7045.0632 WASTE PILES.

- Subpart 1. **Scope.** This part applies to owners and operators of facilities that treat or store hazardous waste in piles, except as part 7045.0552 provides otherwise. Alternatively, a pile of hazardous waste may be managed as a landfill under part 7045.0638.
- Subp. 2. **Protection from wind.** The owner or operator of a pile containing hazardous waste which could be subject to dispersal by wind shall cover or otherwise manage the pile so that wind dispersal is controlled.
- Subp. 3. **Waste analysis.** In addition to the waste analyses required by part 7045.0564, the owner or operator shall analyze a representative sample of waste from each incoming movement before adding the waste to any existing pile, unless:
- A. the only wastes the facility receives which are amenable to piling are compatible with each other; or
- B. the waste received is compatible with the waste in the pile to which it is to be added.

The analyses conducted must be capable of differentiating between the types of hazardous waste the owner or operator places in piles, so that mixing of incompatible waste does not inadvertently occur. The analysis must include a visual comparison of color and texture. As required by part 7045.0564, the waste analysis plan must include analyses needed to comply with subparts 5 and 6. As required by part 7045.0584, the owner or operator shall place the results of this analysis in the operating record of the facility.

- Subp. 4. **Containment.** If leachate or run-off from a pile is a hazardous waste, all the requirements of item A or B must be met:
- A. The pile must be placed on an impermeable base that is compatible with the waste under the conditions of treatment or storage.

The owner or operator shall design, construct, operate, and maintain a run-on control system capable of preventing flow onto the active portion of the pile during peak discharge from at least a 25-year storm.

The owner or operator shall design, construct, operate, and maintain a run-off management system to collect and control at least the water volume resulting from a 24-hour, 25-year storm.

Collection and holding facilities, such as tanks or basins, associated with run-on and run-off control systems must be emptied or otherwise managed expeditiously to maintain design capacity of the system.

B. The pile must be protected from precipitation and run-on by some other means, and no liquids or wastes containing free liquids may be placed in the pile. If collected

leachate or run-off is discharged through a point source to waters of the United States, it is subject to the requirements of the Federal Water Pollution Control Act Amendments of 1972, United States Code, title 33, section 1342, as amended.

Subp. 4a. **Design and operating requirements.** The owner or operator of each new waste pile on which construction commences after January 29, 1992, each lateral expansion of a waste pile unit on which construction commences after July 29, 1992, and each such replacement of an existing waste pile unit that is to commence reuse after July 29, 1992, must install two or more liners and a leachate collection and removal system above and between such liners, and operate the leachate collection and removal systems, in accordance with part 7045.0534, subpart 3, item C, unless exempted under part 7045.0534, subpart 3, item D or E; and must comply with the procedures of part 7045.0630, subpart 1a, item B. "Construction commences" and "existing facility" are defined in part 7045.0020.

Subp. 4b. Action leakage rates.

- A. The owner or operator of waste pile units subject to subpart 4a must submit a proposed action leakage rate to the commissioner when submitting the notice required under subpart 4a. Within 60 days of receipt of the notification, the commissioner will establish an action leakage rate, either as proposed by the owner or operator or modified using the criteria in this subpart, or extend the review period for up to 30 days. If no action is taken by the commissioner before the original 60-day or extended 90-day review periods, the action leakage rate will be approved as proposed by the owner or operator.
- B. The commissioner shall approve an action leakage rate for waste pile units subject to subpart 4a. The action leakage rate is the maximum design flow rate that the leak detection system can remove without the fluid head on the bottom liner exceeding one foot. The action leakage rate must include an adequate safety margin to allow for uncertainties in the design (e.g., slope, hydraulic conductivity, thickness of drainage material), construction, operation, and location of the leak detection system, waste and leachate characteristics, likelihood and amounts of other sources of liquids in the leak detection system, and proposed response actions (e.g., the action leakage rate must consider decreases in the flow capacity of the system over time resulting from siltation and clogging, rib layover and creep of synthetic components of the system, overburden pressures, etc.).
- C. To determine if the action leakage rate has been exceeded, the owner or operator must convert the weekly flow rate from the monitoring data obtained under subpart 9, to an average daily flow rate (gallons per acre per day) for each sump. Unless the commissioner approves a different calculation, the average daily flow rate for each sump must be calculated weekly during the active life and closure period.

