing, or treatment).
- Provide an estimate of the facility's intended capacity and its projected design life.
- Describe the land use where the facility is proposed for the five years prior to the application.
- Submit the following documents, prepared and stamped by a registered professional engineer licensed to practice in the state of New Hampshire (see http://www.state.nh.us/jtboard/pe.htm), pursuant to NH CODE ADMIN. RULES Env-Ws 1600 ("Septage Management", http://www.des.state.nh.us/rules/envws1600.pdf):
    - Facility plan and construction specifications in accordance with Env-Ws 1608.06.
    - Management plan in accordance with Env-Ws 1608.07.
    - Closure plan in accordance with Env-Ws 1608.09.
    - Groundwater monitoring plan (if required) in accordance with 1609.
- Provide a signed statement certifying that:
    - Notice of the proposal has been given to abutters, the host community, and all landowners located within 500 feet of the facility.
    - The operator of the facility has been (or will be) instructed on the requirements of Env-Ws 1600 before operating the facility.
    - A copy of the facility application has been provided to the host community and the information is accurate.
- Include a copy of the U. S. Department of Agriculture's Natural Resource Conservation Service county soils map, or portion thereof, clearly delineating the areas of proposed activity and including a description of each type of soil found at the site (see http://www.nh.nrcs.usda.gov/Soil_Data/).
- Submit a description of the soil profile characteristics for each soil test pit or auger boring, including a description of the soil profile characteristics, depth to seasonal high water table, and depth to bedrock/other restrictive layer.
- Provide a U. S. Geological Survey map (largest scale available) depicting the facility's boundaries and with its latitude/longitude specified (see http://www.topozone.com).
- Provide written verification from the New Hampshire Department of Resources and Economic Development's Natural Heritage Inventory Section that indicates whether any threatened or endangered species exist on the site (see http://www.nhdfl.org/organization/div_nhnhi.htm).
- Prepare a list of all other state permits required for the site, and provide proof of application and status.
- Identify a local public repository where all information concerning the application can be reviewed.
- Provide a written statement that indicates whether the applicant has been convicted of a misdemeanor under any statute administered by DES within five years prior to the date of application, or of a felony in any state or federal court during the ten years prior to the date of application.

- If the applicant is not the owner, submit a written statement that authorizes the applicant to construct and operate the proposed facility on the specified site and further authorizes DES to enter for site inspections and investigations.
- Submit a check or money order for $1,000 (Municipal facilities are exempt from this fee.), made payable to "Treasurer, State of New Hampshire", along with two copies of all information to: Sludge and Septage Management Section, Wastewater Engineering Bureau, New Hampshire Department of Environmental Services, 6 Hazen Drive, P. O. Box 95, Concord, NH 03302-0095. Telephone: (603) 271-3908; fax: (603) 271-4128; or online: http://www.des.state.nh.us/wwe/septslud.htm

What types of projects require this permit?

- A municipal site on which storage lagoons for septage are proposed to be constructed
- Private property on which a processing facility for mixing septage in preparation for offsite disposal is proposed to be constructed
- A regional transfer station that proposes to facilitate the receipt/consolidation and offsite transport of septage to a final disposal site

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If there are questions regarding this page or any other section of the Guidebook, please contact Tim Drew, Administrator, Public Information and Permitting Unit, at tdrew@des.state.nh.us or at (603) 271-3306.

Chapter 9:

Winnipesaukee River Basin Program

2002 Edition

Chapter 9: Winnipesaukee River Basin Program

Introduction

In 1962, the steadily-declining water quality of Lake Winnisquam in New Hampshire's popular "Lakes Region" was made apparent by the emergence of massive blooms of algal species like *Aphanizomenon flos-aquae*, *Microcystis* spp., and *Anabaena* spp. that robbed dissolved oxygen from the lake water and proved to be toxic to fish and other wildlife as the algal populations later died off and decomposed. Treatment of the lake water was often accomplished by filling burlap bags with copper sulfate and towing them behind boats along pre-set transects to release the material directly into the hyperlimnion where the algal mass predominated. Unfortunately, the copper released to the water column was often as toxic to the indigenous aquatic organisms as were the toxins released by the decaying algal blooms. The primary sources of nutrients (*i.e.*, nitrogen and phosphorous compounds) found to be contributing to the problems in Lake Winnisquam were traced to the wastewater treatment system discharges for the City of Laconia and the former Laconia State School. Failing septic systems at shorefront properties, agricultural and urban runoff, and discharges from boats also played a role in adding excess nutrients to the ecosystem. Later studies showed that Lake Winnipesaukee also supported these species of problem algae, but had not yet reached the critical concentrations of nutrients sufficient to support such massive algal blooms; but the potential was there. This degradation of surface water quality in the Lakes Region also had a devastating effect on the local economy, property values, and tourism. A plan to control the pollution was developed in the late 1960s and early 1970s through a study financed by the City of Laconia. The study was undertaken with supervision from the former New Hampshire Water Supply and Pollution Control Commission (one of two predecessor agencies of the current DES Water Division), the U. S. Environmental Protection Agency, and the Winnipesaukee River Basin Study Commission (with representatives from the towns of Franklin, Gilford, Laconia, Meredith, Northfield, Sanbornton, and Tilton). The study focused primarily on the water quality problems that required immediate attention, and recommended specific solutions to those problems. The study's recommendations were as follows:

- Existing and proposed treatment plants should be discouraged from discharging into Lake Winnisquam and Lake Winnipesaukee. Those plants that continued to discharge should provide advanced wastewater treatment to remove the nutrients (primarily phosphorous and nitrates) which cause water quality problems in lakes.
- Water quality problems in the more developed portions of the Lakes Region (Belmont, Franklin, Gilford, Laconia, Meredith, Northfield, Sanbornton, and Tilton) should be treated as a regional concern due to the magnitude and concentration of problems.
- Because no single community in the Lakes Region has the ability to implement the recommended regional solution, the State of New Hampshire should design, construct, own, and operate the recommended system on behalf of the communities it will serve.

Winnipesaukee River Basin Program

The Winnipesaukee River Basin Program ("WRBP") thus was created as a state-owned sewer system to serve portions of the communities of Belmont, Center Harbor, Franklin, Gilford, Laconia, Meredith, Moultonborough, Northfield, Sanbornton, and Tilton (see http://www.des.state.nh.us/winni/towns.htm). The WRBP originally was established under the provisions of RSA 149-G, enacted during the 1972 special session of the New Hampshire Legislature. The WRBP now operates as the Winnipesaukee River Basin Bureau of the DES Water Division, under the re-codified provisions in RSA 485-A:45-54 ("Water Pollution and Waste Disposal/Winnipesaukee River Basin Control", http://gencourt.state.nh.us/rsa/html/indexes/485-A.html) and NH CODE ADMIN. RULES Env-Ws 1200 ("Winnipesaukee River Basin Program", http://gencourt.state.nh.us/rules/env-ws1200.html). The intent of the original legislation was to remove, insofar as practicable, wastewater discharges to lakes and streams in the Winnipesaukee River Basin watershed, and to provide major interceptors along routes where existing development had exceeded the ability of subsurface

disposal (septic) systems to safely dispose of sewage. The cost of operating and administering the WRBP was to be borne entirely by the participating communities, with each sharing in the cost on the basis of actual or anticipated wastewater flows.

Facilities Development/Operation

The WRBP's highly-regarded wastewater collection and treatment facilities are operated by DES employees on behalf of member communities (see http://www.des.state.nh.us/winni/winnimap.pdf). Nearly $70 million have been spent to construct these facilities over the past three decades; this does not include the more than $2 million needed each year to operate and maintain the facilities. Over the past 25 years, nearly 60 miles of state-owned interceptor sewers, 14 major pump stations (and several smaller ones), and the central treatment plant in Franklin have been constructed, employing state-of-the-art technology at every possible location in the system (see http://www.des.state.nh.us/winni/scada.htm). Many additional miles of municipally-owned sewers also have been built over the years to discharge into the state-owned system. These locally-owned sewers have been constructed at times to protect water quality and, at other times, to stimulate industrial, commercial, and residential development. Thus, the availability of the state-owned interceptor system has been beneficial not only for protecting and preserving water quality in the Lakes Region, but it also has served as a catalyst to economic growth in the region.

Regional Wastewater Treatment

The treatment plant itself is classified as a secondary, "activated sludge" facility that uses a head works receiving area for initial screening of inflow, primary and secondary clarifiers, aeration tanks, and ultraviolet disinfection (see http://www.des.state.nh.us/winni/flow.htm). The current average inflow rate is 5.5 million gallons per day, just under half of the design capacity of 11.5 million gallons per day. The treatment facility accepts septage from member communities for final treatment and disposal, and produces sludges that are collected by a private recycling company. This private company, in turn, produces soil from these materials for beneficial reuse at land reclamation sites, landfill closures, and land spreading at area farms (see http://www.des.state.nh.us/winni/sludge.htm). Since the WRBP biosolids are anaerobically digested (*i.e.*, stabilized in oxygen-starved conditions), the nitrogen found in the material has a very slow release rate into the soil. This characteristic protects the groundwater from nitrogen pollution which may occur when chemically-based (commercial) nitrogen fertilizers are land-applied. The treatment plant's anaerobic digestion process also stabilizes organic compounds in the wastewater sludges, producing the added benefit of reducing the odors commonly associated with sludge.

Pretreatment Program/Discharge Permitting

To ensure that connections to the regional system are completed with care and quality and that proposed discharges to the treatment system meet federal and state standards (including pretreatment standards; see http://www.epa.gov/docs/epacfr40/chapt-I.info/subch-N.htm) prior to discharge (see http://www.des.state.nh.us/winni/ipp.htm), the WRBP and the DES Wastewater Engineering Bureau work with local member communities to review such proposals through a series of three types of authorizations: the WRBP Connection Permit Request/Approval Permit, the WRBP Domestic Wastewater Discharge Permit Request/Approval, and the WRBP Industrial Wastewater Discharge Permit Request/Approval. Final decisions on these applications are provided to both the applicant and the host community.

Summary

The DES Winnipesaukee River Basin Bureau is the primary entity responsible for the operation and maintenance of the WRBP facilities in the Lakes Region communities of Belmont, Center Harbor, Franklin, Gilford, Laconia, Meredith, Moultonborough, Northfield, Sanbornton, and Tilton (see

http://www.des.state.nh.us/winni/). Appeals of permit/approval decisions and orders issued for violations of WRBP permits/approvals should be directed to the Water Council (see http://www.des.state.nh.us/councils/#1).

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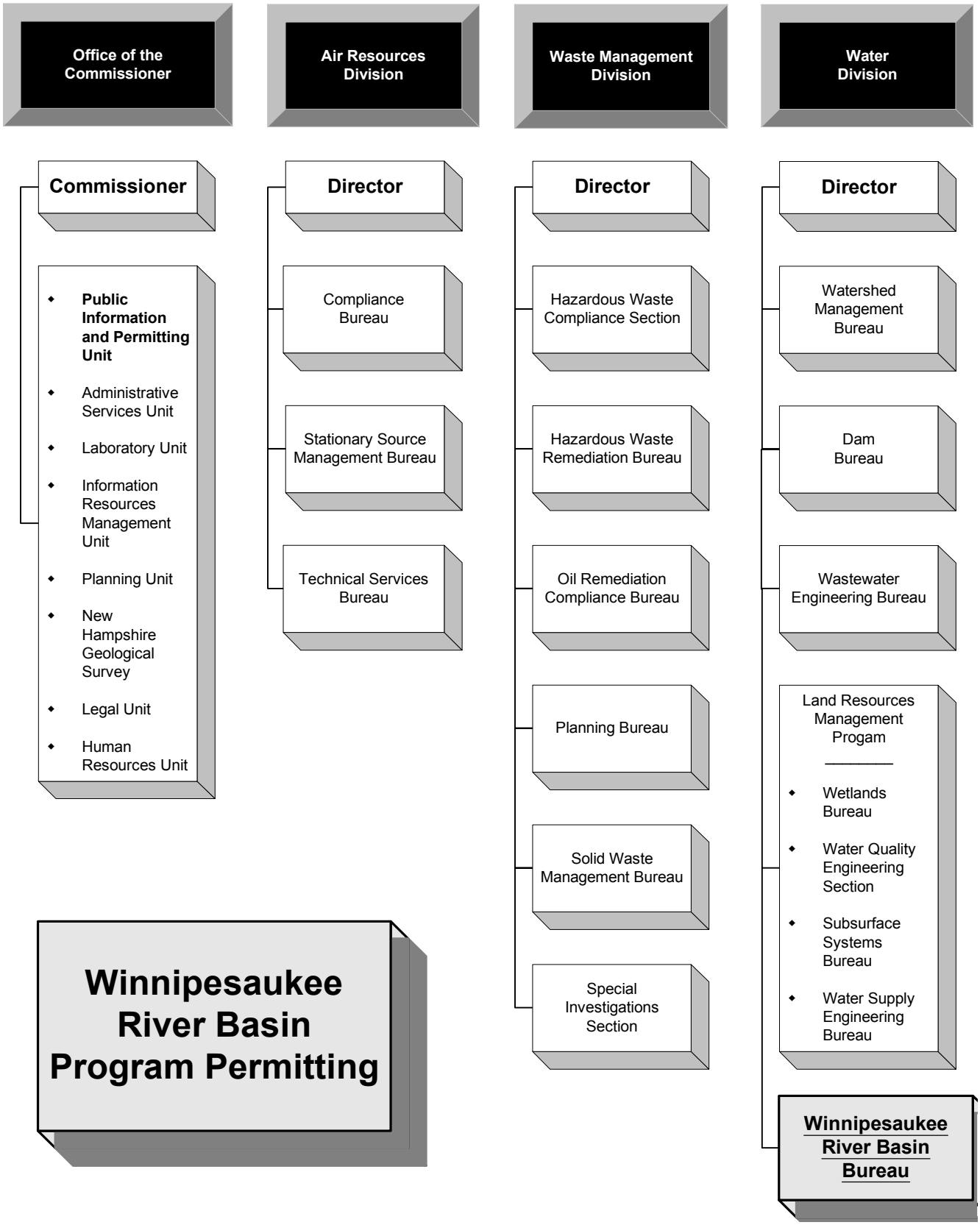
- ✓ **WRBP Domestic Wastewater Discharge Permit Request/Approval**
- ✓ **WRBP Industrial Wastewater Discharge Permit Request/Approval**

Organizational Chart

New Hampshire Department of Environmental Services



WRBP Connection Permit Request/Approval Permit

Introduction: The DES Winnipesaukee River Basin Program ("WRBP") operates the regional, State-owned wastewater treatment system that serves the Lakes Region communities of Belmont, Center Harbor (which serves a portion of Moultonborough), Franklin, Gilford, Laconia, Meredith, Northfield, Sanbornton, and Tilton. The WRBP system includes about 60 miles of major interceptor sewer, 14 pump stations, and the regional wastewater treatment facility located in the City of Franklin, New Hampshire (see http://www.des.state.nh.us/winni/winnimap.pdf). The system, which has been operated as a State-local partnership for more than two decades, diverts all "point" (*i.e.*, piped) discharges of municipal wastewater originating in the communities noted above from Lake Winnipesaukee, Lake Winnisquam, and the Winnipesaukee and Pemigewasset Rivers to the WRBP treatment facility. Following secondary treatment and disinfection, the treated effluent is released in accordance with the limits of the WRBP's National Pollutant Discharge Elimination System ("NPDES") Permit to the Merrimack River (see http://www.des.state.nh.us/winni/flow.htm). The WRBP system has reserve design capacity to serve areas of New Hampshire's Lakes Region that have not yet been developed for residential, commercial, or industrial uses. When such development occurs, if a local municipal sewer system is not available, a WRBP Connection Permit Request must be filed to obtain authorization to connect a sewer service line to the State-owned interceptor sewer (see http://www.des.state.nh.us/factsheets/wwt/web-1.htm). The WRBP Approval Permit for these connections represents the result of a joint process between the local community and the WRBP, with the actual Connection Permit issued to the applicant by the WRBP. If the portion of the State-owned interceptor to which connection will be made is located within a railroad right-of-way, a permit also must be obtained from the New Hampshire Department of Transportation's Bureau of Rails and Transit (see http://webster.state.nh.us/dot/index.htm).

Average number of requests evaluated annually: 2-5

Fees: $150 (excluding municipal fees) Municipalities, counties, state agencies, and school districts are exempt from this fee.

Estimated processing time after application is deemed "complete": 1-2 weeks (Lead time to obtain a permit from the N. H. Department of Transportation's Bureau of Rails & Transit can be as long as 6-9 months.)

Approval Permit duration: 2 years (within which construction must take place)

Approval Permit transferability: A written request must be submitted to the WRBP to demonstrate need, check for compliance status, and identify the new owner. The community also must be aware of and recommend the transfer.

Approval Permit modification: No modifications may be made to the Approval Permit without prior approval of the WRBP.

Approval Permit renewal: One-year extension available, based on written submission of need to WRBP

State statutes: RSA 485-A:45-54 ("Water Pollution and Waste Disposal/Winnipesaukee River Basin Control", http://gencourt.state.nh.us/rsa/html/indexes/485-A.html), RSA 485:8, V ("New Hampshire Safe Drinking Water Act/Approval of Construction Plans", http://gencourt.state.nh.us/rsa/html/indexes/485.html), and RSA 485-A:4, VI, IX, IX-a through IX-c, and XV ("Water Pollution and Waste Disposal/Duties of Department", http://gencourt.state.nh.us/rsa/html/L/485-A/485-A-4.htm), and RSA 485-A:5 ("Water Pollution and Waste Disposal/Pretreatment Standards", http://gencourt.state.nh.us/rsa/html/L/485-A/485-A-5.htm)

N. H. Code of Administrative Rules: Env-Ws 1200 ("Winnipesaukee River Basin Program", http://www.gencourt.state.nh.us/rules/env-ws1200.html), Env-Ws 700 ("Standards of Design and Construction for Sewerage & Wastewater Treatment Facilities", http://www.des.state.nh.us/rules/env700.pdf), and Env-Ws 904 ("Standards for Pretreatment of Industrial Wastewater", http://www.des.state.nh.us/rules/adptd904.pdf)

Appeals body: Water Council at RSA 21-O:7 ("Department of Environmental Services/Water Council", http://gencourt.state.nh.us/rsa/html/I/21-O/21-O-7.htm; see also http://www.des.state.nh.us/rules/env-wc200.pdf and http://www.des.state.nh.us/councils/#1)

Additional information: N. H. DES, Winnipesaukee River Basin Program, (603) 934-2809
N. H. DES, Public Information Center, (603) 271-2975 or (603) 271-8876
N. H. DOT, Bureau of Rails and Transit, (603) 271-2468

WRBP Connection Permit Request/Approval Permit – *Work Sheet*

Key Qualifier Question: *Will the proposed project or activity include a sewer connection to the State-owned sewers located in the communities of Belmont, Center Harbor (which serves a portion of Moultonborough), Franklin, Gilford, Laconia, Meredith, Northfield, Sanbornton, or Tilton?*

What must you do to apply?

- Obtain a copy of the *Connection Permit Request (CPR) – WRBP Interceptor* ("pink form") from the municipality in which the connection is proposed. If the State-owned interceptor is located in a railroad right-of-way owned by the New Hampshire Department of Transportation's Bureau of Rails and Transit, a permit from that agency may also be required (see http://webster.state.nh.us/dot/index.htm).
- Provide the name and mailing address of the applicant
- Provide the address of the property being connected to the interceptor sewer.
- Provide the approximate location on the interceptor where the connection is to be made. The WRBP maintains sewer line as-built drawings (blueprints) for viewing or printing to assist the applicant in defining the connection location.
- Identify the tax map and lot number of the property where the connection is to be made.
- Provide a set of plans and specifications describing sewer connection details such as invert elevation, size and type of connecting pipe, *etc*.
- Provide the name and address of the contractor who will do the work.
- Provide the name and address of the coring contractor (A list of concrete corers is available from the WRBP upon request.)
- Submit a check or money order for $150 made payable to "Treasurer, State of New Hampshire", along with the completed and signed application, the review fee, plans and specifications and any supporting materials to the municipal office in which the connection will be made to allow for local review and approval. The application must be signed by a municipal official to signify local approval.
- The municipality forwards the municipally-approved application to the WRBP, at least 15 days prior to the proposed connection date, for review and evaluation in conformance with NH CODE ADMIN. RULES Env-Ws 700 ("Standards of Design for Sewerage and Wastewater Treatment Facilities", http://www.des.state.nh.us/rules/env700.pdf). Minor technical comments will be conveyed directly to the applicant or consultant, while any major concerns will be communicated in writing.
- Mail all application materials to: Winnipesaukee River Basin Program, 528 River Street, P. O. Box 68, Franklin, NH 03235-0068. For further information, please contact the WRBP offices by telephone at (603) 934-2809, fax at (603) 934-4831, or online at http://www.des.state.nh.us/winni/.
- If acceptable, the WRBP will issue the final Connection Permit to the applicant and will provide a copy of the permit to the host community.

What types of projects require this Approval Permit?

- ❖ Any connection which will require a direct hook-up to a State-owned interceptor

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If there are questions regarding this page or any other section of the Guidebook, please contact Tim Drew, Administrator, Public Information and Permitting Unit, at tdrew@des.state.nh.us or at (603) 271-3306.

WRBP Domestic Wastewater Discharge Permit Request/Approval

Introduction: The DES Winnipesaukee River Basin Program ("WRBP") operates the regional, State-owned wastewater treatment system that serves the Lakes Region communities of Belmont, Center Harbor (which serves a portion of Moultonborough), Franklin, Gilford, Laconia, Meredith, Northfield, Sanbornton, and Tilton. The WRBP system includes about 60 miles of major interceptor sewer, 14 pump stations, and the regional wastewater treatment facility located in the City of Franklin, New Hampshire (see http://www.des.state.nh.us/winni/winnimap.pdf). The system, which has been operated as a State-local partnership for more than two decades, diverts "point" (*i.e.*, piped) discharges of wastewater originating in the communities noted above from Lake Winnipesaukee, Lake Winnisquam, and the Winnipesaukee and Pemigewasset Rivers to the WRBP treatment facility. Following secondary treatment and disinfection, the treated effluent is then discharged to the Merrimack River in accordance with the limits of the WRBP's National Pollutant Discharge Elimination System ("NPDES") Permit (see http://www.des.state.nh.us/winni/flow.htm). Prior to making new connections to the WRBP system, the proposed facilities and connections must be reviewed and approved by the municipality and the WRBP. The purpose of this review process is to ensure the proper design, construction, and operation of wastewater treatment facilities constructed within member communities. Application is made first to the local community in which the domestic (human, non-industrial wastes) discharge will occur. Following local sign-off, the WRBP will evaluate the proposed discharge and, if acceptable, forward the application to the DES Wastewater Engineering Bureau. DES will issue an approval based on joint findings by the WRBP and the DES Wastewater Engineering Bureau, following which the WRBP will forward the approval to the applicant and the community.

Average number of requests evaluated annually: 10-20

Separate fees: To the DES Wastewater Engineering Bureau: $30 for each 300 gallons/day ("gpd") of flow for the first 10,000 gpd of total flow, plus $15 for each additional 300 gpd. A fee of $200 per plan sheet is required for the review of pump stations, force mains, interceptors, and wastewater treatment facilities, which are submitted independently of a collection system. To the WRBP: $50 for application review. (Municipalities, counties, state agencies, and school districts are exempt from these fees.)

Estimated processing time after application is deemed "complete": 2-4 weeks (allow 3-6 weeks for larger than normal or more complex projects)

Approval duration: 2 years (within which construction must begin)

Approval transferability: A WRBP Letter of Approval may be transferred upon change of facility ownership if written notification is received at least 60 days in advance of the transfer. Any intent to change the facility's operations or processes will require the new owner to file a new application with the host community, the WRBP, and the DES Wastewater Engineering Bureau.

Approval modification: For a new discharge or a change in the quantity/quality of an existing discharge is desired, a new application must be filed with the municipality where the discharge is proposed.

Approval renewal: Must be accomplished bi-annually by the permit holder

State statutes: RSA 485-A:45-54 ("Water Pollution and Waste Disposal/Winnipesaukee River Basin Control", http://gencourt.state.nh.us/rsa/html/indexes/485-A.html), RSA 485:8, V ("New Hampshire Safe Drinking Water Act/Approval of Construction Plans", http://gencourt.state.nh.us/rsa/html/L/485/485-8.htm), and RSA 485-A:4, VI, IX, IX-a through IX-c, and XV ("Water Pollution and Waste Disposal/Duties of Department", http://gencourt.state.nh.us/rsa/html/L/485-A/485-A-4.htm)

N. H. Code of Administrative Rules: Env-Ws 1200-1205 ("Winnipesaukee River Basin Program", http://www.gencourt.state.nh.us/rules/env-ws1200.html) and Env-Ws 700 ("Standards of Design and Construction for Sewerage & Wastewater Treatment Facilities", http://www.des.state.nh.us/rules/env700.pdf)

Appeals body: Water Council at RSA 21-O:7 ("Department of Environmental Services/Water Council", http://gencourt.state.nh.us/rsa/html/I/21-O/21-O-7.htm; see also http://www.des.state.nh.us/rules/env-wc200.pdf and http://www.des.state.nh.us/councils/#1)

Additional information: N. H. DES, Winnipesaukee River Basin Program, (603) 934-2809
N. H. DES, Wastewater Engineering Bureau, (603) 271-3908
N. H. DES, Public Information Center, (603) 271-2975 or (603) 271-8876

WRBP Domestic Wastewater Discharge Permit Request/Approval – *Work Sheet*

Key Qualifier Questions: *Will the project or activity result in the discharge of sanitary (human, non-industrial) sewage in excess of 50 population equivalents (5,000 gallons per day), or in an increase in an existing discharge of sanitary sewage of 5,000 additional gallons per day to the system? Will new sewage facilities be constructed (whether publicly or privately owned), regardless of design flow?*

Note: This approval is not needed for sanitary discharges smaller than 5,000 gallons per day provided that no sewerage construction is proposed and provided that such discharge will not be deleterious to the treatment plant operation, safety of personnel, or receiving stream's water quality. If the project includes a sewer connection to a WRBP-owned sewer, the applicant must also file a Connection Permit Request with the WRBP.

What must you do to apply?

From the community -

- Obtain the WRBP *Domestic Wastewater Discharge Permit Request Application* ("green form") from the community in which the discharge will occur.
- Provide the name of the community in which the discharge is located.
- Quantify the total sanitary flow to be discharged
- Submit written evidence of approval with the signature of an authorized community official.
- Submit the completed application to the municipality at least 30 days prior to the construction of the sewerage systems accompanied by three copies of the technical specifications, engineering drawings, pertinent design calculations, a signed "green form", and related fees.

To the WRBP -

- Provide information requested on the "green form" that shows the measured average daily and maximum daily flows (expressed in gallons/day) to the public sewer.
- The municipality must forward the complete application to the WRBP for initial review and evaluation in conformance with NH CODE ADMIN. RULES Env-Ws 1200 ("Winnipesaukee River Basin Program", http://www.gencourt.state.nh.us/rules/env-ws1200.html) and NH CODE ADMIN. RULES Env-Ws 700 ("Standards of Design for Sewerage and Wastewater Treatment Facilities", http://www.des.state.nh.us/rules/env700.pdf). Minor technical comments will be conveyed directly to the applicant or consultant, while any major concerns will be communicated in writing.
- Mail all materials to: Winnipesaukee River Basin Program, P. O. Box 68, 528 River Street, Franklin, NH 03235-0068.
- For more information, please contact the WRBP offices by telephone at (603) 934-2809, fax at (603) 934-4831, or online at http://www.des.state.nh.us/winni/.
- The WRBP will review the application and, if satisfactory, will forward the request to the DES Wastewater Engineering Bureau for final review for conformance with Env-Ws 700. If the application is complete and complies with all requirements, DES will approve the request and the WRBP will transmit the approval to the applicant and the community.

What types of projects require this Letter of Approval?

- Public sewer system extensions with discharge of sanitary sewage in excess of 5,000 gallons per day
- Any construction or renovation of sewers, force mains, or pump stations

If there are any questions regarding this page or any other section of the Guidebook, please contact Tim Drew, Administrator, Public Information and Permitting Unit, at tdrew@des.state.nh.us or at (603) 271-3306.

WRBP Industrial Wastewater Discharge Permit Request/Approval

Introduction: The DES Winnipesaukee River Basin Program ("WRBP") operates the regional, State-owned wastewater treatment system that serves the Lakes Region communities of Belmont, Center Harbor (which serves a portion of Moultonborough), Franklin, Gilford, Laconia, Meredith, Northfield, Sanbornton, and Tilton. The WRBP system includes about 60 miles of major interceptor sewer, 14 pump stations, and the regional wastewater treatment facility located in the City of Franklin, New Hampshire (see http://www.des.state.nh.us/winni/winnimap.pdf). The system, which has been operated as a state-local partnership for more than two decades, diverts all "point" (*i.e.*, piped) discharges of wastewater originating in the communities noted above from Lake Winnipesaukee, Lake Winnisquam, and the Winnipesaukee and Pemigewasset Rivers to the WRBP treatment facility. Following secondary treatment and disinfection, the treated effluent is discharged to the Merrimack River in accordance with the limits of the WRBP's National Pollutant Discharge Elimination System ("NPDES") Permit (see http://www.des.state.nh.us/winni/flow.htm). The WRBP administers a federally-mandated and approved industrial pretreatment program, which surveys and evaluates all industrial wastes discharged to the sewer collection system, and requires all commercial, industrial, and institutional dischargers to apply for a WRBP Industrial Wastewater Discharge Permit (see http://www.des.state.nh.us/winni/ipp.htm). This process provides an early review of an industrial waste stream (*e.g.*, at a metal finishing facility) at its point of origin and serves as a protective "check" in the system by requiring removal (or at least a reduction in concentration) of certain toxic pollutants before discharge to the sewer. Failure to remove the toxic pollutants could disrupt treatment efficiency at the WRBP facility or cause violations of the WRBP discharge permit to the Merrimack River. After the host community co-signs the application, the WRBP reviews the application and forwards it to the DES Industrial Pretreatment Supervisor who, after confirming that applicable requirements have been met, will issue the Letter of Approval for the request. The WRBP will notify the applicant of the approval decision and, if required, will issue the final Industrial Wastewater Discharge Permit to the applicant, incorporating the DES Letter of Approval, which conveys the joint findings of the WRBP, the DES Industrial Pretreatment Supervisor, and local community.

Average number of requests evaluated annually: 20

Fees: $1,000, when plans and specifications are submitted to the DES Industrial Pretreatment Supervisor with the WRBP Industrial Wastewater Discharge Permit Request for the construction or installation of a pretreatment facility, or $50, when plans and specifications are not required. A separate fee of $50 must be submitted to the WRBP for each request. There is an annual renewal fee of $1,000 per permit.

Estimated processing time after application is deemed "complete": 2-4 weeks

Letter of Approval duration: One year (renewable each year thereafter)

Letter of Approval transferability: A WRBP Industrial Wastewater Discharge Permit Request may be transferred upon change of facility ownership if written notification is received at least 60 days in advance of the transfer. Any plan to change the facility's operations or processes will require the new owner to file a new application with the WRBP.

Letter of Approval modification: If a new discharge is planned, or a change in the quantity/quality of an existing discharge is desired, or new pretreatment devices are needed to comply with changed federal or state standards, a new application must first be filed with the municipality 60 days before the proposed change.

Letter of Approval renewal: Must be accomplished annually by the permit holder, if no modifications are requested or submitted prior to renewal. Permits are reissued each year by the WRBP.

State statute: RSA 485-A:45-54 ("Water Pollution Control and Waste Disposal/Winnipesaukee River Basin Control", http://gencourt.state.nh.us/rsa/html/indexes/485-A.html)

N. H. Code of Administrative Rules: Env-Ws 1200 ("Winnipesaukee River Basin Program", http://www.gencourt.state.nh.us/rules/env-ws1200.html) and Env-Ws 904 ("Standards for Pretreatment of Industrial Wastewater", http://www.des.state.nh.us/rules/adptd904.pdf)

Appeals body: Water Council at RSA 21-O:7 ("Department of Environmental Services/Water Council", http://gencourt.state.nh.us/rsa/html/I/21-O/21-O-7.htm); see also http://www.des.state.nh.us/rules/env-wc200.pdf and http://www.des.state.nh.us/councils/#1)

Additional information: N. H. DES, WRBP Industrial Pretreatment Coordinator, (603) 934-2809
N. H. DES, Industrial Pretreatment Supervisor, (603) 271-2052
N. H. DES, Public Information Center, (603) 271-2975 or (603) 271-8876

WRBP Industrial Wastewater Discharge Permit Request/Approval – *Work Sheet*

Key Qualifier Question: *Will the proposed discharge involve a new process or a change in discharge from a categorical industry subject to the National Categorical Pretreatment Standards (Appendix C of 40 CFR Part 403), an industrial subcategory excluded from those standards (Appendix D of 40 CFR Part 403), or involve a commercial or institutional establishment subject to 40 CFR Part 403, Subchapter N?* (See http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfr403_00.html, http://www.epa.gov/docs/epacfr40/chapt-I.info/subch-N.htm, and/or NH CODE ADMIN. RULES Env-Ws 1205, "Industrial Pretreatment Rules", http://www.gencourt.state.nh.us/rules/env-ws1200.html)

Note: If the request involves a WRBP interceptor sewer connection, the applicant must also file an application to obtain a WRBP Connection Permit Request/Approval Permit.

What must you do to apply?

From the community -

- Obtain the WRBP *Industrial Wastewater Discharge Permit Request Application* ("blue form") from the community in which the discharge will occur (see http://www.des.state.nh.us/winni/ipp.htm).
- Provide the name of the community in which the discharge is located.
- Quantify the total flow discharged, including both sanitary and industrial wastes
- Submit written evidence of local approval with the signature of an authorized community official.

To the WRBP -

- Provide the name and address of the user, including the name of the operator(s) and responsible individual who has certified the permit application (see Env-Ws 1205.09).
- Provide a list of all environmental permits held by, or on behalf of, the user.
- Provide a brief description of the nature, average rate of production, and standard industrial classification of the operations carried out by the user.
- Identify the categorical pretreatment standards applicable to each regulated process.
- Provide an analysis that identifies the nature and concentration of pollutants in the discharge.
- Provide information that shows the measured average daily and maximum daily flows (expressed in gallons/day) to the public sewer from regulated process streams, and from any other waste streams.
- If the facility is presently out of compliance, provide a compliance schedule of actions to be taken to comply with discharge limitations.
- Provide a schematic diagram showing the production process, including origin of each waste stream.
- Provide a listing of all chemicals used by the facility that could be discharged, such as production chemicals, degreasers, and cleaning solvents.
- Provide all additional information related to applicable federal or state industrial pretreatment reporting requirements and any other data needed to support a full assessment of the proposed discharge. See http://www.epa.gov/epacfr40/chapt-I.info/chi-toc.htm and http://www.des.state.nh.us/rules/adptd904.pdf
- If pretreatment is necessary for the "significant industrial user" [defined in 40 CFR Part 403.3(t)] (see http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfr403_00.html) to comply with discharge limitations, plans for the pretreatment facilities must be submitted by a professional engineer licensed to practice in the state of New Hampshire (see http://www.state.nh.us/jtboard/pe.htm).
- Include a certification statement signed by an authorized official at the industry or business making the application.
- Submit the application, fees, plans, specifications, and all supporting materials to: Winnipesaukee River Basin Program, Industrial Pretreatment Coordinator, P. O. Box 68, 528 River Street, Franklin, NH 03235-0068.

- For more information, please contact the WRBP offices by telephone at (603) 934-2809, fax at (603) 934-4831, or online at http://www.des.state.nh.us/winni/.
- If the proposed discharge meets applicable requirements, the DES Industrial Pretreatment Supervisor will approve the proposed discharge and the WRBP will notify the applicant and, if required, will issue the Industrial Discharge Permit.

What types of projects require this Letter of Approval?

- Industries/businesses planning to discharge non-sanitary (*i.e.*, non-human) wastes to a public sewer
- Any establishment proposing to upgrade or install a pretreatment facility

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If there are questions regarding this page or any other section of the Guidebook, please contact Tim Drew, Administrator, Public Information and Permitting Unit, at tdrew@des.state.nh.us or at (603) 271-3306.

Chapter 10:

Petroleum Storage/ Site Remediation

2002 Edition

Chapter 10: Petroleum Storage/Site Remediation

Introduction

In 1971, the New Hampshire Legislature enacted RSA 146-A to "cope with the problem of pollution from the spillage or discharge of oil, recognizing the damage resulting…from such pollution" (see RSA 146-A:1, "Oil Discharge or Spillage in Surface Water or Groundwater/Declaration of Purpose", http://gencourt.state.nh.us/rsa/html/X/146-A/146-A-1.htm). The statute prohibited the discharge or spillage of oil to surface water or groundwater, or on a land area where oil would ultimately seep into surface water or groundwater, and required spills to be reported and cleaned up. This led to the development of two distinct, but related, programs: reporting and remediation of contaminated sites and regulation of underground storage facilities for petroleum products and hazardous substances. Development of both programs was undertaken by the former New Hampshire Water Supply and Pollution Control Commission ("WSPCC", one of the precursors to the current DES Water Division), based on RSA 146-A and the requirements of Subtitle I of the federal Resource Conservation and Recovery Act ("RCRA") of 1976 (see http://www.epa.gov/swerust1/fedlaws/sttlitxt.htm). RSA 146-A was amended in 1985 to specifically require the regulation of underground storage facilities for petroleum products, and administrative rules were adopted that same year to establish state-of-the-art standards for the design, installation, operation, maintenance, and monitoring of underground storage systems at all non-residential (*i.e.*, commercial/industrial) underground storage tank ("UST") facilities. The companion site remediation program was designed to minimize the impact from releases that have already occurred. In 1986, the Legislature removed the UST provision from RSA 146-A and enacted RSA 146-C ("Underground Storage Facilities", http://gencourt.state.nh.us/rsa/html/indexes/146-C.html) to establish a more extensive regulatory program for USTs. The UST Program was specifically designed to prevent contamination of the land and waters of the state due to accidental or non-sudden (*i.e.*, gradual) releases of stored petroleum products (*e.g.*, motor fuels, heating oils, lubricating oils, and petroleum-contaminated liquids) and hazardous substances as defined by RSA 146-C:1, VII-a (*i.e.*, *material defined as a regulated substance under 42 U. S. C. 6991(2)(A)* ["Comprehensive Environmental Response, Compensation, and Liability Act/Definitions and Exemptions", http://www4.law.cornell.edu/uscode/42/6991.html] *in addition to any material designated as a hazardous substance in RSA 146-C:9, VI-a* ["Underground Storage Facilities/Rulemaking", http://gencourt.state.nh.us/rsa/html/X/146-C/146-C-9.htm]. In 1990, DES formally adopted rules to govern the reporting and remediation of oil spills and discharges (see NH CODE ADMIN. RULES Env-Ws 412, "Reporting and Remediation of Oil Discharges", http://www.des.state.nh.us/orcb/412.htm) RSA 146-C:4 ("Underground Storage Facilities/Underground Storage Facility Permit Required", http://gencourt.state.nh.us/rsa/html/X/146-C/146-C-4.htm) was amended to require each regulated UST facility to obtain a five-year permit-to-operate from DES (see http://www.des.state.nh.us/orcb/doclist/ustappli.pdf). The State of New Hampshire received final approval for administration of the UST program from the U. S. Environmental Protection Agency on July 1, 1991 (see http://www.epa.gov/swerust1/fsstates.htm), which delegated the responsibility for operating the RCRA Subtitle I UST program to DES in lieu of the federal government. New Hampshire was the third state in the nation to receive such authority (see http://www.epa.gov/swerust1/states/spamap.htm). In 1997, under the authority of RSA 146-A ("Oil Discharge or Spillage in Surface Water or Groundwater/Rulemaking", http://gencourt.state.nh.us/rsa/html/X/146-A/146-A-11-c.htm), DES adopted rules to specifically regulate above-ground petroleum storage facilities (NH CODE ADMIN. RULES Env-Wm 1402, "Control of Aboveground Petroleum Storage Facilities", http://www.des.state.nh.us/orcb/doclist/1402.pdf). Responsibility for these petroleum-related programs is now assigned to the Oil Remediation and Compliance Bureau of the DES Waste Management Division.

Underground Storage of Regulated Substances

DES regulates underground storage tank ("UST") facilities for storage of regulated substances pursuant to RSA 146-C ("Underground Storage Facilities", http://gencourt.state.nh.us/rsa/html/indexes/146-C.html). The UST Program operates under NH CODE ADMIN. RULES Env-Wm 1401 ("Underground Storage Facilities",

http://www.des.state.nh.us/orcb/doclist/1401.pdf), which sets forth the requirements which apply to facilities that have underground petroleum storage tanks for regulated substances. The term "regulated substance means oil or a hazardous substance. The term "oil", as defined in RSA 146-C:1, XII (which refers to RSA 146-A:2, III, "Oil Discharge or Spillage in Surface Water or Groundwater/Definitions", http://gencourt.state.nh.us/rsa/html/X/146-A/146-A-2.htm) and used herein, *means petroleum products and their by-products of any kind, and in any form including, but not limited to, petroleum, fuel, sludge, crude, oil refuse or oil mixed with wastes and all other liquid hydrocarbons regardless of specific gravity and which are used as motor fuel, lubricating oil, or any oil used for heating or processing. The term "oil' shall not include natural gas, liquefied petroleum gas or synthetic natural gas regardless of derivation or source*. The term "hazardous substance" as defined by RSA 146-C:1, VII-a ("Underground Storage Facilities", http://gencourt.state.nh.us/rsa/html/X/146-C/146-C-1.htm) and used herein, *means material defined as a regulated substance under 42 U.S.C. 6991(2)(A)* ["Comprehensive Environmental Response, Compensation, and Liability Act/Definitions and Exemptions", http://www4.law.cornell.edu/uscode/42/6991.html] *in addition to any material designated as a hazardous substance pursuant to RSA 146-C:9, VI-a* ["Underground Storage Facilities/Rulemaking", http://gencourt.state.nh.us/rsa/html/X/146-C/146-C-9.htm]. A list of hazardous substances can be found in 40 CFR 302.4 (see http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfr302_00.html).

Specifically, the rules pertain to standards of design, installation, operation, maintenance, and monitoring of UST facilities. These rules apply to all non-residential UST systems that have a total regulated substance storage capacity of more than 110 gallons and non-residential tank systems that have an on-premise use heating oil storage capacity of more than 1,100 gallons. The owner of an UST facility must register it with DES by providing the information required in RSA 146-C:3 ("Underground Storage Facilities/Registration of Underground Storage Facilities", http://gencourt.state.nh.us/rsa/html/X/146-C/146-C-3.htm) and Env-Wm 1401.06 ("Underground Storage Facilities/Information Required for Registration", http://www.des.state.nh.us/orcb/doclist/1401.pdf) (see http://www.des.state.nh.us/orcb/doclist/registra.pdf). Owners are required to submit in writing any change in facility status (*e.g.*, ownership, equipment, *etc.*) within ten days of the change. No person is allowed to operate a facility that is not registered with DES. Plans that are submitted with an application must be prepared and stamped by a professional engineer registered to practice in the state of New Hampshire (see http://www.des.state.nh.us/orcb/doclist/usteng.pdf). Once the tank systems have been designed and installed, notification to DES is required at least five days prior to backfilling the tank top and/or piping. At this time, the professional engineer who prepared and stamped the approved plans must forward a letter to DES that certifies that the installation (or the tanks and/or piping) has been completed in accordance with the approved plans. The new system must not be backfilled or placed into service until DES has determined that it complies with all applicable requirements. Finally, DES must be notified within 30 days prior to any UST system closure. An assessment must be completed with the results sent to DES to determine whether any residual contamination is present (see http://www.des.state.nh.us/orcb/doclist/clodoc.pdf).

