

**CHAPTER 7045**  
**MINNESOTA POLLUTION CONTROL AGENCY**  
**HAZARDOUS WASTE DIVISION**  
**HAZARDOUS WASTE**

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**7045.0020 DEFINITIONS.**

*[For text of subps 1 to 3, see M.R.]*

**Subp. 3a. Acute hazardous waste.** "Acute hazardous waste" means waste listed as acute hazardous waste in part 7045.0135 or waste designated acute hazardous waste in part 7045.0129, subpart 3.

*[For text of subps 4 to 6c, see M.R.]*

**Subp. 6d. Cathodic protection.** "Cathodic protection" means the technique to prevent corrosion of a metal surface by making that surface the cathode of an electrochemical cell. A tank can be cathodically protected through the application of either galvanic anodes or impressed current.

*[For text of subps 7 to 9c, see M.R.]*

**Subp. 9d. Compatible.** "Compatible" means the ability of two or more substances to maintain their respective physical and chemical properties upon contact with one another. For a secondary containment seal, the impermeability of the seal must be maintained upon contact with a stored substance. For substances, two or more substances, if mixed, must not create a new hazard.

**Subp. 9e. Component.** "Component" means either a tank or ancillary equipment of a tank system.

*[For text of subps 10 to 13a, see M.R.]*

**Subp. 13b. Corrosion protection.** "Corrosion protection" means a method used to protect a metal tank, piping, or other components from corroding. Corrosion protection includes, but is not limited to, cathodic protection, keeping the metal of the tank from being in direct contact with other surfaces, and the application of coatings designed and maintained to prevent corrosion.

*[For text of subp 14, see M.R.]*

**Subp. 15. Designated facility.** "Designated facility" means a hazardous waste treatment, storage, or disposal facility which:

- A. (1) has received interim status;
- (2) has received an agency permit;
- (3) is subject to the requirements of part 7045.0125, subpart 5, 6, or 10, or subpart 9, item B, or part 7045.0685; or
- (4) if located outside Minnesota, has been exempted from the requirements to obtain a permit by the United States Environmental Protection Agency, has either received an Environmental Protection Agency permit or a permit from an authorized state, or has interim status;

B. has been designated on the manifest by the generator pursuant to part 7045.0261, or has been designated on a shipping paper or management plan required by part 7045.0125; and

C. if located in an Environmental Protection Agency authorized state which has not yet obtained authorization to regulate the hazardous waste it is receiving as hazardous, must be a facility allowed by the receiving state to accept the waste.

*[For text of subps 15a to 30, see M.R.]*

**Subp. 31. Generator.** "Generator" means any person, by site, whose act or process produces hazardous waste identified or listed in parts 7045.0100 to 7045.0143, or whose act first causes a hazardous waste to become subject to regulation. "Generator" means all size generators including large quantity generators, small quantity generators, and very small quantity generators, unless specifically stated otherwise.

*[For text of subps 32 to 37a, see M.R.]*

**Subp. 37b. Household battery.** "Household battery" means a disposable or rechargeable dry cell, generated by a household and commonly used as a power source for household products. "Household battery" includes nickel-cadmium, alkaline, mercuric oxide, silver oxide, zinc oxide, zinc-air, lithium, and zinc-carbon batteries, but excludes lead-acid batteries.

*[For text of subps 37c, see M.R.]*

**Subp. 37d. Household hazardous waste collection site or collection site.** "Household hazardous waste collection site" or "collection site" as used in part 7045.0310 has the meaning established under Minnesota Statutes, section 115A.96, subdivision 1, paragraph (c).

**Subp. 37e. Household waste.** "Household waste" means any material including garbage, trash, and sanitary waste in septic tanks derived from households, including single and multiple residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds, and day-use recreation areas.

*[For text of subp 38, see M.R.]*

**Subp. 38a. Impermeable.** "Impermeable" means unable to be passed through.

*[For text of subps 39 to 43, see M.R.]*

**Subp. 43a. Indoor storage.** "Indoor storage" means storage within a permanently constructed building consisting of at least a roof and three walls permanently affixed to an impermeable floor placed on the ground.

**Subp. 43b. Industrial furnace.** "Industrial furnace" means any of the following enclosed devices that are integral components of manufacturing processes and that use controlled flame devices to accomplish recovery of materials or energy: cement kilns; lime kilns; aggregate kilns; phosphate kilns; coke ovens; blast furnaces; smelting, melting, and refining furnaces, including pyrometallurgical devices, such as cupolas, reverberator furnaces, sintering machines, roasters, and foundry furnaces; titanium dioxide chloride process oxidation reactors; methane reforming furnaces; pulping liquor recovery furnaces; combustion devices used in the recovery of sulfur values from spent sulfuric acid; and such other devices as the commissioner determines qualify for inclusion based on one or more of the following factors:

*[For text of items A to E, see M.R.]*

**Subp. 43c. Inground tank.** "Inground tank" means a device meeting the defi-

inition of "tank" in subpart 90 whereby a portion of the tank wall is situated to any degree within the ground, thereby preventing visual inspection of that external surface area of the tank that is in the ground.

*[For text of subps 44 and 45, see M.R.]*

**Subp. 45a. Inorganic solid debris.** "Inorganic solid debris" means nonfriable inorganic solids contaminated with D004-D011 hazardous wastes that are incapable of passing through a 9.5 millimeter standard sieve; that require cutting or crushing and grinding in mechanical sizing equipment prior to stabilization; and that are limited to the following inorganic or metal materials:

- A. metal slags, either dross or scoria;
- B. glassified slag;
- C. glass;
- D. concrete, excluding cementitious or pozzolanic stabilized hazardous wastes;
- E. masonry and refractory bricks;
- F. metal cans, containers, drums, or tanks;
- G. metal nuts, bolts, pipes, pumps, valves; appliances, or industrial equipment; and
- H. scrap metal as defined in subpart 79a.

**Subp. 45b. Installation inspector.** "Installation inspector" means a person who, by knowledge of the physical sciences and the principles of engineering, acquired by a professional education and related practical experience, is qualified to supervise the installation of tank systems.

*[For text of subps 46 to 59a, see M.R.]*

**Subp. 59b. Nonwastewater.** "Nonwastewater" means hazardous waste that is not wastewater as defined in subpart 102c.

**Subp. 59c. Off-specification used oil.** "Off-specification used oil" means a used oil fuel that exceeds any of the specification levels for the following constituents or has a flash point less than 100 degrees Fahrenheit.

Constituent	Allowable level
Arsenic, total	5 parts per million maximum
Cadmium, total	2 parts per million maximum
Chromium, total	10 parts per million maximum
Lead, total	100 parts per million maximum
Total Halogens	4,000 parts per million maximum

**Subp. 59d. Onground tank.** "Onground tank" means a device meeting the definition of "tank" in subpart 90 and that is situated in such a way that the bottom of the tank is on the same level as the adjacent surrounding surface so that the external tank bottom cannot be visually inspected.

*[For text of subps 60 to 64, see M.R.]*

**Subp. 64a. Outdoor storage.** "Outdoor storage" means storage that does not meet the requirements of indoor storage as defined in subpart 43a.

*[For text of subps 65 to 71a, see M.R.]*

**Subp. 72. Pretreatment unit.** "Pretreatment unit" means a device which:

*[For text of item A, see M.R.]*

- B. receives and treats or stores an influent wastewater which is a hazard-

ous waste as defined in parts 7045.0100 to 7045.0143; or generates and accumulates a wastewater treatment sludge which is a hazardous waste as defined in parts 7045.0100 to 7045.0143; or treats or stores a wastewater treatment sludge which is a hazardous waste as defined in parts 7045.0100 to 7045.0143; and

*[For text of item C, see M.R.]*

*[For text of subps 72a to 73, see M.R.]*

Subp. 73a. **RCRA or Resource Conservation and Recovery Act.** "RCRA" or "Resource Conservation and Recovery Act" means the Resource Conservation and Recovery Act.

Subp. 73b. **Receiving country.** "Receiving country" means a foreign country to which a hazardous waste is sent for the purpose of treatment, storage, or disposal, except short-term storage incidental to transportation.

Subp. 73c. **Reclamation.** "Reclamation" means the processing or regeneration of a waste to recover a usable product. Examples are the recovery of lead values from spent batteries and regeneration of spent solvents.

Subp. 73d. **Recycle.** "Recycle" means the reclamation, reuse, or use of a hazardous waste.

*[For text of subps 74 to 80, see M.R.]*

Subp. 80a. **Secondary containment.** "Secondary containment" means a safeguard specifically designed to contain releases of hazardous waste or hazardous waste constituents from a container or a storage tank or its appurtenances.

*[For text of subps 81 to 100b, see M.R.]*

Subp. 100c. **Vault system.** "Vault system" means an underground, concrete or equivalent, impermeable secondary containment structure consisting of four walls, a floor, and roof used to encapsulate one or more tanks.

*[For text of subps 101 to 102, see M.R.]*

Subp. 102a. **Waste household battery.** "Waste household battery" means a household battery which is discarded before use.

Subp. 102b. **Waste oil.** "Waste oil" means virgin oil that is discarded before use.

Subp. 102c. **Wastewater.** "Wastewater" means waste that contains less than one percent by weight total organic carbon (TOC) and less than one percent by weight total suspended solids (TSS), with the following exceptions:

A. F001, F002, F003, F004, or F005 wastewaters are solvent-water mixtures that contain less than one percent by weight total organic carbon or less than one percent by weight total F001, F002, F003, F004, or F005 solvent constituents listed in part 7045.1355;

B. K011, K013, or K014 wastewaters that contain less than five percent by weight total organic carbon and less than one percent by weight total suspended solids as generated; or

C. K0103 or K0104 wastewaters that contain less than four percent by weight total organic carbon and less than one percent by weight total suspended solids.

Subp. 103. **Wastewater treatment unit.** "Wastewater treatment unit" means a device which:

*[For text of item A, see M.R.]*

B. receives and treats or stores an influent wastewater which is a hazardous waste as defined in parts 7045.0100 to 7045.0143; or generates and accumu-

lates a wastewater treatment sludge which is a hazardous waste as defined in parts 7045.0100 to 7045.0143; or treats or stores a wastewater treatment sludge which is a hazardous waste as defined in parts 7045.0100 to 7045.0143; and

*[For text of item C, see M.R.]*

*[For text of subps 104 to 109, see M.R.]*

**Statutory Authority:** *MS s 116.07; 116 37*

**History:** *15 SR 1877; 16 SR 197; 16 SR 2102, 16 SR 2239*

### **7045.0075 PETITIONS.**

**Subpart 1. Petitions for equivalent testing or analytical methods.** Any person seeking to use a testing or analytical method other than those described in parts 7045.0100 to 7045.0143, 7045.0450 to 7045.0544, or 7045.0552 to 7045.0642 may petition under these provisions. The person must demonstrate to the satisfaction of the commissioner that the proposed method is equal to or superior to the corresponding method prescribed in parts 7045.0100 to 7045.0143, 7045.0450 to 7045.0544, or 7045.0552 to 7045.0642 in terms of its sensitivity, accuracy, precision, and reproducibility. Each petition must include:

*[For text of items A to D, see M.R.]*

E. comparative results obtained from using the proposed method with those obtained from using the relevant or corresponding methods prescribed in parts 7045.0100 to 7045.0143, 7045.0450 to 7045.0544, or 7045.0552 to 7045.0642;

*[For text of items F and G, see M.R.]*

*[For text of subps 2 to 4, see M.R.]*

**Subp. 5. Petition for use of alternate manifest.** A person who meets the criteria in item A may submit a petition to the commissioner for approval of the use of an alternate manifest system as described in item B. The criteria the commissioner shall use in determining whether to approve the use of the alternate manifest system are provided in item C.

A. Only persons meeting the following criteria are eligible to file a petition under this subpart:

(1) the person proposing to use the alternate manifest system must agree to only use the alternate manifest for the transportation of waste from small quantity or very small quantity generators;

*[For text of subitems (2) and (3), see M.R.]*

*[For text of items B and C, see M.R.]*

*[For text of subps 6 to 8, see M.R.]*

**Subp. 9. Petitions to allow land disposal of a prohibited waste.** A person seeking an exemption from a prohibition for the disposal of a restricted hazardous waste in a particular unit or units must submit a petition to the agency and to the EPA demonstrating, to a reasonable degree of certainty, that there will be no migration of hazardous constituents from the disposal unit or injection zone for as long as the wastes remain hazardous. The demonstration to the EPA must include the provisions in Code of Federal Regulations, title 40, section 268.6. The demonstration to the agency must include an identification of the specific waste and the specific unit for which the demonstration will be made, a waste analysis to describe fully the chemical and physical characteristics of the subject waste,

and a comprehensive characterization of the disposal unit site including an analysis of background air, soil, and water quality. The demonstration must also include a monitoring plan that detects migration at the earliest practicable time, and sufficient information to assure the commissioner that the owner or operator of a land disposal unit receiving restricted wastes will comply with other applicable federal, state, and local laws. The person seeking the exemption must also comply with items A to L.

*[For text of item A, see M.R.]*

B. Each petition referred to in this subpart must include information described in subitems (1) to (5):

(1) A monitoring plan that describes the monitoring program installed at and around the unit to verify continued compliance with the conditions of the variance. This monitoring plan must provide information on the monitoring of the unit and the environment around the unit. The following specific information must be included in the plan:

(a) the media monitored in the cases where monitoring of the environment around the unit is required;

(b) the type of monitoring conducted at the unit, in the cases where monitoring of the unit is required;

(c) the location of the monitoring stations;

(d) the frequency of monitoring at each station;

(e) the specific hazardous constituents to be monitored;

(f) the implementation schedule for the monitoring program;

(g) the equipment used at the monitoring stations;

(h) the sampling and analytical techniques employed; and

(i) the data recording and reporting procedures.

(2) Where applicable, the monitoring program must be in place for a period of time specified by the commissioner, as part of the commissioner's approval of the petition, before receipt of prohibited waste at the unit.

(3) The monitoring data collected according to the monitoring plan must be sent to the commissioner according to a format and schedule specified and approved in the monitoring plan.

(4) A copy of the monitoring data collected under the monitoring plan must be kept on-site at the facility in the operating record.

(5) The monitoring program in subitem (1) must meet the following criteria:

(a) all sampling, testing, and analytical data must be approved by the commissioner and must provide data that is accurate and reproducible;

(b) all estimation and monitoring techniques must be approved by the commissioner; and

(c) a quality assurance and quality control plan addressing all aspects of the monitoring program must be provided to and approved by the commissioner.

C. After a petition has been approved, the owner or operator must report any changes in conditions at the unit and the environment around the unit that significantly depart from the conditions described in the variance and affect the potential for migration of hazardous constituents from the units as follows:

(1) If the owner or operator plans to make changes to the unit design, construction, or operation, the change must be proposed, in writing, and the owner or operator must submit a demonstration to the commissioner at least 30 days before making the change. The commissioner shall determine whether the proposed change invalidates the terms of the petition and will determine the

appropriate response. Any change must be approved by the commissioner before being made.

(2) If the owner or operator discovers that a condition at the site which was modeled or predicted in the petition does not occur as predicted, this change must be reported, in writing, to the commissioner within ten days of discovering the change. The commissioner shall determine whether the reported change from the terms of the petition requires further action, which may include termination of waste acceptance and revocation of the petition, petition modifications, or other responses.

D. If the owner or operator determines that there is migration of hazardous constituents from the unit, the owner or operator must immediately suspend receipt of prohibited waste at the unit and notify the commissioner in writing within ten days of the determination that a release has occurred. Within 60 days of receiving the notification, the commissioner shall determine whether the owner or operator can continue to receive prohibited waste in the unit and whether the variance is to be revoked. The commissioner shall also determine whether further examination of any migration is warranted under applicable provisions of parts 7045.0450 to 7045.0642.

E. Each petition must include the following statement signed by the petitioner or an authorized representative:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this petition and all attached documents, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

F. After receiving a petition, the commissioner may request additional information that reasonably may be required to evaluate the demonstration.

G. If approved, the petition will apply to land disposal of the specific restricted waste at the individual disposal unit described in the demonstration and will not apply to any other restricted waste at that disposal unit, or to that specific restricted waste at any other disposal unit.

H. The commissioner will give public notice in the State Register of the intent to approve or deny a petition and provide an opportunity for public comment. The final decision on a petition will be published in the State Register.

I. The term of a petition granted under this part must be no longer than the term of the RCRA permit if the disposal unit is operating under an RCRA permit, or up to a maximum of five years from the date of approval provided under item G if the unit is operating under interim status. In either case, the term of the granted petition expires upon the termination or denial of an RCRA permit, or upon the termination of interim status or when the volume limit of waste to be land disposed during the term of petition is reached.

J. Before the agency's decision, the applicant must comply with all restrictions on land disposal under parts 7045.1300 to 7045.1380 when the effective date for the waste has been reached.

K. The petition granted by the agency does not relieve the petitioner of responsibility for the management of hazardous waste under chapters 7001 and 7045.

L. Liquid hazardous wastes containing polychlorinated biphenyls at concentrations greater than or equal to 500 ppm are not eligible for an exemption under this subpart.

*[For text of subps 10 and 11, see M.R.]*

**Subp. 12. Petition for alternate design or operating practices.** An owner or



operator may submit a petition to the commissioner for approval to use alternate design or operating practices in lieu of the requirements of parts 7045.0532, 7045.0534, 7045.0538, 7045.0630, 7045.0632, and 7045.0638. The commissioner's decision shall be based on a demonstration by the petitioner that the alternate design or operating practices, together with location characteristics, will prevent the migration of any hazardous wastes or hazardous constituents into surface and ground water as effectively as the requirements of parts 7045.0532, 7045.0534, 7045.0538, 7045.0630, 7045.0632, and 7045.0638.

**Statutory Authority:** *MS s 116.07; 116.37*

**History:** *15 SR 1877; 16 SR 2102; 16 SR 2239*

#### 7045.0102 MIXTURES OF WASTES.

*[For text of subpart 1, see M.R.]*

**Subp. 2. Mixtures of hazardous and nonhazardous wastes.** The mixing of a hazardous waste with a nonhazardous waste as described in this subpart constitutes treatment. Generators who mix hazardous and nonhazardous wastes on site must meet the requirements of part 7045.0211 for generators with on-site facilities.

A. A mixture is a hazardous waste if it is a mixture of nonhazardous waste and any waste which is hazardous solely because it exhibits the characteristic of ignitability, corrosivity, oxidativity, or reactivity as described in part 7045.0131, unless the resulting mixture does not exhibit any of the characteristics of hazardous waste as defined in part 7045.0131.

B. A mixture is a hazardous waste if it is a mixture of nonhazardous waste and any waste listed in part 7045.0135 solely because of ignitability, corrosivity, or reactivity, unless:

(1) the resulting mixture does not exhibit any of the characteristics of hazardous waste as defined in part 7045.0131;

(2) the resulting mixture has been excluded from regulation pursuant to part 7045.0075, subpart 2; or

(3) the nonhazardous waste is exempt from regulation under part 7045.0120, item I, and the resultant mixture no longer exhibits any characteristic of hazardous waste as defined in part 7045.0131 for which the hazardous waste listed in part 7045.0135 was listed.

*[For text of item C, see M.R.]*

D. A mixture is a hazardous waste if it is a sewerage mixture of nonhazardous waste and any waste which is hazardous because it exhibits the characteristics of extraction procedure (EP) toxicity or toxicity as defined in part 7045.0131 unless:

(1) prior to entering the sewer the resulting mixture no longer exhibits the characteristic of extraction procedure (EP) toxicity or toxicity; and

(2) the sewerage of the mixture has been approved by the agency pursuant to parts 7045.0220 to 7045.0255.

This provision does not apply to those mixtures defined as nonhazardous under item F.

*[For text of items E to G, see M.R.]*

H. Any mixture of a waste from the extraction, beneficiation, and processing of ores and minerals excluded under part 7045.0120, item I, and any other waste exhibiting a characteristic of hazardous waste under part 7045.0131 is a hazardous waste only if:

(1) it exhibits a characteristic that would not have been exhibited by the excluded waste alone if such mixture had not occurred; or

(2) it continues to exhibit any of the characteristics exhibited by the nonexcluded wastes prior to mixture.

For the purposes of applying the toxicity characteristic of part 7045.0131, subpart 7, to such mixtures, the mixture is also a hazardous waste if it exceeds the maximum concentration for any contaminant listed in part 7045.0131, subpart 8, that would not have been exceeded by the excluded waste alone if the mixture had not occurred or if it continues to exceed the maximum concentration for any contaminant exceeded by the nonexempt waste prior to mixture.

**Subp. 3. Mixtures of used oil and hazardous waste.** Items A to C apply to used oil that is intentionally mixed with hazardous waste.

A. Except as provided in item C, used oil mixed with a hazardous waste that exhibits any of the characteristics of part 7045.0131, subparts 2 to 7, is regulated as hazardous waste. If it is burned for energy recovery, it is regulated as a hazardous waste fuel under part 7045.0692 provided the mixture continues to exhibit any of those characteristics. If the mixture no longer exhibits any of those characteristics and is to be burned for energy recovery, it is regulated as a used oil fuel under part 7045.0695. If the mixture no longer exhibits any of those characteristics and is not burned for energy recovery, it is subject to the requirements of part 7045.0125.

*[For text of item B, see M.R.]*

C. A very small quantity generator may mix used oil that is generated on site and regulated as used oil fuel under part 7045.0695 with a waste that is hazardous solely for the characteristic of ignitability under part 7045.0131, subpart 2, if the following conditions are met:

(1) the ignitable waste has a flash point of 100 degrees Fahrenheit or greater, is not a metal bearing paint waste, and is not gasoline; and

(2) the concentration of ignitable waste in the used oil does not exceed ten percent by volume.

