RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
SUBJECT: Snow Disposal Policy

Administrator of Surface Water Protection: _____ DATE 12/1/2023
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APPLICABILITY & PURPOSE:

To provide guidelines to all government agencies and private businesses regarding snow disposal site selection, site preparation and maintenance, and emergency snow disposal options that are acceptable to the Department of Environmental Management - Office of Water Resources. This policy is only for the disposal of snow and ice which is not visibly contaminated with material other than salt and sand from road clearance.

INTRODUCTION:

Finding a place to dispose of collected snow poses a challenge to municipalities and businesses as they clear roads, parking lots, bridges, and sidewalks. While we are all aware of the threats to public safety caused by snow, collected snow that is contaminated with road salt, sand, litter, and automotive pollutants such as oil also threatens public health and the environment.

As snow melts, road salt, sand, litter, and other pollutants are transported into surface water or through the soil where they may eventually reach the groundwater. Road salt and other pollutants can contaminate water supplies and are toxic to aquatic life at certain levels. Sand washed into waterbodies can create sand bars or fill in wetlands and ponds, impacting aquatic life, causing flooding, and affecting our use of these resources. There are several steps that communities, government agencies, and private businesses can take to minimize the impacts of snow disposal on public health and the environment.

The purpose of these guidelines is to help municipalities and businesses select, prepare, and maintain appropriate snow disposal sites before the snow begins to accumulate throughout the winter.

RECOMMENDED GUIDELINES:

Disposal should consider site selection, site preparation and maintenance, and emergency snow disposal locations and procedures.

1. a. Site Selection

The key to selecting effective snow disposal sites is to locate them adjacent to or on pervious surfaces in upland areas away from water resources and wells. At these locations, the snow meltwater can filter into the soil, leaving behind sand and debris which should be removed as soon as possible but no later than the springtime.

When selecting a site for snow disposal, adhere to the following guidelines:

- ❄ Avoid dumping snow into any waterbody, including rivers, reservoirs, ponds, lakes, wetlands, bays, or the ocean. In addition to water quality impacts and flooding, snow disposed of in open water can cause navigational hazards when it freezes.

- ❄ Do not dump snow within a Wellhead Protection Area (WHPA) of a public water supply well or within 200 feet of a private well, where road salt may contaminate water supplies.

- ❄ Avoid dumping snow in sanitary landfills and gravel pits. Snow meltwater will create more contaminated leachate in landfills posing a greater risk to groundwater. In gravel pits, there is little opportunity for pollutants to be filtered out of the meltwater, because groundwater is close to the land surface.

- ❄ Avoid disposing of snow on top of storm drain catch basins or in stormwater drainage swales or ditches. Snow combined with sand and debris may block a storm drainage system, causing localized flooding. In addition, a high volume of sand, sediment, and litter released from melting snow also may be quickly transported through the drainage system into surface water.

1. b. Site Selection Procedures

It is important that the municipal Department of Public Works or Highway Department, and other appropriate municipal offices work together to select appropriate snow disposal sites. The following steps should be taken:

- ❄ Estimate how much snow disposal capacity is needed for the season so that an adequate number of disposal sites can be selected and prepared.

- ❄ Identify sites that could potentially be used for snow disposal such as municipal open space (e.g., parking lots or parks).

- ❄ Sites located in upland locations that are not likely to impact sensitive environmental resources should be selected first; and

- ❄ If more storage space is needed, prioritize the sites with the least environmental impact (using the site selection criteria and the online Environmental Resource Map as a guide).

1. c. Environmental Resource Map

An interactive map containing a wide variety of GIS data layers of interest to local planning or zoning board members, consultants, or anyone else needing a general mapping of soils, wetlands, land use patterns, regulatory overlay districts and other environmental information can be accessed via the internet at the following address by clicking on the “Environmental Resource Map”:

https://dem.ri.gov/online-services/data-maps

This interactive map can be used to identify publicly-owned open spaces and approximate locations of sensitive environmental resources (locations should be field verified where possible).

2. Site Preparation and Maintenance

In addition to carefully selecting disposal sites before the winter begins, it is important to prepare and maintain these sites to maximize their effectiveness. The following maintenance measures should be undertaken for all snow disposal sites:

- ❄ A silt fence or equivalent barrier should be placed securely on the downgradient side of the snow disposal site;

- ❄ To filter pollutants out of the meltwater, a 50-foot vegetative buffer strip should be maintained during the growth season between the disposal site and adjacent waterbodies;

- ❄ Debris should be cleared from the site prior to using the site for snow disposal; and

- ❄ Debris should be cleared from the site and properly disposed of at the end of the snow season.