Aboveground Petroleum Storage Program

The DES Aboveground Petroleum Storage Tank ("AST") Program is designed to prevent releases of oil from aboveground storage systems located throughout the state. Petroleum ASTs are regulated by both the DES Waste Management Division, Oil Remediation and Compliance Bureau ("ORCB") and the New Hampshire Department of Safety, Division of Fire Safety, Office of the State Fire Marshall (603-271-3294). Under the authority of RSA 146-A ("Oil Discharge or Spillage in Surface Water or Groundwater/Rulemaking", http://gencourt.state.nh.us/rsa/html/X/146-A/146-A-11-c.htm), DES adopted NH CODE ADMIN. RULES Env-Wm 1402 ("Control of Aboveground Petroleum Storage Facilities", http://www.des.state.nh.us/orcb/doclist/1402.pdf) effective April 25, 1997 to regulate facilities with a single AST system having a capacity greater than 660 gallons or with two or more ASTs that have a total storage capacity greater than 1,320 gallons intended for use in the storage, transfer, or distribution of oil. ASTs with a capacity of 10,000 gallons or less that store fuel oil (but not used oil or waste oil) that is used solely for on-premise heating of a structure, including home heating

oil tanks, are exempt from the rules. Although home heating oil tanks are exempt from regulation, a program to financially assist homeowners to upgrade such tanks has been authorized under RSA 146-E ("Fuel Oil Discharge Cleanup Fund", http://gencourt.state.nh.us/rsa/html/indexes/146-E.html). For more information on this program, refer to the DES Fact Sheet entitled *The Fuel Oil Discharge Cleanup Fund for On-Premise-Use Heating Oil Users* at http://www.des.state.nh.us/factsheets/oil/oil-7.htm, or call the DES Petroleum Remediation Program at (603) 271-3644. Both DES and the Fire Marshall's Office have adopted the National Fire Protection Association ("NFPA") standards outlined in NFPA 30, NFPA 30A, and NFPA 31 for the installation of all ASTs:

- ***Flammable and Combustible Liquids Code***
  http://www.nfpa.org/Codes/NFPA_Codes_and_Standards/List_of_NFPA_documents/NFPA_30.asp
- ***Code for Motor Fuel Dispensing Facilities and Repair Garages***
  http://www.nfpa.org/Codes/NFPA_Codes_and_Standards/List_of_NFPA_documents/NFPA_30A.asp
- ***Standard for the Installation of Oil-Burning Equipment***
  http://www.nfpa.org/Codes/NFPA_Codes_and_Standards/List_of_NFPA_documents/NFPA_31.asp

The owner of any AST facility subject to Env-Wm 1402.02 ("Control of Aboveground Petroleum Storage Facilities/Applicability", http://www.des.state.nh.us/orcb/doclist/1402.pdf) must register all AST systems at the facility with DES by providing the information required by Env-Wm 1402.05(b) ("Control of Aboveground Petroleum Storage Facilities/Registration"). Both existing and new AST systems must be registered. All plans must be prepared and certified by a professional engineer licensed to practice in the state of New Hampshire (see AST design engineers list at http://www.des.state.nh.us/orcb/doclist/asteng.pdf). Prior to installing a new or substantially modified AST facility, the owner must submit an application and engineering plans and specifications which accurately address the requirements of Env-Wm 1402. Upon review of the application by DES and the subsequent issuance of an approval to construct the system, installation can commence. Before the system can be placed in operation, DES must be contacted to arrange for an inspection to determine if the facility has been installed in accordance with the approved plans and specifications. Once the installation is inspected, approved, and a current registration is on file with DES, a letter is issued granting the owner permission to fully operate the system. All AST systems must be fitted with an overfill protection system in the form of a gauge with an independent audible and visible high-level alarm (see http://www.des.state.nh.us/factsheets/oil/oil-22.htm), tank markings showing the tank number, identification of its contents (*e.g.*, diesel, gasoline, *etc.*), the safe fill volume or fill height, and the appropriate national fire rating symbol as established by NFPA-704, known as the "NFPA four-color hazard identity symbol" (see http://www.des.state.nh.us/factsheets/oil/oil-21.htm). Review the National Fire Protection Association's manual, ***Standard System for the Identification of the Hazards of Materials for Emergency Response,*** at http://www.nfpa.org/Codes/NFPA_Codes_and_Standards/List_of_NFPA_documents/NFPA_704.asp. The AST facility also must have a Spill Prevention Control and Countermeasure ("SPCC") Plan in place (see http://www.des.state.nh.us/orcb/doclist/spcc.pdf and http://www.epa.gov/oilspill/spcc/).

Oil Release/Site Remediation/Redevelopment

Sites contaminated by oil releases that do not qualify for federal oversight are regulated under RSA 146-A ("Oil Discharge or Spillage in Surface Water or Groundwater", http://gencourt.state.nh.us/rsa/html/indexes/146-A.html) and related statutes and rules relative to groundwater protection (see, *e.g.*, RSA 485-C, "Groundwater Protection Act", http://gencourt.state.nh.us/rsa/html/indexes/485-C.html, and NH CODE ADMIN. RULES Env-Wm 1403, "Groundwater Management and Groundwater Release Detection Permits", http://www.des.state.nh.us/orcb/doclist/wm1403.pdf). Hundreds of oil spill sites across the state that have been addressed by this process, ranging in complexity from the cleanup of one-time spills to long-term remediation at historic, long-term leakage sites. DES offers limited funding for eligible projects through its reimbursement fund programs (see http://www.des.state.nh.us/orcb/doclist/fundsum.pdf). Redevelopment and reuse at some of these sites has been facilitated by RSA 147-F; the DES "Brownfields Program" (see

http://gencourt.state.nh.us/rsa/html/indexes/147-F.html and http://www.des.state.nh.us/hwrb/hwrbbfld.htm). The DES Brownfields Program is designed to provide incentives for both site cleanup and redevelopment of contaminated properties that have been underused or abandoned due to contamination, but only persons who did not cause the contamination are eligible to participate. Cleanup at these sites follows guidelines outlined by DES's ***Risk Characterization and Management Policy*** (see http://www.des.state.nh.us/orcb/doclist/explanat.pdf), much of which is being adopted as NH CODE ADMIN. RULES Env-Wm 1600. Once the site has been remediated, DES may determine that certain Activity and Use Restrictions ("AURs") will be needed to maintain the integrity of the cleanup work (see http://www.des.state.nh.us/orcb/doclist/aurlist.pdf). A final remedial end point for the site will be signaled by the issuance of a *Certificate of Completion* by DES (see http://www.des.state.nh.us/factsheets/hw/hw-1.htm) and/or the issuance of a *Certificate of No Further Action* by the New Hampshire Department of Justice (see http://www.des.state.nh.us/orcb/doclist/versus.pdf for comparison and criteria).

Petroleum Reimbursement Fund Program

The New Hampshire Petroleum Reimbursement Funds are a financial assistance program for owners of petroleum storage facilities who incur cleanup costs when a release (spill or leak) occurs (see http://www.des.state.nh.us/orcb/doclist/progsum.pdf). The program is comprised of three separate cleanup reimbursement funds authorized by state statutes: RSA 146-D, "Oil Discharge and Disposal Cleanup Fund", http://gencourt.state.nh.us/rsa/html/indexes/146-D.html; RSA 146-E, "Fuel Oil Discharge Cleanup Fund, http://gencourt.state.nh.us/rsa/html/indexes/146-E.html; and RSA 146-F, "Motor Oil Discharge Cleanup Fund", http://gencourt.state.nh.us/rsa/html/indexes/146-F.html). The program provides coverage for underground storage facilities storing motor fuel, above-ground storage facilities used for the storage and distribution of motor fuel or fuel oil, storage facilities for motor oil or used motor oil, and facilities which store fuel oil for on-premise heating (including residential properties) (see http://www.des.state.nh.us/orcb/doclist/opufpol.pdf). RSA 146-G also establishes a fund ("Gasoline Remediation and Elimination of Ethers Fund", http://gencourt.state.nh.us/rsa/html/indexes/146-G.html) to reimburse costs related to gasoline spills, including those involving Methyl-tert-Butyl-Ether ("MtBE") contamination. Applications for reimbursement should be submitted using the DES *Request for Reimbursement Authorization* form (see http://www.des.state.nh.us/orcb/doclist/fundform_1.pdf). The funds are administered by the Oil Fund Disbursement Board ("ODB"), composed of members representing the New Hampshire Legislature, the petroleum industry, State agencies, and the general public, which operates under the authority of RSA 146-D:5, I ("Oil Discharge and Disposal Cleanup Fund/Board Powers and Duties", http://gencourt.state.nh.us/rsa/html/X/146-D/146-D-5.htm) and in accordance with NH CODE ADMIN. RULES Odb 200-600 ("Rules for Reimbursement/Disbursement from the Petroleum Cleanup Funds under RSA 146-D, RSA 146-E, RSA 146-F, and RSA 146-G", http://www.des.state.nh.us/orcb/doclist/fundrule.pdf).

Summary

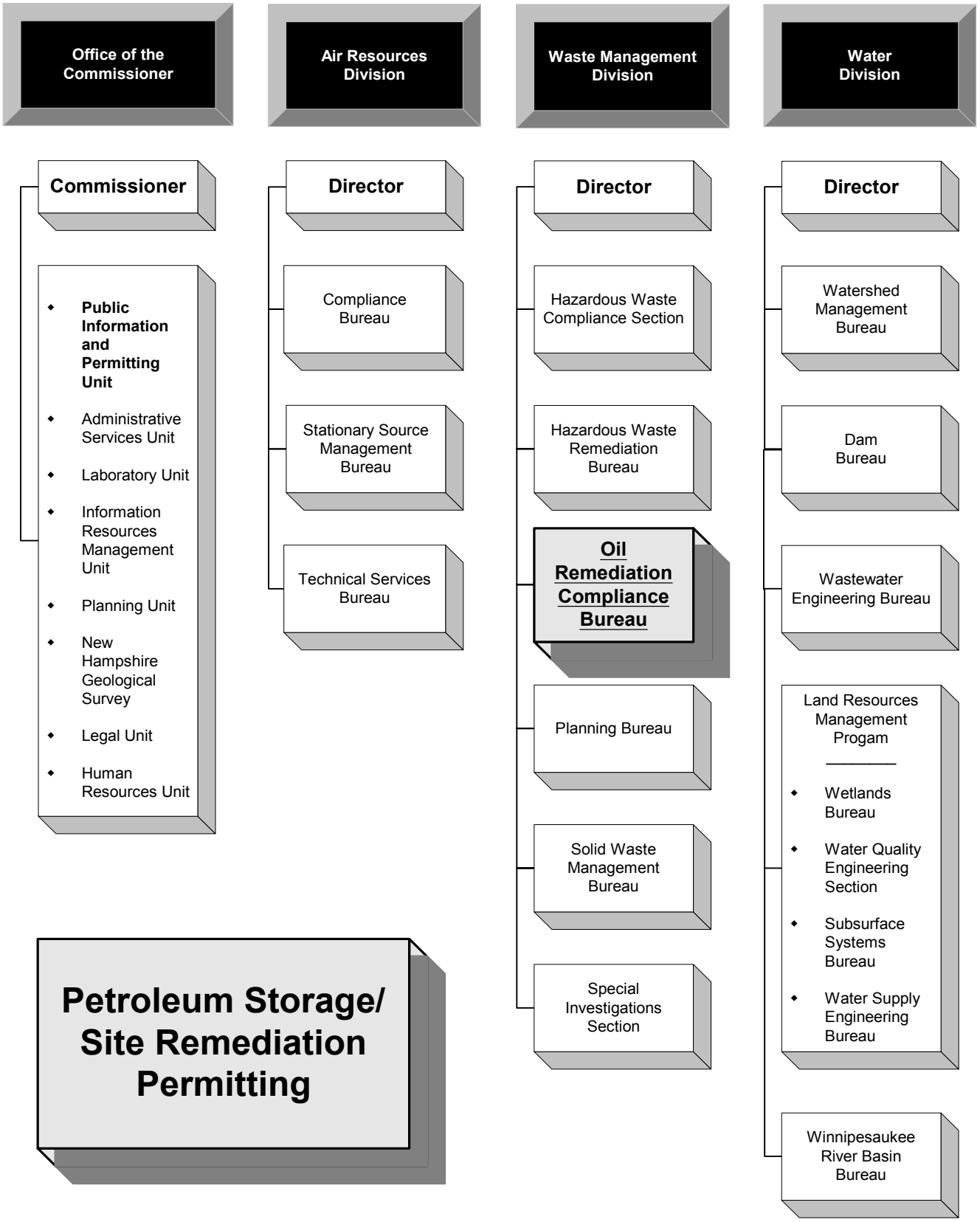
The Oil Remediation and Compliance Bureau of the DES Waste Management Division is responsible for administering both the Aboveground Petroleum Storage Facility Program and Underground Petroleum Storage Facility Program. It also coordinates the various reimbursement programs designed to facilitate the completion of petroleum cleanup projects and assist in the financing of such activities for both businesses and homeowners. The Oil Fund Disbursement Board meets regularly to decide eligibility and grant awards to deserving projects (see http://www.des.state.nh.us/orcb/costprog.htm). Appeals of UST and AST permit decisions or orders issued for violations of program requirements should be directed to the Waste Management Council at http://www.des.state.nh.us/councils/#waste.

Chapter Contents

- ✓ **Aboveground Petroleum Storage Facility Registration**
- ✓ **Construction of a New or Substantially Modified Aboveground Petroleum Storage Tank Facility/Letter of Approval**
- ✓ **Underground Storage Tank Facility Registration**
- ✓ **Construction of a New or Substantially Modified Underground Storage Tank Facility/Letter of Approval**
- ✓ **Underground Storage Tank Facility Permit-to-Operate**
- ✓ **Underground Storage Tank Closure Notification**

Organizational Chart

New Hampshire Department of Environmental Services



Aboveground Petroleum Storage Facility Registration

Introduction: The DES Aboveground Petroleum Storage Tank ("AST") Program is designed to prevent releases of oil from AST systems located throughout the state of New Hampshire. Petroleum ASTs are regulated by both DES, through its Waste Management Division, Oil Remediation and Compliance Bureau ("ORCB"), and the New Hampshire Department of Safety, through its Division of Fire Safety, Office of the State Fire Marshall (telephone: 603-271-3294). DES adopted NH CODE ADMIN. RULE Env-Wm 1402 ("Control of Aboveground Petroleum Storage Tank Facilities (AST)", http://www.des.state.nh.us/orcb/doclist/1402.pdf) to regulate facilities with a single AST system having a capacity greater that 660 gallons, as well as those facilities that include two or more ASTs that have a total storage capacity greater than 1,320 gallons intended for use in the storage, transfer, or distribution of oil*. These rules exempt those ASTs with a capacity of 10,000 gallons or less that store fuel oil (but not used oil or waste oil) that is used solely for on-premise heating of a structure. This exemption includes home heating oil tanks. Both DES and the State Fire Marshall's Office have adopted the National Fire Protection Association ("NFPA") standards outlined in NFPA 30, NFPA 30A, and NFPA 31 (see below) for the installation of all ASTs in New Hampshire (see http://www.nfpa.org/Home/index.asp). DES requires the owner of any AST facility subject to Env-Wm 1402.02 to register all AST systems at the facility by completing the information required by Env-Wm 1402.05(b). Both new and existing AST systems must be registered with DES. All plans must be prepared and certified by a professional engineer licensed to practice in the state of New Hampshire (see AST design engineers list at http://www.des.state.nh.us/orcb/doclist/asteng.pdf). All AST systems must be fitted with an overfill protection system in the form of a gauge with an independent audible and visible high-level alarm (see http://www.des.state.nh.us/factsheets/oil/oil-22.htm), tank markings showing the tank number, identification of its contents (*e.g.*, diesel, gasoline, *etc.*), the safe fill volume or fill height, and the appropriate national fire rating symbol as established by NFPA-704 known as the "NFPA four-color hazard identity symbol" (see http://www.des.state.nh.us/factsheets/oil/oil-21.htm). Review the National Fire Protection Association's manual, ***Standard System for the Identification of the Hazards of Materials for Emergency Response,*** at http://www.nfpa.org/Codes/NFPA_Codes_and_Standards/List_of_NFPA_documents/NFPA_704.asp for more details. All AST facilities must have a Spill Prevention Control and Countermeasure ("SPCC") Plan in place (see http://www.des.state.nh.us/orcb/doclist/spcc.pdf and http://www.epa.gov/oilspill/spcc/).

*Note: The term "oil", as defined by RSA 146-A:2, III ("Oil Discharge or Spillage in Surface Water or Groundwater/Definitions", http://gencourt.state.nh.us/rsa/html/X/146-A/146-A-2.htm) and used herein, means *petroleum products and their by-products of any kind, and in any form including, but not limited to, petroleum, fuel, sludge, crude, oil refuse or oil mixed with wastes and all other liquid hydrocarbons regardless of specific gravity and which are used as motor fuel, lubricating oil, or any oil used for heating or processing. The term "oil" shall not include natural gas, liquefied petroleum gas or synthetic natural gas regardless of derivation or source*.

Average number of registrations submitted annually: Approximately 70

Fees: None

Estimated processing time after application is deemed "complete": 30 days

Registration duration: Indefinite

Registration transferability: When a transfer of ownership of an AST facility occurs, the new owner must file an amended registration form with DES no later than 30 days after the transfer (see http://www.des.state.nh.us/orcb/doclist/astreg.pdf).

Registration modification: If a change in use of the AST system or use of the property occurs at the facility, the owner must both register the facility with DES within 30 days following its change in use. If the AST system

is to be taken out of use, removed, or dismantled, the owner must submit an amended registration form within 30 days after taking such action.

Registration renewal: A renewal of this registration is required only when a change of ownership occurs, or when the amount of storage capacity changes.

State statute: RSA 146-A ("Oil Discharge or Spillage in Surface Water or Groundwater", http://gencourt.state.nh.us/rsa/html/indexes/146-A.html)

Federal law: 33 U. S. C. 2702 to 2761 ("The Oil Pollution Act of 1990", http://www4.law.cornell.edu/uscode/33/ch40.html)

N. H. Code of Administrative Rules: Env-Wm 1402 ("Control of Aboveground Petroleum Storage Facilities", http://www.des.state.nh.us/orcb/doclist/1402.pdf)

U. S. Code of Federal Regulations: 40 CFR Chapter I, Part 112 ("Environmental Protection Agency/Oil Pollution Prevention", http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfr112_main_00.html)

Appeals body: Waste Management Council at RSA 21-O:9 ("Department of Environmental Services/Waste Management Council", http://gencourt.state.nh.us/rsa/html/I/21-O/21-O-9.htm; see also http://www.des.state.nh.us/rules/env-wmc200.pdf and http://www.des.state.nh.us/councils/#waste)

Additional information:
N. H. DES, Oil Remediation Compliance Bureau, (603) 271-3644
N. H. DES, Public Information Center, (603) 271-2975 or (603) 271-8876
U. S. EPA, Office of Underground Storage Tanks, (617) 918-1311
National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02269-9101 Telephone: (617) 770-3000; fax: 617-770-0700

For reference links to NFPA 30, 30A, 31, and 704, see -

- ***Flammable and Combustible Liquids Code***
  http://www.nfpa.org/Codes/NFPA_Codes_and_Standards/List_of_NFPA_documents/NFPA_30.asp

- ***Code for Motor Fuel Dispensing Facilities and Repair Garages***
  http://www.nfpa.org/Codes/NFPA_Codes_and_Standards/List_of_NFPA_documents/NFPA_30A.asp

- ***Standard for the Installation of Oil-Burning Equipment***
  http://www.nfpa.org/Codes/NFPA_Codes_and_Standards/List_of_NFPA_documents/NFPA_31.asp

- ***Standard System for the Identification of the Hazards of Materials for Emergency Response***
  http://www.nfpa.org/Codes/NFPA_Codes_and_Standards/List_of_NFPA_documents/NFPA_704.asp

Aboveground Petroleum Storage Facility Registration – *Work Sheet*

Key Qualifier Questions: *Does your facility have at least one aboveground tank system with the capacity to store greater than 660 gallons of petroleum products, other than for on-premise heating oil? Does your facility have one or more aboveground tank systems with a combined capacity to store greater than 1,320 gallons of petroleum products, other than for on-premise heating oil? Does your facility have one or more aboveground tank systems storing on-premise heating oil with a combined capacity of greater than 10,000 gallons?*

Note: The term "oil", as defined by RSA 146-A:2, III ("Oil Discharge or Spillage in Surface Water or Groundwater/Definitions", http://gencourt.state.nh.us/rsa/html/X/146-A/146-A-2.htm) and used herein, means *petroleum products and their by-products of any kind, and in any form including, but not limited to, petroleum, fuel, sludge, crude, oil refuse or oil mixed with wastes and all other liquid hydrocarbons regardless of specific gravity and which are used as motor fuel, lubricating oil, or any oil used for heating or processing. The term "oil" does not include natural gas, liquefied petroleum gas or synthetic natural gas regardless of derivation or source*.

What must you do to apply?

- Refer to NH CODE ADMIN. RULES Env-Wm 1402.05(b), ("Control of Aboveground Petroleum Storage Facilities/Registration", http://www.des.state.nh.us/orcb/doclist/1402.pdf)
- Obtain a *Registration of Aboveground Bulk Storage Facility* from the DES Oil Remediation and Compliance Bureau ("ORCB"), the DES Public Information Center, or online at http://www.des.state.nh.us/orcb/doclist/astreg.pdf.
- Provide the name, address, and daytime telephone number of the facility owner.
- Provide the location of the AST system and explain its intended use.
- Provide the name, job title, address, and telephone number of the operator in charge of the AST systems at the facility.
- Provide a description of each AST system at the facility, including:
    - Status of the AST
    - Date of AST system installation
    - Total capacity of the AST
    - Construction material of the AST
    - Construction material and location of the piping
    - Contents of the AST
    - Description of AST system supports, if any, and height above grade
- Include a statement regarding whether the AST system is out-of-service, as defined by Env-Wm 1402.03 ("Control of Aboveground Petroleum Storage Facilities", http://www.des.state.nh.us/orcb/doclist/1402.pdf), or has been removed or dismantled.
- Provide a plan view dimensioned drawing of the facility of sufficient detail to locate the ASTs with respect to property lines and any buildings or other structures located on the property.
- Indicate the date of the current Spill Prevention Control and Countermeasure ("SPCC") Plan for the facility (see http://www.des.state.nh.us/orcb/doclist/spcc.pdf and http://www.epa.gov/oilspill/spcc/)
- The facility owner must sign and date the registration form before submittal to DES.
- Submit the application and all supporting information to: Oil Remediation and Compliance Bureau, Waste Management Division, New Hampshire Department of Environmental Services, P. O. Box 95, 6 Hazen Drive, Concord, New Hampshire 03302-0095. Telephone: (603) 271-3644; fax: (603) 271-2181; or online: http:// www.des.state.nh.us/orcb/astprog.htm

What types of projects require this registration?

- ❖ All single, aboveground, non-on-premise, heating oil tank systems greater than 660 gallons

- All multiple, aboveground, non-on-premise, heating oil tank systems greater than 1,320 gallons
- All on-premise, heating oil, aboveground tank systems greater than 10,000 gallons

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If there are questions regarding this page or any other section of the Guidebook, please contact Tim Drew, Administrator, Public Information and Permitting Unit, at tdrew@des.state.nh.us or at (603) 271-3306.

Construction of a New or Substantially Modified Petroleum Aboveground Storage Tank Facility/Letter of Approval

Introduction: To help insure that new aboveground ("AST") facilities are designed and installed properly and to minimize the potential for petroleum discharges to the environment, an approval from DES to construct certain new or replacement AST systems must be obtained. A significant portion of the AST regulations deals with the proper installation of new AST facilities (see NH CODE ADMIN. RULES Env-Wm 1402, "Control of Aboveground Storage Facilities", http://www.des.state.nh.us/orcb/doclist/1402.pdf). Prior to commencing construction or installation of a new or replacement AST system with an oil storage capacity of more than 660 gallons of any oil product* or other virgin heating oil for on-premise use, or with the capacity to store more than 10,000 gallons of heating oil for on-premise use, the owner must submit to DES complete plans and specifications that have been prepared and stamped by a registered professional engineer licensed to practice in the state of New Hampshire (see http://www.des.state.nh.us/orcb/doclist/asteng.pdf). The DES application form can be used as a checklist (see http://www.des.state.nh.us/orcb/doclist/newappli.pdf) to identify the information which must be provided regarding the tanks, the product stored, its piping, secondary containment, overfill protection, interstitial leak monitoring, traffic protection barriers, transfer pads, dispensers and any other aspects of the tank system. Plans and specifications must include a scaled site plan depicting the tank facility as it relates to buildings, traffic areas, surface water, drainage, water supply wells, property boundaries, and other features at the site. Following the submission of the application form, plans and specifications, a review is conducted by DES. If the information is incomplete or the information does not meet the intent of the administrative rules, a letter listing those deficiencies will be sent to the owner and applicant. Once the application is approved, a letter that grants the approval to construct the specific facility is sent to the owner along with copies to the applicant and the local fire department. Construction can begin upon receipt of that approval and after obtaining any and all applicable local permits. Before the system can be placed in operation, DES must be contacted to arrange for an inspection to determine if the facility has been installed in accordance with the approved plans and specifications. Once the installation is inspected, approved, and a current registration is on file with DES, a letter is issued granting the owner permission to fully operate the system.

Note: The term "oil", as defined by RSA 146-A:2, III ("Oil Discharge or Spillage in Surface Water or Groundwater/Definitions", http://gencourt.state.nh.us/rsa/html/X/146-A/146-A-2.htm) and used herein, means *petroleum products and their by-products of any kind, and in any form including, but not limited to, petroleum, fuel, sludge, crude, oil refuse or oil mixed with wastes and all other liquid hydrocarbons regardless of specific gravity and which are used as motor fuel, lubricating oil, or any oil used for heating or processing. The term "oil" shall not include natural gas, liquefied petroleum gas or synthetic natural gas regardless of derivation or source*.

Average number of construction approvals issued annually: 35

Fees: None

Estimated processing time after application is deemed "complete": 45 days

Approval duration: 1 year to complete construction

Approval transferability: An approval to construct or substantially modify an AST facility is transferred by submitting a new application and cover letter. If there are no changes to the design, plans and specifications are not required to be submitted.

Approval modification: An owner must not cause or allow a substantial design change that is not in accordance with the approved plans and all terms of the conditions of the approval. Minor changes may be

handled by a telephone call and follow-up fax or mailing of the changes. All substantial changes must be approved in writing by the design engineer of record and resubmitted to DES for approval.

Approval renewal: An owner may request a waiver for the one-year expiration period in accordance with Env-Wm 1402.36

State statute: RSA 146-A ("Oil Discharge or Spillage in Surface Water or Groundwater", http://gencourt.state.nh.us/rsa/html/indexes/146-A.html)

N. H. Code of Administrative Rules: Env-Wm 1402 ("Control of Aboveground Petroleum Storage Facilities", http://www.des.state.nh.us/orcb/doclist/1402.pdf)

Appeals body: Waste Management Council at RSA 21-O:9 ("Department of Environmental Services/Waste Management Council", http://gencourt.state.nh.us/rsa/html/I/21-O/21-O-9.htm; see also http://www.des.state.nh.us/rules/env-wmc200.pdf and http://www.des.state.nh.us/councils/#waste)

Additional information: N. H. DES, Oil Remediation and Compliance Bureau, (603) 271-3644
N. H. DES, Public Information Center, (603) 271-2975 or (603) 271-8876
N. H. Dept. of Safety, Office of the State Fire Marshal, (603) 271-3294

For reference links to NFPA 30, 30A, and 31, see:

- ✓ http://www.nfpa.org/Codes/NFPA_Codes_and_Standards/List_of_NFPA_documents/NFPA_30.asp
- ✓ http://www.nfpa.org/Codes/NFPA_Codes_and_Standards/List_of_NFPA_documents/NFPA_30A.asp
- ✓ http://www.nfpa.org/Codes/NFPA_Codes_and_Standards/List_of_NFPA_documents/NFPA_31.asp

Construction of a New or Substantially Modified Petroleum Aboveground Storage Tank Facility/Letter of Approval – *Work Sheet*

Key Qualifier Question: *Are you planning to install or replace an aboveground petroleum storage tank system with the capacity to store more than 660 gallons of any oil product* other than virgin heating oil for on-premise use, or are you planning to install or replace an aboveground petroleum storage tank system with the capacity to store more than 10,000 gallons of heating oil for on-premise use?*

*Note: The term "oil", as defined by RSA 146-A:2, III ("Oil Discharge or Spillage in Surface Water or Groundwater/Definitions", http://gencourt.state.nh.us/rsa/html/X/146-A/146-A-2.htm) and used herein, means *petroleum products and their by-products of any kind, and in any form including, but not limited to, petroleum, fuel, sludge, crude, oil refuse or oil mixed with wastes and all other liquid hydrocarbons regardless of specific gravity and which are used as motor fuel, lubricating oil, or any oil used for heating or processing. The term "oil" does not include natural gas, liquefied petroleum gas or synthetic natural gas regardless of derivation or source*.

What must you do to apply?

- Refer to NH CODE ADMIN. RULE Env-Wm 1402.17, "Control of Aboveground Petroleum Storage Facilities/Requirements for Approval of AST Systems", http://www.des.state.nh.us/orcb/doclist/1402.pdf)
- Obtain an *Application for the Construction of New or Substantially Modified Petroleum Aboveground Storage Tank (AST) Facility* from the DES Oil Remediation and Compliance Bureau ("ORCB"), DES Public Information Center, or online at http://www.des.state.nh.us/orcb/doclist/newappli.pdf.
- Provide the facility location name, address, tax map and lot number, contact person, and telephone number.
- Provide the facility owner's name, address and phone number.
- Prepare an accurate scaled diagram (22-inch x 34-inch) as a facility plan which includes the information on that plan that is requested in section I of the application.
- Use the application as a check list and provide the basic tank information such as:
    - Capacity
    - Configuration (horizontal or vertical) and dimensions
    - Product to be stored.
    - Manufacturer
    - Foundation type
    - Whether it is double-walled or single-walled tank
- Prepare detailed information regarding the piping to be used, including whether it is a suction or pressurized system, the size (diameter) and material of construction, a description of piping supports, cathodic protection for buried steel piping, details on transition sumps, check valves and anti-siphoning devices.
- Describe and diagram what method of secondary containment is to be used for the tank system.
- Describe and diagram what method of overfill protection is to be used for the tank system (see http://www.des.state.nh.us/factsheets/oil/oil-22.htm), including:
    - The make and model of the liquid level gauge
    - The make and model of the high level alarm
- Describe the interstitial leak-monitoring device to be used (if applicable).
- Indicate that the tanks will be properly labeled including the "safe fill height" (see http://www.des.state.nh.us/factsheets/oil/oil-21.htm).

- Make sure the plan and supporting materials are stamped, signed, and dated by a professional engineer licensed to practice in the state of New Hampshire (see http://www.des.state.nh.us/orcb/doclist/asteng.pdf).
- Provide a copy of the completed application to the local fire chief.
- Submit the application form and all supporting information to: Oil Remediation and Compliance Bureau, Waste Management Division, New Hampshire Department of Environmental Services, P. O. Box 95, 6 Hazen Drive, Concord, New Hampshire 03302-0095. Telephone: (603) 271-3644; fax: (603) 271-2181; or online: http://www.des.state.nh.us/orcb/astprog.htm
- Before the system can be placed in operation, DES must be contacted to arrange for an inspection to determine if the facility has been installed in accordance with the approved plans and specifications. Once the installation is inspected, approved, and a current registration is on file with DES, a letter is issued granting the owner permission to fully operate the system.

What types of projects require this approval?

- All new or replacement aboveground petroleum storage tanks greater than 660 gallons capacity (other than heating oil tanks for on premise use)
- All new or replacement petroleum storage tanks greater than 10,000-gallon capacity used to store heating oil for on-premise use

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If there are questions regarding this page or any other section of the Guidebook, please contact Tim Drew, Administrator, Public Information and Permitting Unit, at tdrew@des.state.nh.us or at (603) 271-3306.

Underground Storage Tank Facility Registration

Introduction: DES regulates underground storage tank ("UST") facilities for storage of regulated substances pursuant to RSA 146-C.* The UST Program is specifically designed to prevent contamination of the land and waters of the state due to accidental or non-sudden (*i.e.*, gradual) releases of stored petroleum products (e.g., motor fuels, heating oils, lubricating oils, and petroleum-contaminated liquids) and hazardous substances. Included in this program is the registration of UST facilities. DES regulates the underground storage of gasoline and other motor fuels in UST systems possessing a storage capacity of more than 110 gallons. Similarly, DES also requires registration of UST facilities at which heating oil and other regulated petroleum products are stored in quantities of more than 1,100 gallons. RSA 146-C:3, I ("Underground Storage Facilities/Registration of Underground Storage Facilities", http://gencourt.state.nh.us/rsa/html/X/146-C/146-C-3.htm) requires the owner of an UST facility to register the facility with DES. As part of the rules adopted by DES for this program (see NH CODE ADMIN. RULES Env-Wm 1401 ("Underground Storage Facilities," http://www.des.state.nh.us/orcb/doclist/1401.pdf), Env-Wm 1401.06 identifies the information that must be submitted for registration in addition to that required by the statute, and requires the information to be submitted on a form provided by DES (*Registration for Underground Storage Tank Systems*, http://www.des.state.nh.us/orcb/doclist/registra.pdf).

*Note: The term "regulated substance" means oil or a hazardous substance. The term "oil", as defined in RSA 146-C:1, XII (which refers to RSA 146-A:2, III, "Oil Discharge or Spillage in Surface Water or Groundwater/Definitions", http://gencourt.state.nh.us/rsa/html/X/146-A/146-A-2.htm) and used herein, *means petroleum products and their by-products of any kind, and in any form including, but not limited to, petroleum, fuel, sludge, crude, oil refuse or oil mixed with wastes and all other liquid hydrocarbons regardless of specific gravity and which are used as motor fuel, lubricating oil, or any oil used for heating or processing. The term "oil' shall not include natural gas, liquefied petroleum gas or synthetic natural gas regardless of derivation or source*. The term "hazardous substance" as defined by RSA 146-C:1, VII-a ("Underground Storage Facilities", http://gencourt.state.nh.us/rsa/html/X/146-C/146-C-1.htm) and used herein, *means material defined as a regulated substance under 42 U.S.C. 6991(2)(A)* ["Comprehensive Environmental Response, Compensation, and Liability Act/Definitions and Exemptions", http://www4.law.cornell.edu/uscode/42/6991.html] *in addition to any material designated as a hazardous substance pursuant to RSA 146-C:9, VI-a* ["Underground Storage Facilities/Rulemaking", http://gencourt.state.nh.us/rsa/html/X/146-C/146-C-9.htm]. A list of hazardous substances can be found in 40 CFR 302.4 (see http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfr302_00.html).

Average number of registrations received annually: Approximately 200

Fees: None

Estimated processing time after registration is deemed "complete": 1-2 days

Registration duration: The existing registration remains valid so long as the information is accurate and current on the registration form on file with DES.

Registration transferability: When a transfer of ownership of any underground petroleum storage facility is contemplated, the new owner must file an amended registration form with DES within ten days of the transfer (see http://www.des.state.nh.us/orcb/doclist/registra.pdf).

Registration modification: Owners must submit any changes in facility status in writing to DES, such as ownership or equipment, within ten days of the change(s). For new systems, or substantial modifications to existing systems, a new or amended registration form must be submitted to DES at the time of final inspection of the system (see http://www.des.state.nh.us/orcb/doclist/registra.pdf).

Registration renewal: None

State statute: RSA 146-C ("Underground Storage Facilities", http://gencourt.state.nh.us/rsa/html/indexes/146-C.html)

N. H. Code of Administrative Rules: Env-Wm 1401 ("Underground Storage Facilities", http://www.des.state.nh.us/orcb/doclist/1401.pdf)

Appeals body: Waste Management Council at RSA 21-O:9 ("Department of Environmental Services/Waste Management Council", http://gencourt.state.nh.us/rsa/html/I/21-O/21-O-9.htm; see also http://www.des.state.nh.us/rules/env-wmc200.pdf and http://www.des.state.nh.us/councils/#waste)

Additional information: N. H. DES, Oil Remediation and Compliance Bureau, (603) 271-3644
N. H. DES, Public Information Center, (603) 271-2975 or (603) 271-8876
U. S. EPA, Office of Underground Storage Tanks, (617) 918-1311

Underground Storage Tank Facility Registration – *Work Sheet*

Key Qualifier Questions: *Does your facility have an underground tank system storing a regulated substance and having a capacity of more than 110 gallons? Does your facility have a non-residential underground tank system storing on-premise use heating oil with a capacity of more than 1,100 gallons?*

*Note: The term "regulated substance" means oil or a hazardous substance. The term "oil", as defined in RSA 146-C:1, XII (which refers to RSA 146-A:2, III, "Oil Discharge or Spillage in Surface Water or Groundwater/Definitions", http://gencourt.state.nh.us/rsa/html/X/146-A/146-A-2.htm) and used herein, *means petroleum products and their by-products of any kind, and in any form including, but not limited to, petroleum, fuel, sludge, crude, oil refuse or oil mixed with wastes and all other liquid hydrocarbons regardless of specific gravity and which are used as motor fuel, lubricating oil, or any oil used for heating or processing. The term "oil' shall not include natural gas, liquefied petroleum gas or synthetic natural gas regardless of derivation or source*. The term "hazardous substance" as defined by RSA 146-C:1, VII-a ("Underground Storage Facilities", http://gencourt.state.nh.us/rsa/html/X/146-C/146-C-1.htm) and used herein, *means material defined as a regulated substance under 42 U.S.C. 6991(2)(A)* ["Comprehensive Environmental Response, Compensation, and Liability Act/Definitions and Exemptions", http://www4.law.cornell.edu/uscode/42/6991.html] *in addition to any material designated as a hazardous substance pursuant to RSA 146-C:9, VI-a* ["Underground Storage Facilities/Rulemaking", http://gencourt.state.nh.us/rsa/html/X/146-C/146-C-9.htm]. A list of hazardous substances can be found in 40 CFR 302.4 (see http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfr302_00.html).

What must you do to apply?

- Obtain a *Registration for Underground Storage Tank Systems* form from the DES Oil Remediation and Compliance Bureau, the DES Public Information and Permitting Unit, or access it online at http://www.des.state.nh.us/orcb/doclist/registra.pdf.
- Provide the name, address, and daytime telephone number of the facility owner.
- Provide the name and street address of the facility.
- Provide the type of owner (*e.g.,* federal/state/local government/political subdivision, commercial, or other) and type of facility (*e.g.,* gas station, petroleum distributor, air taxi, railroad, *etc.*)
- Provide the name, title, address, and telephone number of the contact person in charge of the UST systems.
- Provide a description of each UST system at the facility, including:
    - Status of UST system
    - Installation date of UST system
    - Capacity of UST(s)
    - Substance(s) stored
    - Tank and piping material
    - Type of piping system
    - Date spill bucket installed
    - Type of overfill, release detection, and corrosion protection
- Provide the owner's financial responsibility compliance status.
- Indicate the number of tanks that are permanently or temporarily closed (as appropriate).
- Provide a detailed site plan and layout.
- Indicate whether the registration is being submitted to signal a change in ownership or a modification to existing systems.
- The facility owner must sign and date the registration form as a *Certification of Compliance*.
- Submit the completed registration form and all supporting information to: Oil Remediation and Compliance Bureau, Waste Management Division, New Hampshire Department of Environmental

Services, P. O. Box 95, 6 Hazen Drive, Concord, NH 03302-0095. Telephone: (603) 271-3644; fax: (603) 271-2181; or online: http://www.des.state.nh.us/orcb

What types of projects require this registration?

- All underground storage systems storing a regulated substance with a capacity of more than 110 gallons
- All non-residential underground storage systems storing on-premise use heating oil with a capacity of more than 1,100 gallons

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If there are questions regarding this page or any other section of the Guidebook, please contact Tim Drew, Administrator, Public Information and Permitting Unit, at tdrew@des.state.nh.us or at (603) 271-3306.

Construction of a New or Substantially Modified Underground Storage Facility/Letter of Approval

Introduction: DES regulates underground storage tank ("UST") facilities for storage of regulated substances pursuant to RSA 146-C.* The UST Program is specifically designed to prevent contamination of the land and waters of the state due to accidental or non-sudden (*i.e.*, gradual) releases of stored petroleum products (*e.g.*, motor fuels, heating oils, lubricating oils, and petroleum-contaminated liquids) and hazardous substances. Included in this program is regulation of the construction of new or substantially modified USTs and UST facilities, which applies to UST facilities having a total regulated substance (*e.g.*, gasoline) storage capacity of more than 110 gallons or non-residential tank systems having an on-premise use heating oil storage capacity of more than 1,100 gallons. An approval to construct certain UST facilities must be obtained from DES to ensure that USTs/UST facilities are designed and installed properly to minimize the chance of petroleum discharges to the environment. A significant portion of the rules adopted by DES to supplement the requirements of RSA 146-C address the proper installation of new or substantially modified UST facilities (see http://www.des.state.nh.us/orcb/doclist/1401.pdf). At least 90 days prior to commencing construction or installation of a new or replacement UST system that has an oil storage capacity of more than 110 gallons of motor fuel (*e.g.*, gasoline diesel, waste oil), or 1,100 gallons of heating oil (*e.g.*, #2, #4, #6), the owner must submit complete plans and specifications to DES pursuant to RSA 146-C:7, I ("Underground Storage Facilities/New Facilities", http://gencourt.state.nh.us/rsa/html/X/146-C/146-C-7.htm) that have been prepared and stamped by a registered professional engineer licensed to practice in the state of New Hampshire (see http://www.des.state.nh.us/orcb/doclist/usteng.pdf). The DES application form (*Application for the Construction of New and Substantially Modified Underground Storage Facilities*, (http://www.des.state.nh.us/orcb/doclist/ustappli.pdf) can be used as a checklist to identify the information which must be provided relative to the plans and specifications for tank and piping standards, secondary containment for the tank(s) and piping, spill containment and overfill protection, and leak monitoring for the tank(s) and piping. Within 90 days of receipt of the application, DES is required to issue either a letter of incompleteness or a letter of approval. An approval is valid for one year from its date of issuance. If construction of the tank system installation is not completed within one year, the approval will expire.

*Note: The term "regulated substance" means oil or a hazardous substance. The term "oil", as defined in RSA 146-C:1, XII (which refers to RSA 146-A:2, III, "Oil Discharge or Spillage in Surface Water or Groundwater/Definitions", http://gencourt.state.nh.us/rsa/html/X/146-A/146-A-2.htm) and used herein, *means petroleum products and their by-products of any kind, and in any form including, but not limited to, petroleum, fuel, sludge, crude, oil refuse or oil mixed with wastes and all other liquid hydrocarbons regardless of specific gravity and which are used as motor fuel, lubricating oil, or any oil used for heating or processing. The term "oil" shall not include natural gas, liquefied petroleum gas or synthetic natural gas regardless of derivation or source*. The term "hazardous substance" as defined by RSA 146-C:1, VII-a ("Underground Storage Facilities", http://gencourt.state.nh.us/rsa/html/X/146-C/146-C-1.htm) and used herein, *means material defined as a regulated substance under 42 U.S.C. 6991(2)(A)* ["Comprehensive Environmental Response, Compensation, and Liability Act/Definitions and Exemptions", http://www4.law.cornell.edu/uscode/42/6991.html] *in addition to any material designated as a hazardous substance pursuant to RSA 146-C:9, VI-a* ["Underground Storage Facilities/Rulemaking", http://gencourt.state.nh.us/rsa/html/X/146-C/146-C-9.htm]. A list of hazardous substances can be found in 40 CFR 302.4 (see http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfr302_00.html).

Average number of approvals issued annually: Approximately 130

Fee: $100 for any person submitting plans and specifications for a new facility, except state and local governments and other political subdivisions. The fee is used to help cover the costs of reviewing plans and specifications and conducting inspections during installation. The fee is deposited with the State Treasurer as unrestricted revenues (see RSA 146-C:7, I-a, "Underground Storage Facilities/New Facilities",

http://gencourt.state.nh.us/rsa/html/X/146-C/146-C-7.htm and http://www.des.state.nh.us/factsheets/oil/oil-3.htm).

Estimated processing time after application is deemed "complete": 90 days

Approval duration: One year

Approval transferability: If a transfer of ownership for an UST facility is to occur prior to construction being complete, the new owner must file an amended registration form (see http://www.des.state.nh.us/orcb/doclist/registra.pdf) with DES no later than ten days after the transfer. The seller must deliver to the buyer all documents and information related to the facility including inventory, new installations, testing, closure or removals, lining, monitoring, sampling and analysis, site assessments, equipment maintenance, repairs, compliance history, financial responsibility, and any other records required to be maintained by NH CODE ADMIN. RULES Env-Wm 1401. The existing approval letter to construct an UST system is valid for one year from its date of issuance, whether for the original or new owner.

Approval modification: Modifications to the approved plans are not allowed, in accordance with Env-Wm 1401.20(c), unless the proposed changes are submitted to and approved by DES prior to implementation.

Approval renewal: An approval letter is valid for one year and is not renewable. If construction is not complete within one year, an application for a new approval must be filed.