**Statutory Authority:** *MS s 116.07*

**History:** *16 SR 197; 16 SR 2102*

**NOTE** Amendments to subpart 2, items A to D, were also adopted at 15 SR 1878 to read as follows

"Subp 2 Mixtures of hazardous and nonhazardous wastes

A A mixture is a hazardous waste if it is a mixture of nonhazardous waste and any waste which is hazardous solely because it exhibits the characteristic of ignitability, corrosivity, oxidativity, or reactivity as described in part 7045 0131, unless the resulting mixture no longer exhibits any of the characteristics of ignitability, corrosivity, oxidativity, or reactivity and does not exhibit characteristics of toxicity or lethality as defined in part 7045 0131

B A mixture is a hazardous waste if it is a mixture of nonhazardous waste and any waste listed in part 7045 0135 solely because of ignitability, corrosivity, or reactivity, unless the resulting mixture either no longer exhibits any of the characteristics of ignitability, corrosivity, and reactivity, and does not exhibit characteristics of toxicity or lethality as defined in part 7045 0131, or has been excluded from regulation pursuant to part 7045 0075, subpart 2

C A mixture is a hazardous waste if it is a nonsewered mixture of nonhazardous waste and any waste listed in part 7045 0135 (other than wastes listed solely because of ignitability, corrosivity, or reactivity) or any waste which is hazardous because it exhibits the characteristics of toxicity or lethality as identified in part 7045 0131 unless the resulting mixture has been excluded from regulation pursuant to part 7045 0075, subpart 2

D A mixture is a hazardous waste if it is a sewered mixture of nonhazardous waste and any waste which is hazardous because it exhibits the characteristics of toxicity or lethality as defined in part 7045 0131 unless before entering the sewer the resulting mixture no longer exhibits the characteristics of toxicity or lethality, and the sewerage of the mixture has been approved by the agency pursuant to parts 7045 0220 to 7045 0255 This provision does not apply to those mixtures defined as nonhazardous under item F "

## **7045.0120 EXEMPTIONS AND SPECIAL REQUIREMENTS.**

**Subpart 1. Exempt types of waste.** The following waste may be stored, labeled, transported, treated, processed, and disposed of without complying with the requirements of this chapter:

A. household waste;

B. sewage and any mixture of untreated sanitary sewage and other wastes that is formed by the combination of untreated sanitary sewage and one or more other wastes discharged through a sewage system to a publicly owned treatment works for treatment, except that this exemption does not include any of the individual wastes which form the composite wastewater;

*[For text of items C to H, see M.R.]*

I. waste from the extraction, beneficiation, and processing of ores and minerals, including coal, and including phosphate rock and overburden from the mining of uranium ore. For purposes of this item, beneficiation of ores and minerals is restricted to the following activities: crushing; grinding; washing; dissolution; crystallization; filtration; sorting; sizing; drying; sintering; pelletizing; briquetting; calcining to remove water or carbon dioxide; roasting, autoclaving, or chlorination in preparation for leaching (except where the roasting, autoclaving, or chlorination/leaching sequence produces a final or intermediate product that does not undergo further beneficiation or processing); gravity concentration; magnetic separation; electrostatic separation; flotation; ion exchange; solvent extraction; electrowinning; precipitation; amalgamation; and heap, dump, vat, tank, and in situ leaching. For the purposes of this item, waste from the processing of ores and minerals includes only the following wastes:

- (1) red and brown muds from bauxite refining;
- (2) slag from elemental phosphorus production;
- (3) gasifier ash from coal gasification;
- (4) process wastewater from coal gasification;
- (5) slag tailings from primary copper processing;
- (6) fluorogypsum from hydrofluoric acid production;
- (7) iron blast furnace slag;
- (8) treated residue from the roasting/leaching of chrome ore; and
- (9) basic oxygen furnace and open hearth furnace slag from carbon steel production;

J. waste resulting from spills if the exemption is determined by the commissioner to be necessary to expedite the proper management of the spilled material and to prevent, abate, or control pollution as an immediate response to an emergency provided the waste is ultimately taken to a hazardous waste facility as specified in part 7045.0208;

*[For text of items K to N, see M.R.]*

O. spent sulfuric acid used to produce virgin sulfuric acid, unless it is accumulated speculatively as defined in part 7045.0020,

P. secondary materials that are reclaimed and returned to the original process or processes in which they were generated where they are reused in the production process provided that:

*[For text of subitems (1) and (2), see M.R.]*

(3) the secondary materials are never accumulated in such tanks for over 12 months without being reclaimed; and

(4) the reclaimed material is not used to produce a fuel, or used to produce products that are used in a manner constituting disposal;

Q. petroleum-contaminated media and debris that fail the test for the toxicity characteristic in part 7045.0131, subpart 7 (hazardous waste codes D018 to D043 only), and are subject to corrective action regulations under chapter 7150;

R. pesticides as provided in part 7045.0213, subpart 2;

S. samples of hazardous waste being collected or shipped for the purpose of conducting treatability studies as provided in part 7045.0121;

T. spent wood preserving solutions that have been reclaimed and reused for their original intended purpose, and wastewaters from the wood preserving process that have been reclaimed and are reused to treat wood; or

U. used chlorofluorocarbon refrigerants from totally enclosed heat transfer equipment, including mobile air conditioning systems, mobile refrigeration, and commercial and industrial air conditioning and refrigeration systems that use chlorofluorocarbons as the heat transfer fluid in a refrigeration cycle, provided the refrigerant is reclaimed for further use.

Subp. 2. **Special requirements.** The following waste is exempt from the general requirements of this chapter if managed as specified:

A. collected household hazardous waste under part 7045.0310;

B. collected spent or waste household batteries under part 7045.0686;  
and

C. collected hazardous waste from very small quantity generators under part 7045.0320.

**Statutory Authority:** *MS s 116.07*

**History:** *15 SR 1877; 15 SR 1878, 16 SR 197; 16 SR 2102; 17 SR 285*

#### **7045.0121 TREATABILITY STUDY EXEMPTIONS.**

Subpart 1. **Applicability.** Except as provided in subpart 2, persons who generate or collect samples for the purpose of conducting treatability studies, as defined in part 7045.0020, are not subject to any requirement of parts 7045.0100 to 7045.0397, or to the notification requirements of the Resource Conservation and Recovery Act, United States Code, title 42, section 6930 when:

*[For text of items A to C, see M.R.]*

Subp. 2. **Conditions of exemption.** The exemption in subpart 1 is applicable to samples of hazardous waste being collected and shipped for the purpose of conducting treatability studies provided that:

*[For text of items A to E, see M.R.]*

F. the generator reports the information required under item E, subitem (3), in its report to the commissioner as specified in part 7045.0248.

*[For text of subp 3, see M.R.]*

**Statutory Authority:** *MS s 116.07*

**History:** *16 SR 2102*

#### **7045.0125 MANAGEMENT OF WASTE BY USE, REUSE, RECYCLING, AND RECLAMATION.**

*[For text of subpart 1, see M.R.]*

Subp. 3. **Out-of-state waste.** Hazardous waste from an out-of-state generator that is to be beneficially used, reused, or legitimately recycled or reclaimed by methods other than burning, is exempt from the requirements of parts 7045.0221 to 7045.0255.

*[For text of subps 3a and 4, see M.R.]*

Subp. 5. **Requirements for use of hazardous waste as feedstock.**

*[For text of item A, see M.R.]*

B. A generator of hazardous waste for use as feedstock is subject to the following generator requirements:

(1) parts 7045.0214 to 7045.0217 for waste evaluation requirements;

(2) part 7045.0221 for identification number requirements;

(3) parts 7045.0225 to 7045.0250 for licensing and license reporting requirements;

*[For text of subitems (4) and (5), see M.R.]*

*[For text of items C and D, see M.R.]*

**Subp. 6. Requirements for reclamation of specific hazardous waste.**

A. A by-product or a sludge that is hazardous only because it exhibits a characteristic of hazardous waste as defined in part 7045.0131 and is reclaimed is subject to the following requirements:

(1) A generator of such a hazardous waste is subject to the requirements of subpart 5, item B.

*[For text of subitems (2) and (3), see M.R.]*

*[For text of item B, see M.R.]*

**Subp. 7. Generator requirements.** Except as provided in subpart 3a, 4, 5, or 6, or part 7045.0695, a generator of hazardous waste that is destined for recycling is subject to the requirements of parts 7045.0205 to 7045.0320.

*[For text of subp 8, see M.R.]*

**Subp. 9. Facility requirements.** Except as provided in subpart 3a, 4, 5, or 6, or parts 7045.0692 and 7045.0695, owners or operators of facilities which recycle hazardous waste are subject to the following requirements:

A. If the recyclable hazardous waste is stored before it is recycled, the owners or operators are subject to the requirements of parts 7045.0450 to 7045.0534, 7045.0552 to 7045.0632, and 7045.1300 to 7045.1380, and chapter 7001. The recycling process itself is exempt from regulation except as provided in item C.

*[For text of item B, see M.R.]*

C. Owners or operators of facilities subject to RCRA permitting requirements with hazardous waste management units that recycle hazardous wastes are subject to the process vent and equipment leak standards in parts 7045.0547 and 7045.0548 and 7045.0647 and 7045.0648.

*[For text of subp 12, see M.R.]*

**Statutory Authority:** *MS s 116.07*

**History:** *16 SR 2102; 16 SR 2321*

**7045.0131 CHARACTERISTICS OF HAZARDOUS WASTE.**

**Subpart 1. In general.** A waste which is not excluded from regulation as a hazardous waste under part 7045.0120 is a hazardous waste if it exhibits ignitability, corrosivity, reactivity, toxicity, lethality, or is an oxidizer, as described in subparts 2 to 7. A hazardous waste which is identified by a characteristic in this part is assigned every hazardous waste number that is applicable. This number must be used in complying with the notification requirements of section 3010 of the federal Resource Conservation and Recovery Act and all applicable record keeping and reporting requirements under parts 7045.0205 to 7045.0642 and 7045.1300, and chapter 7001. For purposes of this part, the commissioner shall consider a sample obtained using any of the applicable sampling methods specified in Code of Federal Regulations, title 40, part 260, Appendix I or part 261, Appendix II, to be a representative sample.

**Subp. 2. Ignitability.** A waste exhibits the characteristic of ignitability if a representative sample of the waste has any of the following properties:

*[For text of items A and B, see M.R.]*

C. it is an ignitable compressed gas as defined in Code of Federal Regulations, title 49, section 173.300 (1983) and as determined by the test methods described in that regulation or equivalent test methods approved by the commissioner under part 7045.0075, subpart 1.

A waste that exhibits the characteristic of ignitability has the hazardous waste number of D001.

**Subp. 3. Oxidizers.** A waste exhibits the characteristics of an oxidizer if a representative sample of the waste has the following properties:

*[For text of item A, see M.R.]*

B. it readily supplies oxygen to a reaction in the absence of air. Oxidative materials include, but are not limited to, oxides, organic and inorganic peroxides, permanganates, perhenates, chlorates, perchlorates, persulfates, nitric acid, organic and inorganic nitrates, iodates, periodates, bromates, perselenates, perbromates, chromates, dichromates, ozone, and perborates. Bromine, chlorine, fluorine, and iodine react similarly to oxygen under some conditions and are therefore also oxidative materials.

A waste that exhibits the characteristics of an oxidizer has the hazardous waste number of D001.

**Subp. 4. Corrosivity.** A waste exhibits the characteristic of corrosivity if a representative sample of the waste has any of the following properties:

*[For text of item A, see M.R.]*

B. It is liquid and corrodes steel (SAE 1020) at a rate greater than 6.35 mm (0.250 inch) per year at a test temperature of 55 degrees Celsius (130 degrees Fahrenheit) as determined by the test method specified in National Association of Corrosion Engineers Standard TM-01-69 as standardized in Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, issued by the United States Environmental Protection Agency, publication number SW 846 (First Edition, 1980 as updated by Revisions A (August 1980), B (July 1981), and C (February 1982) or Second Edition, 1982) or an equivalent test method approved by the commissioner under the procedures set forth in part 7045.0075, subpart 1.

A waste that exhibits the characteristic of corrosivity has the hazardous waste number of D002.

**Subp. 5. Reactivity.** A waste exhibits the characteristic of reactivity if a representative sample of the waste has any of the following properties:

*[For text of items A to G, see M.R.]*

H. it is a forbidden explosive as defined in Code of Federal Regulations, title 49, section 173.51 (1983), a Class A explosive as defined in Code of Federal Regulations, title 49, section 173.53 (1983), or a Class B explosive as defined in Code of Federal Regulations, title 49, Section 173.88 (1983).

A waste that exhibits the characteristic of reactivity has the hazardous waste number of D003.

**Subp. 6. Lethality.** Lethality is determined as follows:

A. A waste exhibits the characteristic of lethality as determined in item B, if a representative sample of the waste has any one of the following properties:

*[For text of subitems (1) to (3), see M.R.]*

(4) an inhalation median lethal concentration of less than 1,000 parts per million of material in air, if the material or component may be inhaled as gas or vapor.

B. Lethality shall be determined by applying knowledge of materials and processes used, including reasonably available information on the lethality of the components of the waste. If available information and knowledge are insufficient to reasonably determine lethality, the generator must notify the commissioner. The commissioner may order additional evaluation as specified in part 7045.0217. Additional evaluation may include testing according to the specifications of item C.

C. Lethality shall be determined as described in subitems (1) to (3):

*[For text of subitems (1) to (3), see M.R.]*

D. A waste that exhibits the characteristics of lethality has the hazardous waste number MN01.

Subp. 7. **Toxicity.** Toxicity is determined as follows:

A. A waste exhibits the characteristic of toxicity if, using the test methods described in Code of Federal Regulations, title 40, part 261, appendix II, as amended, or equivalent methods approved by the commissioner under the procedures in part 7045.0075, subpart 1, the extract from a representative sample of the waste contains any of the contaminants listed in subpart 8 at a concentration equal to or greater than the respective value given in that table. Where the waste contains less than 0.5 percent filterable solids, the waste itself, after filtering, is considered to be the extract.

B. A waste that exhibits the characteristic of toxicity has the hazardous waste number specified in subpart 8 which corresponds to the toxic contaminant causing it to be hazardous.

*[For text of item C, see M.R.]*

Subp. 8. **Maximum concentration of contaminants for the toxicity characteristic.**

Hazardous Waste Number	Contaminant	CAS No.	Maximum Concentration (milligrams per liter)
D004	Arsenic	7440-38-2	5.0
D005	Barium	7440-39-3	100.0
D018	Benzene	71-43-2	0.5
D006	Cadmium	7440-43-9	1.0
D019	Carbon tetrachloride	56-23-5	0.5
D020	Chlordane	57-74-9	0.03
D021	Chlorobenzene	108-90-7	100.0
D022	Chloroform	67-66-3	6.0
D007	Chromium	7440-47-3	5.0
D023	o-Cresol	95-48-7	*200.0
D024	m-Cresol	108-39-4	*200.0
D025	p-Cresol	106-44-5	*200.0
D026	Cresol		*200.0
D016	2,4-D	94-75-7	10.0
D027	1,4-Dichlorobenzene	106-46-7	7.5
D028	1,2-Dichloroethane	107-06-2	0.5
D029	1,1-Dichloroethylene	75-35-4	0.7
D030	2,4-Dinitrotoluene	121-14-2	0.13
D012	Endrin	72-20-8	0.02
D031	Heptachlor (and its epoxide)	76-44-8	0.008
D032	Hexachlorobenzene	118-74-1	0.13
D033	Hexachlorobutadiene	87-68-3	0.5
D034	Hexachloroethane	67-72-1	3.0

D008	Lead	7439-92-1	5.0
D013	Lindane	58-89-9	0.4
D009	Mercury	7439-97-6	0.2
D014	Methoxychlor	72-43-5	10.0
D035	Methyl ethyl ketone	78-93-3	200.0
D036	Nitrobenzene	98-95-3	2.0
D037	Pentachlorophenol	87-86-5	100.0
D038	Pyridine	110-86-1	5.0
D010	Selenium	7782-49-2	1.0
D011	Silver	7440-22-4	5.0
D039	Tetrachloroethylene	127-18-4	0.7
D015	Toxaphene	8001-35-2	0.5
D040	Trichloroethylene	79-01-6	0.5
D041	2,4,5-Trichlorophenol	95-95-4	400.0
D042	2,4,6-Trichlorophenol	88-06-2	2.0
D017	2,4,5-TP (Silvex)	93-72-1	1.0
D043	Vinyl chloride	75-01-4	0.2

\*If o-, m-, and p-cresol concentrations cannot be differentiated, the total cresol (D026) concentration is used. The regulatory level of total cresol is 200 milligrams per liter.

**Statutory Authority:** *MS s 116 07; 116.37*

**History:** *15 SR 1878, 16 SR 2239*

#### **7045.0133 EXEMPTION FROM REGULATION DUE TO LETHALITY.**

Subpart 1. **In general.** A specific generator's waste that meets any of the lethality characteristics as described in part 7045.0131, subpart 6, may be exempted from regulation under parts 7045.0100 to 7045.1030 if the generator can demonstrate to the satisfaction of the agency that the waste is not capable of posing a present or potential hazard to human health and the environment if the waste were to be improperly treated, transported, stored, disposed, or managed under routine waste management methods.

Subp. 2. **Factors to be considered.** In demonstrating that a waste should be exempt from regulation under parts 7045.0100 to 7045.1030, the generator must present information related to the following factors:

- A. the nature of the lethality displayed by the waste;
- B. the median lethal dose or median lethal concentration of the entire waste and each of the lethal constituents within the waste;
- C. the lethal constituent or constituents present in the waste and the respective concentrations;

*[For text of items D and E, see M.R.]*

F. based upon the improper or routine waste management methods considered in item E, the following factors:

(1) the potential of the lethal constituent or constituents or any lethal degradation product or products to migrate from the waste into the environment;

(2) the persistence of the lethal constituent or constituents or any lethal degradation product or products;

(3) the degree to which the lethal constituent or constituents or any lethal degradation product or products may bioaccumulate in the environment;

(4) the potential for the lethal constituents or constituents of any lethal degradation product or products to degrade into nonhazardous constituents and the rate of degradation; and



*[For text of subitem (5), see M.R.]*

*[For text of item G, see M.R.]*

**Statutory Authority:** *MS s 116.07*

**History:** *15 SR 1878*

#### **7045.0135 LISTS OF HAZARDOUS WASTES.**

Subpart 1. **General.** A waste is a hazardous waste if it is listed under subparts 2 to 5 unless it has been excluded from the list under part 7045.0075, subpart 2.

The basis for listing the classes or types of wastes listed in subparts 2 to 5 is indicated by employing one or more of the following hazard codes:

- A. ignitable waste, (I);
- B. corrosive waste, (C);
- C. reactive waste, (R);
- D. toxicity characteristic waste, (E);
- E. acute hazardous waste, (H); and
- F. toxic waste, (T).

The constituent which caused the agency to list the waste as a toxicity characteristic waste (E) or toxic waste (T) in subparts 2 and 3 is identified in part 7045.0139.

Each listed hazardous waste is assigned a hazardous waste number which precedes the name of the waste.

Subp. 2. **Hazardous wastes from nonspecific sources.** Hazardous wastes from nonspecific sources are listed with the generic hazardous waste number and hazard code in items A to Z.

*[For text of items A to L, see M.R.]*

M. F019, wastewater treatment sludges from the chemical conversion coating of aluminum, except from zirconium phosphating in aluminum can washing when such phosphating is an exclusive conversion coating process: (T);

*[For text of items N to Q, see M.R.]*

R. F024, process wastes, including but not limited to, distillation residues, heavy ends, tars, and reactor cleanout wastes from the production of certain chlorinated aliphatic hydrocarbons by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution. This listing does not include wastewaters, wastewater treatment sludges, spent catalysts, and wastes listed in this subpart and subpart 3: (T);

S. F025, condensed light ends, spent filters and filter aids, and spent desiccant wastes from the production of certain chlorinated aliphatic hydrocarbons, by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution: (T);

T. F026, wastes, except wastewater and spent carbon from hydrogen chloride purification, from the production of materials on equipment previously used for the manufacturing use as a reactant, chemical intermediate, or component in a formulating process of tetra-, penta-, or hexachlorobenzene under alkaline conditions: (H);

U. F027, discarded unused formulations containing tri-, tetra-, or pentachlorophenol or discarded unused formulations containing compounds derived from these chlorophenols. This listing does not include formulations containing hexachlorophene synthesized from prepurified 2,4,5-trichlorophenol as the sole component: (H);

V. F028, residues resulting from the incineration or thermal treatment of soil contaminated with hazardous waste Nos. F020, F021, F022, F023, F026, and F027: (T);

W. F032, wastewaters, process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that currently use or have previously used chlorophenolic formulations, except potentially cross-contaminated wastes that have had the F032 waste code deleted in accordance with part 7045.0145 and where the generator does not resume or initiate use of chlorophenolic formulations. This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol. This listing does not include wastewaters which have not come into contact with process contaminants. This listing does not include wastes from plants which have previously used chlorophenolic formulations and are included in the F034 or F035 listings: (T);

X. F034, wastewaters, process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that use creosote formulations. This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol. This listing does not include wastewaters which have not come into contact with process contaminants: (T);

Y. F035, wastewaters, process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that use inorganic preservatives containing arsenic or chromium. This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol. This listing does not apply to wastewaters which have not come into contact with process contaminants: (T); and

Z. F039, leachate resulting from the treatment, storage, or disposal of more than one restricted waste classified as hazardous under part 7045.0131 and this part. Leachate resulting from the management of one or more of the following EPA hazardous wastes and no other hazardous wastes retains its EPA hazardous waste numbers: F020, F021, F022, F023, F026, F027, or F028: (T).

Subp. 3. **Hazardous waste from specific sources.** Hazardous wastes from specific sources are listed with the industry and hazardous waste number and hazard code in items A to Q.

*[For text of items A and B, see M.R.]*

C. Organic chemicals:

*[For text of subitems (1) to (37), see M.R.]*

(38) K118, spent adsorbent solids from purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene: (T);

(39) K136, still bottoms from the purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene: (T);

(40) K107, column bottoms from product separation from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazines: (C,T);

(41) K108, condensed column overheads from product separation and condensed reactor vent gases from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides: (I,T);

(42) K109, spent filter cartridges from product purification from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides: (T); and

(43) K110, condensed column overheads from intermediate separation from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides: (T).

*[For text of item D, see M.R.]*

E. Pesticides:

*[For text of subitems (1) to (18), see M.R.]*

(19) K125, filtration, evaporation, and centrifugation solids from the production of ethylenebis[dithiocarbamic acid] and its salts: (T);

(20) K126, bag house dust and floor sweepings in milling and packaging operations from the production or formulation of ethylenebis[dithiocarbamic acid] and its salts: (T);

(21) K131, wastewater from the reactor and spent sulfuric acid from the acid dryer from the production of methyl bromide: (C,T); and

(22) K132, spent absorbent and wastewater separator solids from the production of methyl bromide: (T).

