

Adopt PART Env- Dw 716 to read as follows:

PART Env-Dw 716 FILTRATION, DISINFECTION, AND WASTE RECYCLING

Env-Env-Dw 716.01 Purpose and Scope.

(a) The purpose of this part is to establish requirements for filtration, disinfection, and waste recycling as specified in 40 CFR 141 Subpart H, §§70-76, 40 CFR 141 Subpart P, §§170 - 175, 40 CFR 141 Subpart T, §§500 - 571, and 40 CFR 141 Subpart W, §§700-723, which, pursuant to 40 CFR 141.1, constitute national primary drinking water requirements.

(b) To meet the purpose stated in (a), above, this part establishes:

- (1) Requirements for filtration and disinfection at public water systems supplied by a surface water source and public water systems supplied by a source of ground-water under the direct influence of surface water;
- (2) Treatment technique requirements in lieu of maximum contaminant levels for giardia lamblia, viruses, heterotrophic plate count bacteria, legionella, cryptosporidium, and turbidity; and
- (3) Criteria under which recycle provisions and recordkeeping requirements apply to public water systems that employ conventional filtration or direct filtration treatment and recycle spent backwash water, thickener supernatant, or liquids from dewatering processes.

Env-Dw 716.02 Applicability. This part shall apply to each public water system (PWS) supplied by:

- (a) Surface water;
- (b) Groundwater under the direct influence of surface water; or
- (c) Any combination of surface water and groundwater under the direct influence of surface water.

Env-Dw 716.03 Definitions.

- (a) “Backwash water” means the water and solids contained therein which is generated by the process of reversing the flow of water back through the filter media to remove entrapped solids.
- (b) “Coagulation” means “coagulation” as defined at 40 CFR 141.2, as reprinted in Appendix A.
- (c) “Conventional filtration” means “conventional filtration treatment” as defined in 40 CFR 141.2, as reprinted in Appendix A.
- (d) “Cryptosporidium” means a microorganism found in raw water which may cause illness after ingestion.
- (e) “Direct filtration” means "direct filtration" as defined in 40 CFR 141.2, as reprinted in Appendix A.
- (f) “Disinfection” means "disinfection" as defined at 40 CFR 141.2, as reprinted in Appendix A.
- (g) “Filtration” means "filtration" as defined in Env-Ws 302.29 or successor rule in Env-Dw 100, as reprinted in Appendix A.
- (h) “Flocculation” means "flocculation" as defined in 40 CFR 141.2, as reprinted in Appendix A.
- (i) “Giardia lamblia” means a microorganism found in raw water which can cause illness after ingestion.

- (j) “Ground-water under the direct influence of surface water” means “ground water under the direct influence of surface water” as defined in 40 CFR 141.2, as reprinted in Appendix A.
- (k) “Legionella” means "legionella" as defined 40 CFR 141.2, as reprinted in Appendix A.
- (l) “Owner” means “supplier of water” as defined in RSA 485:1-a, XVI, as reprinted in Appendix A.
- (m) “Public water system (PWS)” means “public water system” as defined in RSA 485:I-a, XV, as reprinted in Appendix A.
- (n) “PWS subject to this part” means a public water system that is in one of the categories listed in Env-Dw 716.02.
- (o) “Sedimentation” means "sedimentation" as defined in 40 CFR 141.2, as reprinted in Appendix A.
- (p) “Surface water” means "surface water" as defined at 40 CFR 141.2, as reprinted in Appendix A.
- (q) “Virus” means "virus" as defined at 40 CFR 141.2, as reprinted in Appendix A.
- (r) “Waste recycling” means the return of spent filter backwash water, thickener supernatant, and liquids from a treatment solids dewatering processes to the core process for treatment.

Env-Dw 716.04 Filtration and Disinfection Required. The owner of a PWS subject to this part shall comply with the filtration and disinfection requirements of 40 CFR 141.70 through 40 CFR 141.73.

Env-Dw 716.05 Analytical and Monitoring requirements. The owner of a PWS subject to this part shall comply with the analytical and monitoring requirements of 40 CFR 141.74.