State statute: RSA 146-C ("Underground Storage Facilities", http://gencourt.state.nh.us/rsa/html/indexes/146-C.html)

N. H. Code of Administrative Rules: Env-Wm 1401 ("Underground Storage Facilities", http://www.des.state.nh.us/orcb/doclist/1401.pdf)

Appeals body: Waste Management Council at RSA 21-O:9 ("Department of Environmental Services/Waste Management Council", http://gencourt.state.nh.us/rsa/html/I/21-O/21-O-9.htm; see also http://www.des.state.nh.us/rules/env-wmc200.pdf and http://www.des.state.nh.us/councils/#waste)

Additional information: N. H. DES, Oil Remediation and Compliance Bureau, (603) 271-3644
N. H. DES, Public Information Center, (603) 271-2975 or (603) 271-8876
U. S. EPA, Office of Underground Storage Tanks, (617) 918-1311

Construction of a New or Substantially Modified Underground Storage Facility/Letter of Approval – *Work Sheet*

Key Qualifier Question: *Do you plan to install a new underground storage tank ("UST") system for regulated substances, or replace or substantially modify an existing system that has a storage capacity for a regulated substance (e.g., gasoline) of more than 110 gallons, or a capacity of more than 1,100 gallons for non-residential storage of heating oil (e.g., #2, #4, or #6) for on-premise use?*

Note*:* The term "regulated substance" means oil or a hazardous substance. The term "oil", as defined in RSA 146-C:1, XII (which refers to RSA 146-A:2, III, "Oil Discharge or Spillage in Surface Water or Groundwater/Definitions", http://gencourt.state.nh.us/rsa/html/X/146-A/146-A-2.htm) and used herein, means *petroleum products and their by-products of any kind, and in any form including, but not limited to, petroleum, fuel, sludge, crude, oil refuse or oil mixed with wastes and all other liquid hydrocarbons regardless of specific gravity and which are used as motor fuel, lubricating oil, or any oil used for heating or processing. The term "oil" does not include natural gas, liquefied petroleum gas or synthetic natural gas regardless of derivation or source*. The term "hazardous substance" as defined by RSA 146-C:1, VII-a ("Underground Storage Facilities", http://gencourt.state.nh.us/rsa/html/X/146-C/146-C-1.htm) and used herein, *means material defined as a regulated substance* under 42 U. S. C. 6991(2) (A) ["Comprehensive Environmental Response, Compensation, and Liability Act/Definitions and Exemptions", http://www4.law.cornell.edu/uscode/42/6991.html] *in addition to any material designated as a hazardous substance in RSA 146-C:9, VI-a* ["Underground Storage Facilities/Rulemaking", http://gencourt.state.nh.us/rsa/html/X/146-C/146-C-9.htm]. A list of hazardous substances can be found in the *Code of Federal Regulations* at 40 CFR 302.4 (see http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfr302_00.html).

What must you do to apply?

- At least 90 days prior to construction or installation of an underground petroleum storage tank ("UST") system, obtain a DES *Application for the Construction of New and Substantially Modified Underground Storage Facilities* from the DES Oil Remediation and Compliance Bureau, DES Public Information Center, or online at http://www.des.state.nh.us/orcb/doclist/ustappli.pdf.
- Provide all existing facility and tank information, including any UST facility identification number.
- Provide notification to the host community pursuant to RSA 541-A:39 ("Administrative Procedure Act/ Notice to Municipalities", http://gencourt.state.nh.us/rsa/html/LV/541-A/541-A-39.htm)
- Prepare a facility plan that is dated and signed by a registered professional engineer licensed to practice in the state of New Hampshire (see NH CODE ADMIN. RULE Env-Wm 1401.20, ("Underground Storage Facilities/Requirements for Approval of Underground Storage Systems", http://www.des.state.nh.us/orcb/doclist/1401.pdf) including:
    - An accurate diagram (22" x 34") showing tank(s) location, all piping, pump islands, structures, appurtenances, North arrow, 100-year flood plain information, the seasonal high water table, and spot elevations (dispenser/tank)
    - A detailed tank diagram (22" x 34") showing spill containment, leak detection, product pipe (indicate slope), piping termination details, flex connectors, pipe cover depth (inches) and material(s) specifications, complete engineering designs and documentation for tank ballasting, and appurtenances
    - Other supporting documentation on equipment and materials as necessary to describe the facility
- Provide a site location (locus) map or U. S. Geological Survey 7.5-minute series map (see http://www.topozone.com) that clearly identifies the facility's location.
- Supply all information related to the tank(s) (see Env-Wm 1401.21) including:
    - Whether the work is for piping upgrades

- Number of existing tanks to be closed (if any)
- The volume (nominal/actual), diameter, and length of the tank(s)
- Product to be stored
- Manufacturer and type of construction
- Degree of wrap (double-walled)
- Outer wall gauge (steel only)
- Material specifications, construction, and installation details for the vault
- State whether or not dewatering is required.

- Provide all information related to the system's leak monitoring system (see Env-Wm 1401.26) including:
  - Manufacturer and model number for the console's tank monitor and sump monitor
  - Manufacturer and model number for the sensor tank's hydrostatic, wet annular, liquid, dry annular, vapor, dry annular, tank gauging, and any other important components.
- Provide information on the system's spill containment capability (see Env-Wm 1401.25) including:
  - Manufacturer, model number, and capacity of the spill container, submerged fill drop tube, and any other components to the system.
- Provide information on the system's overfill protection capability (see Env-Wm 1401-25) including:
  - Manufacturer, model number, and volume stopped/restricted (gal.) of the ball float, float vent valve extractor, audible alarm level sensor, overfill flow shut-off valve, and any other pertinent information related to overfill protection.
  - If overfill flow shut-off valve is used, attached completed manufacturer's instructions for determining the proper length of the tube and indicate the proper valve dimension setting on the plan.
- For the system's piping (see Env-Wm 1401.22 and Env-Wm 1401.27) include:
  - The pressure or suction (or both) for the primary piping, plus the manufacturer name, model number, material of construction, pipe size and schedule, and any other pertinent information for the primary and secondary piping.
  - Location of check valves
  - Components which provide for independent pressure testing of the tank and piping
  - The manufacturer, model number, material and pipe size for primary and secondary return lines
  - The manufacturer name, model number, and material for the containment sump for the tank and dispenser
  - The number of sump sensors for the tank and dispenser, their manufacturer, and model number
  - The manufacturer and model number for the line leak detector
- Identify whether any tanks are siphoned. If so, provide:
  - Manufacturer, model number, material of construction, pipe and schedule for the primary and secondary piping.
  - Manufacturer and model number for the flex connectors.
  - State whether the flex connectors are cathodically-protected and totally isolated from the soil or backfill material.
- Provide the setback distances from water supply wells and surface water [see Env-Wm 1401.28 (t) and (u)], including:
  - Distance from large community or non-transient, non-community water supply system wells
  - Distance from small community or non-transient, non-community water supply system wells
  - Distance from private water supply systems
- Provide the name, company, telephone number, and New Hampshire Professional Engineer Number for the engineer of record (see http://www.des.state.nh.us/orcb/doclist/usteng.pdf), plus the name, company, International Fire Code Institute ("IFCI") Certification Number (see http://www.ifci.org/wsnsa.dll/certsearch.w?OrgCode=ifci), address, town/city, state, zip code, and telephone number for the contractor/installer.
- Submit a check or money order for $100 made payable to "Treasurer, State of New Hampshire, with the application, plans, and specifications to: Oil Remediation and Compliance Bureau, Waste

Management Division, New Hampshire Department of Environmental Services, P. O. Box 95, 6 Hazen Drive, Concord, NH 03302-0095. Telephone: (603) 271-3644; fax: (603) 271-2181; or online: http://www.des.state.nh.us/orcb/ustprog.htm.

What types of projects require this approval?

- Installation or replacement of an UST system of more than 110 gallons at a service station
- Installation or replacement of an UST system at a manufacturing facility of more than 1,100 gallons of heating oil (*e.g.*, #2, #4, or #6)

If there are questions regarding this page or any other section of the Guidebook, please contact Tim Drew, Administrator, Public Information and Permitting Unit, at tdrew@des.state.nh.us or at (603) 271-3306.

Underground Storage Tank Facility Permit-to-Operate

Introduction: DES regulates underground storage tank ("UST") facilities for storage of regulated substances pursuant to RSA 146-C.* One of the aspects of this program is the UST Permit-to-Operate, which applies to UST facilities having a total regulated substance (*e.g.*, gasoline) storage capacity of more than 110 gallons or non-residential tank systems having an on-premise use heating oil storage capacity of more than 1,100 gallons. Pursuant to RSA 146-C:4, I ("Underground Storage Facilities/Underground Storage Facility Permit Required", http://gencourt.state.nh.us/rsa/html/X/146-C/146-C-4.htm), no person can own or operate an UST facility in New Hampshire with out first obtaining a permit from DES. A Permit-to-Operate is issued within 90 days of receipt of a complete UST registration package (refer to the UST Facility Registration description elsewhere in this chapter), including payment of the fee required by RSA 146-C:4, III, and is valid for five years. The UST Program was specifically designed to prevent and minimize contamination of the land and waters of the state due to accidental or non-sudden (*i.e.*, gradual) releases of stored motor fuels, heating oils, lubricating oils, other petroleum and petroleum-contaminated liquids, and hazardous substances to the subsurface environment as a result of improper storage, maintenance, and/or handling practices.

*Note: The term "regulated substance" means oil or a hazardous substance. The term "oil", as defined in RSA 146-C:1, XII (which refers to RSA 146-A:2, III, "Oil Discharge or Spillage in Surface Water or Groundwater/Definitions", http://gencourt.state.nh.us/rsa/html/X/146-A/146-A-2.htm) and used herein, *means petroleum products and their by-products of any kind, and in any form including, but not limited to, petroleum, fuel, sludge, crude, oil refuse or oil mixed with wastes and all other liquid hydrocarbons regardless of specific gravity and which are used as motor fuel, lubricating oil, or any oil used for heating or processing. The term "oil" shall not include natural gas, liquefied petroleum gas or synthetic natural gas regardless of derivation or source*. The term "hazardous substance" as defined by RSA 146-C:1, VII-a ("Underground Storage Facilities", http://gencourt.state.nh.us/rsa/html/X/146-C/146-C-1.htm) and used herein, *means material defined as a regulated substance under 42 U.S.C. 6991(2)(A)* ["Comprehensive Environmental Response, Compensation, and Liability Act/Definitions and Exemptions", http://www4.law.cornell.edu/uscode/42/6991.html] *in addition to any material designated as a hazardous substance pursuant to RSA 146-C:9, VI-a* ["Underground Storage Facilities/Rulemaking", http://gencourt.state.nh.us/rsa/html/X/146-C/146-C-9.htm]. A list of hazardous substances can be found in 40 CFR 302.4 (see http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfr302_00.html).

Average number of Permits-to-Operate issued annually: Approximately 400

Fees: $350 for each regulated, non-residential UST facility for the five-year permit prior to issuance of a DES Permit-to-Operate. Facilities owned by state and local governments, including counties and school districts, are not required to pay the permit fee but are required to apply for the Permit-to-Operate every five years (see http://www.des.state.nh.us/factsheets/oil/oil-3.htm).

Estimated processing time after application is deemed "complete": 30 days

Permit-to-Operate duration: 5 years

Permit-to-Operate transferability: When transferring the UST facility to a new owner, the current owner must notify the buyer of the facility's status of compliance and the buyer must file an amended registration (see http://www.des.state.nh.us/orcb/doclist/registra.pdf) with the DES within ten days. An amended Permit-to-Operate will be issued to the new owner.

Permit-to-Operate modification: A Permit-to-Operate is issued in the name of the facility and its owner. Submittal of an amended registration must provide sufficient information and data for DES to render a decision on an amended Permit-to-Operate.

Permit-to-Operate renewal: Permits must be renewed every five years. Please note the following renewal schedule (by county):

UST Facility Location	Expiration Date
Belknap County, Merrimack County	April 30, 2007
Rockingham County	April 30, 2003
Coös County, Carroll County, Grafton County	April 30, 2004
Cheshire County, Sullivan County, Strafford County	September 30, 2005
Hillsborough County	April 30, 2006

State statute: RSA 146-C ("Underground Storage Facilities", http://gencourt.state.nh.us/rsa/html/indexes/146-C.html)

N. H. Code of Administrative Rules: Env-Wm 1401 ("Underground Storage Facilities", http://www.des.state.nh.us/orcb/doclist/1401.pdf and *Summary of New Hampshire UST Regulations*, http://www.des.state.nh.us/factsheets/oil/oil-11.htm)

Appeals body: Waste Management Council at RSA 21-O:9 ("Department of Environmental Services/Waste Management Council", http://gencourt.state.nh.us/rsa/html/I/21-O/21-O-9.htm; see also http://www.des.state.nh.us/rules/env-wmc200.pdf and http://www.des.state.nh.us/councils/#waste)

Additional information: N. H. DES, Oil Remediation Compliance Bureau, (603) 271-3644
N. H. DES, Public Information Center, (603) 271-2975 or (603) 271-8876
U. S. EPA, Office of Underground Storage Tanks, (617) 918-1311

Underground Storage Tank Facility Permit-to-Operate – *Work Sheet*

Key Qualifier Questions: *Will your facility have at least one underground tank with the capacity to store more than 110 gallons of motor fuel (gasoline, diesel, waste oil, etc.)? Will your non-residential facility have at least one underground tank with the capacity to store more than 1,100 gallons of heating oil (e.g., #2, #4, and #6 oils)? Will your facility have at least one underground tank with the capacity to store more than 110 gallons of a hazardous substance?*

*Note: The term "regulated substance" means oil or a hazardous substance. The term "oil", as defined in RSA 146-C:1, XII (which refers to RSA 146-A:2, III, "Oil Discharge or Spillage in Surface Water or Groundwater/Definitions", http://gencourt.state.nh.us/rsa/html/X/146-A/146-A-2.htm) and used herein, *means petroleum products and their by-products of any kind, and in any form including, but not limited to, petroleum, fuel, sludge, crude, oil refuse or oil mixed with wastes and all other liquid hydrocarbons regardless of specific gravity and which are used as motor fuel, lubricating oil, or any oil used for heating or processing. The term "oil" shall not include natural gas, liquefied petroleum gas or synthetic natural gas regardless of derivation or source*. The term "hazardous substance" as defined by RSA 146-C:1, VII-a ("Underground Storage Facilities", http://gencourt.state.nh.us/rsa/html/X/146-C/146-C-1.htm) and used herein, *means material defined as a regulated substance under 42 U.S.C. 6991(2)(A)* ["Comprehensive Environmental Response, Compensation, and Liability Act/Definitions and Exemptions", http://www4.law.cornell.edu/uscode/42/6991.html] *in addition to any material designated as a hazardous substance pursuant to RSA 146-C:9, VI-a* ["Underground Storage Facilities/Rulemaking", http://gencourt.state.nh.us/rsa/html/X/146-C/146-C-9.htm]. A list of hazardous substances can be found in 40 CFR 302.4 (see http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfr302_00.html).

What must you do to apply?

For initial Permits-to-Operate:

- Register the facility (refer to the Underground Storage Tank Facility Registration description provided elsewhere in this chapter). For UST facilities owned by government agencies and political subdivisions, the Permit-to-Operate will be issued within 90 days of receiving a complete registration package.
- For all other UST facilities, pay the fee required by RSA 146-C:4, III ("Oil Discharge or Spillage in Surface Water or Groundwater/Definitions", http://gencourt.state.nh.us/rsa/html/X/146-C/146-C-4.htm):
    - A permit fee of $70 per year must be paid to DES by the owner or operator of each permitted facility, except for facilities owned by state and local governments, including counties and school districts, or other political subdivisions (see the DES Fact Sheet entitled *Underground Storage Tank Facility Fee Schedule*, http://www.des.state.nh.us/factsheets/oil/oil-3.htm). All fees will be deposited with the State Treasurer as unrestricted revenue and are due in accordance with the following schedule:

County	Expiration Date/ Renewal Fee Due Date	Amount Due*	Effective Dates
Belknap	April 30, 2007	$350	2007-2012
Carroll	April 30, 2004	$350	2004-2009
Cheshire	September 30, 2005	$350	2005-2010
Coös	April 30, 2004	$350	2004-2009
Grafton	April 30, 2004	$350	2004-2009
Hillsborough	April 30, 2006	$350	2006-2011
Merrimack	April 30, 2007	$350	2007-2012
Rockingham	April 30, 2003	$350	2003-2008
Strafford	September 30, 2005	$350	2005-2010
Sullivan	September 30, 2005	$350	2005-2010

***Note**: Existing facilities with unpaid permit fees from 1990 to the present must be paid up-to-date.

- The Permit-to-Operate will be issued within 90 days of receiving a complete registration package and fee.

For renewal of existing Permits-to-Operate:

- Check the DES "One-Stop" database to ensure that the facility is properly registered (see http://www.des.state.nh.us:1522/des/onestop.des_menu.show). If it is not, proceed as for initial Permits-to-Operate (see above).
- For UST facilities owned by a government agency or political subdivision, DES will provide a notice to renew the Permit-to-Operate and a request to prepare and sign a *Certificate of Compliance*.
- For all other UST facilities, DES will provide a notice to renew the Permit-to-Operate along with an invoice, as well as a request to prepare and sign a *Certificate of Compliance*.
- Prepare and sign the *Certificate of Compliance* located on the lower half of the *Permit-to-Operate Renewal Application*. Compliance should be determined by conducting an UST facility compliance audit or by securing the services of a third party professional consultant familiar with UST compliance audits. An audit checklist is provided with the *Permit-to-Operate Invoice* (see *Underground Storage Facility Compliance Audit Checklist for Third Party Inspections*, http://www.des.state.nh.us/orcb/doclist/cac.pdf).
- If the facility is determined to be in compliance with all applicable requirements, sign the bottom half of the *Renewal Application* or *Permit-to-Operate Invoice*, as applicable.
- If the facility is not in compliance, develop a schedule for correcting the non-compliance issues and submit it with the *Renewal Application* or *Permit-to-Operate Invoice*, as applicable.
- Prepare a check or money order in the amount designated on the invoice, made payable to the "Treasurer, State of New Hampshire". Important: Please write the DES "UST Facility Identification Number" on the face of the check or money order.
- Submit the signed *Renewal Application* or *Permit-to-Operate Invoice*, check or money order (if applicable), and compliance schedule (if applicable) to: UST Program, Oil Remediation and Compliance Bureau, Waste Management Division, New Hampshire Department of Environmental Services, 6 Hazen Drive, P. O. Box 95, Concord, New Hampshire 03302-0095. Telephone: (603) 271-3644; fax: (603) 271-2181; or online: http://www.des.state.nh.us/orcb/ustprog.htm

What types of projects require this Permit-to-Operate?

- All non-residential underground heating oil tank systems greater than 1,100 gallons
- All underground motor fuel tank systems greater than 110 gallons
- All underground regulated hazardous substance tank systems greater than 110 gallons

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If there are questions regarding this page or any other section of the Guidebook, please contact Tim Drew, Administrator, Public Information and Permitting Unit, at tdrew@des.state.nh.us or at (603) 271-3306.

Underground Storage Tank Closure Notification

Introduction: DES regulates underground storage tank ("UST") facilities for storage of regulated substances pursuant to RSA 146-C.* Pursuant to RSA 146-C:9 ("Underground Storage Facilities/Rulemaking", http://gencourt.state.nh.us/rsa/html/X/146-C/146-C-9.htm), DES has adopted NH CODE ADMIN. RULES Env-Wm 1401 ("Underground Storage Facilities", http://www.des.state.nh.us/orcb/doclist/1401.pdf, effective April 22, 1997 which superceded Ws 411 (effective September 17, 1985 through November 1, 1990) and Env-Ws 411 (effective November 2, 1990 through April 21, 1997). The UST Program is specifically designed to prevent contamination of the land and waters of the state due to accidental or non-sudden (*i.e.*, gradual) releases of stored petroleum products (*e.g.*, motor fuels, heating oils, lubricating oils, and petroleum-contaminated liquids) and hazardous substances. Included in this program is the closure of USTs and UST facilities. Pursuant to Env-Wm 1401.18(d) ("Underground Storage Facilities/Permanent Closure", http://www.des.state.nh.us/orcb/doclist/1401.pdf, an owner must notify DES at least 30 days before any scheduled UST system closure. A completed *UST Closure Notification* (see http://www.des.state.nh.us/orcb/doclist/closerep.pdf) must be submitted to DES. Registered steel UST systems without corrosion protection must be permanently closed on or before 25 years after the date of installation, and all existing single-walled underground storage tank systems without secondary containment and leak monitoring must be permanently closed by December 25, 2015. To close an UST system, all petroleum product, liquid, and sludge must be removed from the system and disposed in accordance with applicable state and federal requirements, all piping must be disconnected and removed (or permanently capped or plugged) after all substances have been removed from the system, and the system must be tested for hazardous or explosive vapors and rendered vapor-free, after which it must be removed or permanently close in-place (if removing the UST system will undermine the integrity of overlying structures or adjacent USTs). A tank that is closed in-place must be filled to capacity (including all voids) with a solid inert material such as clean sand or concrete.

*Note: The term "regulated substance" means oil or a hazardous substance. The term "oil", as defined in RSA 146-C:1, XII (which refers to RSA 146-A:2, III, "Oil Discharge or Spillage in Surface Water or Groundwater/Definitions", http://gencourt.state.nh.us/rsa/html/X/146-A/146-A-2.htm) and used herein, *means petroleum products and their by-products of any kind, and in any form including, but not limited to, petroleum, fuel, sludge, crude, oil refuse or oil mixed with wastes and all other liquid hydrocarbons regardless of specific gravity and which are used as motor fuel, lubricating oil, or any oil used for heating or processing. The term "oil' shall not include natural gas, liquefied petroleum gas or synthetic natural gas regardless of derivation or source*. The term "hazardous substance" as defined by RSA 146-C:1, VII-a ("Underground Storage Facilities", http://gencourt.state.nh.us/rsa/html/X/146-C/146-C-1.htm) and used herein, *means material defined as a regulated substance under 42 U.S.C. 6991(2)(A)* ["Comprehensive Environmental Response, Compensation, and Liability Act/Definitions and Exemptions", http://www4.law.cornell.edu/uscode/42/6991.html] *in addition to any material designated as a hazardous substance pursuant to RSA 146-C:9, VI-a* ["Underground Storage Facilities/Rulemaking", http://gencourt.state.nh.us/rsa/html/X/146-C/146-C-9.htm]. A list of hazardous substances can be found in 40 CFR 302.4 (see http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfr302_00.html).

Average number of tank closure notifications received annually: Approximately 200

Fees: None

Estimated processing time after notification is deemed "complete": 5 days

Notification duration: Applicable until actual closure is complete

Notification transferability: Closure notifications are for specific tanks at a facility and are not transferable.

Notification modification: DES must be notified of any changes to the closure information.

Notification renewal: Not applicable

State statute: RSA 146-C ("Underground Storage Facilities", http://gencourt.state.nh.us/rsa/html/indexes/146-C.html)

N. H. Code of Administrative Rules: Env-Wm 1401 ("Underground Storage Facilities", http://www.des.state.nh.us/orcb/doclist/1401.pdf)

Appeals body: Waste Management Council at RSA 21-O:9 ("Department of Environmental Services/Waste Management Council", http://gencourt.state.nh.us/rsa/html/I/21-O/21-O-9.htm; see also http://www.des.state.nh.us/rules/env-wmc200.pdf and http://www.des.state.nh.us/councils/#waste)

Additional information: N. H. DES, Oil Remediation and Compliance Bureau, (603) 271-3644
N. H. DES, Public Information Center, (603) 271-2975 or (603) 271-8876
U. S. EPA, Office of Underground Storage Tanks, (617) 918-1311

Underground Storage Tank Closure Notification – *Work Sheet*

Key Qualifier Question: *Do you plan to permanently close an underground petroleum storage tank ("UST") system?*

Note: If temporary closure of an UST system is contemplated, it must be carried out in accordance with NH CODE ADMIN. RULE Env-Wm 1401.17 ("Underground Storage Facilities/Temporary Closure", http://www.des.state.nh.us/orcb/doclist/1401.pdf). If permanent closure of an UST system is planned, the process to be followed is outlined in Env-Wm 1401.18 and as described below. Registered steel underground storage tank systems without corrosion protection must be permanently closed on or before 25 years after the date of installation. When the date of installation is unknown, the system must have been permanently closed by October 1, 1995. All existing single-walled underground storage tank systems without secondary containment and leak monitoring must be permanently closed by December 22, 2015. When a tank system subject to Env-Wm 1401 regulation is discovered, the owner must register the facility in accordance with Env-Wm 1401.04 and, within 30 days from registration, close the tank system in accordance with Env-Wm 1401.18 ("Underground Storage Facilities/Permanent Closure", http://www.des.state.nh.us/orcb/doclist/1401.pdf).

What must you do to apply?

- Obtain a copy of the *UST Closure Notification* form from the DES Oil Remediation and Compliance Bureau, DES Public Information Center, or access it online at http://www.des.state.nh.us/orcb/doclist/closerep.pdf.
- At least 30 days prior to any scheduled system closure, provide the following closure notification information:
    - Facility identification number, name, street address, and telephone number
    - Facility owner name and telephone number
    - Tank size and product stored
    - Name of the consultant/contractor hired to do the work
    - Confirmation that the local fire department has been notified of the closure
- Ensure that the person hired to permanently close the UST system has been certified in underground storage tank decommissioning by the International Fire Code Institute ("IFCI") (see http://www.ifci.org/wsnsa.dll/certsearch.w?OrgCode=ifci), and that the certified tank remover will comply with safety and testing requirements such as the American Petroleum Institute's ("API") 1604 (***Closure of Unlined Petroleum Storage Tanks***), API 1631 (***Interior Lining and Periodic Inspection of Underground Storage Tanks***), and API 2015 (***Safe Entry and Cleaning of Petroleum Storage Tanks***). See http://www.global.ihs.com/ to purchase these API standards.
- Remove all product, liquid, and sludge from the system(s) and disposed of it appropriately; disconnect and remove all piping or permanently cap or plug the piping; and test the system for hazardous or explosive vapors and render it vapor-free or inert of such vapors.
- Remove the UST or, if removal would undermine the integrity of overlying structures or adjacent USTs, close the UST in-place. An UST closed in-place must be filled to capacity, including all voids within each tank, with a solid inert material such as sand or concrete.
- Conduct an assessment to determine whether any residual contamination is present by digging test pits and obtaining and analyzing representative soil and groundwater samples from beneath and adjacent to the UST and its piping, and from existing release detection devices or subsurface monitoring locations.
- Screen the excavation material from the UST location for contamination by collecting samples and submitting them to a New Hampshire-certified laboratory for analysis (refer to the New Hampshire Environmental Laboratory Accreditation Program presented in the "Drinking Water" chapter of this *Guidebook*, http://www.des.state.nh.us/nhelap/).
- Submit a closure report (see http://www.des.state.nh.us/orcb/doclist/clodoc.pdf) to DES within 30 days from the time of samples being taken that contains the results of all testing and analysis noted above.

- If soil or groundwater contamination from a regulated substance is detected by observation or analysis during the closure of an UST system, immediately notify DES pursuant to RSA 146-A:5, II ("Oil Discharge or Spillage in Surface Water or Groundwater/Duty to Report", http://gencourt.state.nh.us/rsa/html/X/146-A/146-A-5.htm & http://www.des.state.nh.us/factsheets/oil/oil-5.htm).
- DO NOT backfill the excavation or remove the closed UST from the site until DES has inspected the site. If DES is unable to conduct such a site inspection within seven days, it may grant permission for a consultant or person knowledgeable in site assessments for contamination to inspect the site, submit a report containing a detailed account of the soil and groundwater inspection in the vicinity of the tank and piping, and inspect the closed tank for evidence of corrosion and leakage within 30 days of the inspection (see http://www.des.state.nh.us/orcb/doclist/ust_list.pdf).
- UST systems that have not been permanently closed are subject to all requirements of Env-Wm 1401.
- The facility owner must retain all documents pertaining to the closure of the UST or UST system, including contractors' invoices, manifests for disposal of materials, testing and analytical reports, and any other documents generated from the closure, for three years from the date of closure. These documents must be transferred to the new owner at the time of a transfer of facility ownership.
- Submit the *UST Closure Notification* and all supporting materials to: Oil Remediation and Compliance Bureau, Waste Management Division, New Hampshire Department of Environmental Services, P. O. Box 95, 6 Hazen Drive, Concord, NH 03302-0095. Telephone: (603) 271-3644; fax: (603) 271-2181; or online: http://www.des.state.nh.us/orcb/ustprog.htm

What types of projects require this closure notification?

- All underground storage systems that store a regulated substance (*e.g.,* gasoline, oil, *etc.*) with a capacity of greater than 110 gallons
- All non-residential (*i.e.,* commercial and industrial) underground storage systems that store on-premise heating oil (*e.g.,* #2, #4, and #6) with a capacity of greater than 1,100 gallons

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If there are questions regarding this page or any other section of the Guidebook, please contact Tim Drew, Administrator, Public Information and Permitting Unit, at tdrew@des.state.nh.us or at (603) 271-3306.

Chapter 11:

Solid Waste

2002 Edition

Chapter 11: Solid Waste

Introduction

The proper management of solid wastes generated from daily activities has always posed a challenge to individuals, businesses, communities, and government agencies. "Solid waste" is defined by RSA 149-M:4, XXII ("Solid Waste Management/Definitions", http://gencourt.state.nh.us/rsa/html/X/149-M/149-M-4.htm) as *any matter consisting of putrescible material, refuse, residue from an air pollution control facility, and other discarded or abandoned material. It includes solid, liquid, semisolid or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations, and from community activities. For purposes of this chapter, it does not include hazardous waste as defined in RSA 147-A:2; solid or dissolved materials in irrigation return flows; cut or uprooted tree stumps buried on-site with local approval if required, provided that such burial locations are not located within 75 feet of any drinking water supply; municipal and industrial discharges which are point sources subject to permits under section 402 of the federal Water Pollution Control Act, as amended; source, special nuclear or by-product material as defined by the Atomic Energy Act of 1954, as amended; or septage or sludge as defined in RSA 485-A:2, IX-a and XI-a.* Past practices of burying these wastes indiscriminately, dumping them into ravines or onto little-used parcels of land (the "out-of-sight/out-of mind" philosophy), or burning them in open piles at municipal facilities or in backyard burn barrels (see *Open Burning of Trash – Environmental Impacts and Safer Alternatives for "Backyard Burning"*, http://www.des.state.nh.us/factsheets/ard/ard-33.htm) were found to cause unintended and oftentimes long-term impacts to both human health and the environment. These impacts ranged from nuisance conditions due to smoke, odors, and vermin to major environmental contamination of New Hampshire's air, water, and soil. It became evident that a more wide-ranging and comprehensive approach was needed to safely meet the needs of a growing population.

Solid Waste Planning

The first statewide Solid Waste Plan was created in 1973 by the Office of Solid Waste Management in the New Hampshire Division of Public Health Services ("DPHS"). Acting on this plan, the closure of open burning dumps began during the 1970s and led to the conversion of many sites to unlined landfills with little more design or sophistication than the former open dumps. This trend resulted in some direct environmental improvements (such as a reduction in toxic air emissions) and limited improvements to safeguards against contamination of the surrounding environment and its inhabitants, but the burgeoning solid waste volume soon outgrew those facilities' capacity to accept and properly dispose of discarded materials. Some communities and businesses turned to incineration to reduce the volume of the wastes and save valuable landfill capacity. However, even properly-operating incinerators transferred much of the toxicity from the solid wastes being combusted to the air (via stack emissions) or groundwater (via leachate from the ash residue), an unintended consequence known as "cross-media transfer" of pollutants.

State Solid Waste Management Plan

In 1981, a more comprehensive ***State Solid Waste Management Plan*** was created through the efforts of the Governor's Solid Waste Policy Advisory Committee, the New Hampshire Office of State Planning, and the DPHS Office of Waste Management. This new plan set forth a new administrative structure for solid waste management in New Hampshire through the establishment of solid waste districts, which were intended to achieve more efficient and comprehensive management of these wastes and provide sufficient economies-of-scale to support long-term recycling initiatives (viewed as a crucial element in effective solid waste management). It also provided for the first time an accurate inventory of solid waste volumes and estimated generation rates for each community to allow for more effective planning and cost analyses by state and local government officials. An aggressive policy was adopted to close all existing open dumps by a date-certain, and to promote resource recovery, recycling, and more protective designs for municipal combustion systems,

medical waste combustors, secure landfills, transfer station/recycling centers, and composting facilities. Finally, the new plan recommended changes to existing laws that resulted in the codification of what was first designated as RSA 149-L (later repealed) which eventually became RSA 149-M ("Solid Waste Management", http://gencourt.state.nh.us/rsa/html/indexes/149-M.html). The new law carried forward the requirement first set out in RSA 147 that *[E]ach town shall either provide a facility or assure access to another approved solid waste facility for its residents. A town may choose whether to include any associated costs in its tax base* ("Solid Waste Management/Town Responsibility and Authority", http://gencourt.state.nh.us/rsa/html/X/149-M/149-M-17.htm). Since 1981, planning efforts have revolved around assisting solid waste districts and the communities that belong to them to find ways to more efficiently recycle solid wastes at resource recovery and transfer facilities, and compost materials that are amenable to such breakdown, as well as to design, operate and maintain lined and secure land disposal facilities with appropriate closure and post-closure plans (see http://www.des.state.nh.us/pcas). The ***State Solid Waste Plan and Report*** has been updated and revised several times (and RSA 149-M has been amended, as needed) over the last two decades to report on the generation of solid wastes and compliance with the legislatively-mandated disposal hierarchy (see http://www.des.state.nh.us/pcas/hierarchy.htm), as well as to forecast solid waste management and capacity needs, report on state and regional trends, incorporate congressional actions and court rulings that affect solid waste decisions, outline ongoing efforts by DES and other organizations to improve solid waste management, update DES solid waste programs (*i.e.*, adjust their focus and provide sources of assistance), and report on the status of the Recycling Market Development Steering Committee established under RSA 149-O ("Recycling Market Development Steering Committee", http://gencourt.state.nh.us/rsa/html/indexes/149-O.html).

Solid Waste Statistics

To properly characterize the current management of solid wastes in New Hampshire, a few facts and figures are necessary. New Hampshire is experiencing the fastest population growth rate in the northeastern United States. At present, there are more than 1.25 million residents in New Hampshire who generate more than 1.4 million tons of solid wastes each year, at an overall average generation rate of 6.4 pounds of solid waste per person per day (3.2 pounds per person per day for commercial and residential sectors only). New Hampshire's population is organized into 89 single-community solid waste districts and 23 multi-community districts (see http://www.des.state.nh.us/pcas/pdf/sanpshot01.pdf). New Hampshire has two waste-to-energy combustion facilities, five non-energy recovery combustion systems, three infectious medical waste incinerators, five lined (secure) landfills and nine unlined landfills, 201 transfer stations, and three construction/demolition debris processing facilities to serve the needs of residents and visitors. In 1996, the New Hampshire Legislature set a goal of 40 percent diversion of recyclable materials from the overall waste stream to be attained by the year 2000 (Solid Waste Management/Waste Reduction Goal", http://gencourt.state.nh.us/rsa/html/X/149-M/149-M-2.htm). At present, the diversion rate stands at 24 percent. There are currently 39 communities that offer curb-side recycling programs, 36 that have "pay-as-you-throw" programs in place (see http://www.epa.gov/epaoswer/non-hw/payt/index.htm), and 117 that have adopted mandatory recycling. New Hampshire currently has adequate disposal capacity for solid wastes until the year 2010. There are approximately 90 solid waste haulers that collect these materials on a daily basis and deliver them to permitted facilities for separation, recycling, transfer, composting, treatment, and/or disposal.

Solid Waste Management Hierarchy

RSA 149-M:3 ("Solid Waste Management/Achieving Goals; Hierarchy", http://gencourt.state.nh.us/rsa/html/X/149-M/149-M-3.htm) reflects the legislatively-established solid waste management hierarchy of preferred waste management or disposal practices. To ensure that disposal solutions are environmentally safe and economically sound, the New Hampshire Legislature endorsed (in order of preference) source reduction (most preferred), recycling, composting, incineration with energy recovery, incineration without energy recovery, and (least preferred) landfilling (see http://www.des.state.nh.us/pcas/hierarchy.htm). Source reduction refers to the design, manufacture, purchase, or use of materials to reduce their volume and/or toxicity before they enter the municipal solid waste system,

and includes product substitution and using less packaging. Source reduction also encompasses the reuse of products or packaging for other purposes, thereby lengthening the design life of the materials, reducing the need for extracting more raw materials, and postponing final disposal. Some examples of source reduction include donating food to food banks instead of throwing it away, diverting food scraps (other than meat or dairy) to backyard composting sites, reusing packing "peanuts" for other purposes, and even writing shopping lists on used envelopes instead of on virgin paper. Recycling refers to removing materials from the solid waste stream and transporting them to a processor or end-user who will make new products from them. Composting takes the organic components of solid wastes and subjects them to biological decomposition under controlled conditions. This process aerobically breaks down of shredded organic materials through microbial activities to form humus within windrow piles or in mechanical digesters, drums, or similar enclosures. Incineration of solid waste uses controlled thermal combustion (including flame combustion) to thermally break down waste or other materials (including refuse-derived fuels) to yield an ash residue that contains little or no remaining combustible material. The ash residue left over must either be reclaimed and/or ultimately disposed in a secure, lined ash monofill. Landfilling is putting solid waste into lined pits and then compacting and covering it. It is the least favored solution to solid waste disposal, in part because landfills are very expensive to build, operate, close, and monitor (both pre- and post-closure). Landfilling also usually negates any potential beneficial reuses of solid wastes and dedicates valuable acreage and disposal volume to long-term care of these decomposing materials. However, no matter how efficient the process or what percentage of solid wastes are diverted, a limited number of secure, state-of-the-art landfills still must be sited, operated, and maintained to safely dispose of the relatively small fraction of residual wastes generated by the more preferred options that is of no further economic value or beneficial use to anyone.

Solid Waste Management Bureau

The DES Solid Waste Management Bureau is responsible for most of New Hampshire's solid waste permitting and compliance activities. This bureau is comprised of three main programs: Compliance, Financial Management, and Permitting. While each of the programs has specific responsibilities, all work is completed in a cooperative interface to ensure that issues are effectively addressed. Such work includes thoroughly reviewing design plans and specifications prior to construction, tracking and analyzing the performance of completed projects for environmental and health impacts, attempting to protect the citizens of New Hampshire from having to assume unnecessary facility closure and post-closure costs, properly addressing the risks posed by disposal of asbestos-containing materials, and distributing grant money for eligible projects in a timely way.

Solid Waste Compliance

Pursuant to authority provided by RSA 149-M:6 ("Solid Waste Management/Responsibilities", http://gencourt.state.nh.us/rsa/html/X/149-M/149-M-6.htm), DES has the right to inspect any solid waste management facility. Formal compliance inspections are conducted at these facilities using standardized forms (see http://www.des.state.nh.us/sw/swinspections.htm) from which a report is generated that highlights conditions or practices at the facility that may need more attention to achieve and maintain full compliance with all relevant laws and rules. The Compliance Program for the DES Solid Waste Management Bureau focuses on ten specific areas: water quality, gas generation rates (primarily for landfills), dioxin/furan generation (primarily for incineration systems), settlement data (for land disposal facilities and closed landfills), erosion reports (landfill caps), waste receipt information (for assessing the adequacy of long-term disposal capacity), capacity utilization (for public benefit and design life requirements), operation reports (assessment of compliance status and operational issues), complaints (for facility performance evaluation and as potential harbingers of future problems), and cover assessments at asbestos disposal sites (to eliminate exposure of friable asbestos fibers to the public which could lead to inhalation and disease). The authority to issue penalties and enforcement actions is provided by RSA 149-M:15 ("Solid Waste Management/Penalties and Other Enforcement", http://gencourt.state.nh.us/rsa/html/X/149-M/149-M-15.htm) and RSA 149-M:16 ("Solid Waste Management/Administrative Fines", http://gencourt.state.nh.us/rsa/html/X/149-M/149-M-16.htm).

Permitting and Design Review

The Permitting and Design Review Section of the DES Solid Waste Management Bureau carries out a variety of different duties related to proper solid waste management. They include reviewing permit applications for new or expanding solid waste management facilities, providing technical construction oversight and engineering functions for the entire solid waste program, providing assistance relative to the management of specific wastes (such as asbestos-containing materials, certified waste-derived products, ash residue from incineration systems, contaminated soil and other environmental media, infectious waste, and used tires), and participating in discussions of potential legislative changes to RSA 149-M. RSA 149-M:9, I provides that *no person shall construct, operate, or initiate closure of a public or private [solid waste] facility without first obtaining a permit from the department* ("Solid Waste Management/Permit Required", http://gencourt.state.nh.us/rsa/html/X/149-M/149-M-9.htm). The permit structure that has been developed by DES for solid waste management activities ranges from a "permit-by-notification" (*i.e.*, simply notifying DES of the operation, available for certain types of transfer stations and recycling facilities) to application for the Solid Waste Standard Permit which requires in-depth technical analyses, proof of a public benefit by the facility pursuant to RSA 149-M:11 ("Solid Waste Management/Public Benefit Requirement", http://gencourt.state.nh.us/rsa/html/X/149-M/149-M-11.htm), background checks of the applicants by the New Hampshire Department of Justice, and an analysis of financial assurance data. Application review is tied to a timeline to ensure efficient processing. The application first is examined for administrative completeness (*i.e.*, to make sure that all of the required components have been submitted), then undergoes a technical completeness assessment. Next, public comments are collected or a public hearing is scheduled in the locality of the proposed facility, and finally a decision to issue or deny the permit is made and conveyed to all interested parties. The length of time it takes to reach a decision is directly related to the quality and completeness of the initial application materials. In addition to Standard Permits, the DES Solid Waste Management Bureau processes applications for Solid Waste Permits-by-Notification, Solid Waste Research and Development Permits, Solid Waste Emergency Permits, and a Waste-Derived Product Certifications.

Landfill Closure Program

The DES Solid Waste Management Bureau, through its Landfill Closure Program, performs the analyses necessary to support the permanent closure of existing solid waste facilities, mostly unlined landfills, that pose an immediate or ongoing threat to public health or the environment, or simply have exhausted their useful design lives (see http://www.des.state.nh.us/sw/swclosure.htm). Program staff oversee landfill cap installation projects, landfill removal projects (including site restoration), and the long-term maintenance and monitoring programs associated with such actions. Landfill closure often requires other DES permits such as those for wetlands protection, erosion control, storm water management, air emissions control, and long-term groundwater monitoring. Many commercial and municipal incinerators used for treating solid wastes for volume reduction also have reached the end of their useful design life, and have been closed and decommissioned through this process. After closure is complete, annual facility reports are required from the owners of closed landfills in March of each year (see http://www.des.state.nh.us/sw/swpostclosure.htm). The data in these reports are used to assess performance of the closure system, establish remediation needs, and assess progress toward stabilization of the landfill mass as the wastes decompose over time. These reports also are used to determine if and when the owner may be allowed to reduce the frequency of monitoring activities or to eliminate them altogether. Over the past ten years, more than 90 municipally-owned, unlined solid waste landfills have been closed and are presently being subjected to post-closure monitoring activities, in accordance with DES specifications. Twenty-six more unlined landfills have been in the queue for closure during 2002 (see http://www.des.state.nh.us/sw/fy02list.pdf).

Financial Assistance

Financial assistance in the form of both grants and low-interest loans is available to municipalities to cover a portion of the expenses for closing certain solid waste facilities (see http://www.des.state.nh.us/sw/swfinancial.htm). The Grants Management Program within the DES Solid Waste Management Bureau processes applications and distributes state funds for closure of municipally-owned, unlined landfills and the municipal incinerators identified by the New Hampshire Legislature in RSA 149-M:42, IV ("Solid Waste Management/Aid to Municipalities for Closure of Unlined Solid Waste Landfills and Certain Municipal Incinerators/Definitions", http://gencourt.state.nh.us/rsa/html/X/149-M/149-M-42.htm). The State Landfill Closure Program was established by the New Hampshire Legislature to be effective beginning in 1995. In 1999, the law was amended to expand the closure grant program to address the needs of 18 municipal incinerators constructed prior to July 1, 1998. Each year, DES holds a public hearing to receive comment on the current state fiscal year priority closure list of landfills and incinerators (see http://www.des.state.nh.us/sw/fy02list.pdf). The draft closure lists for fiscal years 2003 (see http://www.des.state.nh.us/sw/fy03list.pdf) and 2004 (see http://www.des.state.nh.us/sw/fy04list.pdf) are available, as is the extended priority list (see http://www.des.state.nh.us/sw/extended_list.pdf). The purpose of the closure grants program is to reimburse municipalities for 20 percent of eligible capital costs associated with landfill and/or incinerator closures. Eligible capital costs include hydrogeological and engineering investigation and design, construction of closure elements in accordance with plans approved by DES, and construction supervision. Eligible costs do not include land acquisition (except for land that is necessary to the physical elements of closure); administrative, legal, and fiscal costs; or costs for post-closure monitoring and maintenance. The application forms and instructions for those who wish to apply for a landfill or incinerator grant (see http://www.des.state.nh.us/sw/landfill.pdf and http://www.des.state.nh.us/sw/incinerator.pdf, respectively) are provided by DES. Since the program's inception, the Governor and Executive Council have awarded 108 grants totaling more than $24 million, with over $14.4 million paid to municipalities in reimbursements through July 1, 2002.