*[For text of items F to Q, see M.R.]*

**Subp. 4. Discarded commercial chemical products, off specification species, containers, and spill residues.** The following materials or items are hazardous wastes when they are discarded or intended to be discarded as described in part 7045.0020, subpart 18; when they are mixed with waste oil or used oil or other material and applied to the land for dust suppression or road treatment; when they are otherwise applied to the land in lieu of their original intended use; when they are contained in products that are applied to the land in lieu of their original intended use; or when, in lieu of their original intended use, they are produced for use as, or as a component of a fuel, distributed for use as a fuel, or burned as a fuel.

*[For text of items A to D, see M.R.]*

E. The commercial chemical products or manufacturing chemical intermediates, or off specification commercial chemical products or manufacturing chemical intermediates referred to in items A to D and listed in subitems (1) to (17) are identified as acute hazardous wastes (H). The primary hazardous properties of these materials have been indicated by the letters T (toxicity), and R (reactivity). Absence of a letter indicates that the compound is listed only for acute toxicity. These wastes and their corresponding hazardous waste numbers, Chemical Abstract Service registry numbers, if available, and hazard codes are listed in subitems (1) to (17).

*[For text of subitems (1) to (17), see M.R.]*

F. The commercial chemical products or manufacturing chemical intermediates, or off-specification commercial chemical products referred to in items A to D, and listed in subitems (1) to (24) are identified as toxic wastes (T) unless otherwise designated. The primary hazardous properties of these materials have been indicated by the letters T (toxicity), R (reactivity), I (ignitability), and C (corrosivity). Absence of a letter indicates that the compound is listed only for toxicity. These wastes and their corresponding hazardous waste numbers, Chemical Abstract Service registry numbers, if available, and hazard codes are listed as follows:

*[For text of subitems (1) to (24), see M.R.]*

**Subp. 5. PCB wastes.** Requirements for PCB wastes are as follows:

*[For text of item A, see M.R.]*

B. PCB materials or items are hazardous waste if and when they are discarded or stored prior to being discarded.

C. A generator of PCB wastes who stores on-site prior to disposal is exempt from the agency's hazardous waste storage facility permit requirements and parts 7045.0292 and 7045.0450 to 7045.0642 for the storage of those wastes except for the following requirements:

(1) the storage standards described in Code of Federal Regulations, title 40, section 761.65 (1983); and

(2) the requirements of part 7045.0292, subpart 1, items C, D, and I regarding proper labeling and marking, personnel training, preparedness, prevention, and contingency planning.

*[For text of items D to F, see M.R.]*

**Statutory Authority:** *MS s 116.07; 116.37*

**History:** *15 SR 1878; 16 SR 197; 16 SR 2102; 16 SR 2239; 16 SR 2321; 17 SR 285*

#### **7045.0137 SMALL AMOUNTS OF UNRELATED CHEMICALS.**

For purposes of licensing only under parts 7045.0225 to 7045.0250, a collection of small amounts of unrelated chemicals as described in part 7045.0230, subpart 4, has the hazardous waste number of MN02.

**Statutory Authority:** *MS s 116.07*

**History:** *16 SR 2102*

#### **7045.0139 BASIS FOR LISTING HAZARDOUS WASTES.**

*[For text of subpart 1, see M.R.]*

**Subp. 2. Constituents.** The constituents which are the basis for listing the wastes identified in part 7045.0135, subparts 2 and 3 are listed in items A and B.

A. Constituents of wastes identified in part 7045.0135, subpart 2, are listed in subitems (1) to (26).

(1) F001: Tetrachloroethylene, methylene chloride, trichloro-ethylene, 1,1,1-trichloroethane, carbon tetrachloride, chlorinated fluorocarbons;

(2) F002: Tetrachloroethylene, methylene chloride, trichloroethylene, 1,1,1-trichloroethane, 1,1,2-trichloroethane, chlorobenzene, 1,1,2-trichloro-1,2,2-trifluoroethane, o-dichlorobenzene, trichlorofluoromethane;

(3) F003: N.A.;

(4) F004: Cresols and cresylic acid, nitrobenzene;

(5) F005: Toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, 2-ethoxyethanol, benzene, 2-nitropropane;

(6) F006: Cadmium, hexavalent chromium, nickel, cyanide (complexed);

(7) F007: Cyanide (salts);

(8) F008: Cyanide (salts);

(9) F009: Cyanide (salts);

(10) F010: Cyanide (salts);

(11) F011: Cyanide (salts);

(12) F012: Cyanide (complexed);

(13) F019: Hexavalent chromium, cyanide (complexed);

(14) F020: Tetra- and pentachlorodibenzo-p-dioxins; tetra- and pentachlorodibenzofurans; tri- and tetrachlorophenols and their chlorophenoxy derivative acids, esters, ethers, amine, and other salts;

(15) F021: Penta- and hexachlorodibenzo-p-dioxins; penta- and hexachlorodibenzofurans; pentachlorophenol and its derivatives;

(16) F022: Tetra-, penta-, and hexachlorodibenzo-p-dioxins; tetra-, penta-, and hexachlorodibenzofurans;

(17) F023: Tetra- and pentachlorodibenzo-p-dioxins; tetra- and pentachlorodibenzofurans; tri- and tetrachlorophenols and their chlorophenoxy derivative acids, esters, ethers, amine, and other salts;

(18) F024: Chloromethane, dichloromethane, trichloromethane, carbon tetrachloride, chloroethylene, 1,1-dichloroethane, 1,2-dichloroethane, trans-1,2-dichloroethylene, 1,1-dichloroethylene, 1,1,1-trichloroethane, 1,1,2-trichloroethane, trichloroethylene, 1,1,1,2-tetrachloroethane, 1,1,2,2-tetrachloroethane, tetrachloroethylene, pentachloroethane, hexachloroethane, allyl chloride (3-chloropropene), dichloropropane, dichloropropene, 2-chloro-1,3-butadiene, hexachloro-1,3-butadiene, hexachlorocyclopentadiene, hexachlorocyclohexane, benzene, chlorobenzene, dichlorobenzenes, 1,2,4-trichlorobenzene, tetrachlorobenzene, pentachlorobenzene, hexachlorobenzene, toluene, naphthalene;

(19) F025: Chloromethane; dichloromethane; trichloromethane; carbon tetrachloride; chloroethylene; 1,1-dichloroethane; 1,2-dichloroethane; trans-1,2-dichloroethylene; 1,1-dichloroethylene; 1,1,1-trichloroethane; 1,1,2-trichloroethane; trichloroethylene; 1,1,1,2-tetrachloroethane; 1,1,2,2-tetrachloroethane; tetrachloroethylene; pentachloroethane; hexachloroethane; allyl chloride (3-chloropropene); dichloropropane; dichloropropene; 2-chloro-1,3-butadiene; hexachloro-1,3-butadiene; hexachlorocyclopentadiene; benzene; chlorobenzene; dichlorobenzene; 1,2,4-trichlorobenzene; tetrachlorobenzene; pentachlorobenzene; hexachlorobenzene; toluene; naphthalene;

(20) F026: Tetra-, penta-, and hexachlorodibenzo-p-dioxins; tetra-, penta-, and hexachlorodibenzofurans;

(21) F027: Tetra-, penta-, and hexachlorodibenzo-p-dioxins; tetra-, penta-, and hexachlorodibenzofurans; tri-, tetra-, and pentachlorophenols and their chlorophenoxy derivative acids, esters, ethers, amine, and other salts;

(22) F028: Tetra-, penta-, and hexachlorodibenzo-p-dioxins; tetra-, penta-, and hexachlorodibenzofurans; tri-, tetra-, and pentachlorophenols and their chlorophenoxy derivative acids, esters, ethers, amine, and other salts;

(23) F032: Benz(a)anthracene; benzo(a)pyrene; dibenz(a,h)-anthracene; indeno(1,2,3-cd)pyrene; pentachlorophenol; arsenic; chromium; tetra-, penta-, hexa-, heptachlorodibenzo-p-dioxins; tetra-, penta-, hexa-, heptachlorodibenzofurans;

(24) F034: Benz(a)anthracene; benzo(k)fluoranthene; benzo(a)pyrene; dibenz(a,h)anthracene; indeno(1,2,3-cd)pyrene; naphthalene; arsenic; chromium;

(25) F035: Arsenic; chromium; lead; and

(26) F039: Constituents for which treatment standards are specified for multisource leachate, wastewaters, and nonwastewaters under part 7045.1358.

B. Constituents of wastes identified in part 7045.0135, subpart 3 are listed in subitems (1) to (101).

(1) K001: Pentachlorophenol, phenol, 2-chlorophenol, p-chloro-m-cresol, 2,4-dimethylphenyl, 2,4-dinitrophenol, trichloro-, phenols, tetrachlorophenols, 2,4-dinitrophenol, creosote, chrysene, naphthalene, fluoranthene, benzo(b)fluoranthene, benzo(a)pyrene, indeno(1,2,3-cd)pyrene, benz(a)anthracene, dibenz(a)anthracene, acenaphthalene;

(2) K002: Hexavalent chromium, lead;

(3) K003: Hexavalent chromium, lead;

- (4) K004: Hexavalent chromium;
- (5) K005: Hexavalent chromium, lead;
- (6) K006: Hexavalent chromium;
- (7) K007: Cyanide (complexed), hexavalent chromium;
- (8) K008: Hexavalent chromium;
- (9) K009: Chloroform, formaldehyde, methylene chloride, methyl chloride, paraldehyde, formic acid;
- (10) K010: Chloroform, formaldehyde, methylene chloride, methyl chloride, paraldehyde, formic acid, chloroacetaldehyde;
- (11) K011: Acrylonitrile, acetonitrile, hydrocyanic acid;
- (12) K013: Hydrocyanic acid, acrylonitrile, acetonitrile;
- (13) K014: Acetonitrile, acrylamide;
- (14) K015: Benzyl chloride, chlorobenzene, toluene, benzotrichloride;
- (15) K016: Hexachlorobenzene, hexachlorobutadiene, carbon tetrachloride, hexachloroethane, perchloroethylene;
- (16) K017: Epichlorohydrin, chloroethers [bis (chloromethyl) ether and bis (2-chloroethyl) ethers], trichloropropane, dichloropropanols;
- (17) K018: 1,2-dichloroethane, trichloroethylene, hexachlorobutadiene, hexachlorobenzene;
- (18) K019: Ethylene dichloride, 1,1,1-trichloroethane, 1,1,2-trichloroethane, tetrachloroethanes (1,1,2,2-tetrachloroethane and 1,1,1,2-tetrachloroethane), trichloroethylene, tetrachloroethylene, carbon tetrachloride, chloroform, vinyl chloride, vinylidene chloride;
- (19) K020: Ethylene dichloride, 1,1,1-trichloroethane, 1,1,2-trichloroethane, tetrachloroethanes (1,1,2,2-tetrachloroethane and 1,1,1,2-tetrachloroethane), trichloroethylene, tetrachloroethylene, carbon tetrachloride, chloroform, vinyl chloride, vinylidene chloride;
- (20) K021: Antimony, carbon tetrachloride, chloroform;
- (21) K022: Phenol, tars (polycyclic aromatic hydrocarbons);
- (22) K023: Phthalic anhydride, maleic anhydride;
- (23) K024: Phthalic anhydride, 1,4-naphthoquinone;
- (24) K025: Metadinitrobenzene, 2,4-dinitrotoluene;
- (25) K026: Paraldehyde, pyridines, 2-picoline;
- (26) K027: Toluene diisocyanate, toluene-2, 4-diamine;
- (27) K028: 1,1,1-trichloroethane, vinyl chloride;
- (28) K029: 1,2-dichloroethane, 1,1,1-trichloroethane, vinyl chloride, vinylidene chloride, chloroform;
- (29) K030: Hexachlorobenzene, hexachlorobutadiene, hexachloroethane, 1,1,1,2-tetrachloroethane, 1,1,2,2-tetrachloroethane, ethylene dichloride;
- (30) K031: Arsenic;
- (31) K032: Hexachlorocyclopentadiene;
- (32) K033: Hexachlorocyclopentadiene;
- (33) K034: Hexachlorocyclopentadiene;
- (34) K035: Creosote, chrysene, naphthalene, fluoranthene, benzo(b)fluoranthene, benzo(a)pyrene, indeno(1,2,3-cd)pyrene, benzo(a)anthracene, dibenzo(a)anthracene, acenaphthalene;
- (35) K036: Toluene, phosphorodithioic and phosphorothioic acid esters;
- (36) K037: Toluene, phosphorodithioic and phosphorothioic acid esters;

- (37) K038: Phorate, formaldehyde, phosphorodithioic and phosphorothioic acid esters;
- (38) K039: Phosphorodithioic and phosphorothioic acid esters;
- (39) K040: Phorate, formaldehyde, phosphorodithioic and phosphorothioic acid esters;
- (40) K041: Toxaphene;
- (41) K042: Hexachlorobenzene, orthodichlorobenzene;
- (42) K043: 2,4-dichlorophenol, 2,6-dichlorophenol, 2,4,6-trichlorophenol;
- (43) K044: N.A.;
- (44) K045: N.A.;
- (45) K046: Lead;
- (46) K047: N.A.;
- (47) K048: Hexavalent chromium, lead;
- (48) K049: Hexavalent chromium, lead;
- (49) K050: Hexavalent chromium;
- (50) K051: Hexavalent chromium, lead;
- (51) K052: Lead;
- (52) K060: Cyanide, naphthalene, phenolic compounds, arsenic;
- (53) K061: Hexavalent chromium, lead, cadmium;
- (54) K062: Hexavalent chromium, lead;
- (55) K064: Lead, cadmium;
- (56) K065: Lead, cadmium;
- (57) K066: Lead, cadmium;
- (58) K069: Hexavalent chromium, lead, cadmium;
- (59) K071: Mercury;
- (60) K073: Chloroform, carbon tetrachloride, hexachloroethane, trichloroethane, tetrachloroethylene, dichloroethylene, 1,1,2,2-tetrachloroethane;
- (61) K083: Aniline, diphenylamine, nitrobenzene, phenylenediamine;
- (62) K084: Arsenic;
- (63) K085: Benzene, dichlorobenzenes, trichlorobenzenes, tetrachlorobenzenes, pentachlorobenzene, hexachlorobenzene, benzyl chloride;
- (64) K086: Lead, hexavalent chromium;
- (65) K087: Phenol, naphthalene;
- (66) K088: Cyanide (complexes);
- (67) K090: Chromium;
- (68) K091: Chromium;
- (69) K093: Phthalic anhydride, maleic anhydride;
- (70) K094: Phthalic anhydride;
- (71) K095: 1,1,2-trichloroethane, 1,1,1,2-tetrachloroethane, 1,1,2,2-tetrachloroethane;
- (72) K096: 1,2-dichloroethane, 1,1,1-trichloroethane, 1,1,2-trichloroethane;
- (73) K097: Chlordane, heptachlor;
- (74) K098: Toxaphene;
- (75) K099: 2,4-dichlorophenol, 2,4,6-trichlorophenol;
- (76) K100: Hexavalent chromium, lead, cadmium;

- (77) K101: Arsenic;
- (78) K102: Arsenic;
- (79) K103: Aniline, nitrobenzene, phenylenediamine;
- (80) K104: Aniline, benzene, diphenylamine, nitrobenzene, phenylenediamine;
- (81) K105: Benzene, monochlorobenzene, dichlorobenzenes, 2,4,6-trichlorophenol;
- (82) K106: Mercury;
- (83) K107: 1,1-Dimethylhydrazine (UDMH);
- (84) K108: 1,1-Dimethylhydrazine (UDMH);
- (85) K109: 1,1-Dimethylhydrazine (UDMH);
- (86) K110: 1,1-Dimethylhydrazine (UDMH);
- (87) K111: 2,4-Dinitrotoluene;
- (88) K112: 2,4-Toluenediamine, o-toluidine, p-toluidine, aniline;
- (89) K113: 2,4-Toluenediamine, o-toluidine, p-toluidine, aniline;
- (90) K114: 2,4-Toluenediamine, o-toluidine, p-toluidine;
- (91) K115: 2,4-Toluenediamine;
- (92) K116: Carbon tetrachloride, tetrachloroethylene, chloroform, phosgene;
- (93) K117: Ethylene dibromide;
- (94) K118: Ethylene dibromide;
- (95) K123: Ethylene thiourea;
- (96) K124: Ethylene thiourea;
- (97) K125: Ethylene thiourea;
- (98) K126: Ethylene thiourea;
- (99) K131: Dimethyl sulfate, methyl bromide;
- (100) K132: Methyl bromide; and
- (101) K136: Ethylene dibromide.

**Statutory Authority:** *MS s 116.07; 116.37*

**History:** *16 SR 197; 16 SR 2239; 16 SR 2321; 17 SR 285*

#### 7045.0141 HAZARDOUS CONSTITUENTS.

*[For text of subpart 1, see M.R.]*

Subp. 2. "A" constituents. Hazardous constituents beginning with the letter A are as follows:

*[For text of items A to L, see M.R.]*

- M. Allyl chloride, 107-18-6, \_\_\_\_\_;
- N. Aluminum phosphide, 20859-73-8, P006;
- O. 4-Aminobiphenyl, 92-67-1, \_\_\_\_\_;
- P. 5-(Aminomethyl)-3-isoxazolol, 2763-96-4, P007;
- Q. 4-Aminopyridine, 504-24-5, P008;
- R. Amitrole, 61-82-5, U011;
- S. Ammonium vanadate, 7803-55-6, P119;
- T. Aniline, 62-53-3, U012;
- U. Antimony, 7440-36-0, \_\_\_\_\_;
- V. Antimony compounds, not otherwise specified in this list, \_\_\_\_\_, \_\_\_\_\_;
- W. Aramite®, 140-57-8, \_\_\_\_\_;



- X. Arsenic, 7440-38-2, \_\_\_\_\_;  
 Y. Arsenic compounds, not otherwise specified in this list, \_\_\_\_\_,  
 \_\_\_\_\_;  
 Z. Arsenic acid, 7778-39-4, P010;  
 AA. Arsenic pentoxide, 1303-28-2, P011;  
 BB. Arsenic trioxide, 1327-53-3, P012;  
 CC. Auramine, 492-80-8, P014; and  
 DD. Azaserine, 115-02-6, U015.

Subp. 3. **"B" constituents.** Hazardous constituents beginning with the letter B are as follows:

*[For text of items A to K, see M.R.]*

- L. Benzo(k)fluoranthene, 207-08-9, \_\_\_\_\_;  
 M. Benzo[a]pyrene, 50-32-8, U022;  
 N. p-Benzoquinone, 106-51-4, U197;  
 O. Benzotrichloride, 98-07-7, U023;  
 P. Benzyl chloride, 100-44-7, P028;  
 Q. Beryllium, 7440-41-7, P015;  
 R. Beryllium compounds, not otherwise specified in this list, \_\_\_\_\_,  
 \_\_\_\_\_;  
 S. Bromoacetone, 598-31-2, P017;  
 T. Bromoform, 75-25-2, U225;  
 U. 4-Bromophenyl phenyl ether, 101-55-3, U030;  
 V. Brucine, 357-57-3, P018; and  
 W. Butyl benzyl phthalate, 85-68-7, \_\_\_\_\_.

*[For text of subps 4 to 8, see M.R.]*

Subp. 9. **"H" constituents.** Hazardous constituents beginning with the letter H are as follows:

*[For text of items A to D, see M.R.]*

- E. Heptachlorodibenzofurans, \_\_\_\_\_, \_\_\_\_\_;  
 F. Heptachlorodibenzo-p-dioxins, \_\_\_\_\_, \_\_\_\_\_;  
 G. Hexachlorobenzene, 118-74-1, U127;  
 H. Hexachlorobutadiene, 87-68-3, U128;  
 I. Hexachlorocyclopentadiene, 77-47-4, U130;  
 J. Hexachlorodibenzo-p-dioxins, \_\_\_\_\_, \_\_\_\_\_;  
 K. Hexachlorodibenzofurans, \_\_\_\_\_, \_\_\_\_\_;  
 L. Hexachloroethane, 67-72-1, U131;  
 M. Hexachlorophene, 70-30-4, U132;  
 N. Hexachloropropene, 1888-71-7, U243;  
 O. Hexaethyltetraphosphate, 757-58-4, P062;  
 P. Hydrazine, 302-01-2, U133;  
 Q. Hydrogen cyanide, 74-90-8, P063;  
 R. Hydrogen fluoride, 7664-39-3, U134; and  
 S. Hydrogen sulfide, 7783-06-4, U135.

*[For text of subps 10 to 23, see M.R.]*

**Statutory Authority:** *MS s 116.07*

**History:** *16 SR 197; 17 SR 285*

**7045.0145 DELETION OF CERTAIN HAZARDOUS WASTE CODES FOLLOWING EQUIPMENT CLEANING AND REPLACEMENT AT WOOD PRESERVING PLANTS.**

Subpart 1. **Scope.** Wastes from wood preserving processes at plants that do not resume or initiate use of chlorophenolic preservatives will not meet the listing definition of F032 once the generator has met all of the requirements of subparts 2 and 3. These wastes may, however, continue to meet another hazardous waste listing description or may exhibit one or more of the characteristics of hazardous waste.

Subp. 2. **Process equipment cleaning and replacement.** Generators must either clean or replace all process equipment that may have come into contact with chlorophenolic formulations or constituents thereof, including, but not limited to, treatment cylinders, sumps, tanks, piping systems, drip pads, fork lifts, and trams. Cleaning and replacement of process equipment must be performed in a manner which minimizes or eliminates the escape of hazardous waste or waste constituents, leachate, contaminated drippage, or hazardous waste decomposition products to the groundwater, surface water, or atmosphere. Generators must either:

A. prepare and follow an equipment cleaning plan and clean equipment in accordance with this item by:

(1) preparing and signing a written equipment cleaning plan that describes the equipment to be cleaned, how the equipment will be cleaned, the solvent chosen to be used in the cleaning, how solvent rinses will be tested, and how cleaning residues will be disposed;

(2) removing all visible residues from process equipment and rinsing process equipment with an appropriate solvent until dioxins and dibenzofurans in the final solvent rinse are found to be at or below the lower method calibration limit (MCL) found in SW-846, Method 8290, Table 1; and

(3) managing all residues from the cleaning process as F032 waste;

B. prepare and sign a written equipment replacement plan that describes the equipment to be replaced, how the equipment will be replaced, and how the equipment will be disposed of as F032 waste; or

C. document that previous equipment cleaning and/or replacement was performed in accordance with this part and occurred after cessation of use of chlorophenolic formulations.

