



Salt and Sand Piles Storage Guidance

Business and property owners who plan to store loose or bagged salt or sand outside may not know that improper storage may harm the environment, destroy natural habitats and pollute the Chesapeake Bay.

Salt contains chloride, which is toxic to aquatic and plant life. It corrodes equipment and damages infrastructure. Salt also contains sodium which, once it enters our waterways, is not removed by wastewater treatment or even drinking water treatment processes. Salinization of the nation's waters is a growing concern and regulatory efforts are currently underway to reduce salt inputs to the environment.



Improper salt storage due to lack of containment

Sand-laden runoff from developed areas clogs storm drains, degrades aquatic environments, and harms aquatic life.

In Fairfax County the storm drainage system and the wastewater system are separate. Rainwater and melting snow that enter the storm drainage system are not treated at a wastewater treatment plant.

The Stormwater Management Ordinance (Chapter 124, Article 9 of the county code, effective July 1, 2014), prohibits discharges of runoff water from uncovered or uncontained salt or sand storage piles from entering the storm drainage system or streams. Businesses that illegally discharge salt or sand may be subject to enforcement action or may be referred to the Virginia Department of Environmental Quality (VADEQ) to obtain a Virginia Pollutant Discharge Elimination System (VPDES) Permit.

Business owners and managers who store salt or sand must abide by guidelines, listed on the reverse of this fact sheet, to avoid an illegal discharge of these products. To propose other options, contact the Stormwater Planning Division, 703-324-5500, TTY 711.

Also, please remember:

- Salt or sand storage on a property should be approved by the property owner.
- Salt or sand storage should be located on a designated pad away from storm drains.
- Salt or sand storage should not:
 - ◊ interfere with fire lanes or required parking spaces.
 - ◊ block roadways or loading areas.
 - ◊ contaminate soil, stormwater or local waterways.

Any installation of a structure for salt storage may require a land-disturbing or building permit and must meet all Uniform Statewide Building Codes (USBC). Applicable zoning requirements, and all other related county ordinances and standards must be met.





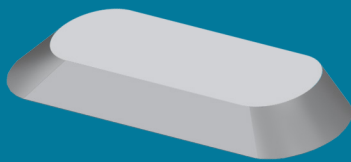
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Requirements

- All salt or sand bags or piles must be covered and contained. Store materials indoors or under cover. Structures with walls and a roof are highly preferred for salt storage.
- Runoff from storage area must not exceed 1,000 uS/cm conductivity.
- Avoid storage areas located within 100 feet of storm drains and ditches and 300 feet from any water well.
- Avoid storage areas located within the 100-year floodplain of a stream or 300 feet of a stream, river, lake, pond or wetland.
- Do not store salt in designated resource protection areas (RPAs).
- All salt must be stored, mixed, and loaded on an impervious pad to prevent salt from infiltrating into the subsurface.
- Pads should be bermed, walled, sloped or surrounded by secondary containment to prevent runoff/run-on. There should be no floor drains.
- After each use, ensure that the material is fully contained within roof or waterproof covering (e.g., sweep material back into bulk storage bay).
- If liquid materials are stored outdoors, the materials must be stored in clean, sturdy leak tight containers that are designed to be stored outside (e.g., drums). Liquid waste materials must be stored in secondary containment.

Windrow Shaped Pile



RECOMMENDED

Conical Shaped Pile



NOT RECOMMENDED

Recommendations

- If it is not feasible to store salt in a structure, ensure the salt is covered with a durable and waterproof tarp. Recommended materials include polyethylene, polyurethane foam, polypropylene, hypalon, canvas, and synthetic fiber.
- Shape the pile properly. For covered outside storage on a pad, the stockpile should be windrowed with well-sloped sides so water will drain off and away. Conical piles are not recommended because they are difficult to cover effectively.
- Minimize spillage during outdoor handling operations. If spills occur, clean promptly with established clean-up procedures.
- Mix sand and salt in batches to avoid large piles. Small piles are easier to keep covered and contained.
- Do not leave excess salt in spreaders after applications. Wash spreaders indoors when possible. When outdoor washing is the only option, do it in a location where the wash water can be contained and collected.
- Store liquid materials in secondary containment where possible, in secure areas and away from traffic.
- Keep storage areas clean and dry. Inspect storage areas for cleanliness, sweep, and remove debris or trash.
- Repair and replace perimeter controls, containment structures, and covers as needed to keep them properly functioning.
- Train employees on proper storage practices for each type of material stored at the facility.
- Train employees and contractors on proper spill containment and cleanup procedures.