The State Revolving Fund ("SRF") Loan Program (see http://www.des.state.nh.us/wwe/srf.htm) is a low-interest loan program designed to assist communities with the design and construction of eligible drinking water system and wastewater system projects, as well as unlined landfill closures, based on specific criteria ("Solid Waste Management/Aid to Municipalities for Closure of Unlined Solid Waste Landfills and Certain Municipal Incinerators/Priorities", http://gencourt.state.nh.us/rsa/html/X/149-M/149-M-49.htm). The requirements for obtaining a State Revolving Fund loan generally are the same as those for the State Aid Grant Program (see http://www.des.state.nh.us/wwe/grants.htm) established under RSA 486 ("Aid to Municipalities for Water Pollution Control", http://gencourt.state.nh.us/rsa/html/indexes/486.html), except that obtaining an SRF loan for construction also requires the use of federal wage rates and the solicitation of services from minority business enterprises and women's business enterprises ("MBE/WBE", http://www.des.state.nh.us/wseb/dbe.htm) for participation in the project (see http://webster.state.nh.us/dot/humanresources/docs/DBEdirectory.pdf). The loan program is administered by the DES Wastewater Engineering Bureau under NH CODE ADMIN. RULES Env-C 500 (see http://www.des.state.nh.us/rules/env500.pdf). For a more complete description of all DES grant and loan programs, please review the brochure entitled ***Grants and Loans from the New Hampshire Department of Environmental Services*** or access the information online at http://www.des.state.nh.us/grants_loans.htm.

Financial Assurance

The Financial Assurance Program within the DES Solid Waste Management Bureau was formed to implement the portion of RSA 149-M:9, X ("Solid Waste Management/Permit Required", http://gencourt.state.nh.us/rsa/html/X/149-M/149-M-9.htm) that directs DES to require evidence of financial responsibility prior to issuing a permit. The program works with applicants and permit holders to ensure that all permitted solid waste facilities have sufficient funding available to close when business operations cease or their design lives are exhausted (see http://www.des.state.nh.us/sw/swassurance.htm). DES's administrative

rules pertaining to this requirement are found in NH CODE ADMIN. RULES Env-Wm 3100 ("Solid Waste Rules/Financial Assurance", http://www.des.state.nh.us/rules/swrules.pdf). Financial assurance is required for all solid waste management facilities except for permit-exempt facilities, permit-by-notification facilities, facilities for which the closure cost estimate is $3,000 or less, emergency permit facilities, and limited private non-landfill facilities. The amount of financial assurance needed is calculated based on representative current market rates for having a third party perform all required closure and post-closure activities at the point in the facility's active life when the extent and manner of facility operations, in compliance with permit conditions and all applicable laws and rules, makes closure the most expensive [see Env-Wm 3101.02(b)]. DES offers a cost-estimate form to assist in determining the closure cost for a specific type of facility (see http://www.des.state.nh.us/sw/estimate.htm). Financial assurance can be obtained by using one or more of a variety of financial mechanisms. DES has specific wording requirements for these documents and provides "models" for use in meeting the financial assurance obligations for a facility (see http://www.des.state.nh.us/sw/swmodeldocs.htm).

Solid Waste Facility Operator Training Program

RSA 149-M:9, VI prohibits any person who has not obtained the appropriate certification from DES from operating a public or private solid waste facility ("Solid Waste Management/Permit Required", http://gencourt.state.nh.us/rsa/html/X/149-M/149-M-9.htm). The Planning and Community Assistance Section of the DES Waste Management Division Planning Bureau operates a certification program to train the operators of solid waste facilities in the proper techniques and practices required to safely and efficiently handle solid wastes. The DES Solid Waste Operator Training Program (see http://www.des.state.nh.us/pcas/opcert.htm) addresses the training and certification needs of more than 1,000 operators who work at landfills, transfer stations, recycling centers, and composting facilities throughout New Hampshire. The program's goal is to enhance environmental protection, public health, and safety through education. It is designed to train those who are not currently certified, those who hold interim certification, and those who would like to upgrade their existing certification. Knowledge gained while attending these training sessions helps participants to attain the skills and knowledge necessary to safely and efficiently operate and manage state-of-the-art solid waste management facilities.

The program offers certification at four levels: Level IV (Operator/Manager), Level III (Advanced Operator), Level II (Operator), and Level I (Attendant).

- A certified Level IV operator/manager is qualified to be in responsible charge for such operations as a secure landfill or an incinerator ash landfill ("Level IV Facility"), a transfer station, recycling facility, or a composting operation that receives 30 tons or less of waste per day on average annually ("Level III Facility"), a commercial brush or stump processing or disposal facility ("Level II Facility"), or a permit-by-notification facility having an active design life of 90 days or less ("Level I Facility"), and may assume supervisory responsibilities.
- A certified Level III advanced operator is qualified to be in responsible charge for such operations as a Class I incinerator (*i.e.*, a combustor unit designed to burn solid waste for volume reduction under controlled conditions) ("Level III Facility"), a monofill for brush and stumps only ("Level II Facility"), or a permitted research and development facility ("Level I Facility"), and may assume supervisory responsibilities.
- A certified Level II operator is qualified to be in responsible charge for such operations as a monofill for stumps and brush ("Level II Facility") or an emergency permit facility ("Level I Facility"), but not assume any supervisory responsibilities.
- A certified Level I attendant, and a Level I attendant-in-training, may work at, but not be in responsible charge at any solid waste facility.

To receive certification, an applicant must meet the education and experience qualifications, apply to take the written examination administered by DES, attend training sessions, and successfully complete the

examination with a score of 70% or better. Certification is valid for one year from the date of issuance. Each applicant for renewal must participate in an approved operator training update program prior to seeking certification renewal. If a certificate-holder allows his or her certification to lapse for more than 90 days, the regular certification process must be successfully repeated to regain certification status. All solid waste facilities must have a manager certified at the appropriate level and there must be at least one supervisor at the facility for every one to five operators. All personnel in a supervisory position must hold (at a minimum) a Level III (Advanced Operator) certification. During operating hours at the facility, no fewer than 50 percent of the on-site personnel directly involved with solid waste management activities must be certified operators. The certificates for all staff must be prominently displayed at the solid waste facility.

Summary

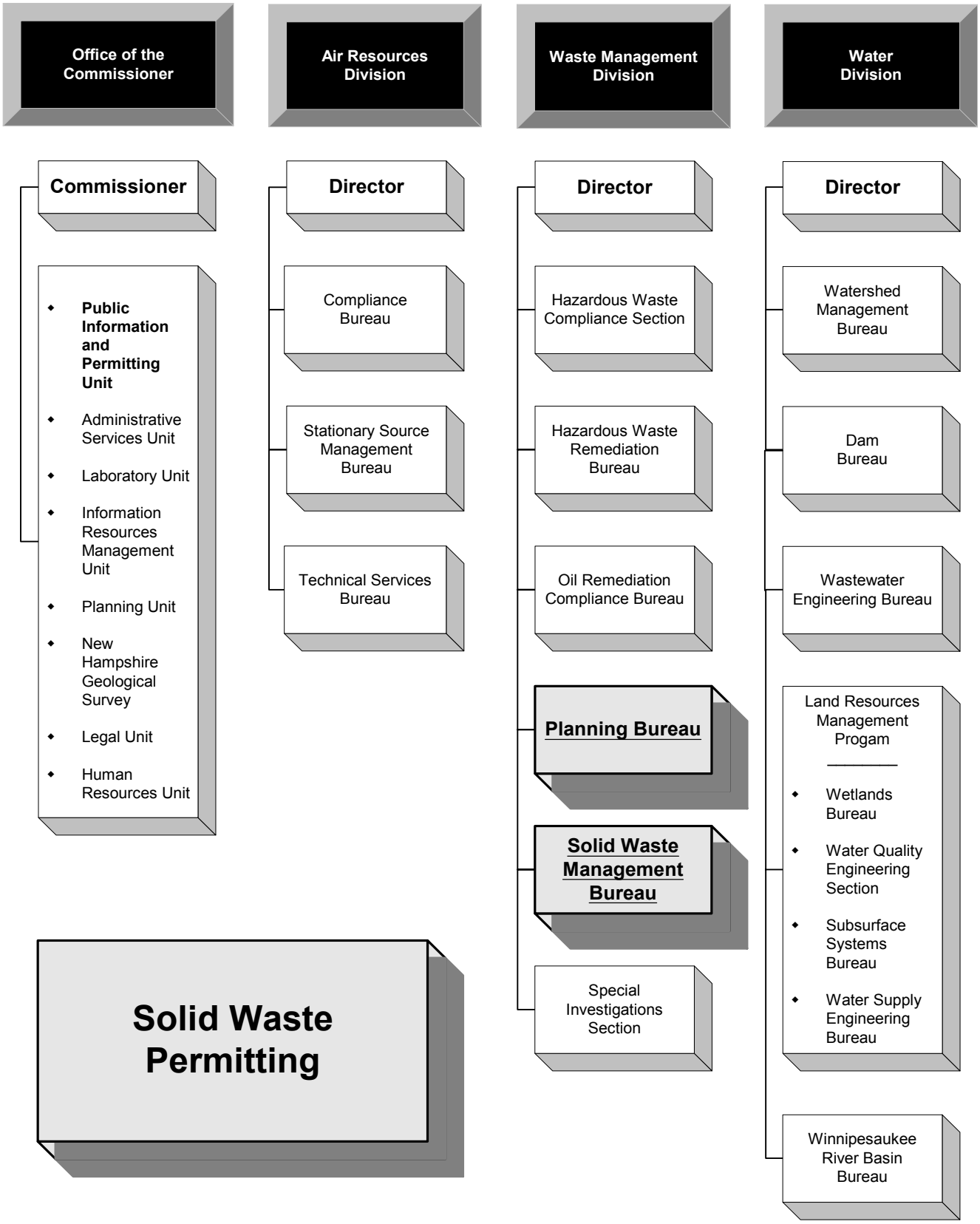
In summary, the compliance, financial management, and permitting of solid waste facilities in New Hampshire is primarily administered by the Solid Waste Management Bureau of the DES Waste Management Division. The Waste Management Division's Planning Bureau provides much of the education and outreach services necessary to support the operation of state-of-the-art facilities. Appeals of these programs' decisions or orders issued for violations of program requirements should be directed to the Waste Management Council (see http://www.des.state.nh.us/councils/#waste).

Chapter Contents

- ✓ **Solid Waste Standard Permit**
- ✓ **Solid Waste Emergency Permit**
- ✓ **Solid Waste Permit-by-Notification**
- ✓ **Solid Waste Research and Development Permit**
- ✓ **Waste-Derived Product Certification**
- ✓ **Solid Waste Facility Operator Certification**

Organizational Chart

New Hampshire Department of Environmental Services



Solid Waste Standard Permit

Introduction: RSA 149-M:9, I ("Solid Waste Management/Permit Required", http://gencourt.state.nh.us/rsa/html/X/149-M/149-M-9.htm) provides that *No person shall construct, operate, or initiate closure of a public or private facility without first obtaining a permit from the department [DES].* RSA 149-M:9, II provides that *It shall be unlawful to transport solid waste to, or to dispose of solid waste at, any facility other than an approved facility*. One type of permit available under the permit structure established by DES to implement these provisions is the Solid Waste Standard Permit. A Standard Permit is required for proposals to design, construct, and operate new public or private facilities (or major expansions of existing ones) which will receive municipal solid wastes, construction and/or demolition debris, contaminated environmental media (*e.g.*, soils, vegetation, *etc.*), and/or non-hazardous industrial wastes for storage, processing, treatment, separation, and/or disposal. Types of facilities that require this permit include double-lined landfills, transfer stations, municipal solid waste combustors, resource recovery facilities, infectious waste incinerators, and large composting operations that receive 30 tons or more of solid wastes per day and are designed to operate for more than 90 days. A Standard Permit also is required for facilities that accept solid wastes other than recyclables from other states, territories, or countries. Applications for the Solid Waste Standard Permit must include a site report, plans and specifications, an operating plan, a closure plan, a financial report, a demonstration that the facility will provide a substantial public benefit as required by RSA 149-M:11 ("Solid Waste Management/ Public Benefit Requirement", http://gencourt.state.nh.us/rsa/html/X/149-M/149-M-11.htm), and a performance history. The performance history must include a thorough description of the applicant's personal and business dealings for delivery to the New Hampshire Department of Justice to serve as the basis for a background investigation by the New Hampshire Department of Justice of the applicant's personal history (*Personal History Disclosure Form*, http://www.des.state.nh.us/sw/personal_disclosure.doc) and business history (*Business Concern Disclosure Statement*, http://www.des.state.nh.us/sw/business_disclosure.doc). The application process involves evaluating the application materials, including technical, financial, and legal data; receiving public input; and issuing a final decision.

Average number of permits issued annually: 4 (or fewer)

Fees: Sliding scale for facility function, size, and life expectancy, ranging from $2,000 to $35,000 per facility

Estimated processing time after application is deemed "complete": Review time for an application deemed complete typically extends for 120 days. However, actual elapsed time is highly dependent upon facility complexity and application quality. A final decision cannot be made within 30 days or less following a public hearing.

Permit duration: Indefinite

Permit transferability: The DES Solid Waste Standard Permit is transferable by using a Type IV permit modification form to *Transfer a Solid Waste Management Facility Permit* (see http://www.des.state.nh.us/sw/modifications_permit.htm). The fee for transfer is $1,000.

Permit modification: Application for a Type I-a, I-b, III, IV, or V permit modification will provide the information needed to make a decision concerning the modification of a DES Solid Waste Standard Permit, depending on the changes sought. Fees range from no fee for Types III, V, and most Type II modifications to a prorated fee for construction plan approval of new landfill phases within an already-permitted "footprint" (see http://www.des.state.nh.us/sw/modifications_permit.htm).

Permit renewal: Solid Waste Standard Permits do not expire. If a permit has been retired or revoked, a new permit is required prior to reactivating solid waste activities at the site.

State statute: RSA 149-M:9 ("Solid Waste Management/Permit Required", http://gencourt.state.nh.us/rsa/html/X/149-M/149-M-9.htm)

N. H. Code of Administrative Rules: Env-Wm 314 ("Solid Waste Rules/Standard Facility Permitting Provisions", http://www.des.state.nh.us/rules/swrules.pdf)

Appeals body: Waste Management Council at RSA 21-O:9 ("Department of Environmental Services/Waste Management Council", http://gencourt.state.nh.us/rsa/html/I/21-O/21-O-9.htm; see also http://www.des.state.nh.us/rules/env-wmc200.pdf and http://www.des.state.nh.us/councils/#waste)

Additional Information: N. H. DES, Solid Waste Management Bureau, (603) 271-2925
N. H. DES, Public Information Center, (603) 271-2975 or (603) 271-8876

Solid Waste Standard Permit – *Work Sheet*

Key Qualifier Question: *Will the facility receive solid wastes and not qualify as a facility type that can be permitted through the DES solid waste permit-by-notification, emergency permit, or research and development application process* (see http://www.des.state.nh.us/sw/swpermits.htm)*?*

What must you do to apply?

- Obtain a copy of the application for a *Standard Permit for a Solid Waste Landfill*, *Standard Permit for a Solid Waste Processing/Treatment Facility*, or *Standard Permit for a Solid Waste Collection/Storage/Transfer Facility* from the DES Solid Waste Management Bureau, DES Public Information Center, or online at http://www.des.state.nh.us/sw/standard_permits.htm.
- Provide a complete description of the facility including its designated name, the type of facility (*e.g.*, double-lined landfill, processing center, *etc.*) and whether it is proposed or existing and public or private, its location by street number and municipality, its mailing address, the tax map and lot number(s) of the property on which the facility is or will be sited, a deed reference to the current owner, latitude/longitude, written (referenced) directions to the facility, and plot plan depicted on a 7½-minute U. S. Geological Survey map (see http://www.topozone.com).
- Provide the name(s), telephone number(s), and mailing address(es) for the facility applicant, owner, and operator.
- Provide a list of all DES permits issued to the facility, and include a status update on each one (see http://www.des.state.nh.us:1522/des/onestop.des_menu.show).
- Describe the facility service type and whether the geographic service area will be "limited" or "unlimited".
- Describe the types of waste to be received and processed, as well as the storage capacity, processing or treatment capacity, and disposal capacity (expressed in tons or cubic yards), and define the facility "footprint" (in acres).
- Notify all abutters, the host community, the host solid waste district, and any other affected entities.
- Provide a copy of the written notification letter sent to abutters, a list of all required recipients, and copies of the signed registered letter receipts or signed acknowledgements of receipt.
- If the applicant is not the property owner, provide a copy of all legal notification and agreement documents to demonstrate that use of the property for its intended purpose is allowed and that compliance with all applicable requirements will be maintained.
- Prepare a site report to demonstrate compliance with applicable state and federal siting criteria:
    - State: NH CODE ADMIN. RULE Env-Wm 314.02(a), "Solid Waste Rules/Standard Facility Permitting Provisions", http://www.des.state.nh.us/rules/swrules.pdf;
    - Federal: "Resource Conservation and Recovery Act" of 1976, 42 U. S. C. Subchapter I, http://www4.law.cornell.edu/uscode/42/ch82.html and Code of Federal Regulations, Title 40, Chapter I, Part 258 at http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfr258_00.html; see also DES Fact Sheet *Federal Criteria for Municipal Solid Waste Landfills (40 CFR Part 258, Subtitle D of RCRA)* at http://www.des.state.nh.us/factsheets/sw/sw-21.htm
- Provide plans and specifications for the facility in accordance with Env-Wm 2803.05, including an operating plan, residual waste management plan, facility maintenance, inspection, and monitoring plan (see http://www.des.state.nh.us/sw/swinspections.htm), contingency plan, employee-training program (see http://www.des.state.nh.us/pcas/opcert.htm), and record keeping and reporting procedures ("Solid Waste Management/Responsibilities", http://gencourt.state.nh.us/rsa/html/X/149-M/149-M-6.htm).
- Prepare a financial report that specifies the estimated cost of constructing the facility, type and source of funding, estimated operating costs, estimated tipping fees or average cost per ton to manage the waste, estimated closure cost (see http://www.des.state.nh.us/sw/swclosure.htm) and the cost of post-closure monitoring (see http://www.des.state.nh.us/sw/swpostclosure.htm and

http://www.des.state.nh.us/sw/swfinancial.htm), and the administration of a financial assurance plan (see http://www.des.state.nh.us/sw/swassurance.htm).

- Submit personal/business disclosure information to the New Hampshire Department of Justice for a background check (see http://www.des.state.nh.us/sw/personal_disclosure.doc, DES *Personal History Disclosure Form*, and http://www.des.state.nh.us/sw/business_disclosure.doc, DES *Business Concern Disclosure Statement*.
- Provide a demonstration that the facility will provide a substantial public benefit to the solid waste management needs of citizens of New Hampshire, as required by RSA 149-M:11 ("Solid Waste Management/Public Benefit Requirement", http://gencourt.state.nh.us/rsa/html/X/149-M/149-M-11.htm).
- Calculate the appropriate fee (as outlined on the application form) and submit three copies of the application (each with original signatures), the fee, and all supporting materials to: Permitting and Design Review Section, Waste Management Division, New Hampshire Department of Environmental Services, 6 Hazen Drive, P. O. Box 95, Concord, NH 03302-0095. Telephone: (603) 271-2925; fax: (603) 271-2456; or online: http://www.des.state.nh.us/sw/

What types of projects require this permit?

- A new double-lined landfill or transfer station that receives municipal solid wastes or construction and demolition debris
- An incinerator that will burn any solid wastes (such as medical waste) that are not certified as a "fuel"
- Any facility that receives asbestos or other non-hazardous industrial wastes

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If there are questions regarding this page or any other section of the Guidebook, please contact Tim Drew, Administrator, Public Information and Permitting Unit, at tdrew@des.state.nh.us or at (603) 271-3306.

Solid Waste Emergency Permit

Introduction: Occasionally, conditions involving a solid waste arise that require an immediate action to control a potential threat to public health and safety or the environment. DES has a Special Investigations Section ("SIS") (see http://www.des.state.nh.us/sis/) which can provide assistance in situations where an expedited response is needed to protect public health and safety or the environment. Such situations include the need to dispose of debris from a major storm, flood or other natural disaster; the need to divert wastes from a solid waste facility that has unexpectedly shutdown; and the need to clean up accidental spills/releases and temporarily hold the wastes at a safe location pending further treatment or disposal. The DES Solid Waste Emergency Permit was created for situations that require the separation, stabilization, segregation, consolidation, or other emergency management of solid wastes exposed to uncontrolled conditions, and may be used to allow a closed solid waste landfill or transfer station to re-open or operate outside normal work hours on a limited basis to protect against unnecessary risks to the general public or environment posed by exposed infectious wastes, asbestos containing materials, oily debris, or other wastes. Final treatment, storage, or disposal at a permitted facility can be arranged later, after the emergency conditions have subsided. The selection and operation of a temporary storage or treatment site for emergency purposes should be reviewed and closely coordinated with the local code enforcement officer and/or fire chief. (See **http://www.des.state.nh.us/emergency_response.htm**)

Average number of permits issued annually: 1 (or fewer)

Fees: None

Estimated processing time after application is deemed "complete": This permit is issued orally by the Director of the DES Waste Management Division once it has been determined that a true emergency exists; written permit is issued within ten working days.

Permit duration: The Solid Waste Emergency Permit remains in effect as long as the need is justified, and as identified in the original application.

Permit transferability: The Solid Waste Emergency Permit is transferable through the submission to DES of a *Type IV Permit Modification* form and fee (see http://www.des.state.nh.us/sw/modifications_permit.htm)

Permit modification: Usually not applicable for an emergency permit

Permit renewal: Not applicable

State statute: RSA 149-M:9 ("Solid Waste Management/Permit Required", http://gencourt.state.nh.us/rsa/html/X/149-M/149-M-9.htm)

N. H. Code of Administrative Rules: Env-Wm 313 ("New Hampshire Solid Waste Rules", http://www.des.state.nh.us/rules/swrules.pdf)

Appeals body: Waste Management Council at RSA 21-O:9 ("Department of Environmental Services/Waste Management Council", http://gencourt.state.nh.us/rsa/html/I/21-O/21-O-9.htm); see also http://www.des.state.nh.us/rules/env-wmc200.pdf and http://www.des.state.nh.us/councils/#waste)

Additional Information: N. H. DES, Solid Waste Management Bureau, (603) 271-2925
N. H. DES, Special Investigations Section, (603) 271-3899
N. H. DES, Public Information Center, (603) 271-2975 or (603) 271-8876

Solid Waste Emergency Permit – *Work Sheet*

Key Qualifier Question: *Does an emergency situation exist that requires the collection, consolidation, segregation, storage, or similar management of solid wastes in circumstances where no readily available mechanism to respond to the situation is available, and where a delayed response will likely pose an unnecessary or excess risk to public health, safety, and/or the environment?*
(See **http://www.des.state.nh.us/emergency_response.htm**)

What must you do to apply?

- After assessing the situation, the applicant (or affiliated person with first-hand knowledge of the circumstances) should contact the DES Waste Management Division at **(603) 271-2900** and describe the nature of the emergency, the types of wastes involved, what action is desired, and the estimated schedule to carry out the response. The DES Special Investigations Section ("SIS") can be reached by telephone at **(603) 271-3899**, or may be contacted online at **http://www.des.state.nh.us/sis/**.
- Based on this pre-application contact and description, DES will make a preliminary determination of whether or not a Solid Waste Emergency Permit is warranted. If it is determined that the Emergency Permit is warranted, the applicant must submit the required application information on letterhead.
- Provide identification of the parties involved.
- Identify the facility where the emergency conditions exist.
- Provide a description of the emergency conditions that pose the threat to public health, safety, or the environment, including an explanation of the cause of the emergency conditions.
- Provide a certification from the local health officer or fire chief that the conditions do pose a threat to public health, safety, or the environment; or, if such certification cannot be obtained, provide a statement that such certification was sought and an explanation as to why the certification was refused.
- Provide a description of the activity proposed to address the emergency conditions and information to demonstrate that the activity will comply with all applicable permitting requirements.
- Provide a description of any post-activity monitoring proposed.
- The application letter and all supporting information must be signed by the applicant (in accordance with NH CODE ADMIN. RULE Env-Wm 303, see http://www.des.state.nh.us/rules/swrules.pdf) and submitted in triplicate to: Director, Waste Management Division, New Hampshire Department of Environmental Services, 6 Hazen Drive, P. O. Box 95, Concord, NH 03302-0095. Telephone: (603) 271-2900; fax: (603) 271-2456; or online: http://www.des.state.nh.us/sw

What types of projects/incidents qualify for issuance of this permit?

- Emergency operation of a centralized burial location for dead animals
- Repair of a landfill liner or capping system severely damaged by a major storm
- The cleanup of a petroleum spill or exposed asbestos waste deposits and resulting debris
- Emergency operation of solid waste transfer stations, processing facilities, or centralized demolition debris collection centers to handle the immediate influx of wastes generated by the emergency

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If there are questions regarding this page or any other section of the Guidebook, please contact Tim Drew, Administrator, Public Information and Permitting Unit, at tdrew@des.state.nh.us or at (603) 271-3306.

Solid Waste Permit-by-Notification

Introduction: Some solid waste management facilities, due to their size or types of wastes handled, pose little threat to public health, safety, or the environment. These facilities do not require the same degree of scrutiny as do those that qualify for the DES standard permitting process. The DES Solid Waste Permit-by-Notification is designed as a streamlined process through which the applicant simply notifies DES of the facility's existence and agrees to conform to relevant criteria set forth in NH CODE ADMIN. RULES Env-Wm 311 ("Solid Waste Rules/Permit-by-Notification Requirements") and Env-Wm 2900 ("Solid Waste Rules/Permit-By-Notification Facility Requirements", http://www.des.state.nh.us/rules/swrules.pdf) for its proper construction, operation, monitoring, and maintenance. The DES Waste Management Division has created seven different permits-by-notification, for limited public solid waste transfer station/recycling facilities, small food waste composting facilities, certified waste-derived product processing facilities (using non-select recyclable materials), collection centers for select recyclables, scrap metal recycling centers, truck transfer stations, and infectious waste treatment facilities/incinerators (see http://www.des.state.nh.us/sw/notification_permit.htm). To qualify for one of these permits-by-notification, the facility must match the criteria specified in the ***Solid Waste Rules*** exactly. If the facility cannot match the criteria, an alternative track may be to apply for a DES Solid Waste Standard Permit. Facilities operating with a permit-by-notification cannot receive in excess of 30 tons of solid wastes per day and cannot receive out-of-state wastes, except for recyclables.

Average number of permits issued annually: 10

Fees: None

Estimated processing time after application is deemed "complete": 30 days

Permit-by-Notification duration: Indefinite

Permit-by-Notification transferability: A Solid Waste Permit-by-Notification facility cannot be transferred to a new owner, except for landfill transfers occurring automatically [see Env-Wm 2902.06(d)]. In all other cases, a transferred permit-by-notification facility must, for administrative purposes, be deemed a new facility and the new owner must obtain a permit as though the facility were new if operations continue after the property transfers.

Permit-by-Notification modification: A Solid Waste Permit-by-Notification for any of the types noted above can be modified in a similar fashion to the Types I-V modification processes for a Solid Waste Standard Permit (see http://www.des.state.nh.us/sw/modifications_permit.htm). However, a permit-by-notification cannot be modified in such a way as to no longer comply with the pre-set criteria for the permit type (*e.g.*, a modification request cannot seek to increase a facility's waste inflow to exceed 30 tons per day).

Permit-by-Notification renewal: A permit-by-notification does not expire. If a permit has been retired or revoked, a new permit is required prior to reactivating solid waste activities at the site.

State statute: RSA 149-M:9 ("Solid Waste Management/Permit Required", http://gencourt.state.nh.us/rsa/html/X/149-M/149-M-9.htm)

N. H. Code of Administrative Rules: Env-Wm 311 and 2900 ("Solid Waste Rules/Permit-By-Notification Facility Requirements", http://www.des.state.nh.us/rules/swrules.pdf)

Appeals body: Waste Management Council at RSA 21-O:9 ("Department of Environmental Services/Waste Management Council", http://gencourt.state.nh.us/rsa/html/I/21-O/21-O-9.htm; see also http://www.des.state.nh.us/rules/env-wmc200.pdf and http://www.des.state.nh.us/councils/#waste)

Additional Information: N. H. DES, Solid Waste Management Bureau, (603) 271-2925
N. H. DES, Public Information Center, (603) 271-2975 or (603) 271-8876

Solid Waste Permit-by-Notification – *Work Sheet*

Key Qualifier Question: *Will the proposed facility accept less than 30 tons per day of in-state solid wastes or include recyclables (only) from out-of-state sources and exactly match the permit-by-notification requirements found in NH CODE ADMIN. RULES Env-Wm 2107, 2207, 2307, or 2407* (see http://www.des.state.nh.us/rules/swrules.pdf)*?*

What must you do to apply?

- Obtain a copy of the *Permit-by-Notification Application* from the DES Solid Waste Management Bureau, DES Public Information Center, or online at http://www.des.state.nh.us/sw/notification_permit.htm. Several types of facilities may qualify for this permit, so be sure to specify the type of operation.
- Provide the name(s), address(es), and telephone number(s) of those who will construct/own/operate the facility.
- Identify the facility by name and its type of operation.
- Provide the dates that facility construction and operations are scheduled to commence.
- Estimate the active life expectancy and design capacity of the facility.
- Prepare a facility site plan, drawn to scale and referenced to a fixed point on a U. S. Geological Survey topographical map (see http://www.topozone.com), that shows the parcel of land where the facility will be located, the property boundaries, access points, rights-of-way or easements, restricted or protected areas or features, above- and below ground structures and utilities such as underground tanks, wells, waterlines, septic systems, sewer lines, power lines, communication lines, and fuel lines. Show all surface waters and wetlands, the proposed facility's waste handling areas, waste storage areas, and (for landfills) the vertical and lateral limits of the proposed waste disposal area and a detail of the cap profile. Include a dimensioned line showing all required setbacks for the facility with adjacent land uses. A registered professional engineer licensed to practice in the state of New Hampshire (see http://www.state.nh.us/jtboard/pe.htm) must stamp the design plans if the facility will be operated for more than 90 days, or when otherwise required by RSA 310-A ("Professional Engineers, Architects, Land Surveyors, Professional Geologists, and Natural Scientists", http://gencourt.state.nh.us/rsa/html/indexes/310-A.html).
- If the facility is located on property subject to an enforcement action or if it lies within a groundwater management zone, provide evidence that demonstrates compliance with all rules and permits (see http://www.des.state.nh.us:1522/des/onestop.des_menu.show).
- For facilities that will operate longer than 90 days, prepare an operating plan and a closure plan.
- File a copy of the completed application with the local community, pursuant to the requirements of RSA 541-A:39 ("Administrative Procedure Act/Notice to Municipalities", http://gencourt.state.nh.us/rsa/html/LV/541-A/541-A-39.htm), and with the host solid waste management district.
- Notify all abutters concerning the proposed facility and its operations.
- Provide a signed certification ("compliance statement") with the application stating that the facility will be operated in conformance with all pertinent federal, state, and local requirements, and that all personnel will be trained and knowledgeable concerning these requirements and practices.
- Sign <u>four</u> <u>copies</u> of the application and provide three legal-sized, postage-paid envelopes bearing no return address and addressed in capital letters to the applicant, the host municipality, and the host solid waste management district.
- Submit the application form, plans, and all other supporting materials to: Permitting and Design Review Section, Waste Management Division, New Hampshire Department of Environmental Services, 6 Hazen Drive, P. O. Box 95, Concord, NH 03302-0095. Telephone: (603) 271-2935; fax: (603) 271-2456; or online: http://www.des.state.nh.us/sw/

What types of projects require this permit-by-notification?

- Limited public transfer stations and truck transfer stations
- Collection centers for select recyclables and scrap metal collection and recycling centers
- Health care facility-owned infectious waste treatment facilities or incinerators
- Processing and treatment facilities for producing certified waste-derived products
- Small food waste composting facilities
- For more examples, please refer to NH CODE ADMIN. RULES Env-Wm Env-Wm 2107, 2207, 2307, and 2407 (see http://www.des.state.nh.us/rules/swrules.pdf)

If there are questions regarding this page or any other section of the Guidebook, please contact Tim Drew, Administrator, Public Information and Permitting Unit, at tdrew@des.state.nh.us or at (603) 271-3306.

Solid Waste Research and Development Permit

Introduction: As with any field of endeavor, experimentation with new concepts, techniques, and practices forms the basis for developing safer, more efficient, and more environmentally-friendly components of the solid waste management system in New Hampshire. Entrepreneurs, industry specialists, research institutions, and facility owner/operators are directly exposed to the limits of existing equipment, facilities, and services that often could benefit from the infusion of new and innovative ideas, which then could be transferred to others in the industry facing similar challenges (see http://www.des.state.nh.us/hwrb/hwrbinov.htm). DES has created the Solid Waste Research and Development Permit to harness those creative energies, support research to develop new concepts, and provide the mechanism through which they can be performance-tested before being applied commercially. This permit is not required for conducting bench-scale research and development projects within a building or other location used for research studies, as long as the practices undertaken comply with the universal facility requirements listed in NH CODE ADMIN. RULES Env-Wm 2700 ("Solid Waste Rules/Universal Facility Requirements", http://www.des.state.nh.us/rules/swrules.pdf). Funding for a project must come from public or private research grants, distributed after submission of a written proposal to DES describing the scope of the project. A government agency or research institution (such as a public or private university) must conduct or supervise the project and must comply with all pertinent ***Solid Waste Rules*** (specifically, Env-Wm 2100-2800). The University of New Hampshire currently supports several specialty research projects through its Environmental Research Group (see http://www.unh.edu/erg) and its Recycled Materials Resource Center (see http://www.rmrc.unh.edu/). The Solid Waste Research and Development Permit will be issued for a limited time period, not to exceed that needed to complete the studies, and will include the time needed to complete any closure activities related to the project or facility. Examples of prior projects that have received this permit include investigations into re-circulating leachate as a treatment technique at a double-lined landfill, mixing of municipal solid waste combustor ash as aggregate in asphalt for a public street, and using coal ash in lightweight concrete.

Average number of permits issued annually: 4 (or fewer)

Fee: Sliding scale, starting at $1,000

Estimated processing time after application is deemed "complete": Review time is generally 120 days. However, actual elapsed time is highly dependent on facility complexity and application quality.

Permit duration: Limited to the study period identified in the application

Permit transferability: The Solid Waste Research and Development Permit is transferable by submitting the *Type IV Permit Modification* form and fee (see http://www.des.state.nh.us/sw/modifications_permit.htm).

Permit modification: Filing an application for modification can modify the Solid Waste Research and Development Permit. There are six types of modification: Type I-a, I-b, II, III, IV, and V, depending upon the type and extent of change. Application costs range from no fee (for Types III, V, and most Type II) to as much as $20,000 for a Type I-a modification (see http://www.des.state.nh.us/sw/modifications_permit.htm).

Permit renewal: Not applicable

State statute: RSA 149-M:9 ("Solid Waste Management/Permit Required", http://gencourt.state.nh.us/rsa/html/X/149-M/149-M-9.htm)

N. H. Code of Administrative Rules: Env-Wm 312 ("New Hampshire Solid Waste Rules/Research and Development Projects Permitting Provisions", http://www.des.state.nh.us/rules/swrules.pdf)

Appeals body: Waste Management Council at RSA 21-O:9 ("Department of Environmental Services/Waste Management Council", http://gencourt.state.nh.us/rsa/html/I/21-O/21-O-9.htm; see also http://www.des.state.nh.us/rules/env-wmc200.pdf and http://www.des.state.nh.us/councils/#waste)

Additional Information: N. H. DES, Solid Waste Management Bureau, (603) 271-2925
N. H. DES, Public Information Center, (603) 271-2975 or (603) 271-8876
U. N. H., Environmental Research Group ("ERG"), (603) 862-4334
U. N. H., ERG/Recycled Materials Resource Center, (603) 862-4704

Solid Waste Research and Development Permit – *Work Sheet*

Key Qualifier Question: *Will your project be designed to further the basic principles and practices of solid waste management in New Hampshire through innovative research and development?*

What must you do to apply?

- Obtain a copy of the *Solid Waste Research and Development Permit Application* from the DES Solid Waste Management Bureau, DES Public Information Center, or online at http://www.des.state.nh.us/sw/swpermits.htm.
- Identify all parties involved in the project.
- If the project will occur at a facility that holds a permit issued by DES, identify the facility by name, location (including municipality and street), and permit number.
- If the project will occur at a location other than an already permitted facility, identify the non-permitted location by municipality and street address.
- Provide the name(s) and address(es) of all person(s) providing funding for the project, in accordance with NH CODE ADMIN. RULE Env-Wm 312.02(a) (see http://www.des.state.nh.us/rules/swrules.pdf).
- Identify the government agency or research institution (such as a public or private university) that will conduct or supervise the project.
- Provide the name(s), address(s), and qualifications of the investigator(s) who will be undertaking the project, including the designation of the lead investigator with primary responsibility for the project.
- Prepare a formal proposal that describes the scope of the project, including the types/quantities of wastes and the process to be studied, a description of how the study relates to the host facility (if already permitted), the anticipated results, and the length of time requested for completion.
- Provide copies of all English language articles or reports (or translated foreign language articles or reports) published in the scientific literature or technical journals that document or otherwise discuss the processes or methods to be investigated in this research.
- Provide a description of how and when the wastes used in the study will be ultimately disposed, how any equipment or property used in the study will be closed, and the schedule for closure activities.
- Provide a written certification by the lead investigator that the project will not contravene the applicable requirements for permitting research and development projects.
- Provide a completed copy of the DES *Personal History Disclosure Form* (see http://www.des.state.nh.us/sw/personal_disclosure.doc) and a DES *Business Concern Disclosure Statement* (see http://www.des.state.nh.us/sw/business_disclosure.doc) for the applicant, lead investigator, and facility operator (see NH CODE ADMIN. RULE Env-Wm 316, "Solid Waste Rules/Performance History Requirements", http://www.des.state.nh.us/rules/swrules.pdf).
- Submit a check or money order for the appropriate fee (based on the sliding scale) made payable to the "Treasurer, State of New Hampshire" with the completed application form and all supporting materials to: Solid Waste Management Bureau, Waste Management Division, New Hampshire Department of Environmental Services, 6 Hazen Drive, P. O. Box 95, Concord, NH 03302-0095. Telephone: (603) 271-2925; fax: (603) 271-2456; or online: http://www.des.state.nh.us/sw/

What types of projects have used this permit?

- A project that involves the re-circulation of leachate at a double-lined landfill
- The use of municipal solid waste combustor ash as an aggregate in asphalt for a public street
- A research an development project to investigate the use of coal ash in lightweight concrete

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If there are questions regarding this page or any other section of the Guidebook, please contact Tim Drew, Administrator, Public Information and Permitting Unit, at tdrew@des.state.nh.us or at (603) 271-3306.

Waste-Derived Product Certification

Introduction: A key component of any integrated solid waste management system is finding beneficial uses and reuses for wastes from residential, commercial, and industrial sources. An unusable waste for one company may represent a valuable component in another's process train or activity. For example, rather than consuming landfill disposal space with old asphalt taken from road construction, that material can be reused as a suitable sub-bed material for the construction of new roads, parking lots, or walkways. Similarly, processed construction and demolition wastes, auto shredder residue, kiln dust, and biosolids incinerator ash can be mixed with soil for use as an alternative daily cover at landfills. Finally, coal ash may be used as a bulking agent for processing wastewater treatment plant sludge. DES provides a mechanism through which to certify these waste-derived products; once certified, they are no longer regulated as solid wastes. A Waste-Derived Product Certification does not represent a permit for a solid waste facility. Rather, it is a certification for a particular product made from a particular waste which means that anyone can use that product as long as the terms of the certification are met. Since this waste-derived product can now be used for other, more beneficial purposes, it is no longer considered a waste until it is ultimately discarded. To obtain certification for a waste-derived product, an application which provides all of the technical information needed to process the request must be filed with the DES Waste Management Division. Once DES issues the Waste-Derived Product Certification, the product is placed on a Certified Waste-Derived Products list maintained by DES (see http://www.des.state.nh.us/sw/waste_derived.htm).

Average number of certifications issued annually: Approximately 4

Fees: None

Estimated processing time after application is deemed complete: 120 days

Certification duration: Indefinite

Certification transferability: Not applicable

Certification modification: Not applicable

Certification renewal: Not applicable

State statute: RSA 149-M ("Solid Waste Management", http://gencourt.state.nh.us/rsa/html/indexes/149-M.html)

N. H. Code of Administrative Rules: Env-Wm 3200 ("New Hampshire Solid Waste Rules", http://www.des.state.nh.us/rules/swrules.pdf)

Appeals body: Waste Management Council at RSA 21-O:9 ("Department of Environmental Services/Waste Management Council", http://gencourt.state.nh.us/rsa/html/I/21-O/21-O-9.htm; see also http://www.des.state.nh.us/rules/env-wmc200.pdf and http://www.des.state.nh.us/councils/#waste)

Additional Information: N. H. DES, Solid Waste Management Bureau, (603) 271-2925
N. H. DES, Public Information Center, (603) 271-2975 or (603) 271-8876

Waste-Derived Product Certification – *Work Sheet*

Key Qualifier Question: *Do you or your company plan to produce, distribute, generate, collect, or use a solid waste that possesses useful characteristics which could benefit another processing activity, product, or application, save valuable natural resources and land disposal space, and/or promote energy conservation?*

What must you do to apply?

- Obtain an *Application to Certify a Waste-Derived Product for Distribution and Use* from the DES Waste Management Division, DES Public Information Center, or access it online at http://www.des.state.nh.us/sw/waste_derived.htm.
- Provide the name, mailing address, and telephone number of the applicant and an official contact (if different).
- If the applicant is a corporation, partnership, or other organization, identify the facility owner, state of incorporation or formation, and business address, and provide a list of all directors, officers, and shareholders (if a corporation), all partners (if a general or limited partnership), or all principals, members, or participants (if another type of organization).
- State whether the application is intended for the production, distribution, generation, collection, or use of a waste-derived product.
- Provide a description of the product and its general use.
- Identify and characterize the waste ingredients used to produce the waste-derived product.
- Identify existing non-waste-derived products that serve the same function.
- Identify the manufacturer of the product and provide the address of its principal place of business.
- Provide a complete description of the production process.
- Identify and describe the source of the waste.
- Describe all Quality Assurance/Quality Control procedures that apply to incoming wastes and to the finished product.
- Identify the markets for the material.
- Provide results of a demonstration to show that the product either performs in a comparable way with a non-waste-derived product, fulfills a need, or otherwise will benefit society.
- Provide results of a demonstration to show that the product does not pose a greater risk to human health and the environment than a comparable non-waste-derived product.
- Provide the results of a demonstration to show that the production process does not pose a greater risk to human health and the environment than a comparable non-waste-derived product.
- Submit three copies of the completed application form (each bearing original signatures) and all supporting materials to: Permitting and Design Review Section, Waste Management Division, New Hampshire Department of Environmental Services, 6 Hazen Drive, P. O. Box 95, Concord, NH 03302-0095. Telephone: (603) 271-2935; fax: (603) 271-2456; or online: http://www.des.state.nh.us/sw/

What types of products have already been certified?

- A 50/50 mixture of processed construction and demolition debris and soil used as an alternative daily cover at lined landfills
- Crushed glass used in construction projects for pipe bedding, road sub-base, or foundation backfill
- Cold mix asphalt produced from virgin petroleum contaminated soil taken from a remediation site

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If there are questions regarding this page or any other section of the Guidebook, please contact Tim Drew, Administrator, Public Information and Permitting Unit, at tdrew@des.state.nh.us or at (603) 271-3306.