Subp. 3. **Record keeping.** The generator must maintain the following records documenting the cleaning and replacement as part of the facility's operating record:

A. the name and address of the facility;

B. formulations previously used and the date on which their use ceased in each process at the plant;

C. formulations currently used in each process at the plant;

D. the equipment cleaning or replacement plan;

E. the name and address of any persons who conducted the cleaning and replacement;

F. the dates on which cleaning and replacement were accomplished;

G. the dates of sampling and testing;

H. a description of the sample handling and preparation techniques, including techniques used for extraction, containerization, preservation, and chain-of-custody for the samples;

I. a description of the tests performed, the dates the tests were performed, and the results of the tests;

J. the name and model numbers of the instruments used in performing the tests;

K. quality assurance/quality control (QA/QC) documentation; and

L. the following statement signed by the generator or the generator's authorized representative: "I certify under penalty of law that all process equipment required to be cleaned or replaced under Minnesota Rules, part 7045.0145, was cleaned or replaced as represented in the equipment cleaning and replacement plan and accompanying documentation. I am aware that there are significant penalties for providing false information, including the possibility of fine or imprisonment."

**Statutory Authority:** *MS s 116.07*

**History:** *17 SR 285*

#### **7045.0205 APPLICABILITY OF GENERATOR STANDARDS.**

**Subpart 1. Applicability to generators.** Parts 7045.0205 to 7045.0320 apply to generators of hazardous waste. A generator shall comply with the generator requirements applicable to generator size as determined under part 7045.0206.

**Subp. 2. Applicability to transporters.** The standards applicable to generators established in parts 7045.0205 to 7045.0320 apply to transporters of hazardous waste if a transporter transports hazardous waste into Minnesota from a foreign country or mixes hazardous waste of different United States Department of Transportation shipping descriptions by placing them into a single container as provided in part 7045.0355.

**Subp. 3. Applicability to owners or operators of hazardous waste facilities.** The standards applicable to generators established in parts 7045.0205 to 7045.0320 apply to owners or operators of hazardous waste treatment, storage, or disposal facilities if a hazardous waste facility initiates a shipment of hazardous waste as provided in parts 7045.0472 and 7045.0578.

**Statutory Authority:** *MS s 116.07*

**History:** *16 SR 2102*

#### **7045.0206 GENERATOR SIZE DETERMINATION.**

**Subpart 1. Applicability.** This part applies to all generators for purposes of determining generator size.

**Subp. 2. Large quantity generator.** A generator is a large quantity generator if, in a calendar month, waste is generated in any of the following quantities:

A. greater than or equal to 1,000 kilograms of hazardous waste, excluding acute hazardous waste;

B. greater than one kilogram of acute hazardous waste; or

C. greater than 100 kilograms of any residue or contaminated soil, water, or other debris resulting from the cleanup of a spill, into or on any land or water, of any acute hazardous waste.

**Subp. 3. Small quantity generator.** A generator is a small quantity generator if, in a calendar month, waste is generated in all of the following quantities:

A. greater than 100 kilograms and less than 1,000 kilograms of hazardous waste, excluding acute hazardous waste;

B. less than or equal to one kilogram of acute hazardous waste; and

C. less than or equal to 100 kilograms of any residue or contaminated soil, water, or other debris resulting from the cleanup of a spill, into or on any land or water, of any acute hazardous waste.

**Subp. 4. Very small quantity generator.** A generator is a very small quantity generator if, in a calendar month, waste is generated in all of the following quantities:

A. less than or equal to 100 kilograms of hazardous waste, excluding acute hazardous waste;

B. less than or equal to one kilogram of acute hazardous waste; and

C. less than or equal to 100 kilograms of any residue or contaminated soil, water, or other debris resulting from the cleanup of a spill, into or on any land or water, of any acute hazardous waste.

**Subp. 5. Waste exempt from size determination.** A generator shall not include the following waste when determining the quantity of hazardous waste generated:

A. exempt waste under part 7045.0120;

B. recycled waste under part 7045.0125, subparts 4, 5, and 6;

C. used oil managed as follows:

(1) used oil that is recycled in some other manner than being burned for energy recovery; and

(2) used oil that is to be burned for energy recovery as regulated under part 7045.0695;

D. sewered hazardous waste that is pretreated as provided in part 7045.0305, subpart 2;

E. for mixtures of nonhazardous waste and hazardous waste, waste that is nonhazardous under part 7045.0102, provided that the volume of the hazardous waste before mixing is counted; and

F. spent materials that are generated, reclaimed, and subsequently reused on site, provided that the spent materials have been counted once.

**Subp. 6. Change in generator size status.** If a small quantity generator exceeds the quantity limits listed in subpart 3, the generator loses small quantity generator status and is subject to all the generator requirements of this chapter unless the generator regains small quantity generator status under item A or B.

If a very small quantity generator exceeds the quantity limits listed in subpart 4, the generator loses very small quantity generator status and is subject to the small quantity generator requirements of this chapter unless very small quantity generator status is regained under item A or C.

A. Once generator size status is lost, the generator shall not regain that status until the generator is notified in writing by the commissioner that the original generator size status has been approved. The commissioner shall only approve generator size status under this item if the generator can demonstrate to the satisfaction of the commissioner that the waste quantities that will be generated in the future will meet the limits established in subpart 3 or 4, as applicable. The generator shall make this demonstration by submitting a written statement to the commissioner requesting reclassification as a small or very small quantity generator, as applicable, and including the information necessary for the commissioner to evaluate the request. The information shall include an explanation of the circumstances that resulted in each instance of overgeneration during the past year, an explanation of the measures that the generator has taken to correct the cause of overgeneration, and other information as necessary to document that the overgeneration will not reoccur.

B. For small quantity generators, if the quantity of hazardous waste generated in any calendar month exceeds the quantities listed in subpart 3 and the cause of the overgeneration is a spill or accidental release of hazardous waste that is not acute hazardous waste; the shutdown or cleanup of some part of the generation process; or the replacement of PCB containing equipment, the generator loses small quantity generator status and is subject to all the generator requirements of this chapter. However, in any of these cases, a generator will automatically regain small quantity generator status without applying to the commissioner for approval if the generator:

(1) resumes generation within the quantity limits in subpart 3; and

(2) complies with the quantity limits in subpart 3 during the other 11 months of the calendar year.

A generator who cannot automatically regain small quantity generator status under this subpart may apply for reclassification under item A.

C. For very small quantity generators, if the quantity of hazardous waste generated in any calendar month exceeds the quantities listed in subpart 4 but does not exceed the quantity listed in subpart 3, the generator loses very small quantity generator status and is subject to the small quantity generator requirements of this chapter. However, a generator shall automatically regain very small quantity generator status without applying to the commissioner for approval if the generator:

- (1) resumes generation within the quantity limits in subpart 4; and
- (2) complies with the quantity limits in subpart 4 during the other 11 months of the calendar year.

A generator who cannot automatically regain very small quantity generator status under this subpart may apply for reclassification under item A.

A very small quantity generator who generates hazardous waste in any calendar month exceeding the quantities listed in subpart 3 is subject to item A or B.

**Statutory Authority:** *MS s 116.07*

**History:** *16 SR 2102*

#### **7045.0208 HAZARDOUS WASTE MANAGEMENT.**

**Subpart 1. Management by generator.** A generator must manage hazardous waste by using one of the methods described in items A to D, unless otherwise specifically exempted under this chapter.

A. A generator may treat or dispose of at an on-site facility as provided under part 7045.0211.

B. A generator may ensure delivery to an off-site storage, treatment, or disposal facility. If located in the United States, the facility used must be permitted to accept hazardous waste under the agency's permitting procedures, have interim status under parts 7045.0552 to 7045.0642, or be authorized to manage hazardous waste by the Environmental Protection Agency or by a state with a hazardous waste management program authorized by the Environmental Protection Agency.

C. A generator may ensure delivery to a facility that under part 7045.0125 beneficially uses or reuses, legitimately recycles, or legitimately reclaims the waste, or treats the waste before beneficial use or reuse, legitimate recycling, or legitimate reclamation.

D. A generator may export to a foreign country under the limitations in part 7045.0302.

**Subp. 2. Relinquishing control.** A generator must not relinquish control of a hazardous waste if:

A. the generator has reason to believe that the hazardous waste will not be properly managed; or

B. the transporter or the treatment, storage, or disposal facility is not exempt under this chapter and has not:

- (1) received an identification number from a state with a hazardous waste program authorized by the Environmental Protection Agency pursuant to Code of Federal Regulations, title 40, part 271; or

- (2) received an identification number from the Environmental Protection Agency.

**Subp. 3. Effect on liability.** Nothing in subpart 1 or 2 is intended to restrict, enlarge, or affect, in any way, any liability the generator may have to correct the mismanagement of the hazardous waste or pay for damages or alleviate any pollution caused by the mismanagement of the hazardous waste.

**Statutory Authority:** *MS s 116.07*

**History:** *16 SR 2102*

#### **7045.0211 REQUIREMENTS FOR GENERATORS WITH ON-SITE FACILITIES.**

Subpart 1. **Waste procedures.** A generator who treats, stores, or disposes of a hazardous waste on site which has been produced on site must comply with this chapter and chapter 7001, as applicable.

Subp. 2. [Repealed, 16 SR 2102]

Subp. 3. [Repealed, 16 SR 2102]

**Statutory Authority:** *MS s 116.07*

**History:** *16 SR 2102*

#### **7045.0212 IMPORTERS OF HAZARDOUS WASTE.**

Any person who imports hazardous waste into the state of Minnesota from a source outside the United States must comply with the standards applicable to generators established in parts 7045.0205 to 7045.0320.

**Statutory Authority:** *MS s 116.07*

**History:** *16 SR 2102*

#### **7045.0213 FARMERS; PESTICIDES.**

Subpart 1. **General applicability.** A farmer who generates waste pesticides which are hazardous waste must comply with the standards applicable to generators established in parts 7045.0205 to 7045.0320 except as provided in subpart 2.

Subp. 2. **Special conditions.** A farmer who generates waste pesticides which are hazardous waste and who triple rinses each emptied pesticide container and disposes of the pesticide residues on the farmer's farm in a manner consistent with the disposal instructions on the pesticide label is not required with respect to those pesticides to comply with other standards in parts 7045.0205 to 7045.0320 or to comply with parts 7045.0450 to 7045.1380, or to obtain a hazardous waste facility permit, provided that:

A. the container or inner liner has been triple rinsed using a solvent capable of removing the commercial chemical product or manufacturing chemical intermediate;

B. the container or inner liner has been cleaned by another method that has been shown in the scientific literature, or by tests conducted by the generator, to achieve equivalent removal; or

C. in the case of a container, the inner liner that prevented contact of the commercial chemical product or manufacturing chemical intermediate with the container has been removed.

**Statutory Authority:** *MS s 116.07*

**History:** *16 SR 2102*

#### **7045.0214 EVALUATION OF WASTES.**

*[For text of subpart 1, see M.R.]*

Subp. 2. **Method for evaluation.** The person evaluating the waste must determine if the waste meets any of the following criteria for a hazardous waste:

A. the waste is listed in part 7045.0135; or

B. if the waste is not listed in part 7045.0135, the person must then determine whether the waste is identified in part 7045.0131 by either:

(1) testing the waste according to the methods in part 7045.0131 or

according to an equivalent method approved by the commissioner pursuant to part 7045.0075, subpart 1; or

(2) applying knowledge of the hazard characteristics of the waste in light of the materials or the processes used.

*[For text of subp 3, see M.R.]*

**Statutory Authority:** *MS s 116.07; 116.37*

**History:** *16 SR 2239*

#### **7045.0216 EVALUATION REPORTS TO THE COMMISSIONER.**

Subpart 1. **Necessary information.** The commissioner may request at any time that a person producing a waste submit the results of the evaluation of the waste. The person must submit the following information as requested by the commissioner:

*[For text of items A and B, see M.R.]*

C. The concentration of each component listed in part 7045.0131, subpart 8 found in the leachate of the waste. The person evaluating the waste may submit soft data in lieu of testing the waste if the data is sufficient to demonstrate whether the waste is hazardous or nonhazardous due to the toxicity characteristic.

*[For text of items D and E, see M.R.]*

*[For text of subp 2, see M.R.]*

**Statutory Authority:** *MS s 116.07*

**History:** *15 SR 1878*

**7045.0219** [Repealed, 16 SR 2102]

**7045.0220** [Repealed, 16 SR 2102]

#### **7045.0225 GENERATOR LICENSE.**

Subpart 1. **Applicability.** A person who generates hazardous waste must obtain a hazardous waste generator license for each individual generation site. The procedures for application and issuance are described in parts 7045.0225 to 7045.0250. The fees associated with the license are set forth in parts 7046.0031 to 7046.0070.

Subp. 2. **Posting.** A generator must prominently display the hazardous waste generator license in a public area at the licensed site.

**Statutory Authority:** *MS s 116.07*

**History:** *16 SR 2102*

#### **7045.0230 CONTENT OF LICENSE APPLICATION.**

Subpart 1. **Information required.** Except as provided in subpart 1a, an application must be on a form provided by the commissioner and must include the following information:

A. the generator's company name, location address, mailing address, type of business, principal products or service, contact person, telephone number, and EPA identification number or date applied for;

B. a list of all hazardous wastes generated, their corresponding hazardous waste numbers from parts 7045.0131 and 7045.0135, the physical state, and the source or process from which the wastes are generated;

C. a list of all wastes of the generator that have been determined by the generator to be nonhazardous wastes. The list must include the type of waste, the physical state, and the source or process from which the waste was produced;

D. a list of all used and waste oils generated, the physical state, and the source or process from which the waste was produced;

E. a management plan for each hazardous waste and oil produced that includes the following information:

(1) the estimated amounts to be produced in a one year period;  
 (2) the names and identification numbers of the transporters to be used;

(3) the frequency with which the hazardous waste is expected to be transported or discharged;

(4) the name of the wastewater treatment works to which a sewered hazardous waste is being discharged;

(5) the national pollutant discharge elimination system or state disposal permit number for discharges to sewers and waters of the state;

(6) the names of the hazardous waste facilities to be involved in the management of the hazardous waste and, as applicable, the numbers of the Hazardous Waste Facility Permits issued by the agency for those facilities located in the state of Minnesota, or the addresses and identification numbers of those facilities located outside the state of Minnesota; and

(7) the method(s) of treatment and/or disposal proposed for each hazardous waste;

(8) the date hazardous waste was first produced; and

(9) in the event any tests were conducted to evaluate the waste, the results of all tests conducted; and

F. the following certification signed by the generator or authorized representative:

“I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.”

**Subp. 1a. Very small quantity generator license application.** An application for a very small quantity generator license must be on a form provided by the commissioner and must include the following information:

A. the generator's company name, location address, mailing address, type of business, contact person, telephone number, and identification number;

B. the date each hazardous waste was first produced;

C. the name or a description of each hazardous waste generated;

D. the estimated amount of each hazardous waste to be produced in a one year period;

E. the methods of treatment and/or disposal;

F. the certification required under subpart 1, item F; and

G. additional information required under subpart 1 as requested by the commissioner.

**Subp. 3.** [Repealed, 16 SR 2102]

**Subp. 4. Laboratory waste.** A person who produces a waste from a laboratory or pilot plant that is a mixture of small amounts of unrelated but compatible chemicals such that the description of any sample or set of samples is not representative of the total waste is exempt from subpart 1, item E, subitem (9).

**Statutory Authority:** *MS s 116.07*

**History:** *15 SR 1878; 16 SR 2102*



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**7045.0235** [Repealed, 16 SR 2102]**7045.0240 SUBMITTAL OF LICENSE APPLICATION.**

Subpart 1. [Repealed, 16 SR 2102]

Subp. 2. [Repealed, 16 SR 2102]

Subp. 3. **License application submittal.** Each generator who is producing hazardous waste in Minnesota must submit a license application to the commissioner within 75 days of first producing a hazardous waste. The generator must at all times manage the waste in full compliance with parts 7045.0205 to 7045.0320. The generator must not treat, dispose of, or relinquish control of the waste until at least 15 days after the application is submitted to the commissioner. In the period between 15 days after the generator's license application submittal and the commissioner's action under part 7045.0245, the generator may treat, dispose of, and relinquish control of the hazardous waste as provided in part 7045.0208 until written response to the generator's license application is received under part 7045.0245. After the commissioner acts on the license application, the generator must manage the waste according to the license conditions and the requirements of this chapter or the generator must cease producing the waste if the license application is denied.

A generator who has notified the commissioner of the generator's waste under this chapter before April 1, 1992, need not submit a license application under this part. A license will be issued by the commissioner after the submittal and approval of the generator's next scheduled report and payment of generator fees under chapter 7046.

Subp. 4. **Prohibition on generation.** A generator who is denied a generator license or who fails to submit a timely application for a generator license shall immediately stop generating the hazardous waste until a license is obtained.

**Statutory Authority:** *MS s 116.07*

**History:** *16 SR 2102*

**7045.0243 TERM AND CONDITIONS OF LICENSE.**

Subpart 1. **Term of license.** A hazardous waste generator license is issued for a term to be determined by the commissioner. The term of a license shall not exceed two years.

Subp. 2. **Special conditions.** Each license will contain or reference conditions necessary for the licensee to achieve compliance with applicable Minnesota or federal statutes or rules, including each of the applicable requirements in parts 7045.0205 to 7045.0320, and any conditions that the commissioner determines and shows with reasonable justification to be necessary to protect human health and the environment.

Subp. 3. **General conditions.** Each license must include the general conditions described in items A to J and the commissioner shall incorporate these conditions into all licenses either expressly or by specific reference to this part.

A. The commissioner's issuance of a license does not release the licensee from any liability, penalty, or duty imposed by Minnesota or federal statutes or rules or local ordinances, except the obligation to obtain the license.

B. The commissioner's issuance of a license does not prevent the future adoption by the agency of pollution control rules, standards, or orders more stringent than those now in existence and does not prevent the enforcement of this chapter, standards, or orders against the licensee.

C. The commissioner's issuance of a license does not obligate the agency to enforce local laws, rules, or plans beyond that authorized by Minnesota statutes.

D. The licensee may not knowingly make a false or misleading statement, representation, or certification in a record, report, or other document

required to be submitted to the agency or to the commissioner by the licensee or this chapter. The licensee must immediately upon discovery report to the commissioner an error or omission in these records, reports, or other documents.

E. When authorized by Minnesota Statutes, sections 115.04; 115B.17, subdivision 4; and 116.091, and upon presentation of proper credentials, the agency, or an authorized employee or agent of the agency, shall be allowed by the licensee to enter at reasonable times upon the licensed property of the licensee to examine and copy books, papers, records, or memoranda pertaining to the activity covered by the license; and to conduct surveys and investigations, including sampling or monitoring, pertaining to the activity covered by the license.

F. If the licensee discovers, through any means, including notification by the commissioner, that noncompliance with a condition of the license has occurred, the licensee shall take all reasonable steps to minimize the adverse impacts on human health, public drinking water supplies, or the environment resulting from the noncompliance.

G. If the licensee begins generation of a hazardous waste that was not included on the license application and is therefore not authorized under the existing license, the licensee must submit an amended application providing information required in part 7045.0230 within 75 days of first producing the new hazardous waste. The generator must at all times manage the new waste in full compliance with parts 7045.0205 to 7045.0320. The generator must not treat, dispose of, or relinquish control of the new waste until at least 15 days after the amended license application is submitted to the commissioner. In the period between 15 days after submittal and the commissioner's action under part 7045.0245, the generator may treat, dispose of, and relinquish control of the new waste as provided in part 7045.0208 until written response to the generator's amended license application is received under part 7045.0245. After the commissioner acts on the amended license application, the generator must manage the new waste according to the amended license conditions and the requirements of this chapter or the generator must cease producing the new waste if the amended license application is denied.

H. If the licensee changes management of a hazardous waste during the term of the license, the licensee must report the change in the next license renewal application required under part 7045.0248.

I. The license is not transferable. If the owner or operator to whom the license has been issued changes, the new owner or operator must apply for a new license not later than 30 days after the change.

J. The license authorizes the licensee to perform the activities described in or referenced by the license under the conditions of the license. In issuing the license, the state and agency assume no responsibility for damage to persons, property, or the environment caused by the activities of the licensee in the conduct of its actions, including those activities authorized under the license. To the extent the state and agency may be liable for the activities of its employees, that liability is explicitly limited to that provided in the Tort Claims Act, Minnesota Statutes, section 3.736.

**Statutory Authority:** *MS s 116.07*

**History:** *16 SR 2102*

#### **7045.0245 LICENSE APPROVAL AND ISSUANCE.**

Subpart 1. **Review and approval.** The commissioner shall conduct a review of the license application and shall:

- A. approve the hazardous waste generator license application;
- B. require the submission of additional information or management plans or both to make the license application complete and approvable;
- C. require changes in the management of the hazardous waste or wastes to make the license application approvable; or

D. deny the license.

**Subp. 2. License issuance.** The commissioner will issue a hazardous waste generator license upon approval of the application under subpart 1 and payment in full of generator fees required under chapter 7046.

**Statutory Authority:** *MS s 116.07*

**History:** *16 SR 2102*

#### **7045.0247 LICENSE RENEWAL AND CONTINUATION OF EXPIRED LICENSE.**

**Subpart 1. License renewal.** The commissioner will renew the license after receipt, review, and approval of the license renewal application required under part 7045.0248 and payment in full of generator fees required under chapter 7046.

**Subp. 2. Continuation of expired license.** A generator who holds an expired license may continue to conduct the licensed activity according to the terms and conditions of the expired license until the commissioner takes final action on the renewal application if the commissioner determines that items A to D are true.

A. The licensee has submitted the application required under part 7045.0248 no later than 30 days after receipt of license renewal application.

B. The licensee responds to requests by the commissioner for additional application information within 14 days of receiving the written request.

