NJDEP De-Icing Storage Material Storage Requirements and Policy

The NJDEP (Department) has recently modified its interpretation of the NJPDES permit requirement regarding de-icing material storage structures in response to comments from permittees across the State and broadened what would be accepted as a “permanent structure” to allow other environmentally appropriate and cost effective alternatives. First, let’s review what the NJPDES Tier A Stormwater General Permit (permit) requires. The permit states that “Regulated entities must construct a permanent structure (a permanent building or permanent structure that is anchored to a permanent foundation with an impermeable floor, and that is completely roofed and walled) for the storage of salt, and other de-icing materials.”

A number of municipalities requested that the Department make a determination whether fabric frame structures meet NJPDES Municipal Stormwater Permit requirements for de-icing material storage. After a thorough assessment of these fabric frame structures the Department determined that they provide the same level of protection that a traditional de-icing structure would provide. Therefore the Department made a policy decision to allow the use of these fabric frame structures as long as they meet the following specifications:

1. structure must be designed to withstand at least 110 mph winds;
2. structure must be covered by a PVC or other similar fire rated material with a minimum twenty (20) year warranty;
3. concrete blocks, jersey barriers or other similar material must be placed around the interior of the structure to protect the side walls during loading and unloading de-icing materials;
4. the design must prevent stormwater run-on and run through;
5. structure must be erected on an impermeable slab;
6. structure cannot be open sided; and
7. must have a roll up door or other means of sealing the access way from wind driven rainfall.

In addition, the Department continues to receive numerous questions regarding whether de-icing material storage structures are required to have doors and what is an appropriate door for a de-icing structure? Originally, our position was that the definition of a permanent structure which includes the phrase "...that is completely roofed and walled..." inferred that a door was required. However, after listening to concerns from municipalities and our own staff, the Department agreed that the permit was not clear on this issue. So instead of requiring a door on a de-icing structure the
Department now strongly recommends that all structures be designed with or retrofitted to have a door or other means of sealing the access way or entrance from wind-driven rainfall.

Lastly the Department wants to stress that even the best de-icing structure is only as good as the house keeping practices implemented by the public works staff. If the municipality allows de-icing material to spill out of the structure or fails to sweep, using dry cleaning methods, after loading and unloading then they defeat the purpose of the structure and not protecting water quality. It is important to remember that Attachment D of the permit requires certain good housekeeping practices for salt and de-icing material handling and that these practices must be implemented at all times.

Specific questions can be directed to the NJDEP, Bureau of Nonpoint Pollution Control at (609) 633 -7021.