The State of New Hampshire
Department of Environmental Services

Robert R. Scott, Commissioner

January 9, 2024

The Honorable Denise Ricchiardi
Chair, Senate Transportation Committee
Legislative Office Building, Room 101
Concord, NH 03301

RE: SB 511, AN ACT relative to salt reduction in Merrimack.

Dear Chair Ricchiardi and Members of the Committee:

Thank you for the opportunity to testify on Senate Bill (SB) 511. The New Hampshire Department of Environmental Services (NHDES) takes no position on this bill but provides the following information for your consideration.

This bill would create a series of requirements placed upon the New Hampshire Department of Transportation relative to winter road salt use in the Town of Merrimack. Our understanding of the intent of the legislation is to reduce the amount of road salt used in certain areas that have been impacted by excessive sodium and chloride in the groundwater.

Over the past 30 years, sodium and chloride levels have substantially increased in all of the production wells that the Merrimack Village District (MVD) public water system relies upon to provide nearly one billion gallons of water annually to over 9,300 service connections. The high-yield wells located in and around Merrimack have experienced increases in sodium and chloride concentrations over 1,000 percent since 1992. Consequently, one of the six high yielding drinking water supply wells MVD operates has been taken offline and utilized as an emergency source only. Elevated sodium and chloride do not only impact the taste of drinking water but can create health risks. Sodium in drinking water is a concern for individuals with hypertension. Sodium and chloride in groundwater also affect the geochemistry and cause the mobilization of metals from the aquifer formation into drinking water. Additionally, sodium and chloride can create corrosive conditions in the water distribution system and in premise plumbing and will cause metals to leach from the plumbing and will cause an increase in drinking water as well as the premature failure of plumbing fixtures. There are no feasible methods to remove salt from drinking water other than using energy intensive treatment technologies that wastes three to five gallons of water for every gallon of treated drinking water that is produced.

NHDES oversees the New Hampshire Voluntary Certified Commercial Salt Applicator Program (Green SnowPro) to train commercial snow and ice management companies to reduce their salt application rates through best practices. Although the New Hampshire Department of Transportation is not eligible for Green SnowPro certification as defined under 489-C:1, salt and brine applicators working for the agency can and are encouraged to enroll in Green SnowPro-approved full courses and then demonstrate their proficiency on the associated written exam. Continuing education opportunities are also available by

attending the Annual New Hampshire Salt Symposium co-hosted by NHDES and Snow and Ice Management Association.

Thank you again for the opportunity to comment on SB 511. Should you have further questions or need additional information, please feel free to contact either Brandon Kernen, Administrator of NHDES' Drinking Water and Groundwater Bureau, at brandon.m.kernen@des.nh.gov (603-271-1168), or Rene Pelletier, Director, Water Division at rene.j.pelletier@des.nh.gov (603-271-0677).

Sincerely,

Robert R. Scott
Commissioner

ec: Sponsors of SB 511: Senators Chandley, Watters, and Soucy, and Representatives Healey, Murphy, Rung, and W. Thomas