3. Emergency Snow Disposal

Under normal winter conditions, storage and disposal of snow should be done exclusively in upland areas, not in or adjacent to waterbodies or wetlands. However, under extraordinary conditions when upland snow storage options are exhausted, it may be necessary to dispose of snow near or in certain waterbodies. The following guidance does not constitute a Clean Water Act permit for such disposal. However, in an emergency situation, DEM is unlikely to pursue an enforcement action for snow disposal by governmental entities into or near certain waters if conducted in accordance with the conditions identified below.

As mentioned earlier, it is important to estimate the amount of snow disposal capacity you will need so that an adequate number of upland disposal sites can be selected and prepared. If, despite your planning, designated upland disposal sites have been exhausted, snow may be disposed of at other locations that meet the criteria in Section 1.

Under extraordinary conditions, when all upland snow disposal options are exhausted, disposal of snow that is not obviously contaminated with road salt, sand, and other pollutants may be allowed near (within 50 feet of) or in certain waterbodies under certain conditions. In these dire situations, notify the DEM – Office of Water Resources, RIPDES Municipal and Industrial Stormwater Program at 401-222-4700 (or 401-222-3070 after normal business hours) before disposing of snow in a waterbody. If upland disposal is not available, and snow needs to be removed/relocated for safety reasons, then:

- **As a last resort,** waterways may be used in accordance with the following conditions:

  - ❄ Dispose of snow in open water with adequate flow and mixing to prevent ice dams from forming;

  - ❄ Do not dispose of snow in coastal or freshwater wetlands, eelgrass beds, vegetated shallows, vernal pools, shellfish beds, mudflats, outstanding resource waters, drinking water reservoirs and their tributaries, Well Head Protection Areas (WHPAs), or other areas designated by the state as being environmentally sensitive;

  - ❄ In coastal communities, preference should be given to disposal in salt water if it is available;

  - ❄ Do not dispose of snow where trucks may cause shoreline damage or streambank damage or erosion; and

  - ❄ Consult with appropriate municipal officials to ensure that snow disposal in water complies with local ordinances and bylaws.

Or, alternatively:

- **As a last resort**, mechanical snow melting equipment may be used in accordance with the following conditions:

  - ❄ Direct discharges of melted snow into waterbodies are prohibited.

  - ❄ The discharge shall not be directed to a combined sewer system (CSS).

- ❄ If the discharge is to a storm sewer, approval from the operator of the storm sewer system (e.g., the municipality) must be received prior to discharge. This approval should include the date, approximate time, location, and duration of the discharge(s) and the DEM – Office of Water Resources, RIPDES Municipal and Industrial Stormwater Program must be notified at 401-222-4700 (or 401-222-3070 after normal business hours) prior to commencing snow melting operations. The guidance included in this document does not reduce the existing authority of the owner of a storm sewer or other local agency from prohibiting or placing additional conditions on the discharge.

- ❄ A filter bag or similar filtration device must be used to remove suspended solids and debris prior to discharge to the storm sewer. This device should be used and maintained in accordance with the manufacturer's specifications. Solids collected in a mechanical snow melter must be disposed of in a proper manner.

- ❄ The discharge and associated runoff should be routed so that it does not cause any erosion.

- ❄ The discharge shall not result in flooding of neighboring property, streets, gutters, or storm sewers.

- ❄ The discharge must be diverted away from building foundations or other areas that may be damaged from ground settling or swelling.

- ❄ The discharge must be visibly clear and not contain floating or solid materials.

- ❄ A visible sheen must not be evident in the discharge.

- ❄ The addition of cleaning materials or chemicals (such as deicers) during snow melting activities is strictly prohibited.

FOR MORE INFORMATION

If you need additional information, contact the RIPDES Municipal and Industrial Stormwater Program at the DEM Office of Water Resources located at 235 Promenade Street Providence, RI; Tel. (401) 222-4700; Brian Lafaille at brian.lafaille@dem.ri.gov or Jennifer Stout at jennifer.stout@dem.ri.gov.