- Subp. 5. **Special requirements for ignitable or reactive waste.** Ignitable or reactive waste must not be placed in a pile unless the waste and pile satisfy all applicable requirements of part 7045.1390:
- A. addition of the waste to an existing pile results in the waste or mixture no longer meeting the definition of ignitable or reactive waste under part 7045.0131, subpart 2 or 5, and the addition complies with part 7045.0562, subpart 2; and
- B. the waste is managed in such a way that it is protected from any material or conditions which may cause it to ignite or react.
- Subp. 6. **Special requirements for incompatible waste.** Incompatible wastes, or incompatible wastes and materials must not be placed in the same pile, unless part 7045.0562, subpart 2 is followed.

A pile of hazardous waste that is incompatible with any waste or other material located nearby must be adequately separated from the other materials, or protected from them by means of a dike, berm, wall, or other device. The purpose of this requirement is to prevent fires, explosions, gaseous emissions, leaching, or other discharge of hazardous waste or hazardous waste constituents which could result from the contact or mixing of incompatible wastes or materials.

Hazardous wastes must not be piled on the same area where incompatible wastes or materials were previously piled, unless that area has been decontaminated sufficiently to ensure compliance with part 7045.0562, subpart 2.

Subp. 7. Closure and postclosure care. At closure, the owner or operator shall:

- A. remove or decontaminate all hazardous waste, hazardous waste residues, contaminated containment system components, such as liners, contaminated subsoils, and structures and equipment contaminated with hazardous waste and leachate, and manage then as hazardous waste, unless the owner or operator can demonstrate that the waste removed is not a hazardous waste; or
- B. close the facility and perform postclosure care in accordance with the closure and postclosure requirements for landfills under part 7045.0638, subpart 4, if, after removing or decontaminating all residues and making all reasonable efforts to effect removal or decontamination of contaminated components, subsoils, structures, and equipment the owner or operator finds that not all contaminated subsoils can be practicably removed or decontaminated.

Subp. 8. Response actions.

A. The owner or operator of waste pile units subject to subpart 4a must submit a response action plan to the commissioner when submitting the proposed action leakage rate under subpart 4b. The response action plan must set forth the actions to be taken if

the action leakage rate has been exceeded. At a minimum, the response action plan must describe the actions specified in item B.

- B. If the flow rate into the leak determination system exceeds the action leakage rate for any sump, the owner or operator must:
- (1) notify the commissioner in writing of the exceedence within seven days of the determination;
- (2) submit a preliminary written assessment to the commissioner within 14 days of the determination, as to the amount of liquids, likely sources of liquids, possible location, size, and cause of any leaks, and short-term actions taken and planned;
- (3) determine to the extent practicable the location, size, and cause of any leak;
- (4) determine whether waste receipts should cease or be curtailed, whether any waste should be removed from the unit for inspection, repairs, or controls, and whether or not the unit should be closed;
- (5) determine any other short-term and longer-term actions to be taken to mitigate or stop any leaks; and
- (6) within 30 days after the notification that the action leakage rate has been exceeded, submit to the commissioner the results of the analyses specified in subitems (3) to (5), the results of actions taken, and actions planned. Monthly thereafter, as long as the flow rate in the leak detection system exceeds the action leakage rate, the owner or operator must submit to the commissioner a report summarizing the results of any remedial actions taken and actions planned.
- C. To make the leak and/or remediation determinations in item B, subitems (3) to (5), the owner or operator must:
 - (1) document the following assessments:
 - (a) assess the source of liquids and amounts of liquids by source;
- (b) conduct a fingerprint, hazardous constituent, or other analyses of the liquids in the leak detection system to identify the source of liquids and possible location of any leaks, and the hazard and mobility of the liquid; and
- (c) assess the seriousness of any leaks in terms of potential for escaping into the environment; or
 - (2) document why such assessments are not needed.
- Subp. 9. **Monitoring and inspection.** An owner or operator required to have a leak detection system under subpart 4a must record the amount of liquids removed from each leak detection system sump at least once each week during the active life and closure period.

Statutory Authority: *MS s 116.07; 116.37*

History: 9 SR 115; 15 SR 1877; 16 SR 2239; 18 SR 1565; 18 SR 1886; 20 SR 715; 33 SR 2042

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