C. The licensee is in compliance with the terms and conditions of the expired license.

D. The licensee has made payment in full of generator fees required under chapter 7046.

**Statutory Authority:** *MS s 116.07*

**History:** *16 SR 2102*

#### **7045.0248 LICENSE RENEWAL APPLICATION.**

**Subpart 1. Applicability.** A licensed generator must submit a license renewal application to the commissioner on forms provided by the commissioner. A generator must submit the application by a date specified by the commissioner. Except as provided in subpart 2, the application must contain the following information for each hazardous waste produced during the preceding calendar year:

A. the generator's company name, location address, mailing address, type of business, principal products or service, contact person, telephone number, and EPA identification number;

B. the calendar year covered by the renewal application;

C. a list of all hazardous wastes generated, their corresponding hazardous waste numbers from parts 7045.0131 and 7045.0135, and the physical state;

D. a list of all used and waste oils generated, the type of waste, and the physical state;

E. for each hazardous waste and oil produced during the reported calendar year the following information:

(1) the amounts produced;

(2) the names and identification numbers of the transporters used;

(3) the frequency with which the hazardous waste was transported or discharged;

(4) the name of the wastewater treatment works to which a sewer hazardous waste was discharged;

(5) the national pollutant discharge elimination system or state disposal permit number for discharges to sewers and waters of the state;

(6) the names of the hazardous waste facilities involved in the man-

agement of the hazardous waste and, as applicable, the numbers of the hazardous waste facility permits issued by the agency for those facilities located in Minnesota, or the addresses and identification numbers of those facilities located outside of Minnesota;

(7) the method(s) of treatment and/or disposal proposed for each hazardous waste; and

(8) the date hazardous waste was first produced;

F. a description of the efforts undertaken during the year to reduce the volume and toxicity of waste generated;

G. a description of the changes in volume and toxicity of waste actually achieved during the year in comparison to previous years to the extent the information is available before 1984; and

H. the following certification signed by the generator or authorized representative:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

**Subp. 2. Very small quantity generator license renewal application.** A very small quantity generator must submit a license renewal application to the commissioner on forms provided by the commissioner. A generator must submit the application by a date specified by the commissioner. The application must contain the following information for each hazardous waste produced during the preceding calendar year:

A. the name or a description of the hazardous waste;

B. the amount of each hazardous waste produced;

C. the methods of treatment and/or disposal;

D. the certification required under subpart 1, item H; and

E. additional information required under subpart 1 as requested by the commissioner.

**Subp. 3. Recycled waste.** A generator of waste that is recycled according to part 7045.0125, and is exempt from the requirements of parts 7045.0261 and 7045.0265, must include as part of the report required under subpart 1 or 2:

A. evidence that the waste was recycled; and

B. evidence that a continuing market exists for the waste.

**Subp. 4. Exported waste.** Reporting for exports of hazardous waste is not required under this part. Export reporting requirements are set out in part 7045.0302, subpart 6.

**Subp. 5. Approval of application.** License renewal applications shall be subject to the commissioner's review and approval procedures under part 7045.0245, subpart 1.

**Statutory Authority:** *MS s 116.07*

**History:** *16 SR 2102*

**7045.0249** [Repealed, 16 SR 2102]

**7045.0250 LICENSE REVOCATION.**

**Subpart 1. Justification to revoke.** The following constitute justification for the commissioner to revoke a license:

A. existence at the licensed site of unresolved noncompliance with appli-

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cable state and federal pollution statutes or rules or a condition of the license, and failure of the licensee to undertake a schedule of compliance to resolve the non-compliance;

B. licensee failure to disclose fully the facts relevant to issuance of the license or submittal of false or misleading information to the commissioner; and

C. licensee failure to pay or escrow a penalty owed under Minnesota Statutes, section 116.072.

**Subp. 2. Procedure.** The commissioner must give a written 30-day notice to the licensee of the commissioner's intent to revoke the hazardous waste generator license. Included in the notice must be specific justification for the revocation as described under subpart 1.

**Subp. 3. Reinstatement.** The licensee may apply to the commissioner for license reinstatement by providing written documentation that the justifications for revocation have been remedied. The commissioner will review the request within 30 calendar days and deny or approve the request in writing. A reinstatement is for the remaining term of the license. Generator fees under chapter 7046 will not be refunded for the period that the license is revoked nor will the fees be credited towards a subsequent fee cycle.

**Subp. 4. Revocation without reissuance.** The commissioner shall give notice to the licensee of a proposal to revoke a license without reissuance. The notice must state that within 30 days of the receipt of the notice the licensee may request that a contested case hearing be held on the proposed action. If the licensee requests a contested case hearing, the agency shall hold the hearing in accordance with the rules of the Office of Administrative Hearings, parts 1400.5100 to 1400.8402.

**Statutory Authority:** *MS s 116.07*

**History:** *16 SR 2102*

**7045.0255 ONE-TIME DISPOSAL REQUIREMENTS.**

A person having hazardous waste subject to regulation under this chapter who is only a hazardous waste generator for the one-time disposal of hazardous waste which is not currently being produced, must comply with this chapter except as provided in items A and B.

A. The generator is exempt from parts 7045.0225 to 7045.0250, license and license reporting, except that the generator must submit a management plan meeting the requirements of part 7045.0230, subpart 1, item E, for approval by the commissioner on forms provided by the commissioner.

B. For accumulation requirements, the generator is exempt from the large quantity generator requirements of part 7045.0292. The generator must meet requirements applicable to small quantity generators in part 7045.0292, subparts 5, 9, 10, and 11.

**Statutory Authority:** *MS s 116.07*

**History:** *16 SR 2102*

**7045.0261 MANIFEST DOCUMENT; GENERAL REQUIREMENTS.**

*[For text of subpart 1, see M.R.]*

**Subp. 1a. Exemptions.** A generator may transport without a manifest as described in item A or B. Transporters exempt under this subpart must comply with all applicable requirements of Minnesota Statutes, sections 221.033 and 221.034, and Code of Federal Regulations, title 49, parts 171 to 199.

A. A very small quantity generator may transport the generator's own hazardous waste without a manifest if transportation is via the generator's own vehicle and if that transportation is to a very small quantity generator hazardous waste collection program under part 7045.0320.

B. A small quantity or a very small quantity generator may use an alternate manifest system as provided under part 7045.0075, subpart 5.

*[For text of subps 2 to 6, see M.R.]*

**Subp. 7. Manifest information.** The Minnesota manifest is based on the Uniform National Manifest that is required under United States Department of Transportation and United States Environmental Protection Agency regulations, as contained in Code of Federal Regulations, title 40, part 262, and Code of Federal Regulations, title 49, part 172. Manifest information requirements include those required by United States Department of Transportation and United States Environmental Protection Agency regulations and consist of the numbered items on the manifest set forth in the Appendix to Code of Federal Regulations, title 40, part 262. Additional state information requirements consist of the telephone number of the designated facility and the hazardous waste numbers specified in parts 7045.0100 to 7045.0143 for each hazardous waste specified on the manifest. Manifests must include the information specified in this subpart and in the instructions on the manifest.

*[For text of subps 8 to 10, see M.R.]*

**Statutory Authority:** *MS s 116.07*

**History:** *16 SR 2102*

#### **7045.0265 USE OF MANIFEST.**

*[For text of subps 1 to 3, see M.R.]*

**Subp. 4. Out-of-state shipments.** When a shipment of hazardous waste is to be delivered to a hazardous waste facility located outside the state of Minnesota, the generator must ensure that:

A. the copy of the hazardous waste manifest signed by the facility operator is sent to the commissioner within 40 days of the acceptance of the hazardous waste by the hazardous waste facility; and

B. for shipments of a hazardous waste to a designated facility in a United States Environmental Protection Agency authorized state which has not yet obtained authorization to regulate that particular waste as hazardous, the designated facility agrees to sign the manifest and return the manifest to the generator, and that any out-of-state transporter signs and forwards the manifest to the designated facility.

*[For text of subp 5, see M.R.]*

**Statutory Authority:** *MS s 116.07*

**History:** *16 SR 197*

#### **7045.0275 MANAGEMENT OF HAZARDOUS WASTE SPILLS.**

Subpart 1. [Repealed, 16 SR 2102]

*[For text of subps 2 and 3, see M.R.]*

**Statutory Authority:** *MS s 116.07*

**History:** *9 SR 115; 11 SR 1832; 16 SR 2102*

**7045.0290** [Repealed, 16 SR 2102]

#### **7045.0292 ACCUMULATION OF HAZARDOUS WASTE.**

Subpart 1. **Large quantity generator.** A large quantity generator may accumulate hazardous waste on site without a permit or without having interim status if:

A. all accumulated hazardous waste is, within 90 days of the accumulation start date, treated on site in compliance with part 7045.0211 or shipped off site in compliance with part 7045.0208;

*[For text of items B to E, see M.R.]*

F. containers that hold free liquids are placed on a containment surface that is impermeable to the wastes stored and, if outside, is curbed;

*[For text of item G, see M.R.]*

H. all waste containers and tanks are labeled with the words "Hazardous Waste" and a description that clearly identifies their contents to employees and emergency personnel; and

I. the requirements of parts 7045.0558; 7045.0562, subparts 1 and 2; 7045.0566 to 7045.0576; and 7045.1315, subpart 1, item D are fulfilled regarding personnel training, ignitable, reactive, or incompatible waste, preparedness and prevention, and contingency planning.

Subp. 2. **Starting date.** A generator's accumulation starting date begins when the generator initiates accumulation in a container or tank, except as provided in subpart 6 for very small quantity generators, subpart 7 for acute hazardous waste, and subpart 8, item B, subitem (3), for satellite accumulation.

Subp. 3. [Repealed, 16 SR 2102]

Subp. 4. [Repealed, 16 SR 2102]

Subp. 5. **Small quantity generator.** A small quantity generator may accumulate up to 3,000 kilograms of hazardous waste that is not acute hazardous waste on site without a permit or without having interim status if:

A. all accumulated hazardous waste is, within 180 days of the accumulation start date, treated on site in compliance with part 7045.0211 or shipped off site in compliance with part 7045.0208;

B. the waste is placed in containers which meet the standards of part 7045.0270, subpart 4, and are managed in accordance with part 7045.0626; or in tanks provided the generator complies with the requirements of part 7045.0629;

C. tanks and containers are clearly labeled with the waste accumulation start date; alternatively, containers are so labeled while a clearly designated and legible log of tank transactions which includes accumulation start dates is maintained; all of these dates must be available for inspection;

D. each container and tank is properly labeled and marked according to part 7045.0270, subparts 1 and 5;

E. outdoor storage areas are protected from unauthorized access and inadvertent damage from vehicles or equipment;

F. containers that hold free liquids are placed on a containment surface that is impermeable to the waste stored and, if outside, is curbed;

G. containers holding hazardous wastes which exhibit the characteristics of ignitability or reactivity or which exhibit the potential for creating vapor pressures capable of causing containers to leak, deform, or otherwise fail if not shaded are shaded from direct sunlight; however, nothing in this item shall relieve the generator from the obligation to comply with any local, state, or federal law governing storage of these wastes;

H. all waste containers and tanks are labeled with the words "Hazardous Waste" and a description that clearly identifies their contents to employees and emergency personnel;

I. the generator meets the requirements of parts 7045.0566, relating to preparedness and prevention, and 7045.0568, relating to the arrangements with local authorities for emergencies; and

J. the generator complies with the following requirements:

(1) the generator must ensure that there is available at all times at least one employee, identified as the emergency coordinator, responsible for coordinating all emergency response measures provided in subitem (4); the emergency coordinator must be either on the generator's premises or available to respond to an emergency by reaching the premises within a short period of time;

(2) the generator must post the following information next to the telephone on the premises: the name and telephone number of the emergency coordinator, the location of fire extinguishers and spill control material, the fire alarm, if present, and the telephone number of the fire department, unless there is a direct alarm;

(3) the generator must ensure and document that all employees are thoroughly familiar with proper waste handling and emergency procedures relevant to their responsibilities during normal facility operations and emergencies; and

(4) the emergency coordinator or a designee must respond to any emergencies that arise. Appropriate responses include: in the event of a fire, call the fire department or try to extinguish the fire by using a fire extinguisher; in the event of a spill, contain the flow of hazardous waste to the extent possible and as soon as practicable, clean up the hazardous waste and any contaminated materials or soils; in the event of a fire, explosion, or other release that could threaten human health outside the premises or when the generator has knowledge that a spill has reached surface water, the generator must immediately comply with part 7045.0275, subparts 2 and 3, and notify the National Response Center using its 24-hour toll free number (800) 424-8802 and provide the name, address, identification number of the generator, date, time, type of incident, and the estimated quantity and disposition of any recovered materials.

**Subp. 6. Very small quantity generator.** A very small quantity generator may accumulate waste on site without a permit or without having interim status until 1,000 kilograms of hazardous waste that is not acute hazardous waste is accumulated if:

A. all accumulated hazardous waste is, within 180 days of the date the 1,000 kilogram limit is reached; treated on site in compliance with part 7045.0211 or shipped off site in compliance with part 7045.0208;

B. the waste is placed in containers which meet the standards of part 7045.0270, subpart 4, and are managed in accordance with part 7045.0626; or in tanks provided the generator complies with the requirements of part 7045.0629;

C. tanks and containers are clearly labeled with the waste accumulation start date; alternatively, containers are so labeled while a clearly designated and legible log of tank transactions which includes accumulation start dates is maintained; all of these dates must be available for inspection;

D. each container and tank is properly labeled and marked according to part 7045.0270, subparts 1 and 5;

E. outdoor storage areas are protected from unauthorized access and inadvertent damage from vehicles or equipment;

F. containers that hold free liquids are placed on a containment surface that is impermeable to the waste stored and, if outside, is curbed;

G. containers holding hazardous wastes which exhibit the characteristics of ignitability or reactivity or which exhibit the potential for creating vapor pressures capable of causing containers to leak, deform, or otherwise fail if not shaded are shaded from direct sunlight; however, nothing in this item shall relieve the generator from the obligation to comply with any local, state, or federal law governing storage of these wastes;

H. all waste containers and tanks are labeled with the words "Hazardous



Waste” and a description that clearly identifies their contents to employees and emergency personnel; and

I. the generator meets the requirements of part 7045.0566, relating to preparedness and prevention, and part 7045.0568, relating to the arrangements with local authorities for emergencies.

**Subp. 7. Acute hazardous waste accumulation.** A small quantity generator or a very small quantity generator who generates acute hazardous waste may accumulate that waste on site indefinitely until one kilogram of acute hazardous waste or 100 kilograms of residue, contaminated soil, water, or other debris resulting from the cleanup of a spill of an acute hazardous waste into or on any land or water, is accumulated. From the date the applicable limit is reached (accumulation start date), the entire quantity of waste must be treated on site in compliance with part 7045.0211 or shipped off site in compliance with part 7045.0208 within 90 days. A generator accumulating wastes under this subpart must meet the requirements in items A and B.

A. For the period preceding the accumulation start date, the generator must comply with subpart 5, items B to J.

B. For the period following the accumulation start date, the generator must comply with subpart 1.

**Subp. 8. Satellite accumulation.** Items A to C apply to all generators of hazardous waste.

A. A generator may, without a permit or interim status and without complying with subparts 1 to 7, as applicable, accumulate as much as 55 gallons of hazardous waste or one quart of acute hazardous waste listed in part 7045.0135, subpart 4, item E, in containers located at or near any point of generation where wastes initially accumulate that is under the control of the operator of the process generating the waste, provided the generator complies with items B and C.

B. The generator must:

(1) comply with part 7045.0626;

(2) clearly label each container with the words “Hazardous Waste” and a description that clearly identifies its contents to employees and emergency personnel; and

(3) clearly label each container with the earliest of either the date on which the container became full or the date on which the volume limits prescribed in item A are reached.

C. A generator of any size who accumulates either hazardous waste or acute hazardous waste listed in part 7045.0135, subpart 4, item E, in excess of the amounts listed in item A at or near any point of generation must, with respect to the amount of excess waste, comply within three days with subparts 1 to 7, as applicable. During the three-day period for compliance, the generator must continue to comply with item B.

**Subp. 9. Transportation time extension.** If waste accumulated under subparts 5 and 6 must be transported 200 miles or more to a facility, the generator may store the waste for an additional 90 days beyond the established limits. In this event, the generator must maintain evidence on site that arrangements have been made for the transport of the waste to the facility and, if requested, show the evidence to the commissioner.

**Subp. 10. Time extension.** One extension may be granted for up to 30 days by the commissioner if hazardous waste must remain on site for longer than the maximum allowable time under subparts 1 to 9, as applicable, due to unforeseen, temporary, and uncontrollable circumstances.

**Subp. 11. Accumulation requiring a permit.** A large quantity generator who accumulates hazardous waste for more than 90 days is an operator of a storage

facility and is subject to the requirements of parts 7045.0450 to 7045.0642 and the agency's permitting procedures in chapter 7001 unless the generator has been granted a time extension under subpart 10.

For small quantity and very small quantity generators, if the quantity of hazardous waste accumulated at any time exceeds the quantities in subpart 5 or 6, whichever applies, the generator must manage all of the accumulated waste in accordance with all the generator requirements of parts 7045.0205 to 7045.0320. The generator does not lose small quantity or very small quantity generator status, as applicable.

**Statutory Authority:** *MS s 116.07; 116.37*

**History:** *16 SR 2102; 16 SR 2239*

#### **7045.0294 RECORD KEEPING.**

**Subpart 1. Manifests.** A generator must keep a copy of each manifest signed according to part 7045.0265, subpart 1, for three years or until the generator receives a signed copy from the designated facility which received the waste. This signed copy must be retained as a record for at least three years from the date the waste was accepted by the initial transporter.

**Subp. 1a. Alternate manifests.** Record keeping requirements under the alternate manifest system provided in part 7045.0075, subpart 5, include:

A. a generator must maintain a copy of the reclamation and transport agreement during the term of the agreement and for a period of at least three years after termination or expiration of the agreement; and

B. for each shipment of waste using an alternate manifest, a generator must submit a completed copy of that alternate manifest to the commissioner within five working days of the transporter's acceptance of the waste shipment.

**Subp. 1b. Very small quantity generator collection program receipt.** A generator must keep a copy of each signed receipt for waste delivered to a collection site under part 7045.0320. This signed copy must be retained as a record for at least three years from the date the waste was accepted at the collection site.

**Subp. 2. Reports.** A generator must keep a copy of the license application, each license renewal application, and each exception report for at least three years from the due date of the report.

**Subp. 2a. Container inspection reports.** A generator must keep a copy of each weekly container inspection report required for generator accumulation under part 7045.0292 for a period of at least three years from the date of the inspection.

*[For text of subs 3 and 4, see M.R.]*

**Subp. 5. Location of records.** The records required in subparts 1 to 3 must be located at the licensed site. The records must be easily available for agency inspection.

**Statutory Authority:** *MS s 116.07*

**History:** *16 SR 2102*

**7045.0296** [Repealed, 16 SR 2102]

#### **7045.0298 EXCEPTION REPORTING.**

**Subpart 1. When applicable.** A generator who does not receive a copy of the manifest with the handwritten signature of the owner or operator of the designated facility within 35 days of the date the waste was accepted by the initial transporter must contact the transporter and the owner or operator of the designated facility to determine the status of the hazardous waste. A generator must submit an exception report to the commissioner if the generator has not received a copy of the manifest with the handwritten signature of the owner or operator of the designated facility within 45 days of the date the waste was accepted by the initial transporter.

Subp. 2. **Content of report.** The exception report must include:

*[For text of item A, see M.R.]*

B. a cover letter signed by the generator or the generator's authorized representative explaining the efforts taken to locate the hazardous waste and the results of those efforts.

**Statutory Authority:** *MS s 116.07*

**History:** *16 SR 2102*

#### **7045.0300 ADDITIONAL REPORTING.**

The commissioner, when necessary to determine compliance with the requirements of this chapter, may require generators to furnish additional reports concerning the quantities and disposition of waste identified or listed in parts 7045.0100 to 7045.0143.

**Statutory Authority:** *MS s 116.07*

**History:** *16 SR 2102*

**7045.0304** [Repealed, 16 SR 2102]

#### **7045.0305 STANDARDS FOR GENERATORS WHO SEWER HAZARDOUS WASTE.**

Subpart 1. **Applicability.** This part applies to generators who discharge their own hazardous waste to a sanitary sewer.

Subp. 2. **Generator size determination.** A generator who sewers hazardous waste shall include the quantity of sewered hazardous waste in their size determination under part 7045.0206 except for the volume of a hazardous waste that has been pretreated provided that:

A. an 80 percent reduction of the quantity of the hazardous waste constituent mass is achieved before sewerage;

B. the discharge is approved by a publicly owned treatment works permitted under part 7001.0520, subpart 3, item B;

C. the generator is licensed to sewer their waste under parts 7045.0225 to 7045.0250; and

D. the generator has met the conditions of part 7001.0520, subpart 3, item C.

Subp. 3. **Management.** A generator who sewers hazardous waste shall comply with the requirements of this chapter applicable to their generator size with the following exception. A generator whose quantity determination is zero because the generator meets the conditions of subpart 2 will be classified as a very small quantity generator and shall meet the requirements of this chapter that apply to very small quantity generators.

**Statutory Authority:** *MS s 116.07*

**History:** *16 SR 2102*

#### **7045.0310 SPECIAL REQUIREMENTS FOR WASTE COLLECTED AS RESULT OF HOUSEHOLD HAZARDOUS WASTE MANAGEMENT PROGRAM.**

*[For text of subpart 1, see M.R.]*

Subp. 2. **Notification.** An operator who intends to establish or operate all or part of a household hazardous waste management program shall ensure that the information required in items A to J is submitted to the commissioner at least 30 days before initiating the household hazardous waste management program.

The notification shall provide a complete description of the program including, as applicable:

[For text of items A to H, see M.R.]

I. a description of the safety and emergency procedures established for the program; and

J. the name and address of all waste transporters and the facilities which will treat or dispose of the waste.

Operators who submit a notification and subsequently change any aspect of the program as described in the notification must submit, within 30 days of making the change, an amended notification to the commissioner fully describing the program changes.

**Subp. 3. Management requirements.** An operator who establishes or operates all or part of a household hazardous waste management program must comply with the standards applicable to large quantity generators established in parts 7045.0205 to 7045.0320, except as modified in items A to E.

A. The operator need not comply with the license and license reporting requirements of parts 7045.0225 to 7045.0250.

B. The operator may transport or offer for transport household hazardous waste for off-site activities as provided in part 7045.0208 or to a collection site that has obtained the commissioner's approval under subpart 6.