Env-Dw 716.06 Reporting and Recordkeeping Requirements. The owner of a PWS subject to this part shall comply with the reporting and recordkeeping requirements of 40 CFR 141.75.

Env-Dw 716.07 Recycling Requirements. The owner of a PWS subject to this part at which water is treated by conventional filtration or direct filtration and spent backwash water, thickener supernatant, or liquids from dewatering processes are recycled shall comply with 40 CFR 141.76.

Env-Dw 716.08 Enhanced Filtration and Disinfection Requirements. The owner of a PWS subject to this part shall comply with the enhanced filtration and disinfection requirements of:

- (a) 40 CFR 141 Subpart P, §§170 -175, if the PWS serves fewer than 10,000 persons; or
- (b) 40 CFR 141 Subpart T, §§500 - 571, if the PWS serves 10,000 persons or more.

Env-Dw 716.09 Enhanced Treatment for Cryptosporidium. The owner of a PWS subject to this part shall comply with the enhanced treatment for cryptosporidium requirements of 40 CFR 141 Subpart W, §§700 -723.

APPENDIX A - CITED DEFINITIONS

RSA 485:1-a Definitions. – As used in this chapter, unless the context clearly indicates otherwise, the following words shall have the following meanings:

XVI. “Supplier of water” means any person who controls, owns or generally manages a public water system.”

XV. “Public water system” means a system for the provision to the public of piped water for human consumption, if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year. Such term includes (1) any collection, treatment, storage, and distribution facilities under control of the operator of such system and used primarily in connection with such system, and (2) any collection or pretreatment storage facilities not under such control which are used primarily in connection with such system. Any water system which meets all of the following conditions is not a public water system:

(a) Consists only of distribution and storage facilities (and does not have any collection and treatment facilities);

(b) Obtains all of its water from, but is not owned or operated by, a public water system; and

(c) Does not sell water to any person.

NH Admin. Rules Env-Ws 302:

Env-Ws 302.29 “Filtration” means a process for removing particulate matter from water by passage through porous media.

40 CFR 141.2:

“Coagulation means a process using coagulant chemicals and mixing by which colloidal and suspended materials are destabilized and agglomerated into flocs.”

“Conventional filtration treatment means a series of processes including coagulation, flocculation, sedimentation, and filtration resulting in substantial sedimentation removal.”

“Direct filtration means a series of processes including coagulation and filtration but excluding sedimentation resulting in substantial particulate removal.”

“Disinfection means a process which inactivates pathogenic organisms in water by chemical oxidants or equivalent agents.”

“Flocculation means a process to enhance agglomeration or collection of smaller floc particles into larger, more easily settleable particles through gentle stirring by hydraulic or mechanical means.”

“Ground-water under the direct influence of surface water (GWUDI) means any water beneath the surface of the ground with significant occurrence of insects or other macroorganisms, algae, or large-diameter pathogens such as *Giardia lamblia* or *Cryptosporidium*, or significant and relatively rapid shifts in water characteristics such as turbidity, temperature, conductivity, or pH which closely correlate to climatological or surface water conditions.”

“*Legionella* means a genus of bacteria, some species of which have caused a type of pneumonia called legionnaires disease.”

“Sedimentation means a process for removal of solids before filtration by gravity or separation.”

“Surface water means all water which is open to the atmosphere and subject to surface runoff.”

“Virus means a virus of fecal origin which is infectious to humans by waterborne transmission.”

APPENDIX B - STATUES AND REGULATIONS IMPLEMENTED

| Rule Section(s) | State Statute(s) Implemented | Federal Statute(s)/ Regulation(s) Implemented |
|------------------------|--|--|
| Env-Dw 716 | RSA 485:3, I & VI RSA 485:41, II & IV | 40 CFR 141 Subpart H, §§70 - 76 40 CFR 141 Subpart P, §§171 - 175 40 CFR 141 Subpart T, §§500 - 571 40 CFR 141 Subpart W, §§700-723 |