Solid Waste Facility Operator Certification

Introduction: Under RSA 149-M:6, XIII ("Solid Waste Management/Responsibilities", http://gencourt.state.nh.us/rsa/html/X/149-M/149-M-6.htm), DES is responsible for establishing and administering a solid waste facility operator training program to ensure that all solid waste management facilities in New Hampshire are managed by a State-certified operator who complies with the requirements for training and experience specific to that type of facility, as required by RSA 149-M:9, VI ("Solid Waste Management/Permit Required", http://gencourt.state.nh.us/rsa/html/X/149-M/149-M-9.htm). The DES Waste Management Division offers a series of courses on specific topics, followed by a written examination, to attain the following levels of proficiency and certification (see http://www.des.state.nh.us/pcas/opcert_announce.htm):

Certification Type	Certification Level
Collection, storage, and transfer facilities	Level I - Attendant
Processing and treatment facilities	Level II - Operator
Incineration with or without energy recovery	Level III - Advanced Operator
Landfilling	Level IV - Manager

The training programs teach operators to manage a facility safely and efficiently, to recognize hazardous wastes when mixed in the solid waste stream, to properly manage asbestos-containing materials and other "special wastes", and to operate the facility in a manner that fully complies with RSA 149-M ("Solid Waste Management", http://gencourt.state.nh.us/rsa/html/indexes/149-M.html) and NH CODE ADMIN. RULES Env-Wm 100-300 & 2100-3800 ("Solid Waste Rules", http://www.des.state.nh.us/hwrb/swrules.pdf). An annual calendar of 15 to 20 workshops is available from the DES Waste Management Division in January of each year and is posted on the DES Web site at http://www.des.state.nh.us/pcas/workshop/. Courses cover such topics as first aid, legal responsibilities, fire safety, defensive driving, used oil management (see http://www.des.state.nh.us/hwcs/used_oil.htm), composting techniques, incinerator technology, recycling/reclamation of solid wastes, and identification of hazardous wastes (see http://www.des.state.nh.us/factsheets/hw/hw-11.htm). A $50 annual certification fee is required which entitles the operator to attend one or more of the technical workshops offered during the year. Interested parties must register for the courses and examinations in advance, since space is limited and participants are taken on a first-come/first-served basis. Each certified operator must attend at least one workshop each year to fulfill the continuing education requirement of his/her certification. Continuing education is required for certification renewal (see http://www.des.state.nh.us/pcas/swotapp.pdf). DES also offers a certification-by-reciprocity to individuals who meet the requirements of Env-Wm 3303.06. The DES Fact Sheet entitled *Solid Waste Operator Training and Certification* provides a brief description of the solid waste operator certification program (see http://www.des.state.nh.us/factsheets/sw/sw-9.htm).

Average number of certifications issued annually: Approximately 800 (including renewals)

Fees: $50 per year

Estimated processing time after examination has been taken and passed: 6-8 weeks

Certification duration: One year

Certificate transferability: Not transferable

Certificate modification: Not applicable

Certificate renewal: Must be renewed annually using the *Renewal Application for Solid Waste Facility Operator Certification* (see http://www.des.state.nh.us/pcas/swotapp.pdf)

State statute: RSA 149-M:6, XIII ("Solid Waste Management/Responsibilities", http://gencourt.state.nh.us/rsa/html/X/149-M/149-M-6.htm) and RSA 149-M:7, VI ("Solid Waste Management/Rulemaking", http://gencourt.state.nh.us/rsa/html/X/149-M/149-M-7.htm)

N. H. Code of Administrative Rules: Env-Wm 3300 ("New Hampshire Solid Waste Rules", http://www.des.state.nh.us/hwrb/swrules.pdf)

Appeals body: Waste Management Council at RSA 21-O:9 ("Department of Environmental Services/Waste Management Council", http://gencourt.state.nh.us/rsa/html/I/21-O/21-O-9.htm; see also http://www.des.state.nh.us/rules/env-wmc200.pdf and http://www.des.state.nh.us/councils/#waste)

Additional information: N. H. DES, Waste Management Division, (603) 271-2928
N. H. DES, Public Information Center, (603) 271-2975 or (603) 271-8876

Solid Waste Facility Operator Certification – *Work Sheet*

Key Qualifier Question: *Do you, or does an employee or an agent currently work or intend to work at a private or public permitted solid waste management facility (landfill, incinerator, recycling facility, transfer station, or composting facility) in the state of New Hampshire?*

What must you do to apply? (See http://www.des.state.nh.us/factsheets/sw/sw-9.htm)

- Obtain an official *Application for Solid Waste Operator Training and Certification* from the DES Waste Management Division or access it online at http://www.des.state.nh.us/pcas/certapp.pdf.
- Indicate the applicant's name, address, type and level of certification sought, proof of qualifications (prior work at solid waste management facilities), and level of education. Include background documents from other states or companies where prior work experience or training occurred, if certification by reciprocity is being sought.
- Submit a check or money order with the application in the amount of $50 made payable to "Treasurer, State of New Hampshire" together with the application and all supporting documents to: Solid Waste Operator Training and Certification Program, Waste Management Division, New Hampshire Department of Environmental Services, 6 Hazen Drive, P. O. Box 95, Concord, NH 03302-0095. Telephone: (603) 271-2928; fax: (603) 271-2456; or online: http://www.des.state.nh.us/pcas/opcert.htm
- The Waste Management Division will review the application for completeness and determine whether the applicant qualifies for the certification program.
- If the application is complete and the applicant qualifies, DES will approve the application, schedule the applicant to attend the next available operator training program, and grant the applicant interim certification pursuant to NH CODE ADMIN. RULE Env-Wm 3303.04 (see http://www.des.state.nh.us/rules/swrules.pdf).
- If the application is denied, the applicant will be notified by mail as to the reasons for denial.
- Successful applicants must attend the scheduled semi-annual training sessions and satisfactorily pass the examination (with a score of at least 70%) to receive certification at the type and level desired.
- To register for workshops online, see http://www.des.state.nh.us/pcas/workshop/registration.htm
- The operator training certificate is valid for one year following its issuance. An application for an annual renewal must be submitted to DES (see http://www.des.state.nh.us/pcas/swotapp.pdf) not less than 15 days or more than 90 days prior to the expiration date of the applicant's current operator certification. Renewal applications should signify any desire to change the level or type of certification, and must be accompanied by a check or money order for $50 (or $75 if filed after certification has expired) made payable to "Treasurer, State of New Hampshire".

What types of operators require this certification?

- An individual who will be in responsible charge of a secure landfill, an incinerator ash landfill, an incinerator, a transfer station, a recycling facility, or a composting operation
- An individual who will be in responsible charge of a monofill for brush and stumps only, or a permitted research and development facility, or who will have supervisory responsibilities at such facilities
- An individual who will work at a solid waste facility, but who will not be in responsible charge or have any supervisory responsibilities

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If there are any questions regarding this page or any other section of the Guidebook, please contact Tim Drew, Administrator, DES Public Information and Permitting Unit, at tdrew@des.state.nh.us or at (603) 271-3306.

Chapter 12:

Hazardous Waste

2002 Edition

Chapter 12: Hazardous Waste

Introduction

In 1976, the United States Congress amended the federal Solid Waste Disposal Act by enacting the Resource Conservation and Recovery Act ("RCRA", see 42 U.S.C. § 321 *et seq*. at http://www4.law.cornell.edu/uscode/42/ch82.html and http://www.des.state.nh.us/factsheets/hw/hw-5.htm; see also http://www.epa.gov/region5/defs/html/rcra.htm). This law was designed to protect human health and the environment from the potential hazards of waste disposal, conserve energy and natural resources, reduce the amount of waste generated, and ensure that wastes are managed in an environmentally sound manner. Subtitle C of RCRA (see http://www4.law.cornell.edu/uscode/42/ch82schIII.html) established standards for hazardous waste generators (any person or business that produces hazardous waste), transporters, and treatment/storage/disposal facilities. In 1980, Congress enacted the federal Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA" or "Superfund", 42 U.S.C. § 9601 *et seq*.) to direct federal resources to the discovery, characterization, and remediation of complex contamination sites across the United States (see http://www.epa.gov/superfund/action/law/cercla.htm and http://www4.law.cornell.edu/uscode/42/ch103.html). This law established prohibitions and requirements concerning closed and abandoned hazardous waste sites, assigned liability to persons responsible for releases of hazardous wastes at these sites, and established a trust fund to provide for cleanup of sites for which no responsible party could be identified. This law also authorized two kinds of response actions: short-term removals designed to address releases or threatened releases requiring prompt response, and long-term remedial response actions designed to permanently and significantly reduce the dangers associated with releases or threats of releases of hazardous substances that are serious, but not life-threatening. Together, these laws create two distinct, but related, groups of programs which work together to protect human health and the environment.

Remediation of Contaminated Sites

The group of programs arising from CERCLA focuses on the discovery and remediation of drum burial sites, orphaned chemical discharge areas, illegal dumping of toxic materials, and uncontrolled release sites where hazardous material inventory losses have occurred due to leaking tanks, trucks, and pipelines. DES programs to oversee cleanup of sites where contamination has occurred are implemented through the Hazardous Waste Remediation Bureau of the Waste Management Division, and include the "Brownfields", Pre-Remedial ("CERCLIS"), RCRA Corrective Action ("RCRIS"), and Time-Critical Removals Programs (see http://www.des.state.nh.us/hwrb/hwrbsite.htm). Removal actions under CERCLA can be conducted only at sites listed on the EPA's National Priority List (see http://www.epa.gov/superfund/sites/npl/npl.htm). There currently are 18 federal "Superfund" sites in various stages of cleanup in New Hampshire (see http://www.des.state.nh.us/hwrb/supfun2k.htm). In 1986, CERCLA was amended by The Superfund Amendments and Reauthorization Act ("SARA") (see http://www.epa.gov/superfund/action/law/sara.htm and http://www4.law.cornell.edu/uscode/42/ch103.html). The amendments stressed the importance of permanent remedies and innovative treatment technologies in cleaning up hazardous waste sites, required Superfund actions to consider the standards and requirements found in other state and federal laws and regulations, provided new enforcement authorities and settlement tools, increased state involvement in every phase of the Superfund program, increased the focus on human health problems posed by hazardous waste sites, encouraged greater citizen participation in making decisions on how sites should be cleaned up, and increased the size of the trust fund to $8.5 billion. Sites contaminated with hazardous wastes that are not subject to federal programs are governed by RSA 147-B ("Hazardous Waste Cleanup Fund", http://gencourt.state.nh.us/rsa/html/indexes/147-B.html). There are hundreds of sites across the state that have been addressed under this program, ranging in complexity from the cleanup of one-time spills to long-term remediation at historic dumping sites. Redevelopment and reuse of some of these sites have been facilitated by RSA 147-F ("Brownfields Program", http://gencourt.state.nh.us/rsa/html/indexes/147-F.html),

which authorizes the "Brownfields" Redevelopment Program (see http://www.des.state.nh.us/hwrb/hwrbbfld.htm). This initiative represents a voluntary cleanup and redevelopment of contaminated properties which have been underutilized or abandoned due to contamination. DES's Brownfields Program is designed to provide incentives for both site cleanup and redevelopment by those who did not cause the contamination. For eligible sites, a *Covenant Not to Sue* is issued by the New Hampshire Department of Justice and a *Certificate of Completion* is issued by DES (see http://www.des.state.nh.us/factsheets/hw/hw-1.htm).

Regulation of Hazardous Waste Management Activities

The group of programs arising from RCRA Subtitle C focuses on the proper management of hazardous waste from the point when and where it was first generated to its ultimate disposal (*i.e.*, "cradle-to-grave" management). DES regulates hazardous waste generators and fixed facilities primarily through the DES Hazardous Waste Compliance Section of the Waste Management Division (see http://www.des.state.nh.us/hwcs), and regulates hazardous waste transporters primarily through the Special Investigations Section of the Waste Management Division (see http://www.des.state.nh.us/sis/). The remainder of this chapter focuses on this group of programs.

Legal Authority

Because it is a federal law, RCRA can be directly implemented only by the U.S. Environmental Protection Agency ("EPA"). However, by adopting state statutes and rules that meet the federal standards for state program adequacy (see http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfr239_00.html), in 1981 the State of New Hampshire was approved to administer the statewide hazardous waste management program in lieu of EPA. State statutes include RSA 147-A ("Hazardous Waste Management", http://gencourt.state.nh.us/rsa/html/indexes/147-A.html), RSA 147-C ("Hazardous Waste Facility Review", http://gencourt.state.nh.us/rsa/html/indexes/147-C.html), and RSA 147-D ("Hazardous Waste Fee", http://gencourt.state.nh.us/rsa/html/indexes/147-D.html), with RSA 147-A being the state equivalent of RCRA. To further implement the statutory provisions, DES has adopted the ***New Hampshire Hazardous Waste Rules***, currently designated as Env-Wm 100-1100 (see http://www.des.state.nh.us/hwrb/hwrules.pdf). The regulatory program includes provisions governing hazardous waste identification (see http://www.des.state.nh.us/factsheets/hw/hw-11.htm), generation, transportation, storage, treatment and disposal (see http://www.epa.gov/epacfr40/chapt-I.info/subch-I.htm). Note that while DES has adopted many federal regulations by reference, some requirements have been modified (including being made more stringent) to address the specific needs of New Hampshire's hazardous waste management program.

Hazardous Waste Defined

RSA 147-A:2, VII defines "hazardous waste" as *a solid, semi-solid, liquid or contained gaseous waste, or any combination of these wastes:*

A. *Which, because of either quantity, concentration, or physical, chemical, or infectious characteristics may:*
    a. *Cause or contribute to an increase in mortality or an increase in irreversible or incapacitating reversible illness; or*
    b. *Pose a present or potential threat to human health or the environment when improperly treated, stored, transported, disposed of or otherwise mismanaged.*
B. *Or which has been identified as a hazardous waste by DES using the criteria established under RSA 147-A:3, I or as listed under RSA 147-A:3, II. Such wastes include, but are not limited to, those which are reactive, toxic, corrosive, ignitable, irritants, strong sensitizers or which generate pressure through decomposition, heat or other means. Such wastes do not include radioactive substances that are*

regulated by the Atomic Energy Act of 1954, as amended (see "Hazardous Waste Management/Definitions", http://gencourt.state.nh.us/rsa/html/X/147-A/147-A-2.htm)

The definition thus establishes two primary categories of hazardous wastes: "listed" or "characteristic". Listed wastes are harmful enough to warrant full hazardous waste regulation because of their origin. Such wastes fall into one of three categories: source-specific wastes from specific industries, such as petroleum refining or pesticide manufacturing; non-specific source wastes from common manufacturing and industrial processes, such as solvents that have been used in cleaning or degreasing operations; and commercial chemical products including specific discarded, unused chemical products and formulations (such as some pesticides and pharmaceutical products). Characteristic wastes are so called because they exhibit one (or more) of four hazardous characteristics: *ignitable*, which means the waste catches fire under certain commonly-encountered conditions (*e.g.*, paint thinners and solvent-based cleaners); *corrosive*, which means the waste corrodes metals or has a very high or very low pH (*e.g.*, rust removers and battery acid); *reactive*, which means the waste is unstable and even under "normal" conditions may explode or produce toxic fumes, gases, or vapors (*e.g.*, certain cyanides or sulfide-bearing wastes, lithium-sulfur batteries, and explosives); and *toxic*, which means the waste is harmful or lethal when ingested or absorbed or leaches into the soil or groundwater when disposed on land (*e.g.*, wastes containing high concentrations of heavy metals such as cadmium, lead, or mercury).

Hazardous Waste Notifications, Registrations, and Permits

Under NH CODE ADMIN. RULE Env-Wm 504 ("Hazardous Waste Rules/Notification", http://www.des.state.nh.us/hwrb/hwrules.pdf) each hazardous waste generator must obtain an EPA identification number from the DES Reporting and Information Management Section ("RIMS") prior to engaging in any hazardous waste management activities that are subject to the ***New Hampshire Hazardous Waste Rules***. RIMS can be reached at (603) 271-2901 (or see http://www.des.state.nh.us/rims).

All operators of commercial vehicles transporting hazardous wastes on public roads within or through New Hampshire must notify RIMS to obtain an EPA identification number (see http://www.des.state.nh.us/rims) and must obtain a hazardous waste *Registration Confirmation Letter* from the DES Special Investigations Section (see http://www.des.state.nh.us/sis/). All transportation of hazardous wastes must be accomplished by using the *Uniform Hazardous Waste Manifest* (see http://www.des.state.nh.us/rims/manifest.htm and http://www.des.state.nh.us/rims/manifest.pdf).

Owners and/or operators of hazardous waste treatment, storage, transfer, or disposal ("TSD") facilities must notify RIMS to obtain an EPA identification number and must also obtain a hazardous waste permit before initiating any hazardous waste activities. A hazardous waste permit is required before a full quantity generator can treat self-generated hazardous waste (including for elementary neutralization, wastewater treatment units, and universal waste lamp crushers) or store hazardous waste on-site for more than 90 days. A hazardous waste permit also is required for transporters who transfer waste from vehicle-to-vehicle or remove waste from the transport vehicle for temporary storage, and is required before receiving hazardous waste from off-site and treating, storing, or disposing of it. Recycling self-generated hazardous waste on-site (*e.g.*, burning used oil for energy recovery or recycling antifreeze) does not require a permit if the process meets certain conditions.

Hazardous Waste Generators

Each New Hampshire hazardous waste generator is classified as either a "small quantity generator" or a "full quantity generator". A small quantity generator is one that generates less than 100 kilograms (220 pounds) of total hazardous wastes or one kilogram (2.2 pounds) of acutely toxic hazardous waste in each month of the year. A full quantity generator is one that generates more than 100 kilograms of total hazardous wastes or one kilogram of acutely toxic hazardous waste in any single month of the year (see Env-Wm 503,

"Hazardous Waste Rules/Generator Classifications", http://www.des.state.nh.us/hwrb/hwrules.pdf). Under Env-Wm 500 ("Hazardous Waste Rules/Requirements for Hazardous Waste Generators", http://www.des.state.nh.us/hwrb/hwrules.pdf), each hazardous waste generator must conduct hazardous waste determinations, obtain an identification number from the DES Reporting and Information Management Section ("RIMS") (which can be reached at (603) 271-2901 or see http://www.des.state.nh.us/rims), comply with storage standards and accumulation time limits such as labeling, packaging, placarding, and removal (usually within 90 days from the initial date of accumulation), prepare and submit a personnel training plan (both small and full quantity generators) and a contingency plan (full quantity generators, only), use the *Uniform Hazardous Waste Manifest* (see http://www.des.state.nh.us/rims/manifest.htm and http://www.des.state.nh.us/rims/manifest.pdf) when shipping hazardous wastes off-site, and complete all record keeping and reporting requirements (such as quarterly reports and exception reports).

Used Oil

Under Env-Wm 800 ("Hazardous Waste Rules/Requirements for Recycling of Hazardous Wastes", http://www.des.state.nh.us/hwrb/hwrules.pdf), used oil is regulated as a hazardous waste in New Hampshire unless it is recycled. DES established the Used Oil Subsection in the Hazardous Waste Compliance Section (see http://www.des.state.nh.us/hwcs/used_oil.htm) to encourage the recycling and safe management of used oil. The two primary functions of this subsection are to award grants to cities and towns to establish or improve used oil collection centers for the "Do-It-Yourselfer" and to ensure compliance with the rules governing the generation, transportation, collection, and recycling of used oil. If used oil is collected and is intended for recycling, it must be labeled as "Used Oil for Recycle" and be kept in sound, well-protected containers that are closed at all times, except during filling or emptying periods. Used oil may be burned for on-site heating purposes under specific conditions or may be offered for off-site transport in bulk to a used oil marketer by using a bill of lading (rather than a hazardous waste manifest). Care must be taken to prevent spills. If one should occur, the release must be reported to DES and the responsible party must initiate the proper cleanup (see http://www.des.state.nh.us/factsheets/oil/oil-5.htm). DES provides emergency services in the event of such an occurrence (see http://www.des.state.nh.us/emergency_response.htm).

Hazardous Waste Compliance Section

The DES Hazardous Waste Compliance Section has four subsections. The RCRA Compliance Subsection conducts inspection of hazardous waste generators and provides a limited amount of on-site technical assistance to the regulated community. The Authorization Subsection coordinates all hazardous waste rulemaking activities in response to changes in federal and state laws and standards, to render the rules more understandable and to encourage better waste management practices. The Permitting Subsection provides engineering support and reviews and processes applications for all hazardous waste (RCRA) permits including the Hazardous Waste Standard Permit, Hazardous Waste Transfer Facility Permit, Hazardous Waste Limited Permit, and Hazardous Waste Emergency Permit. Finally, the Used Oil Subsection (see http://www.des.state.nh.us/hwcs/used_oil.htm) was established to encourage the recycling and safe management of used oil in New Hampshire.

Outreach and Technical Assistance

The DES Hazardous Waste Compliance Section provides a significant amount of education/outreach and technical assistance. As new legislative changes and administrative rules are considered, DES involves those who would be subject to regulation in the rulemaking process, along with various advisory groups and other interested parties. DES recently sponsored a series of discussions on new hazardous waste rules held at each New Hampshire Technical College campus to introduce the changes and provide an opportunity for members of the regulated community to ask questions. DES also posts helpful information, including written regulatory interpretations, on its Web site (http://www.des.state.nh.us/hwcs), and operates a "Hazardous Waste Assistance Telephone Hotline" (603-271-2942) to provide specific answers to specific questions faced

by the regulated community. EPA likewise operates a RCRA Hotline (800-424-9346) and provides information via the Web (http://www.epa.gov/rcraonline/). EPA also provides extensive search capability for waste-related topics at http://www.epa.gov/osw/index.htm. Finally, the New Hampshire Pollution Prevention Program ("NHPPP") (housed at DES, see http://www.des.state.nh.us/nhppp/) offers non-regulatory, free, confidential pollution prevention and compliance assistance. The NHPPP assists businesses through a wide variety of activities including educational outreach, site assistance, and technical information research. These activities are designed to encourage better waste management practices and reduce the amount of hazardous wastes generated through source reduction, reuse, recycling, and raw material substitution and/or replacement (see http://www.des.state.nh.us/factsheets/hw/hw-8.htm).

Compliance Inspections

Compliance inspections are conducted to investigate any threat of potential harm to the environment or public health posed by improper management of hazardous wastes at regulated facilities and to determine compliance with the ***New Hampshire Hazardous Waste Rules***. Pursuant to EPA policy, full quantity generators are inspected more often, but increasing emphasis is being placed by DES on the larger numbers of small quantity generators currently operating in New Hampshire. Facilities in environmentally-sensitive settings such as wellhead protection areas and areas of high population density are more likely to be inspected than facilities in other areas due to the risk of damage to natural resources and the population at large. DES also conducts multi-media inspections at selected facilities to concurrently assess compliance with water, air, and waste standards and practices. A typical inspection consists of a file review while still at DES offices, a pre-inspection meeting at the facility, a facility tour, document review at the facility, and a post-inspection meeting to discuss the findings and suggest possible corrective actions (see http://www.des.state.nh.us/hwcs/Lists.htm).

Reporting and Information Management Section

The DES Waste Management Division's Reporting and Information Management Section ("RIMS", see http://www.des.state.nh.us/rims/) issues EPA identification numbers to those who will be involved with hazardous waste activities. There is no *de minimis* level of hazardous waste generation in New Hampshire. All generators and facility owner/operators must notify the RIMS section and obtain an EPA identification number before initiating any hazardous waste management activities. This can be conveniently accomplished by telephone by dialing (603) 271-2901, during which a determination will be made by DES as to applicability.

Special Investigations Section

The Special Investigations Section (see http://www.des.state.nh.us/sis/) of the DES Waste Management Division issues Hazardous Waste Transporter Registrations and performs periodic compliance inspections of commercial vehicles in the process of transporting hazardous wastes over public roads and highways in New Hampshire. Please note that the transport of hazardous materials (*e.g.*, virgin manufacturing chemicals like ammonia and solvents, fuels such as gasoline and kerosene, *etc.*) through the state is regulated by the New Hampshire Department of Safety (see http://www.state.nh.us/safety/index.html). For more information, contact its Motor Vehicle Inspection Program at (603) 271-3349.

Summary

Hazardous waste management activities are heavily regulated under both federal and state law to protect human health and the environment. Through the combined efforts of the DES Hazardous Waste Remediation Bureau and the Hazardous Waste Compliance Section, both the cleanup of contaminated sites and the regulation of current hazardous waste management activities are addressed to protect the natural environment, as well as residents, workers, and visitors, from undue exposure to toxic wastes. An EPA identification number must be obtained from DES prior to engaging in most hazardous waste activities; some activities also require a permit. This chapter contains further descriptions of specific permits and worksheets

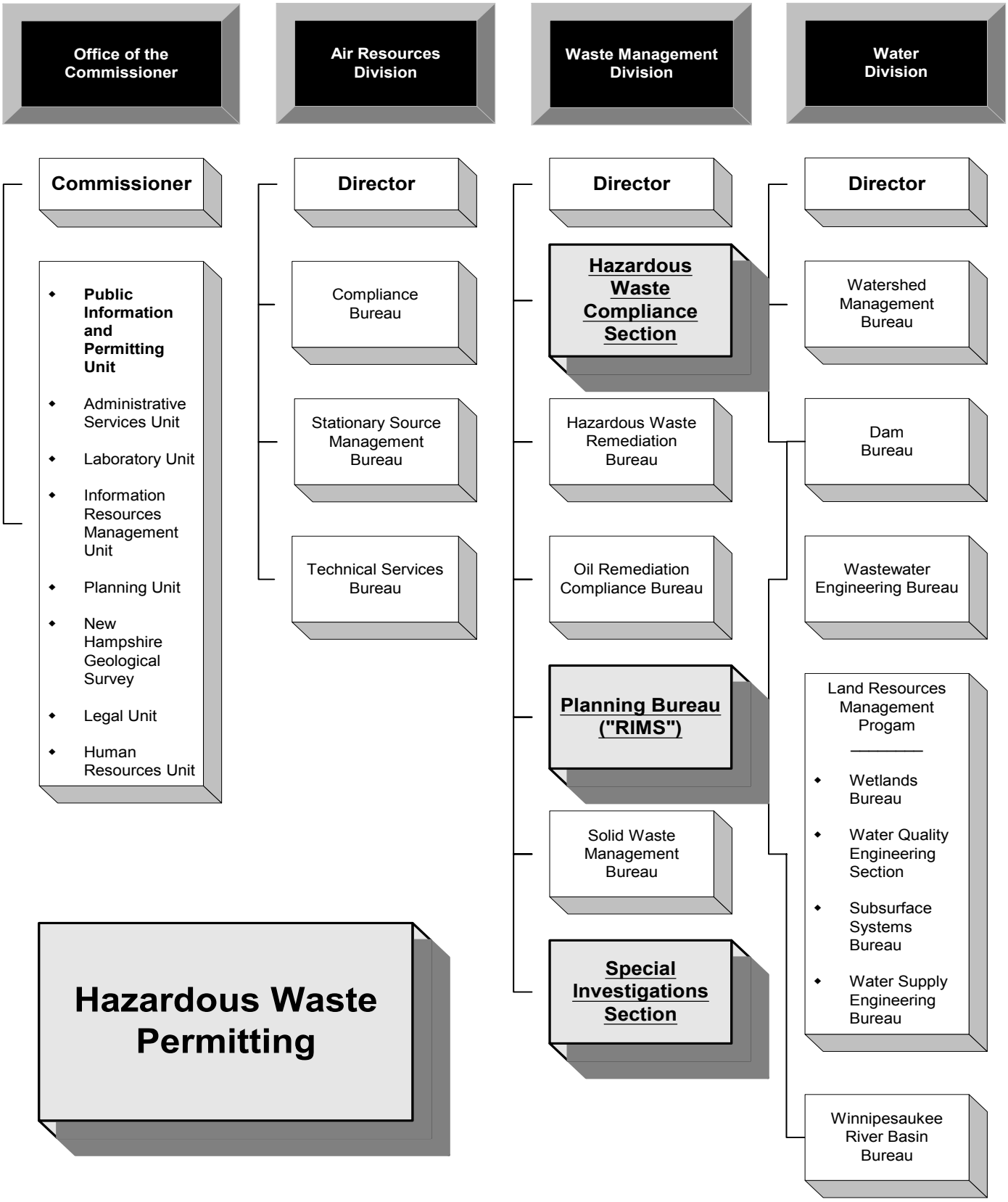
designed to assist a potential permit applicant in determining whether a permit is needed for a particular activity, and what steps must be taken to obtain that permit. Questions and requests for assistance may be directed to the Hazardous Waste Assistance Hotline at (603) 271-2942. Appeals of DES hazardous waste management permit decisions and orders issued for violations of program requirements should be directed to the Waste Management Council (see http://www.des.state.nh.us/councils/#waste).

Chapter Contents

- ✓ **Hazardous Waste Standard Permit**
- ✓ **Hazardous Waste Transfer Facility Permit**
- ✓ **Hazardous Waste Limited Permit**
- ✓ **Hazardous Waste Emergency Permit**
- ✓ **Hazardous Waste Activity Notification**
- ✓ **Hazardous Waste Transporter Registration/Certification Letter**

Organizational Chart

New Hampshire Department of Environmental Services



Hazardous Waste Activity Notification

Introduction: Every company or person that intends to generate, treat, store, dispose, transport, or offer hazardous waste for transport in New Hampshire in any quantity (*i.e.*, there is no *de minimis* level for hazardous waste generation) must notify DES of that activity to obtain an EPA identification number, an emergency or temporary identification number, or a New Hampshire identification number. Identification numbers also are required for facilities that manage used oil (see http://www.des.state.nh.us/hwcs/used_oil.htm) and those that manage 5,000 kilograms (11,000 pounds) or more of combined "universal wastes" on-site at any one time, such as certain types of batteries, certain pesticides, automotive antifreeze, cathode ray tubes, lamps and other devices that contain mercury (see http://www.des.state.nh.us/factsheets/hw/hw-21.htm). Generators of used oil destined for recycling do not need to notify DES provided that all applicable requirements are met (see NH CODE ADMIN. RULES Env-Wm 800, "Hazardous Waste Rules/Requirements for Recycling of Hazardous Wastes", http://www.des.state.nh.us/hwrb/hwrules.pdf). After filing a Hazardous Waste Activity Notification with DES, a unique identification number will be assigned to the site (not the facility) at which the activity occurs and will remain valid as long as the site is active. It will expire upon notification to DES that site operations have ceased and hazardous wastes are no longer being generated there. This site identification number must be affixed to all hazardous waste manifests and reports. The DES Waste Management Division's Reporting and Information Management Section ("RIMS") issues identification numbers (see http://www.des.state.nh.us/rims/). The New Hampshire *Uniform Hazardous Waste Manifest* form can be found at http://www.des.state.nh.us/rims/manifest.pdf, and the instructions for completing it can be found at http://www.des.state.nh.us/rims/manifest.htm.

Average number of notifications/identification numbers issued annually: 700

Fees: There is no fee to obtain an identification number; however a fee is charged based on the amount of hazardous waste shipped in each quarter. Thirty days after the conclusion of each quarter, DES will mail to each generator a report that summarizes the hazardous waste shipments and quarterly fee payment due (if applicable) (see http://www.des.state.nh.us/rims/quarterly_report.pdf). Those who manifested less than 660 pounds of waste are not assessed a fee. A minimum fee of $50 is applied to all generators who manifested between 660 - 1,666 pounds, and those that manifested greater than 1,666 pounds are assessed a fee at the rate of $0.03 per pound (see http://www.des.state.nh.us/rims/hwcf.htm and http://www.des.state.nh.us/rims/calculator.htm). Quarterly fees are not assessed for those wastes destined for recycling, the sludges generated at publicly-owned wastewater treatment works within New Hampshire, the bottom and fly ash from municipal waste incinerators, lead-contaminated soil from shooting ranges (see http://www.des.state.nh.us/factsheets/hw/hw-19.htm), or household hazardous wastes collected at household hazardous waste collection events (see http://www.des.state.nh.us/hhw/).

Estimated processing time after the application is deemed "complete": Immediate

Notification duration: The duration of EPA Identification Numbers vary by type of number issued: "Temporary EPA Identification Numbers" are valid for 30 days unless renewed, "Preliminary EPA Identification Numbers" are valid for 30 days and, "Permanent EPA Identification Numbers" and New Hampshire Identification Numbers are permanent until a declassification request has been submitted (see http://www.des.state.nh.us/rims/request.pdf), at which time the identification number will be deactivated.

Notification transferability: Identification numbers are site-specific and so are not transferable. A new identification number must be obtained when a company moves to a new location. If a company moves to a site to which an identification number previously was assigned, the company will be issued the existing number assigned to that site.

Notification modification: If any reported information has changed, the generator must re-notify DES within 30 days concerning those changes, with the new information submitted on the *Hazardous Waste Activity Notification Form* (see http://www.des.state.nh.us/rims/notification.pdf).

Notification renewal: Temporary EPA Identification Numbers can only be renewed due to unforeseen and uncontrollable circumstances. Preliminary EPA Identification Numbers cannot be renewed, but must be converted to a permanent number by filing a *Hazardous Waste Activity Notification Form* (see http://www.des.state.nh.us/rims/notification.pdf). Permanent EPA Identification Numbers and New Hampshire Identification Numbers need not be renewed.

State statutes: RSA 147-A:3, V ("Hazardous Waste Management/Rulemaking", http://gencourt.state.nh.us/rsa/html/X/147-A/147-A-3.htm) and RSA 147-B ("Hazardous Waste Cleanup Fund", http://gencourt.state.nh.us/rsa/html/indexes/147-B.html)

N. H. Code of Administrative Rules: Env-Wm 500 ("Hazardous Waste Rules/Requirements for Hazardous Waste Generators", http://www.des.state.nh.us/hwrb/hwrules.pdf)

Appeals body: Waste Management Council at RSA 21-O:9 ("Department of Environmental Services/Waste Management Council", http://gencourt.state.nh.us/rsa/html/I/21-O/21-O-9.htm; see also http://www.des.state.nh.us/rules/env-wmc200.pdf and http://www.des.state.nh.us/councils/#waste)

Additional information: N. H. DES, RIMS, (603) 271-2901 or (603) 271-2921
N. H. DES, Hazardous Waste Compliance Hotline, (603) 271-2942
N. H. DES, Used Oil Program 1-880-TAKE OIL, (603) 825-3645

Hazardous Waste Activity Notification – *Work Sheet*

Key Qualifier Question: *Will you generate, treat, store, dispose, or transport hazardous waste? If so, you must notify DES of that activity and obtain a hazardous waste identification number.*

(Note: Many hazardous waste activities also may require a permit, certification, or registration. Please see other chapters of this *Guidebook* for descriptions of those application processes.)

What must you do to apply?

- Call the DES Reporting and Information Management ("RIMS") office at **(603) 271- 2921** or **(603) 271-2901**. A number will be assigned to you over the telephone.
- Provide the following information at the time of the telephone call:
  - Your name, affiliation, and telephone number
  - The name and mailing address of the organization for which the hazardous waste identification number is being obtained
  - The address (by street number/name and municipality) of the site where the activity will occur
  - The name, title, and telephone number of the contact person at the organization
  - The types of wastes to be generated at the site
  - The type of number you are requesting (*i.e.*, EPA Identification Number, emergency or temporary identification number, or New Hampshire Identification Number)
- Following receipt of this information, DES will determine if you must also submit a hazardous waste notification form (see http://www.des.state.nh.us/rims/notification.pdf).
-

What are typical examples of operations that require hazardous waste notification and an identification number?

- Electroplating
- Circuit board manufacturing
- Dry cleaning
- Printing
- Parts cleaning
- Use of solvent degreasers
- Painting (houses, cars, buildings, *etc.*)
- Fiberglass manufacturing
- Automotive repair
- Photo-finishing
- X-ray development
- Leather tanning
- Acid baths
- Caustic baths
- Cyanide baths (plating solutions)
- Pharmaceutical (dispensing, preparation)
- Repair of automotive refrigeration systems
- Wood finishing/treating/stripping
- Pesticide applicators
- Explosive/munitions manufactures
- Oil change facilities (used oil generators)
- Laboratories (hospitals, universities, *etc.*)
- Military bases
- Fleet maintenance
- Paper manufacturing (liquors)
- Chlor-alkali manufacturers
- Chemical manufactures
- Used oil burners
- Used oil marketers
- Waste water treatment (some sludge)
- Off-specification hazardous materials
- Treatment, storage, incineration or disposal of hazardous wastes
- Accidental spills of hazardous materials

If there are questions regarding this page or any other section of the Guidebook, please contact Tim Drew, Administrator, Public Information and Permitting Unit, at tdrew@des.state.nh.us or at (603) 271-3306.

Hazardous Waste Standard Permit

Introduction: The DES Hazardous Waste Standard Permit ("Standard Permit") is issued to those facilities in New Hampshire that treat, store, or dispose of hazardous wastes (known as "TSD facilities"). This permit is required for certain types of facilities that store their own hazardous waste for more than 90 days, that receive hazardous wastes from other sites and store them for more than ten days, or that treat (using a method other than an Elementary Neutralization Unit, Wastewater Treatment Unit, or Evaporator which would require a Hazardous Waste Limited Permit, discussed elsewhere in this chapter) or dispose of hazardous wastes generated from any location, whether from in-house or off-site sources. The purpose of the Standard Permit is to establish conditions under which hazardous wastes can be safely treated, stored, or disposed. This permit typically applies to the commercial management of hazardous wastes, but may also apply to certain types of hazardous waste generator facilities where a facility's wastes are stored for more than 90 days. As applications are submitted to DES for evaluation, they are also subjected to concurrent evaluations by two other entities: the Hazardous Waste Facility Siting Board established pursuant to RSA 147-A:4-a ("Hazardous Waste Management/Hazardous Waste Facility Siting Board", http://gencourt.state.nh.us/rsa/html/X/147-A/147-A-4-a.htm) and the Municipal Hazardous Waste Facility Review Committee established pursuant to RSA 147-C ("Hazardous Waste Facility Review", http://gencourt.state.nh.us/rsa/html/indexes/147-C.html). Pursuant to RSA 147-D:2 ("Hazardous Waste Fee/Hazardous Waste Fees", http://gencourt.state.nh.us/rsa/html/X/147-D/147-D-2.htm), the governing body of a host community may also levy a fee on a TSD facility and require it to report the amount of hazardous wastes stored, treated, or disposed by the facility. Any facility that has a Standard Permit may apply for a Hazardous Waste Land Treatment Demonstration Permit and/or a Hazardous Waste Research, Development, and Demonstration Permit. The Land Treatment Demonstration Permit is issued to facilities that wish to demonstrate a new or innovative land application technique under controlled conditions. The Research and Development Permit is designed for those who wish to carry out experiments on new treatment methodologies for hazardous wastes (see Environmental Research Group, University of New Hampshire, http://www.unh.edu/erg). DES may require a Hazardous Waste Corrective Action Permit for permitted TSD facilities where releases of hazardous wastes have occurred. It also may require that the relative risk to public health or the environment be evaluated and that remediation takes place to return the contaminated area to acceptable environmental conditions.

Average number of permits issued annually: One permit issued every three to five years.

Fees: Initial fee varies from $1,500 to $5,000, depending upon the type of facility permit. Additional charges may be incurred for DES review, evaluation, and processing time. Permit renewal or modification fees vary from $750 to $2,500.

Estimated processing time after application is deemed "complete": 1-2 years, depending upon the scope and complexity of the application and the length of time needed by the Hazardous Waste Facility Siting Board and the Municipal Hazardous Waste Facility Review Committee to reach a final decision.

Permit duration: 5 years

Permit transferability: The new owner must notify abutters and submit a request for a permit modification to DES at least 90 days prior to the scheduled ownership change.

Permit modification: Permit modifications may be requested through a written submittal to DES, accompanied by supporting technical information.

Permit renewal: To obtain a renewal, a new application must be submitted to DES at least 270 days prior to the expiration date of the existing Standard Permit.

State statutes: RSA 147-A:4 ("Hazardous Waste Management/Operator Permits", http://gencourt.state.nh.us/rsa/html/X/147-A/147-A-4.htm), RSA 147-C ("Hazardous Waste Facility Review", http://gencourt.state.nh.us/rsa/html/indexes/147-C.html), and RSA 147-D ("Hazardous Waste Fee", http://gencourt.state.nh.us/rsa/html/indexes/147-D.html)

N. H. Code of Administrative Rules: Env-Wm 353.01 ("Hazardous Waste Rules/Permitting Hazardous Waste Activities/Standard Permits", http://www.des.state.nh.us/hwrb/hwrules.pdf)

Appeals body: Waste Management Council at RSA 21-O:9 ("Department of Environmental Services/Waste Management Council", http://gencourt.state.nh.us/rsa/html/I/21-O/21-O-9.htm; see also http://www.des.state.nh.us/rules/env-wmc200.pdf and http://www.des.state.nh.us/councils/#waste)

Additional information:

N. H. DES, Hazardous Waste Compliance Section, (603) 271-2942
N. H. DES, Air Resources Division (for incinerator permits), (603) 271-1370
N. H. DES, Public Information Center, (603) 271-2975 or (603) 271-8876
N. H. DHHS, Occupational Health & Safety Program, (603) 271-4676
U. S. EPA, RCRA, Superfund, EPCRA Call Center, (800) 424-9346, or http://www.epa.gov/epaoswer/hotline/

Hazardous Waste Standard Permit – *Work Sheet*

Key Qualifier Questions: (1) *If you are a full quantity generator of hazardous waste, do you intend to store your own waste onsite for more than 90 days, dispose of it onsite, or treat it onsite using a method other than an Elementary Neutralization Unit, Wastewater Treatment Unit, or Evaporator? (2) If you are a small quantity generator of hazardous waste, do you intend to dispose of your own waste onsite, or treat it onsite using a method other than an Elementary Neutralization Unit, Wastewater Treatment Unit, or Evaporator? (3) Do you intend to receive hazardous wastes from off-site sources for treatment, storage for more than ten days, or for disposal?*

What must you do to apply?

- Complete and submit a DES *Hazardous Waste Activity Notification Form* available from the DES Reporting and Information Management System Section, DES Public Information Center, or access online http://www.des.state.nh.us/rims/notification.pdf, http://www.des.state.nh.us/rims/notification.htm, and http://www.des.state.nh.us/rims/sample_notification.pdf).
- It is strongly suggested that the applicant meet with DES before submitting an application to review permit application requirements, including the siting requirements of NH CODE ADMIN. RULE 353.09.
- Verify and document that the proposed facility location satisfies the siting requirements in Env-Wm 353.09 (see http://www.des.state.nh.us/hwrb/hwrules.pdf).
- Prepare the Part A application information required by 40 CFR Part 270.13, and the Part B application information in 40 CFR Part 270.14(b)-(d).
  (See http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfr270_main_00.html)
- Provide the name(s) of contact person(s) for the site.
- For new land disposal facilities, provide the floodplain information required by 40 CFR Part 270.14(b)(11), including an identification of whether the facility is to be located within a 500-year floodplain.
- Obtain facility design plans and specifications, prepared and stamped by a registered professional engineer licensed to practice in the state of New Hampshire (see http://www.state.nh.us/jtboard/pe.htm), including the information required by Env-Wm 353.11(a)(4).
- Prepare a construction schedule for any new construction or planned modifications to the existing structures.
- If the applicant is leasing the property on which the facility is located, submit a certified statement from the owner of the property verifying that such a lease exists and specifying the duration of that lease.
- Provide information sufficient to allow the New Hampshire Department of Justice to complete a background investigation of the applicant (including a criminal records check).
- Compile a performance history of the applicant and of its officers and directors relative to the operation, financial security, and ownership of all facilities owned or operated by the applicant, submitted in accordance with RSA 147-A:4, II-c, II-d, and IV-a ("Hazardous Waste Management/Operator Permits", http://gencourt.state.nh.us/rsa/html/X/147-A/147-A-4.htm).
- Prepare a hydrogeological analysis for the site, including the information required by Env-Wm 353.11(a)(8).
- If applicable, prepare the information specified in 40 CFR Part 270.10(j), 40 CFR Part 270.15 through 40 CFR Part 270.16 (inclusive), and 40 CFR Part 270.23 (see 40 CFR Part 270 Web link provided above).
- Prepare a cover letter signed by the applicant certifying that the application meets all necessary application requirements sufficient to render it technically adequate to undergo an engineering review.
- Submit <u>four</u> (4) <u>copies</u> of all permit application information, all supporting materials, and a check or money order for the appropriate fee as specified by Env-Wm 353.07, made payable to "Treasurer, State of New Hampshire", to: Hazardous Waste Compliance Section, Waste Management Division, New Hampshire Department of Environmental Services, 6 Hazen Drive, P. O. Box 95, Concord, NH

03302-0095. Telephone: (603) 271-2942; fax: (603) 271-0869; or online: http://www.des.state.nh.us/hwcs/

- If a waiver to any provision of Env-Wm 353.09(f) is desired, submit an application for a waiver at the time of application for the Standard Permit (see http://www.des.state.nh.us/hwcs/Request_Waiver.pdf).
- If DES determines that the information submitted is insufficient to form the basis of a decision concerning whether or not human health, safety, and the environment will be adequately protected by the proposed facility, the applicant will then need to:
    - Prepare and submit a health assessment that evaluates the hazardous nature of the wastes that will be handled at the facility and their potential impact on the public health resulting from the operation of the facility, including the information required by Env-Wm 353.12(a) (see http://www.dhhs.state.nh.us/DHHS/HLTHRISKASSESS/default.htm);
    - Prepare and submit an ecological analysis that details the potentially adverse effects to the local biotic habitat that could result from the accidental discharge of hazardous wastes from the facility, which describes the environment in the immediate surrounding area of the facility, includes a biologist's report (see http://www.state.nh.us/jtboard/ns.htm) that lists the wildlife species known to live in or migrate through the environmental area (see http://wildlife.state.nh.us), and evaluates the potential adverse biological effects of such a discharge upon said species;
    - Prepare and submit an air quality impact analysis for the proposed facility, including the information required by Env-Wm 353.12(c) (see http://www.des.state.nh.us/ard/procedures.pdf and http://www.des.state.nh.us/ard/enva1400.htm); and
    - Prepare and submit a transportation impact and safety analysis that assesses the potential public health and environmental risks associated with transporting hazardous waste to the facility, which must focus upon those primary and alternate routes most likely to be used by transporters traveling to the facility from their point of exit off the nearest divided, limited-access highway, and frontage roadways providing immediate, direct access to the facility and include the requirements specified in Env-Wm 353.12(e) (see http://webster.state.nh.us/dot/).