C. If the operator transports or offers for transport household hazardous waste for off-site activities at a collection site that has obtained the commissioner's approval under subpart 6, the operator:

(1) may, in lieu of a manifest, prepare and use a shipping paper containing all the information required on a manifest in part 7045.0261, excluding the identification number, to comply with the requirements of parts 7045.0205 to 7045.0320;

(2) may designate an alternate collection site which meets the requirements of subpart 6 or an alternate facility and must indicate the alternate collection site or facility on the shipping paper prepared under subitem (1); and

(3) must instruct the transporter to return the waste, if the transporter is unable to deliver the household hazardous waste to the facility or collection site designated on the shipping paper.

D. If the operator intends to store household hazardous waste for more than 90 days after the accumulation start date, the operator must obtain the approval of the commissioner as set out in subpart 6, but no facility permit is required unless the operator intends to perform treatment procedures other than those specified in subpart 7 or disposes of the waste on site.

E. The operator need not comply with the record keeping requirements of part 7045.0294, subparts 2 and 3.

**Subp. 4. [Repealed, 16 SR 2102]**

**Subp. 5. Transportation requirements.** An operator or other persons who transport waste collected as a result of a household hazardous waste management program shall transport collected waste in compliance with the requirements in items A to D.

A. A transporter may not accept household hazardous waste from any operator who establishes or operates all or part of a household hazardous waste management program unless the waste is accompanied by either a manifest signed by the generator according to parts 7045.0205 to 7045.0320 or a shipping paper prepared according to subpart 3, item E, subitem (1).

B. If the household hazardous waste is destined for a hazardous waste facility, the transporter shall comply with all of the hazardous waste transporter requirements in parts 7045.0351 to 7045.0397.

C. If the household hazardous waste is destined for a collection site that has obtained approval from the commissioner under subpart 6, the transporter

shall comply with the hazardous waste transporter requirements in parts 7045.0351 to 7045.0397, except:

*[For text of subitems (1) and (2), see M.R.]*

*[For text of item D, see M.R.]*

**Subp. 6. Storage of collected wastes.** An operator who accepts household hazardous waste from another collection site or stores household hazardous waste for more than 90 days must comply with the requirements of items A to E.

A. No operator may accept household hazardous waste from another collection site or store household hazardous waste for more than 90 days after the accumulation start date as provided in part 7045.0292, without the approval of the commissioner.

B. An operator intending to accept household hazardous waste from another collection site or store household hazardous waste for more than 90 days must submit a request for approval to the commissioner at least 30 days before initiating a household hazardous waste program. The commissioner shall approve the request if the commissioner determines that, based on the information contained in the request, the storage and management practices employed at the storage facility will appropriately protect human health and the environment from any adverse effects associated with the household hazardous waste.

C. If the commissioner approves a request, the operator shall manage the waste in compliance with the applicable standards in parts 7045.0526 and 7045.0528 for the use and management of containers and tanks.

D. If the commissioner does not approve a request, the operator must transport or arrange to transport the household hazardous waste for off-site activities at a facility that either has a hazardous waste permit or a collection site that has obtained the commissioner's approval under this subpart. Operators who store household hazardous waste for more than 90 days without the commissioner's approval are in violation of this chapter.

E. If the operator has not submitted a request as required under item B, or if the commissioner does not approve a request, the commissioner may still grant a storage extension if household hazardous waste must remain on-site for longer than 90 days due to unforeseen, temporary, and uncontrollable circumstances as provided in part 7045.0292, subparts 10 and 11.

**Subp. 7. Treatment.** Operators conducting treatment of collected household hazardous wastes are subject to the requirements of items A to C.

A. An operator intending to perform any treatment not specified in item B must submit a request for approval to the commissioner. The commissioner shall approve the request if the commissioner determines that the requirements of item C have been satisfied and that all other management practices at the collection site are adequate to protect human health and the environment.

B. Treatment methods which do not require approval of the commissioner are bulking of:

- (1) paints;
- (2) solvents;
- (3) used or waste oil; and
- (4) antifreeze.

While bulking is being done, the personnel training and safety procedures must specifically address how this activity will be conducted.

C. All other methods of waste treatment must be identified in the notification required under subpart 2 and the commissioner's approval obtained for those specific activities before any of those activities are begun. In addition to the information required in subpart 2, the notification must provide the following information:

(1) the name of the person appointed to direct and oversee the treatment process; and

(2) a detailed description of the treatment activity and an explanation of how human health and the environment will be protected.

**Statutory Authority:** *MS s 116.07*

**History:** *15 SR 2106; 16 SR 2102*

**7045.0320 VERY SMALL QUANTITY GENERATOR HAZARDOUS WASTE COLLECTION PROGRAMS.**

**Subpart 1. Applicability.** This part provides the requirements for the management and transportation of waste collected as part of a very small quantity generator hazardous waste collection program. Full compliance with this part exempts the program operator from the permit requirements of part 7001.0520.

An operator of a hazardous waste facility permitted under chapter 7001 is exempt from the requirements of this part to the extent that the facility permit specifically allows the facility to accept and store waste from other generators.

**Subp. 2. Generators who operate collection programs.** A generator who is also a program operator must comply with the applicable provisions of parts 7045.0205 to 7045.0320 as they apply to the generator's hazardous waste. A generator who operates a collection program must maintain separate records for the collected waste and waste generated by the generator.

**Subp. 3. Definitions.** When used in this part, the terms in items A to D have the meanings given them.

A. "Collection program" means a program licensed under this part to accept, collect, transport, store, or treat hazardous waste from very small quantity generators.

B. "Collection site" means a site established as part of a collection program under this part.

C. "Program operator" means a person or persons who establish a collection program and arrange for the acceptance, collection, transportation, storage, and treatment of collected hazardous waste from very small quantity generators.

D. "Site operator" means a person or persons who operate a collection site.

**Subp. 4. Program license.** A program operator must apply for and obtain a collection program license from the commissioner before accepting any waste. The program operator must renew the license annually.

**Subp. 5. License application.** The license application must provide a complete description of the program including, as applicable:

A. the name, address, and telephone number of persons establishing the program;

B. the name, address, and telephone number of persons operating the program, if different than item A;

C. the location and EPA identification number of all collection sites, designating central facilities and satellite facilities;

D. the duration and operating hours of the program;

E. the intended program service area;

F. a description of the operator's administrative process for accepting waste from very small quantity generators;

G. the anticipated types and amounts of waste to be collected, stored, treated, transported, and disposed of;

H. a description of how the waste is to be collected, analyzed, stored, treated, transported, and disposed of;

I. except as provided in item J, if treatment of collected waste is applied

for under this license, the following additional information must be submitted for each method of waste treatment proposed:

(1) the name of the person appointed to direct and oversee the treatment process;

(2) a detailed description of the treatment activity and an explanation of how human health and the environment will be protected; and

(3) evidence of compliance with part 7045.0210 addressing financial responsibility;

J. the bulking of paints, solvents, used or waste oil, and antifreeze does not require submittal of the additional information under item I but must be addressed under items G and H;

K. the amount of time the site operator intends to store collected waste at individual collection sites;

L. a description of the physical structures where collection and storage will occur;

M. a description of personnel safety training;

N. a description of the safety and emergency procedures established;

O. the name, address, and EPA identification number of all hazardous waste transporters to be used; and

P. the name, address, and EPA identification number of all hazardous waste facilities which will treat or dispose of the waste.

**Subp. 6. Changes to license conditions.** A program operator may change the conditions of management or operation during the time period for which the license is valid, except for treatment changes approved under subpart 5, item I, which require the commissioner's written approval before the operator may implement the treatment changes. If the program operator changes any of the conditions of management or operation during the life of the license, the operator shall report the changes in the next annual report.

**Subp. 7. License issuance and renewal.** After receiving the license application or annual report, as applicable, the commissioner will conduct a review of the submitted information and will:

A. issue or reissue, as applicable, a collection program license;

B. request in writing the submittal of additional information to make the license application or annual report, as applicable, complete and approvable;

C. request in writing facility operational or waste management changes to make the application or annual report, as applicable, approvable; or

D. deny approval of license application within 45 days of last submittal of information by license applicant.

**Subp. 8. Reporting requirements.** A program operator must meet the reporting requirements established in part 7045.0248, subpart 1.

In addition, the site operator must keep a written operating record at the collection site and available for inspection that contains the following information for each time a waste is collected:

A. the generator names and identification numbers as required under part 7045.0221 from whom waste was collected;

B. the name or a description of the hazardous waste collected;

C. the amount of each hazardous waste collected;

D. the date the waste was received at the collection site; and

E. the date the waste was treated or shipped from the collection site.

**Subp. 9. Management requirements.** A person or persons involved in management of hazardous waste from very small quantity generators as part of a collection program shall comply with the requirements of items A to F.

A. The program operator must comply with the standards applicable to large quantity generators established in parts 7045.0205 to 7045.0320 with respect to collected hazardous waste except as modified in this part.

B. The license requirements of parts 7045.0225 to 7045.0250 are replaced by the requirements of subparts 4 to 8.

C. A site operator may accumulate hazardous waste on site without a permit or without interim status if the site operator complies with the accumulation time limits and management requirements provided in part 7045.0292. The site operator is a generator whose size shall be determined by applying part 7045.0206. The site operator shall comply with the requirements applicable to a generator of the appropriate size.

D. The site operator may transport or offer for transport collected waste for off-site activities as provided in part 7045.0208 or to a collection site that is part of the same collection program licensed under this part.

E. If the site operator transports or offers for transport collected waste for off-site activities to a collection site that is part of the same collection program licensed under this part, the operator:

(1) may, in lieu of a manifest, prepare and use a shipping paper containing all the information required on a manifest in part 7045.0261, excluding the identification number, to comply with the requirements of parts 7045.0261 to 7045.0265;

(2) may designate an alternate collection site that has obtained the commissioner's approval or an alternate facility and must indicate the alternate collection site or facility on the shipping paper prepared under subitem (1); and

(3) must instruct the transporter to return the waste, if the transporter is unable to deliver the collected waste to the facility or collection site designated on the shipping paper.

F. The site operator must provide a written receipt to the generator immediately upon receipt of waste. The receipt must include:

(1) the date the waste was received at the collection site;

(2) the name or a description of the hazardous waste received;

(3) the amount of each hazardous waste received;

(4) the generator name and identification number; and

(5) the signature of the generator or authorized representative.

**Subp. 10. Transport requirements.** A person or persons who transport waste collected as a result of a collection program licensed under this part shall transport collected waste in compliance with the requirements in items A to D.

A. A transporter may not accept collected waste from a program operator or a site operator unless the waste is accompanied by either a manifest signed by the program operator or a shipping paper prepared according to subpart 9, item E, subitem (1).

B. If the collected waste is destined for a hazardous waste facility, the transporter shall comply with all of the hazardous waste transporter requirements in parts 7045.0351 to 7045.0397.

C. If the collected waste is destined for a collection site that has obtained approval from the commissioner under the licensing provisions of this part, the transporter shall comply with the hazardous waste transporter requirements in parts 7045.0351 to 7045.0397, except:

(1) a transporter identification number under part 7045.0361 is not required; and

(2) a shipping paper prepared according to subpart 9, item E, subitem (1), may be used, in lieu of a manifest, to comply with the manifest requirements of parts 7045.0351 to 7045.0395.



D. An operator who transports waste for hire in Minnesota must obtain for-hire operating authority from the Minnesota Transportation Regulation Board as required by Minnesota Statutes, chapter 221.

**Statutory Authority:** *MS s 116.07*

**History:** *16 SR 2102*

#### 7045.0351 APPLICABILITY AND EXEMPTIONS.

Subpart 1. **Applicability.** The provisions of parts 7045.0355 to 7045.0391 establish standards that apply to persons transporting hazardous waste that originates or terminates within the state of Minnesota if the transportation requires a manifest under parts 7045.0205 to 7045.0320. Parts 7045.0395 and 7045.0397 apply to the transportation of all hazardous waste within the state of Minnesota.

*[For text of subp 2, see M.R.]*

**Statutory Authority:** *MS s 116.07*

**History:** *16 SR 2102*

#### 7045.0375 THE MANIFEST SYSTEM; GENERAL REQUIREMENTS.

Subpart 1. **Acceptance of shipment.** A transporter may not accept hazardous waste from a generator unless it is accompanied by a manifest signed by the generator according to parts 7045.0205 to 7045.0320. In the case of exports, a transporter may not accept waste:

*[For text of items A and B, see M.R.]*

*[For text of subps 2 and 3, see M.R.]*

**Statutory Authority:** *MS s 116.07*

**History:** *16 SR 2102*

#### 7045.0450 FACILITIES GOVERNED BY FACILITY STANDARDS.

Subpart 1. **General requirements.** Parts 7045.0450 to 7045.0544 apply to owners and operators of all facilities that treat, store, or dispose of hazardous waste except as specifically provided otherwise in this part or in parts 7045.0100 to 7045.0320.

Parts 7045.0450 to 7045.0544 apply to the owners or operators of publicly owned treatment works that treat, store, or dispose of hazardous waste only to the extent they are included in a permit-by-rule granted under the agency's permitting procedures.

Parts 7045.0450 to 7045.0544 apply to a person disposing of hazardous waste by means of ocean disposal subject to a permit issued under the Marine Protection, Research, and Sanctuaries Act of 1972, United States Code, title 16, sections 1431 to 1434, as amended through December 31, 1982, and United States Code, title 33, section 1401, as amended through December 31, 1982, only to the extent they are included in a permit-by-rule granted under the agency's permitting procedures. Parts 7045.0450 to 7045.0544 apply to the treatment or storage of hazardous waste before it is loaded onto an ocean vessel for incineration or disposal at sea.

Parts 7045.0450 to 7045.0544 apply to the owners and operators of all facilities that treat, store, or dispose of hazardous waste referred to in parts 7045.1300 to 7045.1380.

*[For text of subp 2, see M.R.]*

Subp. 3. **Exemptions.** Parts 7045.0450 to 7045.0544 do not apply to the following:

*[For text of items A and B, see M.R.]*

C. a farmer disposing of waste pesticides from the farmer's own use in compliance with part 7045.0213, subpart 2;

*[For text of items D to J, see M.R.]*

**Statutory Authority:** *MS s 116.07*

**History:** *16 SR 2102*

#### **7045.0452 GENERAL FACILITY STANDARDS.**

*[For text of subps 1, to 4, see M.R.]*

Subp. 5. **General inspection requirements.** General inspection requirements include the following:

*[For text of items A and B, see M.R.]*

C. The frequency of inspection may vary for the items on the schedule. However, it must be based on the rate of possible deterioration of the equipment and the probability of an environmental or human health incident if the deterioration or malfunctions or any operator error goes undetected between inspections. Areas subject to spills, such as loading and unloading areas, must be inspected daily when in use. The inspection schedule must include the terms and frequencies called for in parts 7045.0526, subpart 5; 7045.0528, subparts 4, 5, and 7; 7045.0532, subpart 5; 7045.0534, subparts 5 and 6; 7045.0538, subpart 5; 7045.0539, subpart 3; and 7045.0542, subpart 7; and the process vent and equipment leak standards in Code of Federal Regulations, title 40, sections 264.1033, 264.1052, 264.1053, and 264.1058, as amended, where applicable. The inspection schedule must be submitted with the permit application. The commissioner shall evaluate the schedule along with the rest of the application to ensure that it adequately protects human health and the environment. As part of this review, the commissioner may modify or amend the schedule as necessary.

*[For text of items D and E, see M.R.]*

**Statutory Authority:** *MS s 116.07*

**History:** *16 SR 2321*

#### **7045.0458 WASTE ANALYSIS REQUIREMENTS.**

Subpart 1. **Waste analysis.** Waste analysis procedures are listed in items A to D.

A. Before an owner or operator treats, stores, or disposes of any hazardous waste, or nonhazardous waste if applicable under part 7045.0488, subpart 2a, the owner or operator shall obtain a detailed chemical and physical analysis of a representative sample of the waste. This analysis must contain all the information which must be known in order to treat, store, or dispose of the waste in accordance with the requirements of parts 7045.0450 to 7045.0544 and 7045.1300 to 7045.1380, or with the conditions of a permit issued under the agency's permitting procedures.

B. The analysis may include data developed under parts 7045.0100 to 7045.0143 and existing published or documented data on the hazardous waste or on hazardous waste generated from similar processes, including data obtained from the generator.

C. The analysis must be repeated as necessary to ensure that it is accurate and up-to-date. The analysis must be repeated at the following times:

(1) when the owner or operator is notified, or has reason to believe, that the process or operation generating the hazardous waste, or nonhazardous waste if applicable under part 7045.0488, subpart 2a, has changed; and

*[For text of subitem (2), see M.R.]*

*[For text of item D, see M.R.]*

**Subp. 2. Waste analysis plan.** The owner or operator shall develop and follow a written waste analysis plan which describes the procedures that will be used to comply with subpart 1. The owner or operator shall keep this plan at the facility. The plan must specify:

A. the parameters for which each hazardous waste, or nonhazardous waste if applicable under part 7045.0488, subpart 2a, will be analyzed and the rationale for the selection of these parameters;

*[For text of items B to E, see M.R.]*

F. where applicable, the methods that will be used to meet the additional waste analysis requirements for specific waste management methods as specified in parts 7045.0456; 7045.0538, subpart 10; 7045.0542, subpart 2; and 7045.1315; and the process vent and equipment leak test methods and procedures in Code of Federal Regulations, title 40, sections 264.1034(d) and 264.1063(d), as amended;

*[For text of item G, see M.R.]*

H. for surface impoundments exempted from the land disposal restrictions under part 7045.1310, the procedures and schedules for:

(1) the sampling of impoundment contents;

(2) the analysis of test data; and

(3) the annual removal of residues which are not delisted under part 7045.0075, subpart 2, or which exhibit a characteristic of hazardous waste under part 7045.0131, and either do not meet the treatment standards of parts 7045.1350 to 7045.1360, or, where no treatment standards have been established, such residues are prohibited from land disposal under parts 7045.1320 to 7045.1333 or RCRA section 3004(d).

**Statutory Authority:** *MS s 116.07; 116.37*

**History:** *16 SR 1225; 16 SR 2102; 16 SR 2239; 16 SR 2321*

#### **7045.0472 FACILITY SHIPPING REQUIREMENTS.**

When a shipment of hazardous waste is initiated from a facility, the owner or operator of that facility shall comply with the requirements of parts 7045.0205 to 7045.0320.

**Statutory Authority:** *MS s 116.07*

**History:** *16 SR 2102*

#### **7045.0478 OPERATING RECORD.**

*[For text of subps 1 and 2, see M.R.]*

**Subp. 3. Record information.** The information in items A to Q must be recorded, as it becomes available, and maintained in the operating record until closure of the facility.

*[For text of items A to D, see M.R.]*

E. Records and results of waste analyses performed as specified in parts 7045.0456, 7045.0458, 7045.0538, subpart 10, 7045.0542, subpart 2, 7045.1310, and 7045.1315; and the process vent and equipment leak test methods and procedures in Code of Federal Regulations, title 40, sections 264.1034 and 264.1063, as amended.

*[For text of items F and G, see M.R.]*

H. Monitoring, testing, or analytical data and corrective action where required by parts 7045.0484; 7045.0528, subparts 2, 4, 5, and 7; 7045.0532, subpart 5; 7045.0534, subparts 5 and 6; 7045.0536, subparts 5, 6, and 8; 7045.0538, subparts 5 and 6; 7045.0539, subpart 3; and 7045.0542, subpart 7; and the process vent and equipment leak test methods and procedures and record keeping requirements in Code of Federal Regulations, title 40, sections 264.1034(c) to (f), 264.1035, 264.1063(d) to (i), and 264.1064, as amended.

*[For text of items I to L, see M.R.]*

M. Records of the quantities and date of placement for each shipment of hazardous waste placed in land disposal units under an extension to the effective date of any land disposal restriction granted under part 7045.0075, subpart 8, a petition under part 7045.0075, subpart 9, or a certification under Code of Federal Regulations, title 40, section 268.8, and the applicable notice required of a generator under part 7045.1315, subpart 1.

N. For an off-site treatment facility, a copy of the notice, and the certification and demonstration, if applicable, required of the generator or the owner under Code of Federal Regulations, title 40, section 268.8, or part 7045.1315, subpart 1, item A.

O. For an on-site treatment facility, the information contained in the notice, except the manifest number, and the certification and demonstration, if applicable, required of the generator or owner or operator under Code of Federal Regulations, title 40, section 268.8, or part 7045.1315, subpart 1, item A.

P. For an off-site land disposal facility, a copy of the notice, and the certification and demonstration, if applicable, required of the generator or the owner or operator of a treatment facility under Code of Federal Regulations, title 40, section 268.8, and part 7045.1315, whichever is applicable.

Q. For an on-site land disposal facility, the information contained in the notice required of the generator or owner or operator of a treatment facility under part 7045.1315, except for the manifest number, and the certification and demonstration, if applicable, required under Code of Federal Regulations, title 40, section 268.8, whichever is applicable.

R. For an off-site storage facility, a copy of the notice, and the certification and demonstration if applicable, required of the generator or the owner or operator under Code of Federal Regulations, title 40, section 268.8, or part 7045.1315.

S. For an on-site storage facility, the information contained in the notice, except the manifest number, and the certification and demonstration if applicable, required of the generator or the owner or operator under Code of Federal Regulations, title 40, section 268.8, or part 7045.1315.

**Statutory Authority:** *MS s 116.07; 116.37*

**History:** *16 SR 2239; 16 SR 2321*

#### **7045.0482 REQUIRED REPORTS.**

*[For text of subps 1, to 3, see M.R.]*

**Subp. 4. Additional reports.** In addition to submitting the manifest discrepancy report described in part 7045.0476, subpart 3, and the annual reports and the unmanifested waste reports described in subparts 2 and 3, the owner or operator shall also report to the commissioner:

*[For text of items A and B, see M.R.]*

C. as otherwise required by parts 7045.0484, 7045.0532 to 7045.0538;

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and the process vent and equipment leak standards in Code of Federal Regulations, title 40, part 264, subparts AA and BB, as amended.

**Statutory Authority:** *MS s 116.07*

**History:** *16 SR 2321*

## 7045.0484 GROUNDWATER PROTECTION.

*[For text of subps 1 to 3, see M.R.]*

**Subp. 4. Hazardous constituents.** The agency shall specify in the facility permit the hazardous constituents to which the groundwater protection standard applies. Hazardous constituents are constituents identified in part 7045.0141, or constituents which are not listed in part 7045.0141, but which are contained in wastes that meet criteria established in part 7045.0131, subpart 6, for lethality and which may reasonably be expected to contribute to the lethality.

*[For text of subps 5 to 14, see M.R.]*

**Statutory Authority:** *MS s 116.07*

**History:** *15 SR 1878*

## 7045.0486 CLOSURE.

*[For text of subps 1 to 4, see M.R.]*

**Subp. 5. Notification of partial and final closure.**

*[For text of item A, see M.R.]*

B. The date on which the owner or operator "expects to begin closure" is defined as follows:

*[For text of subitem (1), see M.R.]*

(2) Where the owner or operator of a hazardous waste management unit reasonably anticipates that the owner or operator will continue to receive hazardous wastes, then the date on which the owner or operator "expects to begin closure" is one year after the date the last volume of hazardous waste was received by the hazardous waste management unit. An owner or operator shall only be considered to "reasonably anticipate receiving additional volumes of hazardous waste" if the owner or operator in fact receives hazardous wastes within one year after the last volume was received. The commissioner may approve an extension to this one-year limit if the owner or operator of a hazardous waste management unit can demonstrate to the commissioner that the unit or facility has the capacity to receive additional hazardous wastes and he or she has taken, and will continue to take, all steps to prevent threats to human health and the environment, including compliance with all applicable permit requirements.

For units meeting the requirements of part 7045.0488, subpart 2a, the date on which the owner or operator expects to begin closure must be no later than 30 days after the date on which the hazardous waste management unit receives the known final volume of nonhazardous wastes, or if there is a reasonable possibility that the hazardous waste management unit will receive additional nonhazardous wastes, no later than one year after the date on which the unit received the most recent volume of nonhazardous wastes. If the owner or operator can demonstrate to the commissioner that the hazardous waste management unit has the capacity to receive additional nonhazardous wastes and the owner or operator has taken, and will continue to take, all steps to prevent threats to human health and the environment, including compliance with all applicable permit requirements, the commissioner shall approve an extension to this one-year limit.

If the facility's permit or interim status is terminated, or if the facility is otherwise ordered by judicial decree or compliance order to cease receiving hazardous waste or to close, then the requirement in this item does not apply. However, the owner or operator shall close the facility in accordance with established deadlines.

*[For text of subp 6, see M.R.]*

**Statutory Authority:** *MS s 116.07*

**History:** *16 SR 1225*

**7045.0488 CLOSURE ACTIVITIES.**

**Subpart 1. Time allowance to begin closure activities.** Within 90 days after receiving the final volume of hazardous waste, or the final volume of nonhazardous waste if the owner or operator complies with all applicable requirements of subpart 2a, at a hazardous waste management unit or facility, the owner or operator shall treat, remove from the unit or facility, or dispose of on-site all hazardous waste in accordance with the approved closure plan. The commissioner may approve a longer period if the owner or operator demonstrates at least 30 days before expiration of the 90 day period, that the owner or operator has taken and will continue to take all steps to prevent threats to human health and the environment, including compliance with all permit requirements and:

*[For text of item A, see M.R.]*

B. the hazardous waste management unit or facility has the capacity to receive additional hazardous waste, or has the capacity to receive nonhazardous waste if the owner or operator complies with subpart 2a, there is a reasonable likelihood that the owner or operator or another person will recommence operation of the unit or facility within one year, and closure of the unit or facility would be incompatible with continued operation of the site; and

*[For text of item C, see M.R.]*

**Subp. 2. Time extension for closure activities.** The owner or operator shall complete partial and final closure activities in accordance with the approved closure plan and within 180 days after receiving the final volume of hazardous waste, or the final volume of nonhazardous waste if the owner or operator complies with all applicable requirements in subpart 2a, at the hazardous waste management unit or facility. The commissioner may approve a longer closure period if the owner or operator demonstrates at least 30 days before expiration of the 180 day period that the owner or operator has taken, unless the owner or operator is otherwise subject to the deadlines of subpart 2a, and will continue to take all steps to prevent threats to human health and the environment from the unclosed but not operating hazardous waste management unit or facility, including compliance with all applicable permit requirements and:

*[For text of item A, see M.R.]*

B. the hazardous waste management unit or facility has capacity to receive additional hazardous waste, or has the capacity to receive nonhazardous waste if the owner or operator complies with subpart 2a, there is a reasonable likelihood the owner or operator or another person will recommence operation of the unit or facility within one year, and closure of the unit or facility would be incompatible with continued operation of the site; and

*[For text of item C, see M.R.]*

**Subp. 2a. Conditions for receiving nonhazardous waste.** The commissioner shall allow an owner or operator to receive only nonhazardous waste in a landfill,

land treatment, or surface impoundment unit after the final receipt of hazardous waste at that unit if:

A. the owner or operator requests a permit modification in compliance with all applicable requirements of chapter 7001 and in the permit modification request demonstrates that:

(1) the unit has the existing design capacity, as previously indicated by the owner or operator on the Part A application, to receive nonhazardous wastes;

(2) there is a reasonable likelihood that the owner or operator or another person will receive nonhazardous wastes in the unit within one year after the final receipt of hazardous waste;

(3) the nonhazardous waste will not be incompatible with any remaining wastes in the unit, or with the facility design and operating requirements of the unit or facility under parts 7045.0450 to 7045.0544;

(4) closure of the hazardous waste management unit would be incompatible with continued operation of the unit or facility; and

(5) the owner or operator is operating and will continue to operate in compliance with all applicable permit requirements;

B. the request to modify the permit includes an amended waste analysis plan required under part 7045.0458, groundwater monitoring and response program required under part 7045.0484, human exposure assessment required under parts 7001.0590 and 7001.0620, closure and postclosure plans required under parts 7045.0486 and 7045.0490, and updated cost estimates and demonstration of financial assurance for closure and postclosure care as necessary and appropriate required under parts 7045.0502 to 7045.0508, to reflect any changes due to the presence of hazardous constituents in the nonhazardous wastes, and changes in closure activities required under part 7045.0488, including the expected year of closure if applicable under part 7045.0486, subpart 4, as a result of the receipt of nonhazardous wastes following the final receipt of hazardous wastes;

C. the request to modify the permit includes revisions, as necessary and appropriate, to affected conditions of the permit to account for the receipt of nonhazardous wastes following receipt of the final volume of hazardous wastes; and

D. the request to modify the permit and the demonstrations referred to in items A and B are submitted to the commissioner no later than 120 days before the date on which the owner or operator of the facility receives the known final volume of hazardous wastes at the unit.

If the owner or operator of a surface impoundment is not in compliance with the liner and leachate collection system minimum technology requirements of part 7045.0532, subpart 3, the owner or operator may not delay closure in order to accept nonhazardous wastes.

**Subp. 3. Disposal or decontamination of equipment, structures, and soils.** During the partial and final closure periods, all contaminated facility equipment, structures, and soils must be properly disposed of or decontaminated unless otherwise specified in part 7045.0528, subpart 9; 7045.0532, subpart 7; 7045.0534, subpart 7; 7045.0536, subpart 8; or 7045.0538, subpart 7, or under the authority of part 7045.0539, subparts 2 and 4. By removing any hazardous waste or hazardous waste constituents during partial and final closure, the owner or operator may become a generator of hazardous waste and must handle that waste according to all applicable requirements of parts 7045.0205 to 7045.0320.

*[For text of subp 4, see M.R.]*

**Statutory Authority:** *MS s 116 07*

**History:** *16 SR 1225; 16 SR 2102*

**7045.0502 COST ESTIMATE FOR FACILITY CLOSURE.**

Subpart 1. **Cost estimate requirements.** The owner or operator shall have a detailed written estimate, in current dollars, of the cost of closing the facility in accordance with parts 7045.0486 and 7045.0488 and applicable closure requirements in parts 7045.0526, subpart 9; 7045.0532, subpart 7; 7045.0534, subpart 7; 7045.0536, subpart 8; 7045.0538, subpart 7; 7045.0539, subparts 2 to 4; and 7045.0542, subpart 8. The closure cost estimate must equal the cost of final closure at the point in the facility's active life when the extent and manner of its operation would make closure the most expensive, as indicated by its closure plan. The closure cost shall be estimated as follows:

*[For text of item A, see M.R.]*

B. The closure cost estimate may not incorporate any salvage value that may be realized with the sale of hazardous wastes, or nonhazardous wastes if applicable under part 7045.0488, subpart 2a, facility structures or equipment, land, or other assets associated with the facility at the time of partial or final closure.

C. The owner or operator may not incorporate a zero cost for hazardous wastes, or nonhazardous wastes if applicable under part 7045.0488, subpart 2a, that might have economic value.

*[For text of subs 2 to 4, see M.R.]*

**Statutory Authority:** *MS s 116.07*

**History:** *16 SR 1225*

**7045.0526 USE AND MANAGEMENT OF CONTAINERS.**

*[For text of subs 1 to 5, see M.R.]*

Subp. 6. **Containment.** Requirements for containment systems are as described in items A to E.

A. Container storage areas must have a containment system that is capable of collecting and holding spills, leaks, and precipitation. The containment system must:

(1) have a floor underlying the containers that is free of cracks or gaps and is sufficiently impervious to contain leaks, spills, and accumulated precipitation until the collected material is detected and removed;

(2) have a floor that is sloped, or be otherwise designed and operated to drain and remove liquids resulting from leaks, spills, or precipitation, unless the containers are elevated or in some other manner are protected from contact with accumulated liquids; and

*[For text of subitem (3), see M.R.]*

*[For text of item B, see M.R.]*

C. Spilled or leaked waste and accumulated precipitation must be removed from the sump or collection area in as timely a manner as is necessary to prevent overflow of the collection system. If the collected material is a hazardous waste as defined in parts 7045.0100 to 7045.0143, it must be managed as a hazardous waste according to all applicable requirements of parts 7045.0205 to 7045.1030. If the collected material 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, through June 30, 1983.

*[For text of items D and E, see M.R.]*



*[For text of subps 7 and 8, see M.R.]*

**Subp. 9. Closure.** At closure, all hazardous waste and hazardous waste residues must be removed from the containment system. Remaining containers, liners, floors, and soil containing or contaminated with hazardous waste or hazardous waste residues must be decontaminated or removed. At closure and throughout the operating period, unless the owner or operator can demonstrate that the waste removed from the containment system is not a hazardous waste, the owner or operator becomes a generator of hazardous waste and shall manage it in accordance with all applicable requirements of parts 7045.0205 to 7045.1030.

**Statutory Authority:** *MS s 116.07*

**History:** *16 SR 2102*

#### **7045.0532 SURFACE IMPOUNDMENTS.**

*[For text of subps 1 and 2, see M.R.]*

**Subp. 3. Design and operating requirements.** Design and operating requirements are as follows:

A. A surface impoundment must have a double liner system that is designed, constructed, and installed to prevent migration of waste out of the impoundment to the adjacent soil or ground water or surface water at any time during the active life, including the closure and post closure periods, of the impoundment. The double liner system must consist of two liners with a leak detection, collection, and removal system between the liners. This system must be designed, constructed, maintained, and operated to detect, collect, and remove liquids from the space between the liners, without clogging, through the scheduled post closure care period of the surface impoundment. The liners must conform to the requirements of item B or C, as appropriate, and must be:

(1) constructed of materials that have appropriate chemical properties and sufficient strength and thickness to prevent failure due to pressure gradients, including static head and external hydrogeologic forces, physical contact with the waste or leachate to which they are exposed, climatic conditions, the stress of installation, and the stress of daily operation;

(2) placed upon a foundation or base capable of providing support to the liner and resistance to pressure gradients above and below the liner to prevent failure of the liner due to settlement, compression, or uplift; and

(3) installed to cover all surrounding earth likely to be in contact with the waste or leachate.

B. For any surface impoundment that is not covered by item C or part 7045.0630, the liners may be constructed of materials that may allow wastes to migrate into the liner, but not into the adjacent subsurface soil or drainage layer or ground water or surface water provided that the impoundment is closed according to subpart 7, item A, subitem (1). For impoundments that will be closed according to subpart 7, item A, subitem (2), at least one liner must be constructed of materials that can prevent wastes from migrating into the liner.

C. For any new surface impoundment, new surface impoundment unit at an existing facility, replacement of an existing surface impoundment unit, and lateral expansion of an existing surface impoundment unit that accepts waste after issuance of a permit for units where Part B of the permit application is received by the commissioner after November 8, 1984, the top liner must be constructed of materials that prevent wastes from migrating into the liner. The lower liner may be constructed of materials that allow wastes to migrate into the liner, but not into the adjacent subsurface soil or drainage layer or ground water or surface water. For the purpose of the preceding sentence, a lower liner satisfies the

requirement if it is constructed of at least a three-foot thick layer of recompacted clay or other natural material with a permeability of no more than  $1 \times 10^{-7}$  centimeter per second.

D. A surface impoundment must be designed, constructed, maintained, and operated to prevent overtopping resulting from normal or abnormal operations; overfilling; wind and water action; rainfall; run-on; malfunctions of level controllers, alarms, and other equipment; and human error.

E. A surface impoundment must have dikes that are designed, constructed, and maintained with sufficient structural integrity to prevent massive failure of the dikes. Massive failure of the dikes means any uncontrolled flow of hazardous waste from the surface impoundment. In ensuring structural integrity, it must not be presumed that the liner system will function without leakage during the active life of the unit.

F. The owner or operator of a surface impoundment shall have a method of emptying its wastes in an emergency. Acceptable methods include backup surface impoundments or tanks.

G. The owner or operator of a surface impoundment shall submit to the agency with the permit application a plan for the treatment and disposal of leachate which is removed from the surface impoundment.

H. An owner or operator may petition for alternate design and operating practices under part 7045.0075, subpart 12.

I. The agency shall specify in the permit all design and operating practices that are necessary to ensure that the requirements of items A to H are satisfied.

*[For text of subps 4 to 6, see M.R.]*

**Subp. 7. Closure and postclosure care.** The requirements of closure and postclosure care are as follows:

A. At closure, the owner or operator shall:

(1) remove or decontaminate all waste residues, contaminated containment system components including liners, contaminated subsoils, and structures and equipment contaminated with waste and leachate, and manage them as hazardous waste unless they are shown to not be hazardous according to parts 7045.0100 to 7045.0143; or

*[For text of subitem (2), see M.R.]*

*[For text of items B to E, see M.R.]*

**Subp. 8. Special requirements for ignitable or reactive waste.** Ignitable or reactive waste must not be placed in a surface impoundment, unless the waste and impoundment satisfy all applicable requirements of parts 7045.1300 to 7045.1380, and:

*[For text of items A to C, see M.R.]*

*[For text of subps 9 and 10, see M.R.]*

**Statutory Authority:** *MS s 116 07; 116 37*

**History:** *15 SR 1877; 16 SR 2102; 16 SR 2239*

#### **7045.0534 WASTE PILES.**

*[For text of subps 1 and 2, see M.R.]*

**Subp. 3. Design and operating requirements.** Design and operating requirements are as follows:

*[For text of items A to G, see M.R.]*

H. An owner or operator may petition for alternate design or operating practices under part 7045.0075, subpart 12.

I. The agency shall specify in the permit all design and operating practices that are necessary to ensure that the requirements of items A to H are satisfied.

*[For text of subp 6, see M.R.]*

**Subp. 7. Closure and postclosure care.** Closure and postclosure requirements are as follows:

A. At closure, the owner or operator shall remove or decontaminate all waste residues, contaminated containment system components including liners, contaminated subsoils, and structures and equipment contaminated with waste and leachate; and manage them as hazardous waste unless they are shown to not be hazardous according to parts 7045.0100 to 7045.0143.

*[For text of items B to D, see M.R.]*

**Subp. 8. Special requirements for ignitable or reactive waste.** Ignitable or reactive waste must not be placed in a waste pile unless the waste and waste pile satisfy all applicable requirements of parts 7045.1300 to 7045.1380, and:

*[For text of items A and B, see M.R.]*

*[For text of subps 9 and 10, see M.R.]*

**Statutory Authority:** *MS s 116.07; 116.37*

**History:** *15 SR 1877; 16 SR 2102; 16 SR 2239*

#### **7045.0536 LAND TREATMENT.**

*[For text of subps 1 to 8, see M.R.]*

**Subp. 9. Ignitable or reactive waste.** The owner or operator shall not apply ignitable or reactive waste to the treatment zone unless the waste and the treatment zone meet all applicable requirements of parts 7045.1300 to 7045.1380, and:

*[For text of items A and B, see M.R.]*

*[For text of subps 10 and 11, see M.R.]*

**Statutory Authority:** *MS s 116.07; 116.37*

**History:** *16 SR 2239*

#### **7045.0538 LANDFILLS.**

*[For text of subps 1 and 2, see M.R.]*

**Subp. 3. Design and operation.** Design and operation requirements are as follows:

A. A landfill must have a double liner system that is designed, constructed, and installed to prevent any migration of wastes out of the landfill to the adjacent subsurface soil or ground water or surface water at any time during the active life, including the closure and post closure periods, of the landfill. The double liner system must consist of two liners with a leak detection, collection, and removal system. This system must be designed, constructed, maintained, and operated to detect, collect, and remove liquids without clogging, through the scheduled post closure care period of the landfill. Both liners and the leak detec-

tion, collection, and removal system must conform to the requirements of item B or C, as appropriate, and must be:

(1) constructed of materials that have appropriate chemical properties and sufficient strength and thickness to prevent failure due to pressure gradients, including static head and external hydrogeologic forces, physical contact with the waste or leachate to which they are exposed, climatic conditions, the stress of installation, and the stress of daily operation;

(2) placed upon a foundation or base capable of providing support to the liner and resistance to pressure gradients above and below the liner to prevent failure of the liner due to settlement, compression, or uplift; and

(3) installed to cover all surrounding earth likely to be in contact with the waste or leachate.

B. For any landfill that is not covered by item C or part 7045.0638, one of the liners may be constructed of materials that allow wastes to migrate into the liner, but not into the adjacent subsurface soil, drainage layer, or ground water or surface water. At least one liner must be constructed of materials that prevent wastes from passing into the liner. The double liner system must consist of two liners with a leak detection, collection, and removal system between the liners.

C. For any new landfill, new landfill unit at an existing facility, replacement of an existing landfill unit, and lateral expansion of an existing landfill unit that accepts waste after issuance of a permit for units where Part B of the permit application is received by the commissioner after November 8, 1984, the top liner must be constructed of materials that prevent wastes from migrating into the liner. The lower liner may be constructed of materials that allow wastes to migrate into the liner, but not into the adjacent subsurface soil or drainage layer or ground water or surface water. For the purpose of the preceding sentence, a lower liner satisfies the requirement if it is constructed of at least a three-foot thick layer of recompacted clay or other natural material with a permeability of no more than  $1 \times 10^{-7}$  centimeter per second. The double liner system must consist of two liners with a leak detection, collection, and removal system above and between the liners.

D. A landfill must have a leachate collection and removal system immediately above each liner that is designed, constructed, maintained, and operated to collect and remove leachate from the landfill. The agency shall specify design and operating conditions in the permit to ensure that the leachate depth over each liner does not exceed 30 centimeters (one foot) at any point. The leachate collection and removal systems must be:

(1) constructed of materials that are chemically resistant to the waste managed in the landfill and the leachate expected to be generated, and of sufficient strength and thickness to prevent collapse under the pressures exerted by overlying wastes, waste cover materials, and by any equipment used at the landfill; and

(2) designed, constructed, maintained, and operated to function without clogging through the scheduled post closure care period of the landfill.

E. 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 landfill during peak discharge from at least a 100-year storm.

F. 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, 100-year storm.

G. 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 after storms to maintain design capacity of the system.

H. The owner or operator shall cover or otherwise manage the landfill to control wind dispersal of particulate matter.

I. The owner or operator shall develop the landfill in appropriately sized cells to minimize the amounts of liquids entering each cell due to precipitation.

J. The owner or operator of a landfill shall submit to the agency with the permit application a plan for the treatment and disposal of run-off contained in the run-off management system and leachate which is removed from the landfill.

K. An owner or operator may petition for alternate design or operating practices under part 7045.0075, subpart 12.

L. The agency shall specify in the permit all design and operating practices that are necessary to ensure that the requirements of items A to K are satisfied.

*[For text of subps 4 to 7, see M.R.]*

**Subp. 8. Special requirements for ignitable or reactive waste.** Special requirements for ignitable or reactive waste are as follows:

A. Except as provided in item B and subpart 12, ignitable or reactive waste must not be placed in a landfill, unless the waste and landfill meet all applicable requirements of parts 7045.1300 to 7045.1380, and the resulting waste, mixture, or dissolution of material no longer meets the definition of ignitable or reactive waste under part 7045.0131, subpart 2 or 5, and compliance with part 7045.0456, subpart 2 is maintained.

B. Except for prohibited wastes which remain subject to treatment standards in parts 7045.1350 to 7045.1360, ignitable wastes in containers may be landfilled without meeting the requirements of item A, provided that the wastes are disposed of in such a way that they are protected from any material or conditions which may cause them to ignite. At a minimum, ignitable wastes must be disposed of in nonleaking containers which are carefully handled and placed so as to avoid heat, sparks, rupture, or any other condition that might cause ignition of the wastes; must be covered daily with soil or other noncombustible material to minimize the potential for ignition of the wastes; and must not be disposed of in cells that contain or will contain other wastes which may generate heat sufficient to cause ignition of the waste.

*[For text of subps 9 to 11, see M.R.]*

**Subp. 12. Disposal of small containers of hazardous waste in overpacked drums.** Small containers of hazardous waste in overpacked drums, or laboratory packs, may be placed in a landfill if the requirements of items A to F are met:

*[For text of items A to E, see M.R.]*

F. The disposal is in compliance with parts 7045.1300 to 7045.1380. Persons who incinerate lab packs according to part 7045.1360 may use fiber drums in place of metal outer containers. The fiber drums must meet United States Department of Transportation specifications in Code of Federal Regulations, title 49, section 173.12, and be overpacked according to the requirements in item B.