What types of projects require this permit?

- A full quantity generator of hazardous waste that will store certain of its wastes on site for longer than 90 days
- A small or full quantity generator that will stabilize its wastes by adding cement kiln dust, or treat using any technique other than elementary neutralization, wastewater treatment, or evaporation
- A facility that will receive hazardous waste generated off-site for storage until a nearby disposal facility is permitted, constructed, and in operation
- A small or full quantity generator that will dispose of its hazardous waste in an on-site surface impoundment

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If there are questions regarding this page or any other section of the Guidebook, please contact Tim Drew, Administrator, Public Information and Permitting Unit, at tdrew@des.state.nh.us or at (603) 271-3306.

Hazardous Waste Emergency Permit

Introduction: A DES Hazardous Waste Emergency Permit provides timely authorization to treat hazardous wastes in response to specific, unexpected incidents. Most Emergency Permits are issued to hazardous waste generators to allow treatment of a hazardous waste that is too dangerous to transport in its current condition. An Emergency Permit is not required for treatment or containment activities during an immediate response to a discharge of hazardous waste to the environment, or for a material that (when discharged) becomes a hazardous waste. However, this permit is required if treatment or containment is continued or initiated after the immediate response has been completed. When DES determines that an imminent and substantial hazard exists to human health or the environment (see RSA 147-A:13, "Hazardous Waste Management/Imminent Hazard", http://gencourt.state.nh.us/rsa/html/X/147-A/147-A-13.htm), an Emergency Permit may be issued for a non-permitted facility to treat, store, or dispose of hazardous wastes; or for a permitted facility to treat, store, or dispose of hazardous wastes not covered by a permit currently in effect. The DES Hazardous Waste Emergency Permit may be issued in either oral or written form. If oral, it must be followed-up within five days by a written Emergency Permit. A public notice that includes an identification of the hazardous wastes involved, the name and address of the site, a description of the activity to be covered by the permit, and the duration of the permit accompanies each DES Hazardous Waste Emergency Permit issued. Any release of hazardous material or hazardous waste (non-petroleum) to the environment must be reported immediately to the local fire department, then to the DES Special Investigations Section ("SIS") at (603) 271-3899 if the spill occurs during business hours. Releases of petroleum products or wastes must be reported immediately to the local fire department, then to the DES Petroleum Spill Response Section at (603) 271-3644 if the spill occurs during business hours. Releases which occur after normal business hours or on weekends or holidays must be reported to the New Hampshire State Police HAZMAT Response Team at (800) 346-4009 or (603) 271-3636. More information on these and other emergency response contacts for toxic air releases, wastewater treatment plant emergencies, dam failures, or drinking water supply problems can be found at **http://www.des.state.nh.us/emergency_response.htm**. In virtually all cases, there is a legal "duty to report" such releases to DES (see http://www.des.state.nh.us/factsheets/oil/oil-5.htm).

Average number of permits issued annually: 6-7

Fees: None

Estimated processing time after application is deemed "complete": Immediate (if oral), followed within five days by a written Emergency Permit. DES treats such requests as the highest priority and expedites its response to site officials.

Permit duration: Up to 90 days from the date of issuance

Permit transferability: Not transferable

Permit modification: Any necessary changes to the original permit must be communicated immediately to DES.

Permit renewal: Renewable when justified by site or extended response conditions

State statute: RSA 147-A:13 ("Hazardous Waste Management/Imminent Hazard", http://gencourt.state.nh.us/rsa/html/X/147-A/147-A-13.htm)

N. H. Code of Administrative Rules: Env-Wm 353.05(a) ("Hazardous Waste Rules/Permitting Hazardous Waste Activities/Special Permits", http://www.des.state.nh.us/hwrb/hwrules.pdf)

Appeals body: Waste Management Council at RSA 21-O:9 ("Department of Environmental Services/Waste Management Council", http://gencourt.state.nh.us/rsa/html/I/21-O/21-O-9.htm; see also http://www.des.state.nh.us/rules/env-wmc200.pdf and http://www.des.state.nh.us/councils/#waste)

Additional information:

N. H. DES, Hazardous Waste Compliance Section, (603) 271-2942
N. H. DES, Public Information Center, (603) 271-2975 or (603) 271-8876
N. H. DES, Special Investigations Section, (603) 271-3899 (M-F, 8AM-4PM)
N. H. DES, Petroleum Spill Response, (603) 271-3644 (M-F, 8AM-4PM)
N. H. Department of Safety, State Police, (603) 271-3636 (anytime)
Local or regional police/fire/rescue/HAZMAT personnel, at 911 (**during the actual emergency, only**)

Hazardous Waste Emergency Permit – *Work Sheet*

Key Qualifier Question: *Not including the immediate response to a release of hazardous waste, does an emergency situation exist such that hazardous wastes must be treated on-site or otherwise managed to avoid unnecessary risk to human health and/or the environment?*

What must you do to apply?

- Contact the DES Hazardous Waste Compliance Section at (603) 271-2942 and describe the nature of the emergency, the types of waste involved, the proposed treatment method, and the proposed date and duration of the treatment event.
- If appropriate, the *Hazardous Waste Emergency Permit Application* will be faxed or mailed to you.
- Provide information about the facility location, owner, and operator.
- Provide a description of the situation (*e.g.,* laboratory clean out, site remediation, *etc.*), the potential hazards posed by the untreated materials, and a description of the planned treatment activity.
- Submit a description of the site, including size and abutting properties, with a map showing hazardous waste storage areas, treatment/process areas, on-site buildings, nearby surface waters, and any other information pertinent to the proposed action.
- Identify all hazardous wastes to be treated, how they were generated, exact quantities, analytical results, and copies of their Material Safety Data Sheets ("MSDSs").
- Describe the treatment process and operating conditions, including the processing rate, a process flow diagram, and equipment specifications, as appropriate.
- Provide the name(s), address(es), telephone number(s), contact person(s), and qualifications of the individual(s) or contractor performing the treatment.
- Describe on-site controls to minimize surface water runoff and air emissions, if necessary, and describe any on-site air or water monitoring, if planned.
- If treatment requires federal, state, or local approvals for wastewater discharges or air emissions, attach copies (see http://cfpub1.epa.gov/npdes/, http://www.des.state.nh.us/ard/permit.htm, and http://www.des.state.nh.us/wwe/dprapp.pdf).
- Describe the post-treatment sampling procedures, frequency, and analyses to confirm and demonstrate that the treatment was effective.
- Describe the on-site storage conditions and procedures for storage of the waste following treatment.
- Provide a copy of the Site Safety Plan or proposed Work Plan for the treatment event.
- Provide the name and telephone number of the primary site contact for emergencies.
- Describe the security procedures for the site.
- Contact the local fire and police departments and obtain any required approvals of the proposed treatment method, location, date, and time.
- Identify the hazardous waste or solid waste facility where the treated waste will be disposed, including permit number, principal contact, and telephone number.
- Prepare and forward the application and all supporting documents to: Hazardous Waste Compliance Section, Waste Management Division, New Hampshire Department of Environmental Services, 6 Hazen Drive, P. O. Box 95, Concord, NH 03302-0095. Telephone: (603) 271-2942; fax: (603) 271-0869.
- If a hazardous waste/material spill has occurred, immediately report it to the local fire department, then to DES (if the spill occurs during business hours) or to the New Hampshire State police (after business hours and on weekends and holidays (see **http://www.des.state.nh.us/emergency_response.htm**). Those who discover such releases have a duty to report the release to DES (see http://www.des.state.nh.us/factsheets/oil/oil-5.htm).

What types of projects require this permit?

- Moving swollen drums in danger of exploding if not treated on site prior to transport
- Treating containers of peroxide-forming or temperature-sensitive chemicals at a manufacturing facility, or a school or research laboratory, so they can be safely transported for disposal
- Removal of coal tar that has a flash point of less than 140 degrees Fahrenheit and must be stabilized prior to transport from a remediation site before the final disposal facility will accept it

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If there are questions regarding this page or any other section of the Guidebook, please contact Tim Drew, Administrator, Public Information and Permitting Unit, at tdrew@des.state.nh.us or at (603) 271-3306.

Hazardous Waste Transfer Facility Permit

Introduction: Hazardous waste transfer facilities in New Hampshire provide an important link between the hazardous waste generator and the permitted final disposal facility. Such facilities represent a critical means of ensuring efficient, safe, and cost-effective "cradle-to-grave" management for such wastes. Most Hazardous Waste Transfer Facility Permit applications are submitted to DES by properly registered hazardous waste transporters who want to collect and/or consolidate hazardous wastes from off-site generator locations and store the wastes for ten days or less prior to transferring them to an authorized hazardous waste treatment, storage, or disposal facility ("TSD facility"). Prior to applying for the Transfer Facility Permit, an applicant must also complete and submit a DES *Hazardous Waste Activity Notification Form* (see http://www.des.state.nh.us/rims/notification.pdf). A DES Hazardous Waste Transfer Facility Permit authorizes the establishment of central locations where hazardous wastes can be temporarily collected and provides the means for the facility owner/operator to store these materials prior to shipment to a TSD facility. This permit also allows hazardous waste transporters to consolidate and safely bulk compatible wastes and to re-load them onto a DES registered transporter vehicle for more secure and cost-effective transportation to an authorized facility for treatment, storage, and/or final disposal. This permit, however, does not provide any authority for the transporter or other owner/operator to treat hazardous wastes at the transfer facility. Treatment may occur only at a permitted TSD facility.

Average number of permits issued annually: One every three to five years

Fees: $3,000, plus an additional $1,250 to process a re-submittal, if the initial application is deemed "incomplete". The permit renewal or modification fee is $2,000.

Estimated processing time after application is deemed "complete": 12-18 months

Permit duration: 5 years

Permit transferability: The new owner must notify abutters and submit a request for a permit modification at least 90 days prior to the change of ownership.

Permit modification: Permit modifications may be requested through a written submittal to DES, accompanied by supporting technical information.

Permit renewal: To obtain a renewal, a new application must be submitted at least 270 days before the existing permit expires.

State statute: RSA 147-A:4 ("Hazardous Waste Management/Operator Permits", http://gencourt.state.nh.us/rsa/html/X/147-A/147-A-4.htm)

N. H. Code of Administrative Rules: Env-Wm 353.1 ("New Hampshire Hazardous Waste Rules/ Permitting Hazardous Waste Activities/Standard Permits", http://www.des.state.nh.us/hwrb/hwrules.pdf)

Appeals body: Waste Management Council at RSA 21-O:9 ("Department of Environmental Services/Waste Management Council", http://gencourt.state.nh.us/rsa/html/I/21-O/21-O-9.htm; see also http://www.des.state.nh.us/rules/env-wmc200.pdf and http://www.des.state.nh.us/councils/#waste)

Additional information:
N. H. DES, Hazardous Waste Compliance Section, (603) 271-2942
N. H. DES, Public Information Center, (603) 271-2975 or (603) 271-8876
N. H. DHHS, Occupational Health & Safety Program, (603) 271-4676
U. S. Department of Transportation (DOT), (603) 225-1626
U. S. EPA, RCRA, Superfund, EPCRA Call Center, (800) 424-9346, or
http://www.epa.gov/epaoswer/hotline/

Hazardous Waste Transfer Facility Permit – *Work Sheet*

Key Qualifier Question: *Will your facility receive, consolidate and/or temporarily store (for ten days or less) hazardous waste that was generated at off-site locations to facilitate transferring the wastes to an authorized off-site treatment, storage, or disposal facility?*

What must you do to apply?

- Complete and submit a DES *Hazardous Waste Activity Notification Form* available from the DES Reporting and Information Management Section, DES Public Information Center, or online at http://www.des.state.nh.us/rims/notification.pdf, http://www.des.state.nh.us/rims/notification.htm, and http://www.des.state.nh.us/rims/sample_notification.pdf.
- It is strongly suggested that the applicant meet with DES before submitting an application to review permit application requirements, including the siting requirements of NH CODE ADMIN. RULE Env-Wm 353.09.
- Verify and document that the proposed facility location satisfies the applicable siting requirements in Env-Wm 353.09 (http://www.des.state.nh.us/hwrb/hwrules.pdf).
- Prepare Part A application information required by 40CFR270.13 and Part B application information in 40CFR270.14(b)-(d) at http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfr270_main_00.html)
- Provide the name(s) of contact person(s) for the site.
- Obtain facility design plans and specifications prepared, stamped and approved by a professional engineer licensed to practice in the state of New Hampshire (see http://www.state.nh.us/jtboard/pe.htm), including the information required by Env-Wm 353.11(a)(4).
- Prepare a construction schedule for new construction or planned modifications to existing structures.
- If the applicant is leasing the property on which the facility is located, obtain a certified statement from the owner of the property verifying that such a lease exists and specifying the duration of that lease.
- Provide information sufficient to allow the New Hampshire Department of Justice to complete a background investigation of the applicant (including a criminal records check).
- Compile a performance history of the applicant and its officers/directors relative to the operation, financial security, and ownership of all facilities owned/operated by applicant, pursuant to RSA 147-A:4, II-c, II-d, and IV-a ("Hazardous Waste Management/Operator Permits", http://gencourt.state.nh.us/rsa/html/X/147-A/147-A-4.htm).
- Prepare a hydrogeological analysis including the information required by Env-Wm 353.11(a)(8). [Note: Installation of groundwater monitoring wells is not required under the conditions in Env-Wm 351.03(f)].
- If applicable, prepare the information specified in 40 CFR 270.10(j), 40 CFR 270.15 through 40 CFR 270.16 (inclusive), and 40 CFR 270.23 (use Web link provided above)
- Prepare a cover letter signed by the applicant certifying that the application meets all necessary application requirements sufficient to render it technically adequate to undergo an engineering review.
- Submit four (4) copies of the application, all supporting materials, and a check or money order made payable to "Treasurer, State of New Hampshire" for the appropriate fee as specified by Env-Wm 353.07 to: Hazardous Waste Compliance Section, Waste Management Division, New Hampshire Department of Environmental Services, 6 Hazen Drive, P. O. Box 95, Concord, NH 03302-0095. Telephone: (603) 271-2942; fax: (603) 271-2456; or online: http://www.des.state.nh.us/hwcs/
- If a waiver to any provision of Env-Wm 353.09(f) is desired, submit an application for a waiver at the time of application for the Standard Permit (see http://www.des.state.nh.us/hwcs/Request_Waiver.pdf).

What types of projects require this permit?

- A facility that will receive liquid hazardous wastes generated off-site, bulk compatible wastes for storage for up to ten days, and pump them into tank trucks for transport to a treatment or disposal facility.
- A facility that will receive drums of hazardous wastes and stores them (unopened) for up to ten days until a truckload has accumulated.

- A manufacturing plant that receives hazardous waste from another generator prior to pick-up by a transporter, unless: a) the other facility is a small quantity generator and is owned by the manufacturing plant, and b) the manufacturing plant counts the waste received towards its generator status.

If there are questions regarding this page or any other section of the Guidebook, please contact Tim Drew, Administrator, Public Information and Permitting Unit, at tdrew@des.state.nh.us or at (603) 271-3306.

Hazardous Waste Limited Permit

Introduction: Businesses or individuals that generate hazardous wastewaters must first obtain a DES Hazardous Waste Limited Permit if they wish to treat those wastes onsite. "Treatment" of hazardous waste is defined under RSA 147-A:2, XVII ("Hazardous Waste Management/Definitions", http://gencourt.state.nh.us/rsa/html/indexes/147-A.html as *any process, including neutralization, designed to change the physical, chemical or biological character or composition of any hazardous waste so as to neutralize the waste or to render the waste not hazardous, safer for transport, amenable to recovery, amenable to storage or reduced in volume.* Treatment may involve neutralization or other processes that will render the waste non-hazardous, safer for transport, amenable to recovery, easier to store, or reduced in volume. The DES Hazardous Waste Limited Permit authorizes the treatment of hazardous wastewaters by one (or more) of the following methods: (1) use of elementary neutralization units to reduce the corrosivity (*i.e.*, acidic or caustic characteristic) of a waste, (2) use of wastewater treatment units to remove hazardous waste constituents (*e.g.*, heavy metals, organic solvents, *etc.*) from process wastewater, and (3) use of wastewater evaporation units to reduce or consolidate hazardous waste constituents by an evaporation/heat process. On-site treatment may be performed to achieve heightened waste minimization goals, reduced costs, recovery and reuse of valuable raw materials (see http://www.des.state.nh.us/factsheets/hw/hw-8.htm), or to implement pollution prevention measures (see http://www.des.state.nh.us/p2_all.htm). On-site treatment of hazardous wastewaters also may reduce the need for off-site transport, treatment, storage, and/or disposal of the wastewaters. Other environmental permits also may be required to properly manage these wastes, including a U. S. EPA National Pollutant Discharge Elimination System ("NPDES") Permit for a piped discharge of treated wastewater to a receiving surface water body (see http://cfpub1.epa.gov/npdes/), a DES Temporary Air Emission Permit and Air Emission Permit-to-Operate for control of contaminated air emissions to the atmosphere from an onsite evaporation unit (see http://www.des.state.nh.us/ard/permit.htm), and/or a DES Industrial Wastewater Discharge Permit for the discharge of wastewater to a public sewer system (see http://www.des.state.nh.us/wwe/dprapp.pdf). For more information on these associated permitting processes, refer to the "Air Quality" and "Wastewater" chapters of this *Guidebook*.

Average number of permits issued annually: 10-12

Fees: The initial fee is $500. The permit renewal or modification fee is $250.

Estimated processing time after application is deemed "complete": 30-60 days

Permit duration: 5 years

Permit transferability: The new owner must submit to DES a written request for permit transfer no later than 15 days prior to the change of ownership.

Permit modification: A revised DES Hazardous Waste Limited Permit application (see http://www.des.state.nh.us/hwcs/Limited_App.pdf) must be submitted that indicates the proposed changes, and must be received by DES for review at least 60 days before any changes are scheduled to begin.

Permit renewal: A request for renewal must be submitted to DES at least 90 days prior to the expiration date of the current permit.

State statute: RSA 147-A:4 ("Hazardous Waste Management/Operator Permits", http://gencourt.state.nh.us/rsa/html/X/147-A/147-A-4.htm)

N. H. Code of Administrative Rules: Env-Wm 353.04 ("Hazardous Waste Rules/Permitting Hazardous Waste Activities/Limited Permits", http://www.des.state.nh.us/hwrb/hwrules.pdf)

Appeals body: Waste Management Council at RSA 21-O:9 ("Department of Environmental Services/Waste Management Council", http://gencourt.state.nh.us/rsa/html/I/21-O/21-O-9.htm; see also http://www.des.state.nh.us/rules/env-wmc200.pdf and http://www.des.state.nh.us/councils/#waste)

Additional information:

N. H. DES, Hazardous Waste Compliance Section, (603) 271-2942
N. H. DES, Wastewater Engineering Bureau, (603) 271-2457
N. H. DES, Air Resources Division, (603) 271-1370
N. H. DES, Public Information Center, (603) 271-2975 or (603) 271-8876
Local municipal wastewater treatment facility for Discharge Permit Request

Hazardous Waste Limited Permit – *Work Sheet*

Key Qualifier Questions: *If you are a full quantity generator of hazardous waste, do you intend to treat your own hazardous wastewaters on site in an Elementary Neutralization Unit, a Wastewater Treatment Unit, and/ or an Evaporator Unit? Or, do you intend to use those devices to treat your own non-hazardous wastewaters which, when treated, generate hazardous sludge?*

What must you do to apply?

- Complete and submit a *Hazardous Waste Activity Notification Form*, available from the DES Reporting and Information Management Section, DES Public Information Center, or online at http://www.des.state.nh.us/rims/notification.pdf, http://www.des.state.nh.us/rims/notification.htm, and http://www.des.state.nh.us/rims/sample_notification.pdf).
- Verify that your facility is not a small quantity generator of hazardous waste. Small quantity generators are not required to obtain DES Hazardous Waste Limited Permits.
- Apply for, obtain, and submit any necessary permits for air emissions or wastewater discharges, if applicable, at http://cfpub1.epa.gov/npdes/, http://www.des.state.nh.us/ard/permit.htm, and http://www.des.state.nh.us/wwe/dprapp.pdf.
- Obtain a DES *Hazardous Waste Limited Permit Application Form* from the DES Hazardous Waste Compliance Section, DES Public Information Center, or online at http://www.des.state.nh.us/hwcs/Limited_App.pdf.
- Prepare a description, including process design drawings or a flow diagram, of the process that generates the wastewater to be treated.
- Prepare a description of the neutralization, treatment or evaporation unit or process, including design capacity, equipment used, and the physical/chemical treatment technique.
- Obtain engineering design plans, process flow drawings, or manufacturer's technical specifications for the unit.
- Prepare a table listing the name (or description) of the waste to be treated, its waste code, and the amount to be treated per day, week, and month, in pounds or gallons.
- Prepare a list of the hazardous constituents (organic chemicals, inorganic chemicals, metals) in the wastewater to be treated.
- Provide a copy of the facility's Industrial Discharge Permit, if any.
- For evaporation units, provide either the facility's Air Emission Permit-to-Operate or documentation that no air permits are necessary.
- Provide a copy of a typical analysis for a representative sample of the wastewater to be treated.
- List the pH (acidity/alkalinity) of the water solutions before and after treatment.
- If the unit generates sludge, indicate whether or not the sludge is a hazardous waste and provide the applicable waste code, amount generated, and proposed disposal location.
- If the unit recycles any wastewaters, describe the percentage and recycling process.
- Specify the facility's total wastewater discharge or evaporation volume.
- Provide the date the unit started or will start treating/ neutralizing/ evaporating the wastewater.
- Submit a check or money order for $500 made payable to "Treasurer, State of New Hampshire" with the application and all supporting documents as noted above to: Hazardous Waste Compliance Section, Waste Management Division, New Hampshire Department of Environmental Services, 6 Hazen Drive, P. O. Box 95, Concord, NH 03302-0095. Telephone: (603) 271-2942; fax: (603) 271-0869; or online: http://www.des.state.nh.us/hwcs/

What types of projects require this permit?

- ❖ A manufacturing facility that generates corrosive wastewaters, which, if neutralized, can be discharged to the local sewer system

- A facility that generates a large volume of chrome-laden wastewater, evaporates it, and disposes of the small volume of resulting sludge as hazardous waste.
- An electronics manufacturer that removes lead from wastewater using a lead-specific ion exchange resin

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If there are questions regarding this page or any other section of the Guidebook, please contact Tim Drew, Administrator, Public Information and Permitting Unit, at tdrew@des.state.nh.us or at (603) 271-3306.

Hazardous Waste Transporter Registration/Confirmation Letter

Introduction: Hazardous waste transporters represent the link between the numerous sites throughout New Hampshire where hazardous waste is generated and the ultimate destination for these wastes at authorized treatment, storage, and disposal facilities ("TSD Facilities"). DES regulates more than 5,400 hazardous waste generators that are served by more than 150 hazardous waste transporters registered with the State of New Hampshire (see http://www.des.state.nh.us:1522/des/onestop.mts_transporters_rpt.show_parms). All transporters of hazardous waste that operate within or pass through New Hampshire, including transporters of hazardous wastes destined for recycling, must be registered in this state. Before hazardous waste transport activities begin, a transporter application packet must be obtained, completed, and returned to DES. If the hazardous waste transporter company is based in New Hampshire, prior to applying for the Transporter Registration, the applicant must complete and submit a DES *Hazardous Waste Activity Notification Form* (see http://www.des.state.nh.us/rims/notification.pdf). A background investigation will be conducted by the New Hampshire Department of Justice as part of the registration process to ensure that the applicant has sufficient reliability, expertise, integrity, and competence to transport hazardous wastes within and/or through New Hampshire. Once the background check has been completed and the application is approved, DES will issue a *Registration Confirmation Letter* to the applicant, who must carry a copy of this letter in each vehicle used to transport hazardous waste. The transporter must maintain compliance with NH CODE ADMIN. RULE Env-Wm 600 ("Hazardous Waste Rules/Requirements for Hazardous Waste Transporters", http://www.des.state.nh.us/hwrb/hwrules.pdf) concerning such issues as vehicle identification, personnel training, contingency planning, emergency preparedness, financial responsibility, manifest management, record keeping, and reporting (see http://www.des.state.nh.us/rims/). Please note the distinction between the transportation of "hazardous wastes" (*i.e.*, contaminated solids, liquids, and gases), which is regulated by DES, and the transportation of "hazardous materials" (*i.e.*, virgin chemical products or reagents intended for use in product manufacturing), which is regulated by the New Hampshire Department of Safety [see http://webster.state.nh.us/safety/ or call (603) 271-0333)].

Average number of registrations issued annually: Approximately 150

Fees: None

Estimated processing time after application is deemed "complete": Approximately 3-4 weeks

Registration duration: One year

Registration transferability: Non-transferable

Registration modification: Requests to modify a registration must be submitted in writing to the DES Special Investigations Section within 15 days of the change in accordance with Env-Wm 609.03. Modifications can involve the transporter name, address, EPA identification number, ownership of the company, *etc*.

Registration renewal: Annually. A request for renewal must be received on or before May 15 of each year. DES renewal information is mailed to all registered hazardous waste transporters prior to that date.

State statute: RSA 147-A:6 ("Hazardous Waste Management/Transporter Registration", http://gencourt.state.nh.us/rsa/html/X/147-A/147-A-6.htm)

N. H. Code of Administrative Rules: Env-Wm 600 ("Hazardous Waste Rules/Requirements for Hazardous Waste Transporters", http://www.des.state.nh.us/hwrb/hwrules.pdf)

Appeals body: Waste Management Council at RSA 21-O:9 ("Department of Environmental Services/Waste Management Council", http://gencourt.state.nh.us/rsa/html/I/21-O/21-O-9.htm; see also http://www.des.state.nh.us/rules/env-wmc200.pdf and http://www.des.state.nh.us/councils/#waste)

Additional information: N. H. DES, Special Investigations Section, (603) 271-3899
N. H. DES, Public Information Center, (603) 271-2975 or (603) 271-8876
N. H. Department of Safety, (603) 271-0333
U. S. EPA, RCRA, Superfund, EPCRA Call Center, (800) 424-9346, or
http://www.epa.gov/epaoswer/hotline/

Hazardous Waste Transporter Registration/Confirmation Letter – *Work Sheet*

Key Qualifier Question: *Do you intend to transport hazardous wastes*[1] *(e.g. contaminated solvents, metal plating sludges, used oil* [2]*, etc.) over the road, air, or water, originating from within or passing through New Hampshire?*

What must you do to apply?

- Contact the DES Special Investigations Section at (603) 271-3899 to obtain a registration packet. This packet includes:
  - New Hampshire Hazardous Waste Transporter Registration Application [3, 4]
  - DES Fact Sheet No. WMD-HW-20 entitled *Hazardous Waste Transporter Frequently Asked Questions* (see http://www.des.state.nh.us/factsheets/hw/hw-20.htm).
  - RSA 147-A:6 ("Hazardous Waste Management/Transporter Registration", http://gencourt.state.nh.us/rsa/html/X/147-A/147-A-6.htm)
  - NH CODE ADMIN. RULES Env-Wm 600 and 807 ("New Hampshire Hazardous Waste Rules", http://www.des.state.nh.us/hwrb/hwrules.pdf)

- The *New Hampshire Hazardous Waste Transporter Registration Application* requires the following:

  - Transporter's name, mailing address, and telephone number
  - Name and title of the transporter's contact person
  - Transporter's U. S. EPA identification number
  - Transporter's U. S. DOT Motor Carrier Census or Interstate Commerce Commission number
  - Transporter's U. S. Research and Special Programs Administration ("RSPA") registration number (if applicable). (This is the U. S. Department of Transportation's hazardous materials registration program. To determine whether the "RSPA Number" applies to you, contact the U. S. DOT at (202) 366-4109. If you would like to request a registration application, please call (617) 494-2545 or E-mail the U. S. DOT at REGISTER@rspa.dot.gov.)
  - Verification/attestation statement (*i.e.*, financial responsibility requirements)

What types of circumstances require this registration?

- A trucking company that wishes to begin transporting hazardous wastes from, within, or through the state of New Hampshire
- A company that is transporting used oil[2], which is regulated as a hazardous waste in New Hampshire. (See Env-Wm 807 and the DES Used Oil Program at http://www.des.state.nh.us/hwcs/used_oil.htm for further regulatory requirements pertaining to used oil.)
- A company that imports or exports hazardous wastes to or from the U. S. and, in so doing, transports the wastes in or through New Hampshire (Note that additional management and record keeping requirements apply to transporters that engage in import/export practices.)

Note 1: New Hampshire regulates its more than 4,700 small quantity (*i.e.*, less than 100 kg/220 pounds per month) hazardous waste generators more stringently than does the U. S. Environmental Protection Agency. Therefore, New Hampshire small quantity generators are required to prepare a hazardous waste manifest prior to offering their wastes to a registered transporter (The New Hampshire *Uniform Hazardous Waste Manifest* form can be found at http://www.des.state.nh.us/rims/manifest.pdf, and the instructions for completing it can be found at http://www.des.state.nh.us/rims/manifest.htm).

Note 2: Used oil is governed by its own set of administrative rules, Env-Wm 807 ("Hazardous Waste Rules/Requirements for Management of Used Oil being Recycled", http://www.des.state.nh.us/hwrb/hwrules.pdf). For its transport, you must determine if it is classed as "specification" used oil or "off-spec" used oil, whether the total volume will be less than 110 gallons, and whether it will be recycled or simply disposed. For specifics, please see, http://www.des.state.nh.us/hwcs/used_oil.htm.

Note 3: If your company is incorporated in a state other than New Hampshire, you must obtain a *Certificate of Authority* from the New Hampshire Secretary of State (see http://webster.state.nh.us/sos/corporate/PDF/form40v2.pdf). To view the legal requirements for the *Certificate of Authority*, please see RSA 293-A:15.03 ("New Hampshire Business Corporation Act/Application for Certificate of Authority", http://gencourt.state.nh.us/rsa/html/XXVII/293-A/293-A-15.03.htm).

Note 4: In accordance with NH CODE ADMIN. RULE Env-Wm 603.12 ("Hazardous Waste Rules/Financial Responsibility", http://www.des.state.nh.us/hwrb/hwrules.pdf), all hazardous waste transporters must meet the requirements of 49 CFR Section 387.9 (see "Transportation/Minimum Levels of Financial Responsibility for Motor Carriers", http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_49/49cfr387_main_00.html) and must obtain a *Certificate of Insurance* to operate in New Hampshire. The "New Hampshire Insurance Department Company Lists" (see http://webster.state.nh.us/insurance/Exams/company_lists.htm) and "Property and Casualty Licensed Companies" (see http://webster.state.nh.us/insurance/Exams/P&C%20List.pdf) can be found on the New Hampshire Insurance Department Web page, or call the Exams Division at (603) 271-2241.

If there are any questions regarding this page or any other section of the Guidebook, please contact Tim Drew, Administrator, Public Information and Permitting Unit, at tdrew@des.state.nh.us or at (603) 271-3306.

Appendices

A. DES Environmental Equity Policy
B. DES Growth Management/Sprawl Policy
C. Major Federal Environmental Laws/Internet Links
D. Major Federal Environmental Regulations/Internet Links
   a. Organized by Environmental Program
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NEW HAMPSHIRE DEPARTMENT OF Environmental Services

2002 Edition

Appendix A:

DES Environmental Equity Policy

2002 Edition

Environmental Equity

New Hampshire Department of Environmental Services

***Policy Statement*: The New Hampshire Department of Environmental Services will, within its authority, ensure fair and equitable treatment of all New Hampshire citizens in the implementation of federal and state environmental laws, rules, programs, and policies.**

Background

There is a body of evidence that suggests that, in certain instances around the country, minority and lower income citizens, neighborhoods, and/or communities have faced an inequitable share of the risks associated with environmental hazards. While the issues and concerns regarding environmental equity (also commonly referred to as Environmental Justice or "EJ") vary from state to state and from community to community, the core issue is one of fairness in the siting, monitoring, and/or cleanup of facilities, and the regulation of activities that may produce environmental hazards. The documentation for this issue at the national level suggests that, for a variety of reasons not necessarily discriminatory by intent, minority and lower income populations have sometimes borne a disproportionate share of the risks from activities which cause air, water, or soil pollution.

One of the primary factors contributing to "environmental inequities" is the co-location of many minority and lower income populations in more densely developed and industrialized areas with greater concentrations of environmental hazards. While this suggests that environmental equity is more of an urban issue, there are other factors such as siting decisions which apply to all areas of the state. It is important to recognize that inequities may exist, and then make a commitment to work toward their elimination. The New Hampshire Department of Environmental Services has created and adopted the above policy to recognize this issue and has devised the following implementation strategy to honor that commitment.

Implementation Strategy

DES's overall approach in implementing this policy is to incorporate equity considerations – in context with other key factors such as environmental risk – into every applicable decision or action. More specifically, DES will take the following steps to initiate and continue implementation of its Environmental Equity Policy:

- Post the Environmental Equity Policy throughout the agency's offices (both at headquarters and at regional sites) and provide a copy to all staff.
- Use the U. S. Environmental Protection Agency's ("EPA") national criteria for identifying areas of concern according to race, ethnicity, economic status, or community (as modified for New Hampshire) in implementing the Environmental Equity Policy.
- Develop and distribute written guidance and provide training on incorporating the Environmental Equity Policy into DES's daily decisions or actions. These decisions or actions take the form of such things as development, public education and outreach, technical assistance, rulemaking, permit application reviews, compliance monitoring, enforcement actions, emergency response, complaint response, and site cleanup.
- Incorporate the Environmental Equity Policy into all appropriate annual work plans and grant applications.
- Add implementation of the Environmental Equity Policy as a specific objective in DES's ***Strategic Plan***, and monitor progress with implementation as part of that plan's annual review.

Appendix B:

DES Growth Management/Sprawl Policy

2002 Edition

Encouraging Better Growth Management and Development Practices through Environmental Permitting

New Hampshire Department of Environmental Services

Policy Statement: The New Hampshire Department of Environmental Services will encourage the application of smart growth practices, including minimum impact development practices, through education, outreach, and regulatory efforts.

Background

In preparing the 2000 report, ***Managing Growth in New Hampshire: Changes and Challenges*** (see http://www.state.nh.us/osp/planning/GMReport/TOC.html), the New Hampshire Office of State Planning compared growth trends and land development patterns with the goals and objectives stated in the master plans of several towns and concluded that many current planning and zoning approaches do not provide the type and pattern of growth and development desired by communities. Sprawling patterns of growth contribute to greater fragmentation of large blocks of undeveloped open space, more traffic congestion, higher costs for public services, increased air and water pollution, and greater pressure on environmentally-sensitive areas. In 1999, Governor Jeanne Shaheen issued Executive Order 99-2 directing the Council on Resources and Development to coordinate a study concerning the issue of sprawl and to report on how State agencies could adjust their programs to both recognize the importance of preserving New Hampshire's traditional communities and landscapes and to evaluate actions they either are currently implementing or might be implementing in the future to further that goal (see the December 1999 ***Report to Governor Shaheen on Sprawl***, http://www.state.nh.us/osp/planning/guide/docs/SprawlReport1999.pdf). State agencies, municipalities, local planning boards and conservation commissions, developers, builders and others must work together so that future growth and development supports local goals and does not compromise New Hampshire's quality of life. DES is committed to supporting these efforts through our education, outreach, and regulatory efforts.

Implementation

To support state and local efforts to better manage future growth and development, DES encourages the use of practices that minimize the impact of development on the environment, including smart growth and sustainable development practices. By influencing the pattern, location, and nature of development on the landscape, smart growth and sustainable development practices help to reduce the impacts of sprawl and thus protect air and water quality, maintain habitat, and provide for more efficient use of our natural resources.

Increased and early communication between DES, municipalities, and permit applicants facilitates the review and approval of projects using appropriate smart growth and sustainable development practices. Continued communication between DES and municipalities also helps to ensure that local objectives are supported through our permitting activities.

Compact development, such as cluster or conservation subdivisions and higher density neighborhoods within and near existing town and village centers, energy-efficient building design, clean up and redevelopment of contaminated properties, a mixture of residential and commercial activities in traditionally-designed neighborhoods with facilities to support walking, biking, and public transportation options, and increased buffers and other protections to protect sensitive habitats are just some examples of smart growth and sustainable development practices that help maintain habitat and protect air and water quality.

Please contact the Public Information and Permitting Unit for additional information on this topic at (603) 271-3305, fax (603) 271-8013, or via email at pip@des.state.nh.us.

Appendix C:

Major Federal Environmental Laws/Internet Links

2002 Edition

Major Federal Environmental Laws and Their Internet Links - 2002

FEDERAL ENVIRONMENTAL LAW	INTERNET LINK
National Environmental Policy Act of 1969 (NEPA); 42 U.S.C. 4321-4347	http://ceq.eh.doe.gov/nepa/regs/nepa/nepaeqia.htm
Chemical Safety Information, Site Security and Fuels Regulatory Relief Act, Public Law 106-40, January 6, 1999; 42 U.S.C. 7412(r) (Amendment to Section 112(r) of the Clean Air Act)	http://www.epa.gov/ceppo/ap-99law.htm
The Clean Air Act (CAA); 42 U.S.C. § 7401 *et seq*. (1970)	http://www4.law.cornell.edu/uscode/42/ch85.html
The Clean Water Act (CWA); 33 U.S.C. § 1251 *et seq*. (1977)	http://www4.law.cornell.edu/uscode/33/ch26.html
Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA or "Superfund"); 42 U.S.C. § 9601 *et seq*. (1980)	http://www4.law.cornell.edu/uscode/42/ch103.html
The Emergency Planning & Community Right-to-Know Act (EPCRA); 42 U.S.C. 11011 *et seq*. (1986)	http://www4.law.cornell.edu/uscode/42/ch116.html
The Endangered Species Act (ESA); 7 U.S.C. 136; 16 U.S.C. 460 *et seq*. (1973)	http://www4.law.cornell.edu/uscode/16/ch35.html
Federal Insecticide, Fungicide and Rodenticide Act (FIFRA); 7 U.S.C. §135 *et seq*. (1972)	http://www4.law.cornell.edu/uscode/7/ch6.html
Federal Food, Drug, and Cosmetic Act (FFDCA); 21 U.S.C. 301 *et seq*.	http://www4.law.cornell.edu/uscode/21/ch9.html
Food Quality Protection Act (FQPA); Public Law 104-170, August 3, 1996	http://www.epa.gov/opppsps1/fqpa/
The Freedom of Information Act (FOIA); U.S.C. § 552 (1966)	http://www4.law.cornell.edu/uscode/5/552.html
The Occupational Safety and Health Act (OSHA); 29 U.S.C. 651 *et seq*. (1970)	http://www4.law.cornell.edu/uscode/29/ch15.html
The Oil Pollution Act of 1990 (OPA); 33 U.S.C. 2702 to 2761	http://www4.law.cornell.edu/uscode/33/ch40.html
The Pollution Prevention Act (PPA); 42 U.S.C. §13101 and 13102 *et seq*. (1990)	http://www.epa.gov/opptintr/p2home/p2policy/act1990.htm
The Resource Conservation and Recovery Act (RCRA); 42 U.S.C. § 321 *et seq*. (1976)	http://www4.law.cornell.edu/uscode/42/ch82.html
The River and Harbor Act of 1899; 33 U. S. C. Chapter 12 *et seq.*	http://www4.law.cornell.edu/uscode/33/ch12.html
The Safe Drinking Water Act (SDWA); 42 U.S.C. § 300f *et seq*. (1974)	http://www4.law.cornell.edu/uscode/42/300f.html
The Superfund Amendments and Reauthorization Act (SARA); 42 U.S.C. 9601 *et seq*. (1986)	http://www4.law.cornell.edu/uscode/42/ch103.html
The Toxic Substances Control Act (TSCA); 15 U.S.C. § 2601 *et seq*. (1976)	http://www4.law.cornell.edu/uscode/15/ch53.html

Appendix D:

Major Federal Environmental Regulations/Internet Links

2002 Edition

Major Federal Environmental Regulations and Their Internet Links - Organized by Program - 2002

CODE OF FEDERAL REGULATIONS	INTERNET LINKS
40 CFR Subchapter A - General (Parts 1-29)	http://www.epa.gov/docs/epacfr40/chapt-I.info/subch-A.htm
40 CFR Subchapter B - Grants and other Federal Assistance (Parts 30-49)	http://www.epa.gov/docs/epacfr40/chapt-I.info/subch-B.htm
40 CFR Subchapter C - Air Programs (Parts 50-99)	http://www.epa.gov/docs/epacfr40/chapt-I.info/subch-C.htm
40 CFR Subchapter D - Water Programs (Parts 100-149)	http://www.epa.gov/docs/epacfr40/chapt-I.info/subch-D.htm
40 CFR Subchapter E - Pesticide Programs (Parts 150-189)	http://www.epa.gov/docs/epacfr40/chapt-I.info/subch-E.htm
40 CFR Subchapter F - Radiation Protection Programs (Parts 190-197)	http://www.epa.gov/docs/epacfr40/chapt-I.info/subch-F.htm
40 CFR Subchapter G - Noise Abatement Programs (Parts 201-211)	http://www.epa.gov/docs/epacfr40/chapt-I.info/subch-G.htm
40 CFR Subchapter H - Ocean Dumping (Parts 220-238)	http://www.epa.gov/docs/epacfr40/chapt-I.info/subch-H.htm
40 CFR Subchapter I - Solid Wastes (Parts 239-299)	http://www.epa.gov/docs/epacfr40/chapt-I.info/subch-I.htm
40 CFR Subchapter J - Superfund, Emergency Planning, and Community Right-to-Know Programs (Parts 300-399)	http://www.epa.gov/docs/epacfr40/chapt-I.info/subch-J.htm
40 CFR Subchapter N - Effluent Guidelines and Standards (Parts 400-471)	http://www.epa.gov/docs/epacfr40/chapt-I.info/subch-N.htm
40 CFR Subchapter O - Sewage Sludge (Parts 501-503)	http://www.epa.gov/docs/epacfr40/chapt-I.info/subch-O.htm
40 CFR Subchapter Q - Energy Policy (Parts 600-699)	http://www.epa.gov/docs/epacfr40/chapt-I.info/subch-Q.htm
40 CFR Subchapter R - Toxic Substances (Parts 700-799)	http://www.epa.gov/docs/epacfr40/chapt-I.info/subch-R.htm
40 CFR Chapter V – Council on Environmental Quality (Parts 1500-1517)	http://www.epa.gov/epacfr40/chapt-V.info/chv-toc.htm
40 CFR Chapter VII – Environmental Protection Agency and Department of Defense - Uniform National Discharge Standards for Vessels of the Armed Forces (Part 1700)	http://www.epa.gov/epacfr40/chapt-VII.info/chvii-toc.htm

Major Federal Environmental Regulations and Their Internet Links – Organized by 40 CFR Volume – 2002

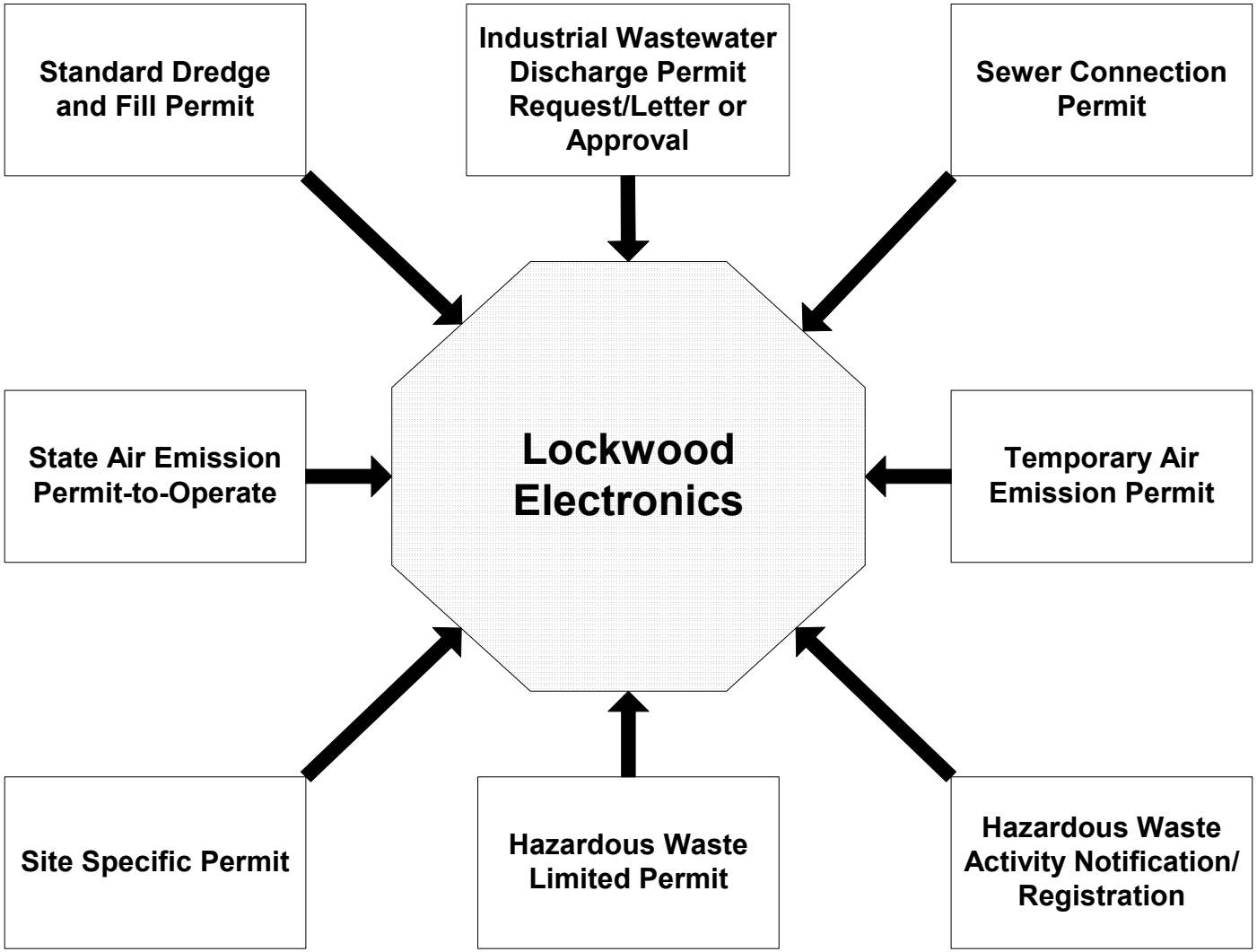
TITLE 40/CHAPTER I	VOLUME	PARTS	INTERNET LINKS THROUGH "e-CFR"
Protection of the Environment	1	1-49	http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfrv1_00.html
	2	50-51	http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfrv2_00.html
	3	-52.01-52.1018	http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfrv3_00.html
	4	52.1019-End	http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfrv4_00.html
	5	53-59	http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfrv5_00.html
	6	60.1-End	http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfrv6_00.html
	7	Part 60, Appendixes	http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfrv7_00.html
	8	61-62	http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfrv8_00.html
	9	63.1-63.599	http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfrv9_00.html
	10	63.600-63.1199	http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfrv10_00.html
	11	63.1200-End	http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfrv11_00.html
	12	64-71	http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfrv12_00.html
	13	72-80	http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfrv13_00.html
	14	81-85	http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfrv14_00.html
	15	86.1-86.599-99	http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfrv15_00.html
	16	86.600-1-End	http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfrv16_00.html
	17	87-99	http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfrv17_00.html
	18	100-135	http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfrv18_00.html
	19	136-149	http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfrv19_00.html
	20	150-189	http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfrv20_00.html
	21	190-259	http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfrv21_00.html
	22	260-265	http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfrv22_00.html
	23	266-299	http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfrv23_00.html
	24	300-399	http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfrv24_00.html
	25	400-424	http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfrv25_00.html
	26	425-699	http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfrv26_00.html
	27	700-789	http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfrv27_00.html
	28	790-End	http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfrv28_00.html

Appendix E:

Project Organization/ Permitting Diagrams

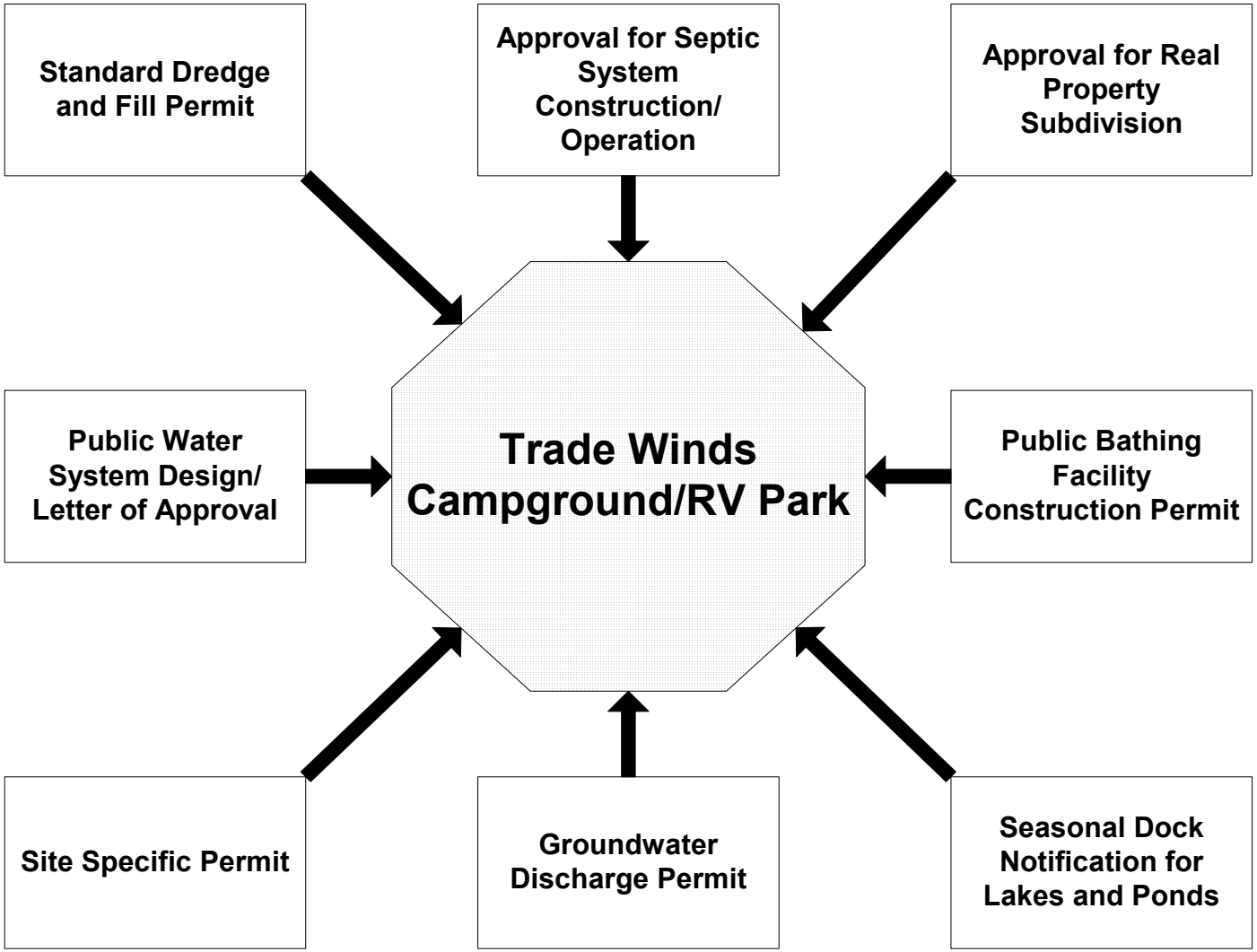
2002 Edition

Permit Selection Example #1: Relocation of Lockwood Electronics to existing industrial park*



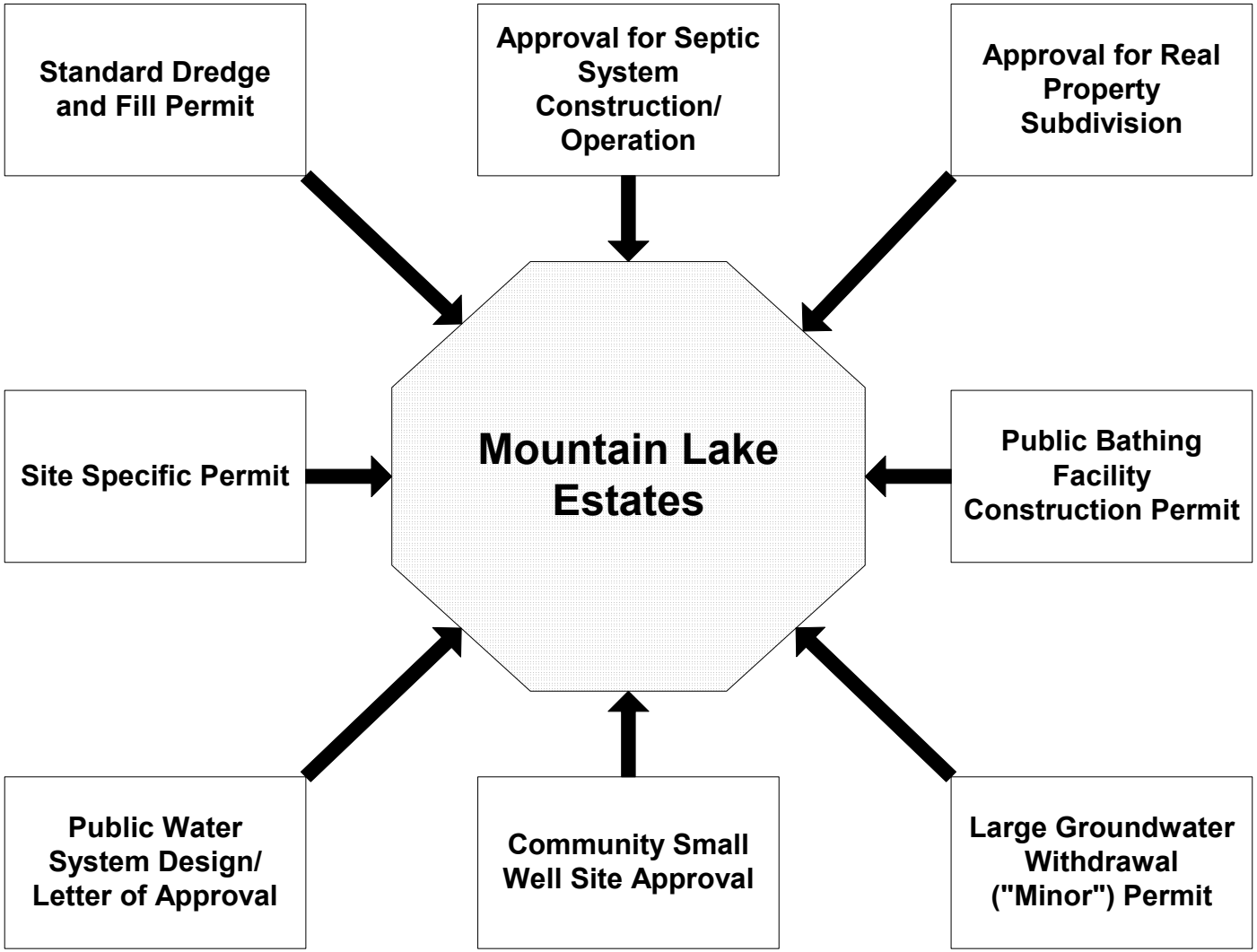
***Note**: Since project parameters may vary, the specific permit types selected above may not apply to all similar projects.

Permit Selection Example #2: Creation of a new campground/recreational vehicle park*



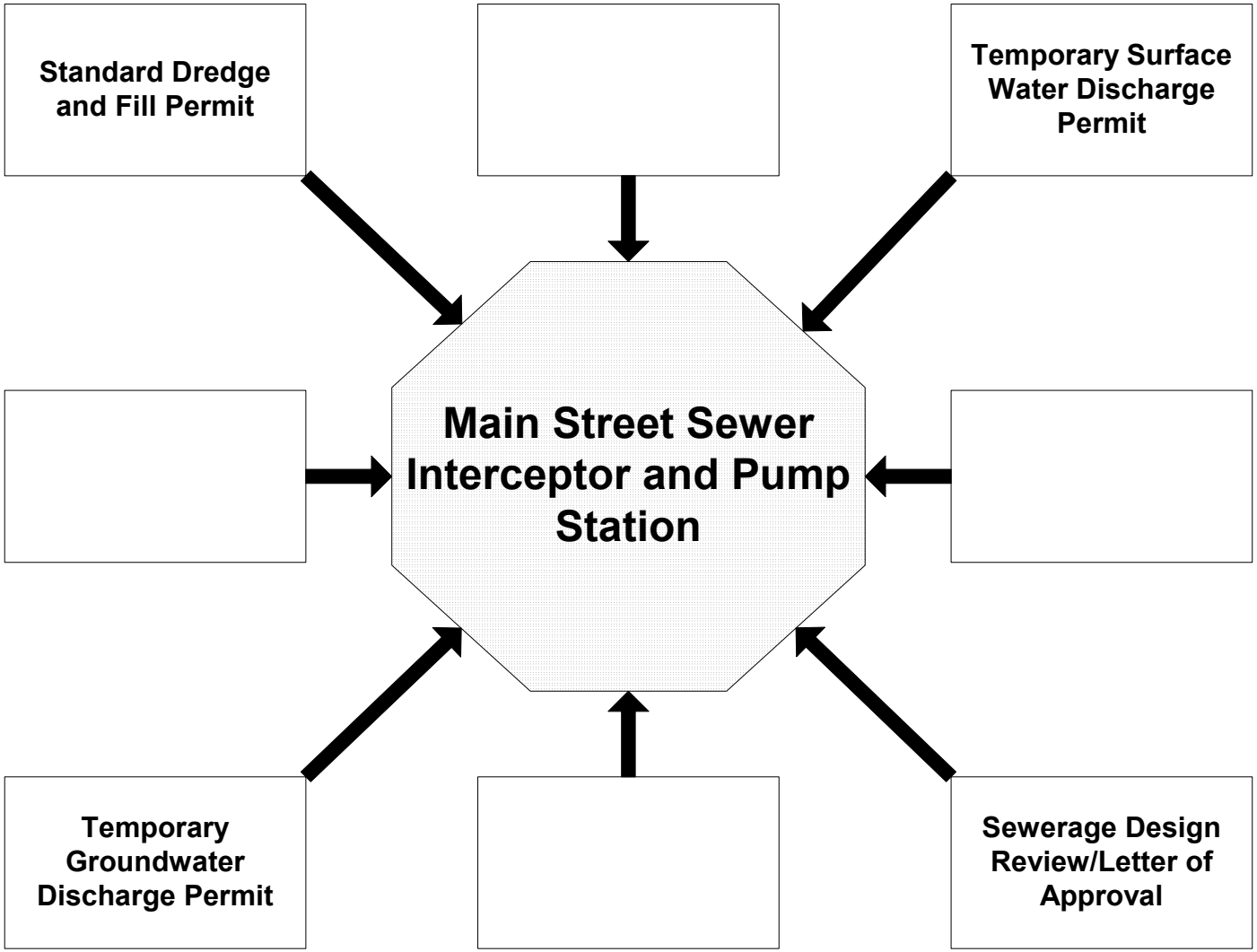
***Note**: Since project parameters may vary, the specific permit types selected above may not apply to all similar projects.

Permit Selection Example #3: Subdivision of a parcel of land for single-family home development*



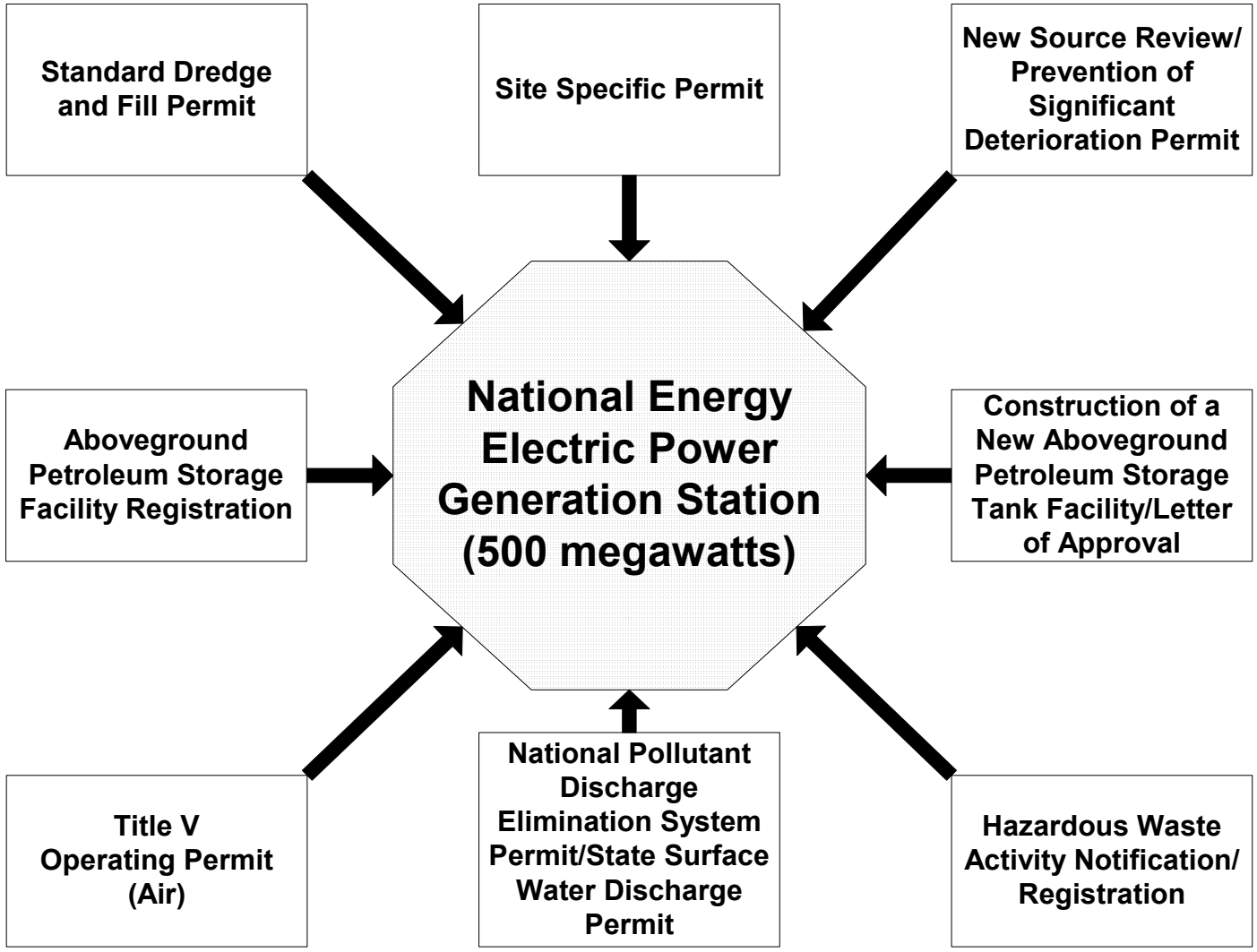
***Note**: Since project parameters may vary, the specific permit types selected above may not apply to all similar projects.

Permit Selection Example #4: Installation of a new community sewer interceptor and pump station*



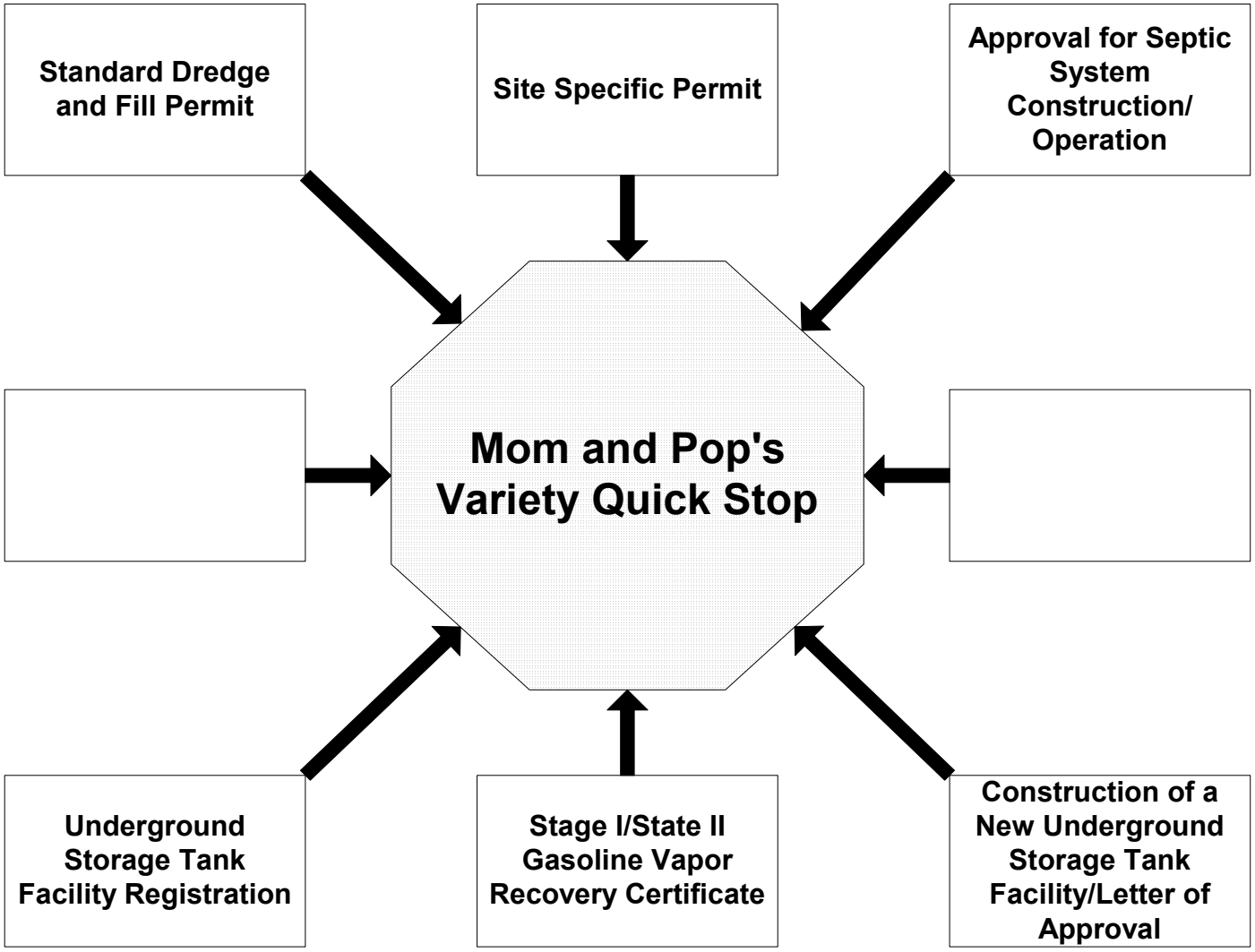
***Note**: Since project parameters may vary, the specific permit types selected above may not apply to all similar projects.

Permit Selection Example #5: Siting and construction of a new electric power generating station*



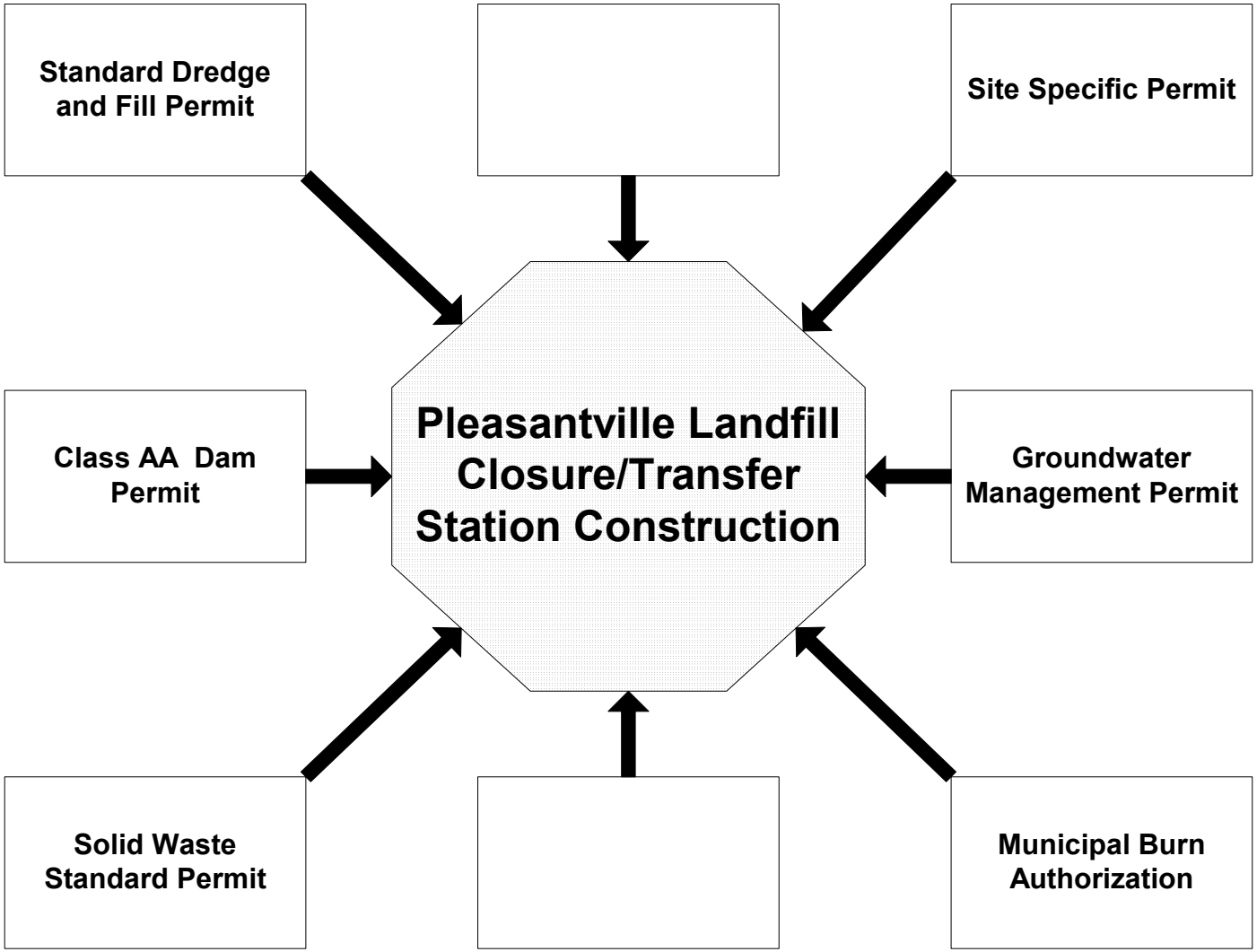
*Note: Since project parameters may vary, the specific permit types selected above may not apply to all similar projects.

Permit Selection Example #6: Development of a gas and convenience store, Rockingham County, NH *



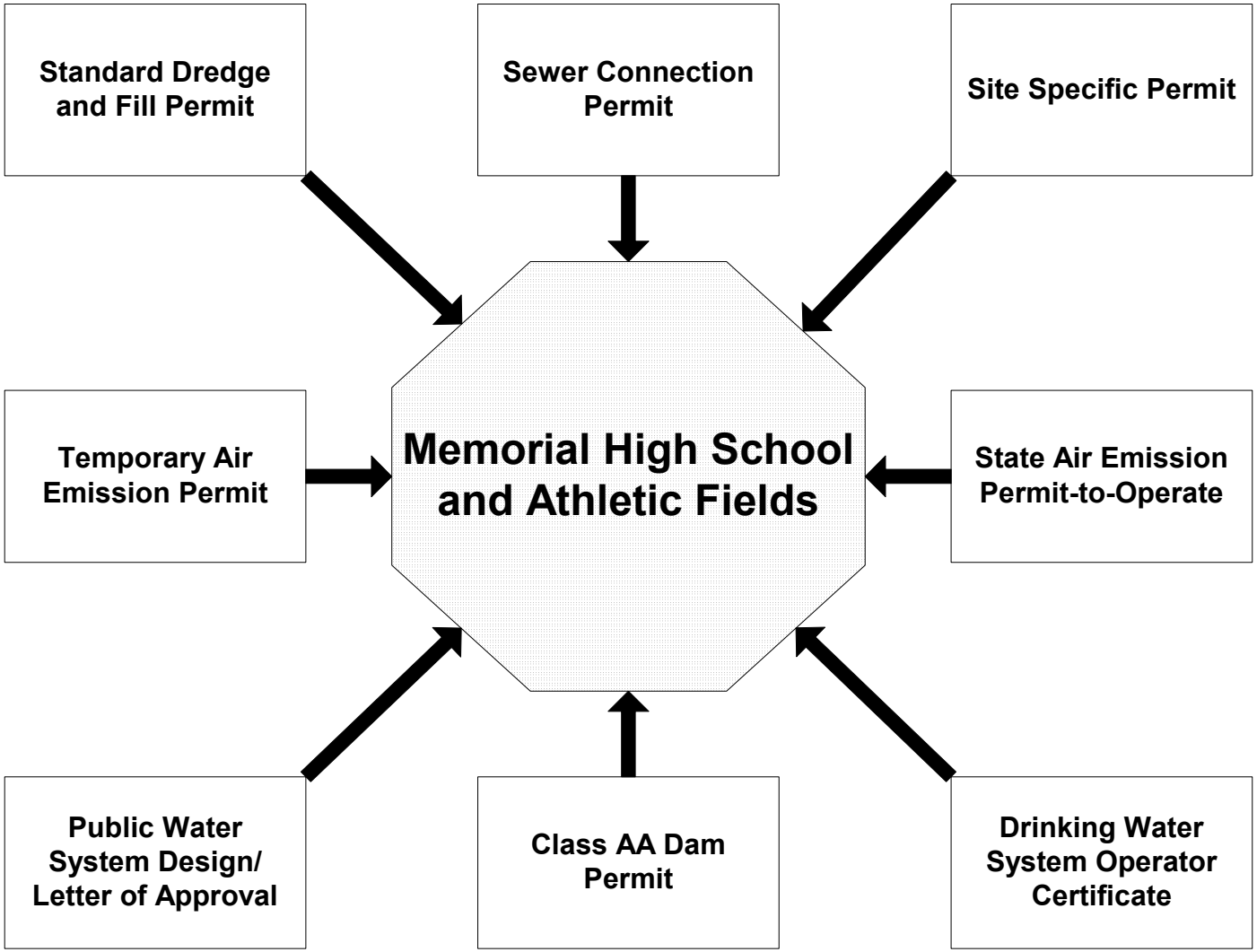
*__Note__: Since project parameters may vary, the specific permit types selected above may not apply to all similar projects.

Permit Selection Example #7: Closure of an old municipal landfill/opening of a new transfer station*



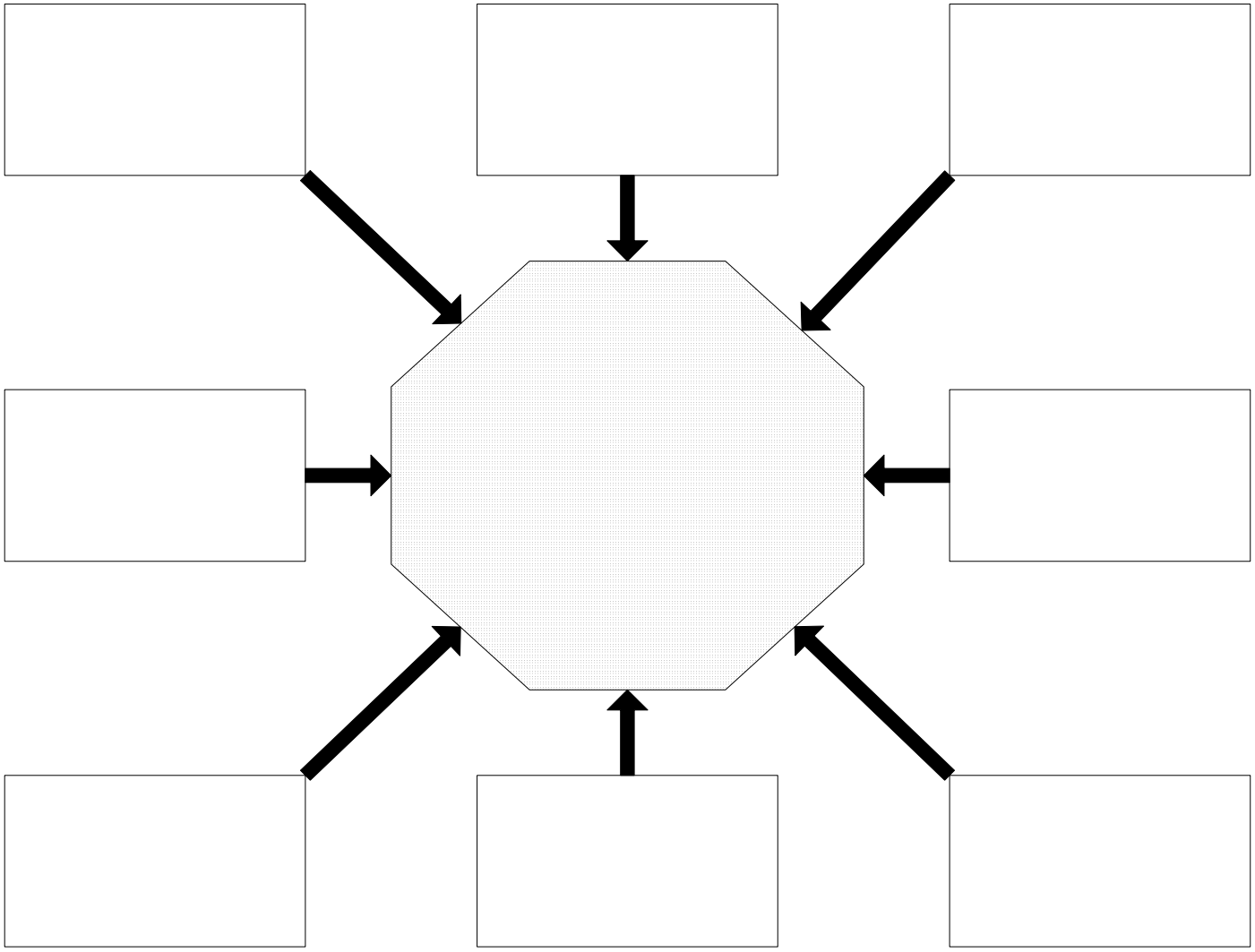
***Note**: Since project parameters may vary, the specific permit types selected above may not apply to all similar projects.

Permit Selection Example #8: Siting and construction of a new high school and athletic fields*



*__Note__: Since project parameters may vary, the specific permit types selected above may not apply to all similar projects.

Permit Selection Work Sheet: *



*__Note__: Since project parameters may vary, the specific permit types selected above may not apply to all similar projects.

Appendix F:

Summary of DES Authorizations 2002

2002 Edition

Summary of DES Authorizations
2002

Division	Group	Chapter	Page	Name
Air	Air Quality	1	13	Temporary Air Emission Permit
		1	19	State Air Emission Permit-to-Operate
		1	25	General State Air Permit for Emergency Generators (Internal Combustion Engines)
		1	29	New Source Review/Prevention of Significant Deterioration Permit
		1	37	Title V Operating Permit
		1	43	Stage I/II Gasoline Vapor Recovery Certificate
		1	47	Municipal Burn Authorization
Water	Drinking Water	2	59	Community Large Well Site Approval
		2	63	Community Small well Site Approval
		2	67	Public Water System Design/Letter of Approval
		2	71	Public Water System Permit-to-Operate
		2	75	Drinking Water System Operator Certificate
		2	79	Environmental Laboratory Accreditation
		2	83	Water Well Contractor License
		2	87	Pump Installer License
		2	91	Bottled Water Source Approval
		2	95	Youth Recreation Camp License
	Surface Water	3	107	Section 401 Water Quality Certificate
		3	111	Site Specific Permit
		3	115	Temporary Surface Water Discharge Permit
		3	119	Public Bathing Facility Construction Approval
	Wetlands	4	131	Standard Dredge and Fill – Major/Minor/Minimum Impact Projects
		4	139	Standard Dredge and Fill – Emergency Authorization
		4	143	Minimum Impact Expedited Permit
		4	147	Minimum Impact Agricultural Permit
		4	151	Recreational Mineral Dredge Permit
		4	155	Minimum Impact Forestry/Timber Harvesting Notification
		4	159	Seasonal Dock Notification for Lakes and Ponds
		4	163	Minimum Impact Trail Development Notification
	Groundwater	5	173	Large Groundwater Withdrawal (“Major”) Permit
		5	177	Large Groundwater Withdrawal (“Minor”) Permit
		5	181	Underground Injection Control Registration for Floor Drains

		5	185	Holding Tank Registration
		5	189	Groundwater Release Detection Permit
		5	193	Temporary Groundwater Discharge Permit
		5	197	Groundwater Discharge Permit
		5	201	Groundwater Management Permit
	Dam Safety	6	211	Class AA Dam Permit (Non-Hazard Potential)
		6	215	Class A Dam Permit (Low Hazard Potential)
		6	219	Class B Dam Permit (Significant Hazard Potential)
		6	223	Class C Dam Permit (High Hazard Potential)
		6	227	Hydropower Dam Permit (All Hazard Classifications)
	Septic Systems/Real Property Subdivision	7	237	Approval for Septic System Construction/Operation
		7	241	Approval for Real Property Subdivision
		7	245	Designer of Subsurface Disposal Systems License
		7	249	Installer of Subsurface Disposal Systems License
	Wastewater	8	263	Sewer Connection Permit
		8	267	Sewerage Design Review/Letter of Approval
		8	271	Industrial Wastewater Discharge Permit Request/Approval
		8	275	National Pollutant Discharge Elimination System/State Surface Water Discharge Permit
		8	281	Wastewater Treatment Facility Operator Certificate
		8	285	Pre-Qualification of Consulting Engineering Firms/Approval
		8	289	Sludge Quality Certification
		8	293	Sludge Hauler Permit
		8	297	Sludge Site Permit
		8	301	Sludge Facility Permit
		8	305	Septage Holding Tank Registration
		8	309	Septage Hauler Permit
		8	313	Septage Site Permit
		8	317	Septage Facility Permit
	Winnipesaukee River Basin Program	9	327	WRBP Connection Permit Request/Approval Permit
		9	331	WRBP Domestic Wastewater Discharge Permit Request/Approval
		9	335	WRBP Industrial Wastewater Discharge Permit Request/Approval
Waste	Petroleum Storage/Site Remediation	10	347	Aboveground Petroleum Storage Facility Registration
		10	351	Construction of a New or Substantially Modified Aboveground Petroleum Storage Tank Facility/Letter of Approval
		10	355	Underground Storage Tank Facility Registration
		10	359	Construction of a New or Substantially Modified Underground Storage Tank Facility/Letter of Approval
		10	365	Underground Storage Tank Facility Permit-to-Operate
		10	369	Underground Storage Tank Closure Notification
	Solid Waste	11	383	Solid Waste Standard Permit

		11	387	Solid Waste Emergency Permit
		11	391	Solid Waste Permit-by-Notification
		11	395	Solid Waste Research and Development Permit
		11	399	Waste-Derived Product Certification
		11	403	Solid Waste Facility Operator Certification
	Hazardous Waste	12	417	Hazardous Waste Activity Notification
		12	421	Hazardous Waste Standard Permit
		12	425	Hazardous Waste Emergency Permit
		12	429	Hazardous Waste Transfer Facility Permit
		12	433	Hazardous Waste Limited Permit
		12	437	Hazardous Waste Transporter Registration/Confirmation Letter

DES Application Fee Schedule
2002

Authorization Type	Fee
Air Quality	
Temporary Air Emission Permit	No fixed application fee. The emission-based fee is an annual fee that all permitted sources pay for each ton of pollutant emitted for each calendar year, up to 4,000 tons per pollutant. All permitted sources are subject to the emission-based fee. The applicability of the fee is not based on the type of permit, but whether the source is required to have a permit, and then the fee is based on actual emissions. This method provides an economic incentive for sources to reduce emissions, since the fee is assessed only for pollutants actually emitted. Testing and monitoring fees for this permit, for sources not subject to the Title V Operating Permit Program, are assessed based on expenses incurred in coordinating compliance testing, witnessing the actual test, and reviewing the final technical report submitted to DES. Testing/monitoring expenses include the DES engineer's salary/benefit costs for the time spent on a particular testing program, travel expenses, and lodging/meal costs (see NH CODE ADMIN. RULES Env-A 702, "Rules Governing the Control of Air Pollution/Permit Review Fees", http://www.des.state.nh.us/rules/env-a700.pdf. See also http://www.des.state.nh.us/ard/whatfees.htm).
State Air Emission Permit-to-Operate	No application fee. The emission-based fee is an annual fee that all permitted sources pay for each ton of pollutant emitted for each calendar year, up to 4,000 tons per pollutant. This method provides an economic incentive for sources to reduce emissions, since the fee is assessed only for pollutants actually emitted (see NH CODE ADMIN. RULE Env-A 702 ("Rules Governing the Control of Air Pollution/Permit Review Fees", http://www.des.state.nh.us/rules/env-a700.pdf). Also see "What Fees Are Required for an Air Permit" (http://www.des.state.nh.us/ard/whatfees.htm) and DES Fact Sheet #ARD-17 (http://www.des.state.nh.us/factsheets/ard/ard-17.htm) for more information about fees.

General State Air Permit for Emergency Generators (Internal Combustion Engines)	No application fee. The emission-based fee is an annual fee that all permitted sources pay for each ton of pollutant emitted for each calendar year, up to 4,000 tons per pollutant. This method provides an economic incentive for sources to reduce emissions, since the fee is assessed only for pollutants actually emitted (see NH CODE ADMIN. RULES Rule Env-A 702 ("Rules Governing the Control of Air Pollution/Permit Review Fees", http://www.des.state.nh.us/rules/env-a700.pdf). Also see "What Fees Are Required for an Air Permit" (http://www.des.state.nh.us/ard/whatfees.htm) and DES Fact Sheet #ARD-17 (http://www.des.state.nh.us/factsheets/ard/ard-17.htm) for more information about fees.
New Source Review/Prevention of Significant Deterioration Permit	Sources subject to either NSR or PSD permits are required to pay a permit review fee in accordance with Env-A 702 ("Rules Governing the Control of Air Pollution/Permit Review Fees", http://www.des.state.nh.us/rules/env-a700.pdf). The permit review fee is based on the actual time spent by DES staff in processing the permit application. Sources also pay an emission-based fee, which is an annual fee that all permitted sources pay for each ton of pollutant emitted during each calendar year, up to 4,000 tons per pollutant. This method provides an economic incentive for sources to reduce emissions, since the fee is assessed only for pollutants actually emitted. For more information on fees, see "What Fees Are Required for an Air Permit" (http://www.des.state.nh.us/ard/whatfees.htm) and DES Fact Sheet #ARD-17 (http://www.des.state.nh.us/factsheets/ard/ard-17.htm).
Title V Operating Permit	An annual emission-based fee which requires all permitted sources to pay for each ton of pollutant emitted for each calendar year, up to 4,000 tons per pollutant. For calendar year 2000 emissions, the emission-based fee is $57.65 per ton. This fee is re-established annually by the DES Air Resources Division (see http://www.des.state.nh.us/ard/whatfees.htm)
Stage I/II Gasoline Vapor Recovery Certificate	With each notification of construction, installation or significant modification, a non-refundable fee of $75 is required for Stage I, and a non-refundable fee of $200 is required for Stage II systems. The Stage I fee is waived for facilities which also are required to have Stage II. Upon completion of a significant modification to a Stage I or Stage II system, the facility owner must submit a new fee and, for Stage II systems, the facility must successfully complete a new vapor recovery test. A Stage II certification renewal fee of $200 is due within 90 days prior to the 3-year certificate expiration date, and the facility must successfully complete a new vapor recovery test (see NH CODE ADMIN. RULES Env-A 1205.09 and Env-A 1205.28, "Rules Governing the Control of Air Pollution/Volatile Organic Compounds (VOCs): Gasoline Dispensing Facilities and Cargo Trucks", http://www.des.state.nh.us/ard/enva1205.pdf).
Municipal Burn Authorization	None

Drinking Water	
Community Large Well Site Approval	None
Community Small Well Site Approval	None
Public Water System Design/Letter of Approval	A design review fee applies only to projects that create a new public water system or to projects for the conversion of a non-community system to a community system. Projects that expand or modify existing public water systems do not require a design review fee. The fee is $45 per residential unit or residential equivalent unit. A residential equivalent unit is equal to 300 gallons per day.
Public Water System Permit-to-Operate	Public water systems are defined in three categories, dependent upon the frequency with which the public uses them. All "community" and "non-transient/non-community" systems must obtain a Permit-to-Operate, but only privately-owned systems are required to pay a fee. "Community" Permit-to-Operate fee: $10/residential-equivalent unit, with a maximum fee of $300; "Non-transient/Non-community" Permit-to-Operate fee: $150/year; and "Transient/Non-community Permit-to-Operate fee: None.
Drinking Water System Operator Certificate	The fee for water treatment certifications, distribution certifications, or combined treatment/distribution (Grade 1A) certifications is $50 per certification. For a person who holds both a treatment and distribution certificate in Grades I - IV, the fee is $100. The fee to re-take the certification exam is $50.
Environmental Laboratory Accreditation	(1) A base fee of $100 plus the applicable amount(s) from (2) below must be submitted with the application. The fee is non-refundable. (2) The non-refundable fee paid must include the applicable amount(s) from the table below: Additional Charges to be Included with the Non-Refundable Fee:

Type of Accreditation Requested	Charge
Microbiology	$100
Limited inorganic chemistry (only)	$100
One or two metals (only)	$100
Microbiology and limited inorganic chemistry	$150
Microbiology and one or two metals	$150
Microbiology, limited inorganic chemistry, and one or two metals	$250
Metals and/or inorganic chemistry	$400
Organic chemistry	$400
Radiological chemistry	$250
Each performance-based method that must be evaluated	$175

	(3) In addition to the fee specified above, the laboratory must reimburse the State of New Hampshire for staff time and travel expenses of the on-site assessment. The exact amount will vary depending on the analyses for which accreditation is requested and the location of the laboratory.
Water Well Contractor License	$25 application fee for new license applicants; $10 examination fee for each license category; $225 annual fee for technical drilling contractors; and for contractors (other than technical drilling contractors), an annual fee based on the type of equipment used, as follows: **Well Type** / **Construction Equipment/Technique** / **Fee** Dug wells / Backhoe (or similar equipment) / $100 Point Wells / Jetting, Driving, or Auguring / $150 Washed Wells / Wash Well Machine / $150 Drilled Wells / Cable Tool Machine / $150 Drilled Wells / Rotary Drilling Machine / $225 Monitor Wells / Includes Multiple Technologies and/or Equipment / $225 For contractors who are licensed for more than one type of equipment, the fee charged is the highest applicable fee.
Pump Installer License	$25 application fee; $10 examination fee for either domestic or commercial license category; $100 annual license fee
Bottled Water Source Approval	None for DES/$125-$140 for DHHS Bottled Water License
Youth Recreation Camp License	$50 per camp per year
Surface Water	
Section 401 Water Quality Certificate	None
Site Specific Permit	$100 for up to 200,000 square feet of impact; an additional $100 for each additional 100,000 square feet, or portion thereof, of impact
Temporary Surface Water Discharge Permit	None
Public Bathing Facility Construction Approval	$100 per application
Wetlands	
Standard Dredge and Fill – Major/Minor/Minimum Impact Projects	$100 per boat slip requested plus $0.04 per square foot of impact requested (not necessarily granted), with a $50 minimum. Example #1) 7,000 sq. ft. of wetland impact: 7,000 x $0.04 = $280. Example #2) 6-foot by 30-foot permanent dock (2 slips): (180 sq. ft x $0.04) + $200 = $207.20. Example #3) 300 square feet of tidal marsh: 300 sq. ft. x $0.04 = $12, therefore fee = $50.

Standard Dredge and Fill – Emergency Authorization	Generally, no fee is collected at the time that an Emergency Authorization is issued. However, for those projects that require a follow-up application, fees are established by RSA 482-A:3, I ("Fill and Dredge in Wetlands/Excavating and Dredging Permit; Certain Exemptions", http://gencourt.state.nh.us/rsa/html/L/482-A/482-A-3.htm) at $0.04 per square foot of impact requested impact, with a minimum fee of $50.
Minimum Impact Expedited Permit	$50
Minimum Impact Agricultural Permit	$50
Recreational Mineral Dredge Permit	$25 for New Hampshire residents; $50 for non-residents
Minimum Impact Forestry/Timber Harvesting Notification	$25
Seasonal Dock Notification for Lakes and Ponds	None
Minimum Impact Trail Development Notification	$25
Groundwater	
Large Groundwater Withdrawal ("Major") Permit	None
Large Groundwater Withdrawal ("Minor") Permit	None
Underground Injection Control Registration for Floor Drains	None
Holding Tank Registration	None
Groundwater Release Detection Permit	$1,000 (The application fee is waived for state, county and municipal government.)
Temporary Groundwater Discharge Permit	None
Groundwater Discharge Permit	$1,000
Groundwater Management Permit	$1,000 (State and local government, including counties and other political subdivisions, are exempt from this fee.)
Dam Safety	
Class AA Dam Permit (Non-Hazard Potential)	$250 application fee. (Class AA dams are not subject to an annual dam registration fee to support the State Dam Inspection Program.) The DES Dam Bureau will assess all impacts of dam failure when assigning a hazard classification (see http://www.des.state.nh.us/factsheets/dam/db-15.htm). If the assessment confirms the Class AA designation, no further fees will be required.
Class A Dam Permit (Low Hazard Potential)	$250 application fee. Class A dams are subject to an annual dam registration fee of $100 to support the State Dam Inspection Program. The DES Dam Bureau will assess all impacts of dam failure when assigning a hazard classification (see http://www.des.state.nh.us/factsheets/dam/db-15.htm). Note: If the assessment confirms that the dam is a Class A structure, an additional payment of $250 will be required.
Class B Dam Permit (Significant Hazard Potential)	$250 application fee. Class B dams are subject to an annual dam registration fee of $300 to support the State Dam Inspection Program. The DES Dam

	Bureau will assess all impacts of dam failure when assigning a hazard classification (see http://www.des.state.nh.us/factsheets/dam/db-15.htm). Note: If the assessment confirms a Class B designation, an additional filing fee of $750 will be required.
Class C Dam Permit (High Hazard Potential)	$250 application fee. Class C dams are subject to an annual dam registration fee of $600 to support the State Dam Inspection Program. The DES Dam Bureau will assess all impacts of dam failure when assigning a hazard classification (see http://www.des.state.nh.us/factsheets/dam/db-15.htm). Note: If the assessment confirms a Class C designation, an additional filing fee of $1,000 will be required.
Hydropower Dam Permit (All Hazard Classifications)	$250 application fee, plus a fee corresponding to the assigned hazard classification. An additional $100 initial deposit must be submitted with the application to cover costs associated with a public hearing. Additional monies may be required depending on the final cost of the process. An annual dam registration fee, to support the State Dam Inspection Program, may be required depending upon the resulting hazard classification. The DES Dam Bureau will assess all impacts of dam failure when assigning hazard classifications (see http://www.des.state.nh.us/factsheets/dam/db-15.htm). Note: Depending on the classification of the structure, an additional filing fee may be necessary.
Septic System/Real Property Subdivision	
Approval for Septic System Construction/Operation	$90 per septic system submission
Approval for Real Property Subdivision	$80/lot or unit
Designer of Subsurface Disposal Systems License	$40 per exam; $40 per renewal
Installer of Subsurface Disposal Systems License	$40 per exam; $40 per renewal
Wastewater	
Sewer Connection Permit	$50 application fee. Fee payment is not required for connection requests by state agencies, county or municipal governments, sewer districts, or school districts.
Sewerage Design Review/Letter of Approval	Review fee is based on the project's estimated wastewater flow rate; currently assessed at $0.10 per gallon/day for average daily flows up to 10,000 gallons/day, with an additional $0.05 per gallon/day for any flow in excess thereof. State agencies, county or municipal governments, school districts or sewer districts are not required to pay the fee, but still must submit design plans for review (see http://www.des.state.nh.us/factsheets/wwt/web-4.htm).
Industrial Wastewater Discharge Permit Request/Approval	$1,000 when plans and specifications are submitted relative to the installation of a wastewater pretreatment facility; $50 when plans and specifications are not required
National Pollutant Discharge Elimination System/State Surface Water Discharge Permit	None

Wastewater Treatment Facility Operator Certificate	$30 per day for courses, $50 for the examination, and $50 for certificate renewal
Pre-Qualification of Consulting Engineering Firms/Approval	$200 initial application fee; $50 annual renewal fee
Sludge Quality Certification	$1,000 per application (In-state municipal wastewater treatment facilities are exempt from this fee.)
Sludge Hauler Permit	$100 per transport vehicle (Municipalities that transport their own sludge are exempt from this fee.)
Sludge Site Permit	$100 for sites with less than 5 acres, $150 for sites with 5-10 acres, and $300 for sites greater than 10 acres (All municipalities are exempt from these fees.)
Sludge Facility Permit	Sludge composting facilities require a $500 application fee, while all other types of sludge management facilities require a $1,000 fee. (All municipalities are exempt from these fees.) The fee differential was established to encourage the development of composting operations, where possible.
Septage Holding Tank Registration	None
Septage Hauler Permit	$100 for each vehicle tank, plus $5 for each new permit plate (All municipalities are exempt from these fees.)
Septage Site Permit	$100 for sites with less than 5 acres, $150 for those with 5-10 acres, and $300 for sites greater than 10 acres in size. (All municipalities are exempt from these fees.)
Septage Facility Permit	$1,000, unless applicant is exempt (All municipalities are exempt from these fees.)
Winnipesaukee River Basin Program	
WRBP Connection Permit Request/Approval Permit	$150 (excluding municipal fees) Municipalities, counties, state agencies, and school districts are exempt from this fee.
WRBP Domestic Wastewater Discharge Permit Request/Approval	To the DES Wastewater Engineering Bureau: $30 for each 300 gallons/day ("gpd") of flow for the first 10,000 gpd of total flow, plus $15 for each additional 300 gpd. A fee of $200 per plan sheet is required for the review of pump stations, force mains, interceptors, and wastewater treatment facilities, which are submitted independently of a collection system. To the WRBP: $50 for application review. (Municipalities, counties, state agencies, and school districts are exempt from these fees.)
WRBP Industrial Wastewater Discharge Permit Request/Approval	$1,000, when plans and specifications are submitted to the DES Industrial Pretreatment Supervisor with the WRBP Industrial Wastewater Discharge Permit Request for the construction or installation of a pretreatment facility, or $50, when plans and specifications are not required. A separate fee of $50 must be submitted to the WRBP for each request. There is an annual renewal fee of $1,000 per permit.
Petroleum Storage/Site Remediation	

Aboveground Petroleum Storage Facility Registration	None
Construction of a New or Substantially Modified Aboveground Petroleum Storage Tank Facility/Letter of Approval	None
Underground Storage Tank Facility Registration	None
Construction of a New or Substantially Modified Underground Storage Tank Facility/Letter of Approval	$100 for any person submitting plans and specifications for a new facility, except state and local governments and other political subdivisions. The fee is used to help cover the costs of reviewing plans and specifications and conducting inspections during installation. The fee is deposited with the State Treasurer as unrestricted revenues (see RSA 146-C:7, I-a, "Underground Storage Facilities/New Facilities", http://gencourt.state.nh.us/rsa/html/X/146-C/146-C-7.htm and http://www.des.state.nh.us/factsheets/oil/oil-3.htm).
Underground Storage Tank Facility Permit-to-Operate	$350 for each regulated, non-residential UST facility for the five-year permit prior to issuance of a DES Permit-to-Operate. Facilities owned by state and local governments, including counties and school districts, are not required to pay the permit fee but are required to apply for the Permit-to-Operate every five years (see http://www.des.state.nh.us/factsheets/oil/oil-3.htm).
Underground Storage Tank Closure Notification	None
Solid Waste	
Solid Waste Standard Permit	Sliding scale for facility function, size, and life expectancy, ranging from $2,000 to $35,000 per facility
Solid Waste Emergency Permit	None
Solid Waste Permit-by-Notification	None
Solid Waste Research and Development Permit	Sliding scale, starting at $1,000
Waste-Derived Product Certification	None
Solid Waste Facility Operator Certification	$50 per year
Hazardous Waste	
Hazardous Waste Activity Notification	There is no fee to obtain an identification number; however a fee is charged based on the amount of hazardous waste shipped in each quarter. Thirty days after the conclusion of each quarter, DES will mail to each generator a report that summarizes the hazardous waste shipments and quarterly fee payment due (if applicable) (see http://www.des.state.nh.us/rims/quarterly_report.pdf). Those who manifested less than 660 pounds of waste are not assessed a fee. A minimum fee of $50 is applied to all generators who manifested between 660 - 1,666 pounds, and those that manifested greater than 1,666 pounds are assessed a fee at the rate of $0.03 per pound (see http://www.des.state.nh.us/rims/hwcf.htm and http://www.des.state.nh.us/rims/calculator.htm). Quarterly fees are not assessed for those wastes destined for recycling, the sludges generated at

	publicly-owned wastewater treatment works within New Hampshire, the bottom and fly ash from municipal waste incinerators, lead-contaminated soil from shooting ranges (see http://www.des.state.nh.us/factsheets/hw/hw-19.htm), or household hazardous wastes collected at household hazardous waste collection events (see http://www.des.state.nh.us/hhw/).
Hazardous Waste Standard Permit	Initial fee varies from $1,500 to $5,000, depending upon the type of facility permit. Additional charges may be incurred for DES review, evaluation, and processing time. Permit renewal or modification fees vary from $750 to $2,500.
Hazardous Waste Emergency Permit	None
Hazardous Waste Transfer Facility Permit	$3,000, plus an additional $1,250 to process a re-submittal, if the initial application is deemed "incomplete". The permit renewal or modification fee is $2,000.
Hazardous Waste Limited Permit	The initial fee is $500. The permit renewal or modification fee is $250.
Hazardous Waste Transporter Registration/Confirmation Letter	None

DES Application Processing Time
2002

Authorization Type	Processing Time*
Air Quality	
Temporary Air Emission Permit	30-60 days for most sources
State Air Emission Permit-to-Operate	30-60 days
General State Air Permit for Emergency Generators (Internal Combustion Engines)	15 days
New Source Review/Prevention of Significant Deterioration Permit	Up to one year
Title V Operating Permit	1-5 years for the initial issuance of Title V Operating Permits, and 18 months for all new Title V sources thereafter
Stage I/II Gasoline Vapor Recovery Certificate	60 days, following a successful stage II vapor recovery test
Municipal Burn Authorization	2-4 weeks
Drinking Water	
Community Large Well Site Approval	Up to 60 days
Community Small Well Site Approval	Up to 30 days
Public Water System Design/Letter of Approval	4 weeks
Public Water System Permit-to-Operate	2-3 weeks
Drinking Water System Operator Certificate	6 weeks
Environmental Laboratory Accreditation	If an in-state laboratory requests accreditation, the process takes from three to nine months, depending on the preparedness of the laboratory. When an out-of-state laboratory requests NH ELAP to be the primary accrediting authority, it will be put on a waiting list until staff is available to conduct the on-site assessment (possibly as long as several years to complete). If the laboratory has applied for secondary accreditation, the process will take from two to three weeks to complete.
Water Well Contractor License	Examinations are administered quarterly. Applications must be received at least ten days prior to the examination date for the applicant to sit for that

	examination. Processing is completed approximately four weeks after the exam.
Pump Installer License	Examinations are administered quarterly. Applications must be received at least ten days prior to the examination date. Processing is completed approximately four weeks after the exam.
Bottled Water Source Approval	Up to 60 days
Youth Recreation Camp License	30 days
Surface Water	
Section 401 Water Quality Certificate	1-6 months, if FERC is not involved; 6-12 months when FERC has licensing jurisdiction
Site Specific Permit	4-6 weeks
Temporary Surface Water Discharge Permit	7-10 days
Public Bathing Facility Construction Approval	30 days
Wetlands	
Standard Dredge and Fill – Major/Minor/Minimum Impact Projects	Minimum and minor impact projects typically take 60 to 90 days to process, once all necessary information has been received. Six months or more may be required for major impact projects being reviewed during the busy season (March through the first snow), or if there is considerable public opposition or if the application is unusually complex.
Standard Dredge and Fill – Emergency Authorization	Immediately following the initial contact with the DES Wetlands Bureau Administrator, a completed *Emergency Authorization Verification* form will be prepared and usually sent by facsimile to the applicant. This authorization allows for emergency work to be completed without further review.
Minimum Impact Expedited Permit	30 days
Minimum Impact Agricultural Permit	30 days
Recreational Mineral Dredge Permit	2-3 weeks
Minimum Impact Forestry/Timber Harvesting Notification	7 work days
Seasonal Dock Notification for Lakes and Ponds	Immediately, upon mailing, work may begin
Minimum Impact Trail Development Notification	Immediate, based upon receipt of all required information and forms
Groundwater	
Large Groundwater Withdrawal (“Major”) Permit	Preliminary Application - 60 days; Final Report - 45 days
Large Groundwater Withdrawal (“Minor”) Permit	Preliminary Application - 60 days; Final Report - 45 days
Underground Injection Control Registration for Floor Drains	2 weeks
Holding Tank Registration	2 weeks
Groundwater Release Detection Permit	90 days
Temporary Groundwater Discharge Permit	15 days

Groundwater Discharge Permit	Up to 2 months
Groundwater Management Permit	90 days
Dam Safety	
Class AA Dam Permit (Non-Hazard Potential)	2-3 weeks
Class A Dam Permit (Low Hazard Potential)	4-5 weeks
Class B Dam Permit (Significant Hazard Potential)	6-8 weeks
Class C Dam Permit (High Hazard Potential)	10-12 weeks
Hydropower Dam Permit (All Hazard Classifications)	6-12 months for DES Dam Permit, and up to three years for a new FERC license
Septic System/Real Property Subdivision	
Approval for Septic System Construction/Operation	15 work days
Approval for Real Property Subdivision	30 calendar days
Designer of Subsurface Disposal Systems License	5 days
Installer of Subsurface Disposal Systems License	5 days
Wastewater	
Sewer Connection Permit	1-3 weeks
Sewerage Design Review/Letter of Approval	Average 2-4 weeks (Longer for large and/or more complex sewerage projects.)
Industrial Wastewater Discharge Permit Request/Approval	2-4 weeks
National Pollutant Discharge Elimination System/State Surface Water Discharge Permit	12-18 months for individual permits; 2 months for general permits; less than one month for storm water or construction dewatering general permits
Wastewater Treatment Facility Operator Certificate	1-2 months, depending upon grade level of the exam
Pre-Qualification of Consulting Engineering Firms/Approval	20-30 days
Sludge Quality Certification	2-4 weeks
Sludge Hauler Permit	1 week
Sludge Site Permit	2-3 months
Sludge Facility Permit	3-4 months
Septage Holding Tank Registration	1-2 weeks
Septage Hauler Permit	1 week
Septage Site Permit	3-4 months
Septage Facility Permit	3-4 months
Winnipesaukee River Basin Program	
WRBP Connection Permit Request/Approval Permit	1-2 weeks (Lead time to obtain a permit from the N. H. Department of Transportation's Bureau of Rails & Transit can be as long as 6-9 months.)

WRBP Domestic Wastewater Discharge Permit Request/Approval	2-4 weeks (allow 3-6 weeks for larger than normal or more complex projects)
WRBP Industrial Wastewater Discharge Permit Request/Approval	2-4 weeks
Petroleum Storage/Site Remediation	
Aboveground Petroleum Storage Facility Registration	30 days
Construction of a New or Substantially Modified Aboveground Petroleum Storage Tank Facility/Letter of Approval	45 days
Underground Storage Tank Facility Registration	1-2 days
Construction of a New or Substantially Modified Underground Storage Tank Facility/Letter of Approval	30 days
Underground Storage Tank Facility Permit-to-Operate	30 days
Underground Storage Tank Closure Notification	One day
Solid Waste	
Solid Waste Standard Permit	Review time typically extends for 120 days. However, actual elapsed time is highly dependent upon facility complexity and application quality.
Solid Waste Emergency Permit	This permit is issued orally by the Director of the DES Waste Management Division once it has been determined that a true emergency exists; written permit is issued within ten working days.
Solid Waste Permit-by-Notification	30 days
Solid Waste Research and Development Permit	Review time is generally 120 days. However, actual elapsed time is highly dependent on facility complexity and application quality.
Waste-Derived Product Certification	120 days
Solid Waste Facility Operator Certification	6-8 weeks
Hazardous Waste	
Hazardous Waste Activity Notification	Immediate
Hazardous Waste Standard Permit	1-2 years, depending upon the scope and complexity of the application and the length of time needed by the Hazardous Waste Facility Siting Board and the Municipal Hazardous Waste Facility Review Committee to reach a final decision.
Hazardous Waste Emergency Permit	Immediate (if oral), followed within five days by a written Emergency Permit. DES treats such requests as the highest priority and expedites its response to site officials.
Hazardous Waste Transfer Facility Permit	12-18 months
Hazardous Waste Limited Permit	30-60 days
Hazardous Waste Transporter Registration/Confirmation Letter	Approximately 3-4 weeks

***Note**: These processing times represent best estimates or statutory limits for the time it takes to complete the review of an application and formulate a decision; and are further based on extensive experience with these types of application processes. They also assume that the application was administratively "complete" when submitted to DES and that all necessary forms, plans, maps, charts, reports, fees, *etc*. had been included with the initial submittal. These processing times are provided as an index to enable the *Guidebook* user to prepare a reasonable schedule and timeline for his or her specific project, practice, or event.

Appendix G:

DES Directory of Program and Services 2002

2002 Edition

N.H. DEPARTMENT OF ENVIRONMENTAL SERVICES

DIRECTORY TO PROGRAMS & SERVICES 2002

EMERGENCY NUMBERS

Dam failure emergencies:

8 am - 4 pm, Mon. - Fri. **271-3406**

Dam emergencies, evenings and weekends:

N.H. State Police Emergency # **1-800-852-3411**

Hazardous materials/waste spills:

8 am - 4 pm, Mon. - Fri. **271-3899**

Hazardous materials emergencies, evenings and weekends:

N.H. State Police Hazardous Materials # **1-800-346-4009**

Petroleum spills:

8 am - 4 pm, Mon. - Fri. **271-3644**

Petroleum spill emergencies, evenings and weekends:

N.H. State Police Hazardous Materials # **1-800-346-4009**

TOLL-FREE NUMBERS

Air Resources information	1-800-498-6868
Ozone hotline	1-800-935-SMOG
Pollution Prevention Program	1-800-273-9469
Small Business Technical Assistance Program	1-800-837-0656
Used oil disposal	1-888-TAKEOIL

TELEPHONE NUMBERS FOR PROGRAM AREAS

COMMISSIONER'S OFFICE **271-3503**

FAX (603) 271-2867

George Dana Bisbee, Acting Commissioner

Administrative Services	271-3503
Enforcement	271-3503
Geology	271-6482
Human Resources	271-3441
Information Resources Management	271-3503
Laboratory	271-3445/3446
	FAX (603) 271-2997
Planning	271-3503
Public Information & Permitting	271-2975
	FAX (603) 271-8013

AIR RESOURCES **271-1370**

Director FAX (603) 271-1381

Air Resources Council 271-1386
Emissions Trading Program 271-6794
Public Education & Outreach 271-6284
Regional/National Issues 271-6800

Air Toxics 271-1987
Air Quality Planning 271-6284
Engineering/Permitting; Title V 271-6793
Engineering/Permitting; State 271-6791
FAX (603) 271-7053
Enforcement 271-0882
Small Business Technical Assistance 271-1379
Technical Services 271-1382

WASTE MANAGEMENT 271-2900
Philip J. O'Brien, Ph.D., Director FAX (603) 271-2456

Hazardous Waste Compliance 271-2942
Hazardous Waste Reporting Section 271-2921
Hazardous Waste Spill Response 271-3899
Hazardous & Solid Waste Technical Assistance 271-1749
Household Hazardous Waste 271-2047
Petroleum Spills Response 271-3644
Petroleum Storage Tanks 271-3644
Pollution Prevention ..... (800) 273-9469
Planning & Community Assistance 271-1749
Recycling 271-3712
Site Remediation 271-3644
FAX (603) 271-2181
Solid Waste 271-2925
Solid Waste Permitting/Enforcement 271-2935

Waste Management District Offices:
Grantham Office 863-1125
Pease Office 433-6370

WATER 271-3503
Harry T. Stewart, P.E., Director FAX (603) 271-2982

Dam Bureau 271-3406
FAX (603) 271-7894
Land Resources Management Programs 271-2951
Shoreland Protection Section 271-7109
Subsurface Systems Bureau 271-3501
FAX (603) 271-6683
Subsurface Systems District Offices:
Concord 271-2182
Gilford 524-7730
Gorham 466-5379
Grantham 863-3266

Keene 271-2913
Milford 673-0405
Portsmouth 431-8141
Salem 893-3637
Water Quality Engineering Section 271-2973
Regional Office: Portsmouth 433-5981
Water Supply Engineering Bureau 271-2513
Wetlands Bureau 271-2147
FAX (603) 271-6588
Wetlands Regional Office: Portsmouth 433-6183
Wastewater Engineering Bureau 271-3908
FAX (603) 271-4128
Franklin Training Center 934-6463
Watershed Management Bureau 271-2457
Winnipesaukee River Basin Bureau
Franklin Wastewater Treatment Facility 934-2809
FAX (603) 934-4831
Laconia Wastewater Treatment Facility 528-6746

TELEPHONE NUMBERS BY SUBJECT

A

Abandoned storage sites/tanks (Hazardous Waste)	271-3644
Aboveground storage tanks	271-3577/6058
Acid deposition	271-1383
Acid rain; water quality (Watershed Mgt.)	271-2963/2964
Acid rain; air quality (Air Resources)	271-6284
Agricultural discharges (Surface Water Quality)	271-2457
Air emissions (Air Resources)	271-1370
Air, indoors	271-4664
Air monitoring network (Air Resources)	271-7502
Air pollution control permitting (Air Resources)	271-6791
Air quality data (Air Resources)	271-1384
Air toxics program (Air Resources)	271-6865
Algae in small ponds (Watershed Mgt.)	271-2964/2248
Alternative fuel vehicles	271-6749
Antifreeze; disposal; commercial	271-2942
Antifreeze; disposal; household	271-2047
Appeals	271-6072
Aquatic plants/weeds (Watershed Mgt.)	271-2248
Aquifers (Groundwater)	271-3644
Asbestos contaminated property remediation	271-1168
Asbestos demolition/removal & fees (Air Resources)	271-1373
Asbestos disposal	271-2925
Asbestos testing (Lab)	271-3446
Ash, incinerator (Waste)	271-2907
Automotive/body shops wastes (Waste)	271-2942
Automotive oil wastes (Do-It-Yourselfers) (Waste)	271-6424/5328

B

Barrels/drums, abandoned (Hazardous Waste)	271-3899
Batteries, disposal (Waste Mgt.)	271-2942

Biomonitoring (Watershed Mgt.)	271-2963
Biosolids/Septage/Sludge	271-3571/2492
Boil orders (Water Supply Engineer.)	271-2854
Bottled Water	271-3303
Boilers (Air Resources)	271-6791
Brick/concrete disposal	271-2935
“Brownfields” (Hazardous Waste)	271-6422
Building construction permit information (PIP)	271-3306
Burial of solid waste (Waste Mgt.)	271-2925
Burn authorizations/permits (PIP/Air Resources)	271-0537

C

Campgrounds (not youth camps)	271-3304/2904
Camps; youth (Water Supply Engineer.)	271-2542
CERCLA hazardous waste sites (SUPERFUND)	271-2908
Certification; solid waste facility operators	271-2928
Certification; wastewater operators	271-2586
CFCs; licensing/certification (Air Resources)	271-1121
CFC disposal (Hazardous Waste)	271-2942
Chemical content (Hazardous Waste)	271-2942
Chemical storage areas (Hazardous Waste)	271-2942
Chemical storage tanks (U.S. EPA)	(617) 565-3420
also (NH Dept. of Safety)	271-3349
Coal combustion (Air Resources)	271-6791
Combined sewers overflows	271-2458
Complaints; illegal “dumping” (Solid or Hazardous Waste)	271-3899
Complaints; air pollution (Air Resources)	271-0907
Comprehensive Shoreland Rules/Act	271-6876/7109
Contaminated rags (Hazardous Waste)	271-2942
Contaminated soil; oil, hazardous waste, gasoline	271-2942
Creosote disposal (Hazardous Waste)	271-2942
Culverts; permits (Wetlands)	271-2147
Current land use board (NH Dept. of Revenue)	271-2687

D

Dam safety and permits (Dam)	271-3406
Demolition debris; permitted/unpermitted	271-2925/3899
Discharge to rivers/streams	271-3307
Discharge permits; wastewater	271-2052
Discharge permits; air (Air Resources)	271-6791
Dock permits (Wetlands)	271-2147
Drawdowns, lake (Dam Bureau)	271-3406/1968/1962
Dredge & fill permits (Wetlands)	271-2147
Drinking water tests; homeowners & public supplies (Lab)	271-3445
Drinking water source protection	271-1168
Drinking water systems/facilities (Water Supply Engin.)	271-2513
Dumps (Solid Waste)	271-2925
Dust (Air Resources)	271-0907

E

Education, public outreach, general	271-2975
Electronic wastes	271-2942
Emergency response; dam failure	
8 am - 4 pm, Mon-Fri	271-3406
All other times: N.H. State Police	1-800-852-3411

Emergency response; hazardous materials/waste spills	
8 am - 4 pm, Mon-Fri	271-3899
All other times: N.H. State Police	1-800-346-4009
Emergency response; petroleum spills	
8 am - 4 pm, Mon-Fri	271-3644
All other times: N.H. State Police	1-800-346-4009
Emergency permits; solid waste	271-2925
Emissions inventory/fees (Air Resources)	271-6283
Emissions, modeling, permitting (Air Resources)	271-1377
Emissions, modeling, photochemical (Air Resources)	271-1102
Emissions reduction credits trading	271-6794
Emissions, stack testing (Air Resources)	271-6546
Employment opportunities at DES	271-1496
Enforcement; air	271-0882
EPA ID numbers for generators	271-2921/5186
Erosion control	271-2973/2303

F

File reviews (Air Resources)	271-1370
File reviews (Site Remediation)	271-2919
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Fill permits for wetlands (Wetlands)	271-2147
Financial assurance (Solid Waste)	271-2925
Fire extinguisher disposal (Waste Mgt.)	271-2942
Fire training burns (Air Resources)	271-1379
Floor drains	271-2858
Fluorescent lamp disposal (Waste Mgt.)	271-2942/2956
Freon; licensing/certification (Air Resources)	271-1121
Freon disposal (Waste Mgt.)	271-2942
Fuel oil storage/spills (Waste Mgt.)	271-3644
Fumes (Air Resources)	271-1370

G

Garage/auto body shop wastes (Waste Mgt.)	271-2942
Garbage disposal (Solid Waste)	271-2925
Gasoline/oil spills (Waste Mgt.)	271-3644
Geographic Information Systems (GIS)	271-3909
Geologic maps for purchase (PIP)	271-2975
Geologist, State	271-6482
Global climate change/warming (Air Resources)	271-6796
Gold mining dredging	271-2974
Grants; landfills	271-2925
Grants; household hazardous waste	271-2047
Grants; wastewater	271-2977
Grants; drinking water systems	271-2948
Grants; drinking water source protection	271-7017
Grants; nonpoint source pollution	271-2457
Grants; used oil collection centers	1-888-TAKEOIL
Gravel/sand pits	271-2973/2303
Gray water (Subsurface)	271-3501
Great ponds	271-2968
Greenhouse gases/global climate change	271-5552
Groundwater contamination	271-3644
Groundwater discharge permits	271-2858
Groundwater maps	271-1975
Groundwater protection	271-1168

Groundwater testing 271-6542
Gulf of Maine Council 271-8866

H

Halon disposal (Hazardous Waste) 271-2942
Hazardous waste analysis; list of labs 271-2942
Hazardous waste cleanup fund 271-1749
Hazardous waste complaints 271-3899
Hazardous waste compliance 271-2942
Hazardous waste generators 271-2942
Hazardous waste permits 271-2937
Hazardous waste reduction 271-6460
Hazardous waste regulations/rules; questions 271-2942
Hazardous waste site list 271-2919
Hazardous waste spills & emergency response 271-3899
Hazardous waste state site cleanup program 271-2800
Hazardous waste training 271-2942
Hazardous waste transportation 271-3899
Health risks of hazardous materials (Public Health) 271-4664
Household hazardous waste (Solid Waste) 271-2047
Human resources 271-1496

I

Illegal discharge to streams 271-3307
Illegal dumping (Solid & Hazardous Waste) 271-3899
Incinerator emissions (Air Resources) 271-6283
Incinerators; solid waste permit information 271-2935
Incinerators; air permit information 271-6791
Industrial pretreatment 271-2052
Infectious waste disposal (Waste Mgt.) 271-2925
Injection wells (Water Supply Engineer.) 271-2513
Inside air (Health Risk Assessment) 271-4664
Inspection checklist request; hazardous waste generators 271-2942

J, K, L

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Laboratory certification program 271-2991
Laboratories, list of; hazardous waste analysis 271-2942
Lake assessment program 271-2963
Lake level information 271-3406
Lake water quality 271-2963
Lakes; permits for dredge, fill, docks (Wetlands) 271-2147
Landfill information (Solid Waste) 271-2925
Landfills; list of (Solid Waste) 271-2925
Land management 271-3406
Leachate (Solid Waste) 271-2925
Leachfields (Subsurface) 271-3501
Lead paint disposal 271-2942
Lead paint removal/abatement (Public Health) 271-4507
Legislation; DES-related; general questions 271-2975
Limnology/lakes (Watershed Mgt.) 271-2963
Loans; low-interest for landfills 271-3448
Loans; low-interest for wastewater treatment 271-3448
Low emitting vehicles, “LEVs” 271-6390

M

Manifests for hazardous wastes	271-2921/2901
Manufacturing facilities; hazardous wastes	271-2942
Media inquiries	271-3710
Medical waste disposal	271-5890
Mercury waste disposal	271-2942
Mercury emissions (Air Resources)	271-6865
Mercury in fish (Watershed Mgt.)	271-3357
Mercury spills	271-3899
Milfoil; Eurasian (Watershed Mgt.)	271-2963
Mining, gold	271-2147
Mobile sources (Air Resources)	271-6390
Modeling; permitting (Air Resources)	271-1377
Modeling; photochemical (Air Resources)	271-1102
Mold in homes (Health Risk Assessment)	271-4664
Monitoring wells (Waste Mgt.)	271-3644
Motor oil tax (Waste Mgt.)	271-8873/3645
Motor vehicle emissions (Air Resources)	271-6390
Mussels	430-7900

N

NPDES (Nat'l Pollutant Discharge Elimination Permits)	271-2458
Nonattainment areas (Air Resources)	271-1370
Nonpoint source pollution issues/concerns	271-2457
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O

Oceans; Coastal Zoning (NH Office of State Planning)	271-2155
Oil discharge/disposal cleanup fund (Waste Mgt.)	271-3644
Oil spills (Waste Mgt.)	271-3644
One stop reporting program	271-2961
Open burning	271-0537
Ozone, ground-level; "smog" (Air Resources)	271-1102
Ozone hotline, daily levels, summer	1-800-935-SMOG
Ozone; stratospheric	271-1121

P

Paint waste (Waste Mgt.)	271-2047
Particulate matter (Air Resources)	271-1370
PCB; airborne (Air Resources)	271-1121
PCB-contaminated used oil (Hazardous Waste)	271-2942
Perc tests (Subsurface)	271-3501
Permit information & assistance (PIP)	271-3306
Permit program; air; general	271-6791
Permit program; Title V (Air Resources)	271-6793
Permit program; air; state	271-6798
Permit program; solid waste management	271-2925
Permits (see specific categories)	
Personnel (Human Resources)	271-1496
Pesticides; disposal (Hazardous Waste)	271-2942
Pesticides; health risks (DHHS Public Health)	271-4664
Petroleum spills response	271-3644
Petroleum storage tanks	271-3644
Photoprocessing wastes (Waste Mgt.)	271-2942

Pollution prevention, general information	271-6460
Pollution prevention program (Waste Mgt.)	271-6460
	1-800-273-9469
Pool regulations/inspections (Watershed Mgt.)	271-7108
Propane Tanks (Fire Standards & Training)	271-2661
Propane Tanks; Recycling & Disposal	271-3712
Pressure treated lumber (Hazardous Waste)	271-2942
Prequalification of engineers (Wastewater Eng.)	271-2001
Printed circuit boards (Waste Mgt.)	271-2942
Project WET (aquatic education)	271-4071
Public bathing beach inspections (Watershed Mgt.)	271-3414
Public information, general	271-2975
Public outreach, Air Resources	271-6284
Public water supply	271-2513/3139
Publications of DES (PIP)	271-2975

Q, R

Quarterly reports (Waste Mgt.)	271-2921/2901
Radon; in drinking water (Water Supply Eng.)	271-2952
Radon; in air (DHHS Public Health)	271-4674
RCRA Subtitle C (Waste Mgt.)	271-2942
RCRA Subtitle D (Waste Mgt.)	271-2925
Recycling facilities; permitted/unpermitted	271-2925/3899
Recycling; consumer information (Waste Mgt.)	271-3712
Recycling hazardous waste	271-2942
Recycling markets	271-3712
Recycling solid waste	271-3712
Recycling used oil	271-2942
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Refrigerant disposal (Air Resources)	271-1121
Regional haze/visibility	271-1102
Regional/national air quality issues (Air Resources)	271-6800
Reporters/media inquiries (PIP)	271-3710
River classification (Rivers Program)	271-8865
River-front building regulations (Rivers Program)	271-8865
River nominations (Rivers Program)	271-8865
Rivers & streams testing (Watershed Mgt.)	271-2471
Rulemaking, Air Resources	271-0882
Rules, Administrative (for purchase) (PIP)	271-2975

S

Salt in sheds	271-3398
Sand & gravel pits (Water Quality Engineering)	271-2973/2303
SARA Title III	271-2231
Scrap metal management permits for appliances	271-2925
Scrap metal recycling (Solid Waste)	271-3712
Septage hauler permits	271-2492
Septage & sludge disposal/haulers	271-2492
Septic systems (Subsurface)	271-3501
Septic tank trucks	271-2492
Sewage treatment	271-2980
Shellfish Program	430-7900
Shoreland protection/development/setbacks	271-7109/6876
SIS unit	271-3899

Site Assessment; waterfront properties	271-3501/2922
Site remediation/cleanup	271-3644
Site specific permits	271-2973/2303
Sludge/biosolid issues	271-2818
Small business ombudsman	271-1379
Small business technical assistance	271-1379
	1-800-837-0656
Smoke/smokestacks (Air Resources)	271-1370
Soils testing	271-3304
Solid waste complaints & inspections	271-3899
Solid waste compliance	271-2925
Solid waste facility permitting	271-2925
Solid waste landfill list	271-1749
Solid waste management plan	271-6847
Solid waste operator training & certification	271-2928
Solid waste source reduction	271-3712
Solid waste tipping fees	271-6847
Special investigation section	271-3899
Special permits; hazardous waste	271-2937
Stack testing/continuous emissions monitoring	271-6546
Stage I/Stage II vapor recovery (Air Resources)	271-6546
State Implementation Plan (SIP) submittals (Air Resources)	271-0882
State Revolving Fund (SRF); drinking water	271-2513
State Revolving Fund (SRF); landfills	271-3448
State Revolving Fund (SRF); wastewater treatment	271-3448
Statutes, copies of (PIP)	271-2975
Storm drains	271-1494/2985
Stormwater regulations/permits—federal	271-2984
Stormwater regulations/permits—state	271-2973/2303
Strategic planning	271-8989
Stump dumps; on-site disposal only	271-2925
Subdivisions (Subsurface)	271-3501
Superfund program (Waste Mgt.)	271-2908
Surface water protection	271-2457

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Technical assistance; waste	271-1749
Temporary air permits (Air Resources)	271-6791
Testing requirements; air (Air Resources)	271-6546
Testing requirements; surface waters (Watershed Mgt.)	271-2457
Testing requirements; drinking water (Water Supply Eng.)	271-2513
Testing requirements; soils; for septic installers/designers	271-3304
Tipping fee (Solid Waste)	271-6847
Tire disposal (Solid Waste)	271-2925
Title V permit system (Air Resources)	271-6793
Toxics; air (Air Resources)	271-1987
TCLP (toxic characteristic leaching procedure) (Waste Mgt.)	271-2942
Toxics; complaints/dumping (Hazardous Waste)	271-3899
Toxics; health effects/risks (Public Health)	271-4664
Toxics disposal (Hazardous Waste)	271-2942
Toxics in packaging	271-2918
Transfer stations; solid waste	271-2925
Transportation/air quality planning	271-6284
Transporters, hazardous waste	271-3899

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Underground storage tanks (Hazardous Wastes)	271-3644
Universal waste	271-2942
Used waste oil; commercial/municipal	271-2942
Used waste oil; “do-it-yourselfers”	271-6424
Used waste oil disposal	1-888-TAKEOIL

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Waste, hazardous, quarterly generator fees	271-3203
Waste management (main line)	271-2900
Waste oil	271-6424
Wastewater engineering	271-3908
Wastewater operator certification/training	271-2586/3325
Wastewater permits	271-3908
Wastewater treatment	271-3908
Wastewater system design review	271-2980
Water Council	271-3434
Water Education for Teachers (Project WET)	271-4071
Water quality analysis	271-3446
Water quality standards	271-2457
Water quality statistics	271-2457
Water resources	271-3139
Water sampling; community/municipal	271-2513
Water sampling; noncommunity systems	271-2513
Water systems design review	271-2949
Water user registration & reporting	271-4086
Water Well Board	271-1974/1973
Water well construction complaints	271-1973/1974
Well drilling/licensing	271-2410
Well head protection	271-2949/2947
Wetlands Council	271-3434
Wetlands protection & permitting	271-2147
Winnipesaukee River Basin Program	934-2809
Wood ash; land application	271-2928

E-MAIL ADDRESSES FOR DES PROGRAMS

General Comments & Inquiries	feedback@des.state.nh.us
Public Information & Permitting	pip@des.state.nh.us
Commissioner’s Office	
Appeals	appeals@des.state.nh.us
Human Resources	hr@des.state.nh.us
Human Resources (2)	people@des.state.nh.us
Laboratory	lab@des.state.nh.us
Legal	legal@des.state.nh.us
Public Information & Permitting	pip@des.state.nh.us
Air Resources	
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Waste Management	
Federal Sites	rpm2@des.state.nh.us
Hazardous Waste	hwcomp@des.state.nh.us
Household Hazardous Waste	hhw@des.state.nh.us
Library	lib@des.state.nh.us
Oil Compliance	comp@des.state.nh.us
Petroleum Remediation	remed@des.state.nh.us

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Reporting Section	report2@des.state.nh.us
Solid Waste	swcomp@des.state.nh.us
Water	
Biology section	bio@des.state.nh.us
Dam Safety	damsafety@des.state.nh.us
Lakes Program	lakes@des.state.nh.us
Limnology	limno@des.state.nh.us
Non-Point Source Program	nps@des.state.nh.us
Permitting	permits@des.state.nh.us
River Water Quality	riverwq@des.state.nh.us
Rivers Program	rivers@des.state.nh.us
Source Water Assessment Progr.	swap@des.state.nh.us
Volunteer Lakes Assessment Prog.	vlap@des.state.nh.us
Volunteer Rivers Assessment Prog.	vrap@des.state.nh.us
Water Education for Teachers	wet@des.state.nh.us
Watershed Management	swq2@des.state.nh.us

NEW HAMPSHIRE STATE AGENCIES WITH ENVIRONMENT-RELATED PROGRAMS

Department of Agriculture
Pesticides Control
10 Ferry Street, 4th Floor
PO Box 2042
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(603) 271-3550

Department of Fish & Game
2 Hazen Drive
Concord, NH 03301-6500
(603) 271-3421

Department of Health & Human Services
Health Risk Assessment
6 Hazen Drive
Concord, NH 03301-6527
(603) 271-4664

Department of Justice
Environmental Protection
33 Capitol Street
Concord, NH 03301-6397
(603) 271-3679

Department of Resources & Economic Development (DRED)
Forests & Lands
172 Pembroke Road
PO Box 1856
Concord, NH 03302-1856

(603) 271-2215

Heritage Inventory
172 Pembroke Road
PO Box 1856
Concord, NH 03302-1856
(603) 271-3622

Parks
172 Pembroke Road
PO Box 1856
Concord, NH 03302-1856
(603) 271-3556

Department of Safety
State Police
10 Hazen Drive
Concord, NH 03305-0002
(603) 271-3636
EMERGENCIES: 1-800-346-4009

Marine Division
31 Dock Road
Gilford, NH 03246-7626
(603) 293-0091

Department of Transportation
Environmental Services
John O. Morton Building
1 Hazen Drive
PO Box 485
Concord, NH 03302-0485
(603) 271-3226

Emergency Management Office
107 Pleasant Street
Concord, NH 03301-3809
(603) 271-2231
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Governor's Office of Energy and Community Services
57 Regional Drive - Suite 3
Concord, NH 03301-8519
(603) 271-2611

Office of State Planning
2 1/2 Beacon Street
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(603) 271-2155

Coastal Program
(603) 431-9366

Governor's Recycling Program
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