*[For text of subp 13, see M.R.]*

**Statutory Authority:** *MS s 116.07; 116.37*

**History:** *15 SR 1877; 16 SR 2239*

## **7045.0547 FEDERAL AIR EMISSION STANDARDS FOR PROCESS VENTS.**

**Subpart 1. Federal regulation adopted.** If the applicant proposes to treat, store, or dispose of hazardous waste in a facility that uses process vents as defined in Code of Federal Regulations, title 40, section 264.1031, as amended, the applicant must comply with the air emission standards for process vents in Code of

Federal Regulations, title 40, subpart AA, sections 264.1030 to 264.1049, as amended.

Subp. 2. **Exceptions to adopted federal regulation.** Exceptions to the federal regulation adopted in subpart 1 are as follows:

A. references in the adopted regulation to other federal regulations also refer to the corresponding Minnesota rules; and

B. references in the adopted regulation to "regional administrator" mean "agency commissioner."

**Statutory Authority:** *MS s 116.07*

**History:** *16 SR 2321*

#### **7045.0548 FEDERAL AIR EMISSION STANDARDS FOR EQUIPMENT LEAKS.**

Subpart 1. **Federal regulation adopted.** If the applicant proposes to treat, store, or dispose of hazardous waste in a facility that uses equipment as defined in Code of Federal Regulations, title 40, section 264.1031, as amended, the applicant must comply with the air emission standards for equipment leaks in Code of Federal Regulations, title 40, subpart BB, sections 264.1050 to 264.1079, as amended.

Subp. 2. **Exceptions to adopted federal regulation.** Exceptions to the federal regulation adopted in subpart 1 are as follows:

A. references in the adopted regulation to other federal regulations also refer to the corresponding Minnesota rules; and

B. references in the adopted regulation to "regional administrator" mean "agency commissioner."

**Statutory Authority:** *MS s 116.07*

**History:** *16 SR 2321*

#### **INTERIM STATUS STANDARDS**

##### **7045.0552 FACILITIES GOVERNED BY INTERIM STATUS.**

Subpart 1. **General requirements.** Parts 7045.0552 to 7045.0642 establish minimum standards for the management of hazardous waste during the period of interim status and until certification of final closure or, if the facility is subject to postclosure requirements, until postclosure responsibilities are fulfilled. These standards apply to owners and operators of existing facilities who have fully complied with the requirements for state or federal interim status until a permit is issued or until applicable interim status closure and postclosure responsibilities are fulfilled, and those who have failed to achieve state or federal interim status. These standards apply to all treatment, storage, or disposal of hazardous waste at these facilities after July 16, 1984, except as specifically provided otherwise.

For existing facilities which were not required to obtain federal interim status under the Resource Conservation and Recovery Act, United States Code, title 42, sections 6901 to 6986, as amended through June 30, 1983, but are required to obtain state interim status, the requirements of parts 7045.0590; 7045.0592; 7045.0632, subpart 4, items A and B; 7045.0634, subpart 2; 7045.0638, subparts 2, 7, and 8, become effective 12 months after July 16, 1984, and the requirements of parts 7045.0608 to 7045.0624 become effective 90 days after July 16, 1984.

Parts 7045.0552 to 7045.0642 apply to the owners and operators of all facilities that treat, store, or dispose of hazardous waste referred to in parts 7045.1300 to 7045.1380, land disposal restrictions, and those restrictions are considered material conditions or requirements of parts 7045.0552 to 7045.0642, interim status standards.

*[For text of subps 1a and 2, see M.R.]*

Subp. 3. **Exemptions.** The requirements of parts 7045.0522 to 7045.0642 do not apply to:

*[For text of items A to C, see M.R.]*

D. A farmer disposing of waste pesticides from the farmer's own use in compliance with part 7045.0213, subpart 2.

*[For text of items E to J, see M.R.]*

*[For text of subp 4, see M.R.]*

**Statutory Authority:** *MS s 116.07; 116.37*

**History:** *16 SR 2102; 16 SR 2239*

#### **7045.0556 GENERAL FACILITY STANDARDS.**

*[For text of subs 1 to 4, see M.R.]*

Subp. 5. **General inspection requirements.** General inspection requirements are listed in items A to E.

*[For text of items A and B, see M.R.]*

C. The frequency of inspection may vary for the items on the schedule. However, it must be based on the rate of possible deterioration of the equipment and the probability of an environmental or human health incident if the deterioration or malfunction or any operator error goes undetected between inspections. Areas subject to spills, such as loading and unloading areas, must be inspected daily when in use. The inspection schedule must include the terms and frequencies called for in parts 7045.0626, subpart 5; 7045.0628, subparts 4, 5, and 7; 7045.0630, subpart 5; 7045.0640, subpart 4; and 7045.0642, subpart 4; and the process vent and equipment leak standards in Code of Federal Regulations, title 40, sections 264.1033, 264.1052, 264.1053, and 264.1058, as amended.

*[For text of items D and E, see M.R.]*

*[For text of subs 6 and 7, see M.R.]*

**Statutory Authority:** *MS s 116.07*

**History:** *16 SR 2321*

#### **7045.0564 WASTE ANALYSIS REQUIREMENTS.**

Subpart 1. **Waste analysis.** The analysis must comply with the requirements in items A to D.

A. Before an owner or operator treats, stores, or disposes of any hazardous waste, or nonhazardous waste if applicable under part 7045.0596, subpart 2a, the owner or operator shall obtain a detailed chemical and physical analysis of a representative sample of the waste. This analysis must contain all the information which must be known in order to treat, store, or dispose of the waste in accordance with the requirements of parts 7045.0552 to 7045.0642 and 7045.1300 to 7045.1380.

B. The analysis may include data developed under parts 7045.0100 to 7045.0143, and existing published or documented data on the hazardous waste or on hazardous waste generated from similar processes, including data obtained from the generator.

C. The analysis must be repeated as necessary to ensure that it is accurate and up-to-date. The analysis must be repeated:

(1) when the owner or operator is notified, or has reason to believe, that the process or operation generating the hazardous waste, or nonhazardous waste if applicable under part 7045.0596, subpart 2a, has changed; and

*[For text of subitem (2), see M.R.]*

*[For text of item D, see M.R.]*

**Subp. 2. Waste analysis plan.** The owner or operator shall develop and follow a written waste analysis plan which describes the procedures the owner or operator will carry out to comply with subpart 1. The owner or operator shall keep this plan at the facility. The plan must specify:

A. The parameters for which each hazardous waste, or nonhazardous waste if applicable under part 7045.0596, subpart 2a, will be analyzed and the rationale for the selection of these parameters.

*[For text of items B to E, see M.R.]*

F. Where applicable, the methods that will be used to meet the additional waste analysis requirements for specific waste management methods as specified in parts 7045.0628, subpart 12; 7045.0630, subpart 4; 7045.0632, subpart 3; 7045.0634, subpart 3; 7045.0638, subpart 7; 7045.0640, subpart 2; 7045.0642, subpart 3; and 7045.1315; and the process vent and equipment leak test methods and procedures in Code of Federal Regulations, title 40, sections 264.1034(d) and 264.1063(d), as amended.

*[For text of item G, see M.R.]*

H. For surface impoundments exempted from the land disposal restrictions under part 7045.1310, the procedures and schedule for:

(1) the sampling of impoundment contents;

(2) the analysis of test data; and

(3) the annual removal of residues which are not delisted under part 7045.0075, subpart 2, or which exhibit a characteristic of hazardous waste under part 7045.0131, and either do not meet applicable treatment standards of parts 7045.1350 to 7045.1360, or, where no treatment standards have been established, such residues are prohibited from land disposal under parts 7045.1320 to 7045.1333 or RCRA section 3004(d).

**Statutory Authority:** *MS s 116.07; 116.37*

**History:** *16 SR 1225; 16 SR 2102, 16 SR 2239; 16 SR 2321*

#### **7045.0578 FACILITY SHIPMENT REQUIREMENTS.**

Whenever a shipment of hazardous waste is initiated from a facility, the owner or operator of that facility shall comply with the requirements of parts 7045.0205 to 7045.0320.

**Statutory Authority:** *MS s 116 07*

**History:** *16 SR 2102*

#### **7045.0584 OPERATING RECORD.**

*[For text of subparts 1 and 2, see M.R.]*

**Subp. 3. Record information.** The following information must be recorded, as it becomes available, and maintained in the operating record until closure of the facility.

*[For text of items A to D, see M.R.]*

E. Records and results of waste analyses and trial tests performed as specified in parts 7045.0564; 7045.0628, subpart 12; 7045.0630, subpart 4; 7045.0632, subpart 3; 7045.0634, subpart 3, 7045.0638, subpart 7; 7045.0640, subpart 2; 7045.0642, subpart 3; 7045.1310; and 7045.1315; and the process vent



and equipment leak test methods and procedures in Code of Federal Regulations, title 40, sections 264.1034 and 264.1063, as amended.

*[For text of items F and G, see M.R.]*

H. Monitoring, testing, or analytical data where required by parts 7045.0590, subparts 1, 6, and 7; 7045.0592, subparts 1 and 7; 7045.0628, subparts 2, 4, 5, and 7; 7045.0634, subparts 4 and 6, item D, subitem (1); 7045.0636; and 7045.0640, subpart 4; and the process vent and equipment leak test methods and procedures and record keeping requirements in Code of Federal Regulations, title 40, sections 264.1034(c) to (f), 264.1035, 264.1063(d) to (i), and 264.1064, as amended. As required by parts 7045.0590, subparts 6 and 7; and 7045.0592, subpart 7, monitoring data at disposal facilities must be kept throughout the post closure period.

*[For text of item I, see M.R.]*

J. Records of the quantities and date of placement of each shipment of hazardous waste placed in land disposal units under an extension to the effective date of any land disposal restriction granted under part 7045.0075, subpart 8 or 9, monitoring data required pursuant to a petition under part 7045.0075, subpart 9, or a certificate and demonstration under Code of Federal Regulations, title 40, section 268.8, and the notice required by a generator under part 7045.1315, subpart 1, item C.

K. For an off-site treatment facility, the notice, and the certification and demonstration, if applicable, required by a generator or the owner or operator under Code of Federal Regulations, title 40, section 268.8, and part 7045.1315, subpart 1, item A.

L. For an on-site treatment facility, the information contained in the notice and the certification and demonstration, if applicable, required by a generator or the owner or operator under Code of Federal Regulations, title 40, section 268.8, and part 7045.1315, subpart 1, item A, except for the manifest number required under part 7045.1315, subpart 1, item A, subitem (3).

M. For an off-site land disposal facility, the notice, certification and demonstration, if applicable, required by the generator, owner or operator of a treatment facility under Code of Federal Regulations, title 40, section 268.8, or part 7045.1315, subpart 2, items A and B, for the facility or part 7045.1315, subpart 1, item B, for the generator, whichever is applicable.

N. For an on-site land disposal facility, the information contained in the notice and the certification and demonstration, if applicable, required by a generator or the owner or operator under Code of Federal Regulations, title 40, section 268.8, or part 7045.1315 except for the manifest number, whichever is applicable.

O. For an off-site storage facility, a copy of the notice, and the certification and demonstration if applicable, required by the generator or the owner or operator under Code of Federal Regulations, title 40, section 268.8, or part 7045.1315.

P. For an on-site storage facility, the information contained in the notice, except the manifest number, and the certification and demonstration if applicable, required by the generator or the owner or operator of a treatment facility under Code of Federal Regulations, title 40, section 268.8, or part 7045.1315.

**Statutory Authority:** *MS s 116.07; 116 37*

**History:** *16 SR 2239; 16 SR 2321*

#### **7045.0588 REQUIRED REPORTS.**

*[For text of subps 1 to 3, see M.R.]*

Subp. 4. **Additional reports.** In addition to submitting the manifest discrepancy report described in part 7045.0582, subpart 3, and the annual report and the unmanifested waste reports described in subparts 2 and 3, the owner or operator shall also report to the commissioner and the Environmental Protection Agency Region V Administrator:

*[For text of item A, see M.R.]*

B. groundwater contamination and monitoring data as specified in part 7045.0590, subparts 6 and 7; and 7045.0592, subpart 6;

C. facility closure as specified in part 7045.0594, subpart 3; and

D. as otherwise required by the process vent and equipment leak emission standards in Code of Federal Regulations, title 40, part 265, subparts AA and BB, as amended.

**Statutory Authority:** *MS s 116.07*

**History:** *16 SR 2321*

#### **7045.0594 CLOSURE.**

*[For text of subparts 1 and 2, see M.R.]*

Subp. 3. **Submittal of closure plan.** The closure plans must be submitted as follows:

*[For text of items A to D, see M.R.]*

E. The date on which the owner or operator "expects to begin closure" is defined as follows:

*[For text of subitem (1), see M.R.]*

(2) Where the owner or operator of a hazardous waste management unit reasonably anticipates that the owner or operator will continue to receive hazardous wastes, then the date on which the owner or operator "expects to begin closure" is one year after the date on which the last volume of hazardous waste was received by the hazardous waste management unit. An owner or operator shall only be considered to "reasonably anticipate receiving additional hazardous waste" if the owner or operator in fact receives additional hazardous wastes within one year after the last volume was received. If the owner or operator can demonstrate to the commissioner that the unit or facility has the capacity to receive additional hazardous wastes and the owner or operator has taken and will continue to take all steps to prevent threats to human health and the environment, including compliance with all interim status requirements, the commissioner may approve an extension to this one-year limit.

For units meeting the requirements of part 7045.0596, subpart 2a, the date on which the owner or operator expects to begin closure must be no later than 30 days after the date on which the hazardous waste management unit receives the known final volume of nonhazardous wastes, or if there is a reasonable possibility that the hazardous waste management unit will receive additional nonhazardous wastes, no later than one year after the date on which the unit received the most recent volume of nonhazardous wastes. If the owner or operator can demonstrate to the commissioner that the hazardous waste management unit has the capacity to receive additional nonhazardous wastes and the owner or operator has taken, and will continue to take, all steps to prevent threats to human health and the environment, including compliance with all applicable interim status requirements, the commissioner shall approve an extension to this one-year limit.

*[For text of item F, see M.R.]*

*[For text of subp 4, see M.R.]*

**Statutory Authority:** *MS s 116.07*

**History:** *16 SR 1225*

#### **7045.0596 CLOSURE ACTIVITIES.**

**Subpart 1. Time allowance to begin closure activities.** Within 90 days after receiving the final volume of hazardous waste, or the final volume of nonhazardous waste if the owner or operator complies with all applicable requirements in subpart 2a, at a hazardous waste management unit or facility, or within 90 days after approval of the closure plan, whichever is later, the owner or operator shall treat, remove from the unit or facility, or dispose on-site all hazardous waste in accordance with the approved closure plan. The commissioner may approve a longer period if the owner or operator demonstrates at least 30 days before expiration of the 90 day period, that he or she has taken and will continue to take all steps to prevent threats to human health and the environment, including compliance with all applicable interim status requirements, and:

*[For text of item A, see M.R.]*

B. the hazardous waste management unit or facility has the capacity to receive additional hazardous waste, or has the capacity to receive nonhazardous waste if the facility owner or operator complies with subpart 2a, there is a reasonable likelihood that the owner or operator or another person will recommence operation of the hazardous waste management unit or facility within one year, and closure of the unit or facility would be incompatible with continued operation of the site.

If the owner or operator of a facility required to maintain financial assurance for closure, post closure care, or corrective action fails to make any required payment or to substitute alternative financial assurance when required to do so, the commissioner shall order the owner or operator to begin closure activities.

**Subp. 2. Time extension for closure activities.** The owner or operator shall complete partial or final closure activities in accordance with the approved closure plan and within 180 days after receiving the final volume of hazardous waste, or the final volume of nonhazardous waste if the owner or operator complies with all applicable requirements of subpart 2a, at the hazardous waste management unit or facility, or 180 days after approval of the closure plan if that is later. The commissioner may approve a longer closure period if the owner or operator demonstrates at least 30 days before expiration of the 180 day period that he or she has taken, unless the owner or operator is otherwise subject to the deadlines in subpart 2a, and will continue to take all steps to prevent threats to human health and the environment from the unclosed but not operating hazardous waste management unit or facility, including all applicable interim status requirements, and:

*[For text of item A, see M.R.]*

B. the hazardous waste management unit or facility has capacity to receive additional hazardous waste, or has the capacity to receive nonhazardous wastes if the facility owner or operator complies with subpart 2a, there is a reasonable likelihood that the owner or operator or another person will recommence operation of the unit or facility within one year, and closure of the unit or facility would be incompatible with continued operation of the site.

If operation of the site is recommended, the commissioner may defer completion of partial or final closure activities until the new operation is terminated.

**Subp. 2a. Conditions for receiving nonhazardous waste.** The commissioner shall allow an owner or operator to receive only nonhazardous waste in a landfill,

land treatment, or surface impoundment unit after the final receipt of hazardous waste at that unit if:

A. the owner or operator submits an amended Part B application; or a Part B application, if not previously required, and demonstrates that:

(1) the unit has the existing design capacity, as previously indicated by the owner or operator on the Part A application, to receive nonhazardous wastes;

(2) there is a reasonable likelihood that the owner or operator or another person will receive nonhazardous wastes in the unit within one year after the final receipt of hazardous waste;

(3) the nonhazardous waste will not be incompatible with any remaining wastes in the unit, or with the facility design and operating requirements of the unit or facility under parts 7045.0552 to 7045.0642;

(4) closure of the hazardous waste management unit would be incompatible with continued operation of the unit or facility; and

(5) the owner or operator is operating and will continue to operate in compliance with all permit applicable interim status requirements;

B. the Part B application includes an amended waste analysis plan required under part 7045.0564, groundwater monitoring and response program required under parts 7045.0590 and 7045.0592, human exposure assessment required under parts 7001.0590 and 7001.0620, closure and postclosure plans required under parts 7045.0594 and 7045.0600, and updated cost estimates and demonstration of financial assurance for closure and postclosure care as necessary and appropriate required under parts 7045.0610 to 7045.0618, to reflect any changes due to the presence of hazardous constituents in the nonhazardous wastes, and changes in closure activities required under part 7045.0596, including the expected year of closure if applicable under part 7045.0594, subpart 3, item A, subitem (5), as a result of the receipt of nonhazardous wastes following the final receipt of hazardous wastes;

C. the Part B application is amended, as necessary and appropriate, to account for the receipt of nonhazardous wastes following receipt of the final volume of hazardous wastes; and

D. the Part B application and the demonstrations referred to in items A and B are submitted to the commissioner no later than 120 days before the date which the owner or operator of the facility receives the known final volume of hazardous wastes at the unit.

If the owner or operator of a surface impoundment is not in compliance with the liner and leachate collection system minimum technology requirements of part 7045.0630, subpart 1a, the owner or operator may not delay closure in order to accept nonhazardous wastes.

**Subp. 3. Disposal or decontamination of equipment, structures, and soils.** During the partial and final closure periods, all contaminated facility equipment, structures, and soils must be properly disposed of or decontaminated, unless otherwise specified in part 7045.0628, subpart 9; 7045.0630, subpart 6; 7045.0632, subpart 7; 7045.0634, subpart 6; or 7045.0638, subpart 4. By removing any hazardous wastes or hazardous constituents during partial or final closure, the owner or operator may become a generator of hazardous waste and must handle that waste according to all applicable requirements of parts 7045.0205 to 7045.0320.

*[For text of subp 4, see M.R.]*

**Statutory Authority:** *MS s 116.07*

**History:** *16 SR 1225; 16 SR 2102*

#### **7045.0610 COST ESTIMATE FOR FACILITY CLOSURE.**

**Subpart 1. Cost estimate requirements:** The owner or operator shall prepare

a detailed written estimate, in current dollars, of the cost of closing the facility in accordance with the closure plan in part 7045.0594 and applicable closure requirements in parts 7045.0626, subpart 8; 7045.0628, subpart 5; 7045.0630, subpart 6; 7045.0632, subpart 7; 7045.0634, subpart 6; 7045.0638, subpart 4; 7045.0640, subpart 5; and 7045.0642, subpart 5. The closure cost estimate must equal the cost of closure at the point in the facility's operating life when the extent and manner of its operation would make closure the most expensive, as indicated by its closure plan. The closure cost shall be estimated as follows:

*[For text of item A, see M.R.]*

B. The closure cost estimate may not incorporate any salvage value that may be realized with the sale of hazardous wastes, or nonhazardous wastes if applicable under part 7045.0596, subpart 2a, facility structures or equipment, land, or other assets associated with the facility at the time of partial or final closure.

C. The owner or operator may not incorporate a zero cost for hazardous wastes, or nonhazardous wastes if applicable under part 7045.0596, subpart 2a, that might have economic value.

*[For text of subps 2 to 4, see M.R.]*

**Statutory Authority:** *MS s 116.07*

**History:** *16 SR 1225*

#### **7045.0629 REQUIREMENTS FOR SMALL QUANTITY AND VERY SMALL QUANTITY GENERATORS THAT ACCUMULATE HAZARDOUS WASTE IN TANKS.**

Subpart 1. **Scope.** The requirements of this part apply to small quantity and very small quantity generators that accumulate hazardous waste in tanks, and do not exceed accumulation amounts as provided in part 7045.0292.

Subp. 2. **General operating requirements.** Generators regulated under this part must comply with the following general operating requirements:

*[For text of items A to D, see M.R.]*

Subp. 3. **Inspections.** Generators regulated under this part must inspect, where present:

*[For text of items A to E, see M.R.]*

Subp. 4. **Closure.** Generators regulated under this part must, upon closure of the facility, remove all hazardous waste from tanks, discharge control equipment, and discharge confinement structures.

Subp. 5. **Ignitable and reactive wastes.** Generators regulated under this part must comply with the following special requirements for ignitable or reactive waste:

*[For text of items A and B, see M.R.]*

Subp. 6. **Incompatible wastes.** Generators regulated under this part must comply with the following special requirements for incompatible wastes:

*[For text of items A and B, see M.R.]*

**Statutory Authority:** *MS s 116.07*

**History:** *16 SR 2102*

#### **7045.0630 SURFACE IMPOUNDMENTS.**

*[For text of subpart 1, see M.R.]*

**Subp. 1a. Design requirements.** Design requirements are as follows:

A. The owner or operator of a surface impoundment must install two or more liners and leachate collection systems according to part 7045.0532, subpart 3, items A to H, with respect to each new unit, replacement of an existing unit, or lateral expansion of an existing unit that is within the area identified in the Part A permit application, and with respect to waste received beginning May 8, 1985.

B. The owner or operator of each unit referred to in item A must notify the commissioner at least 60 days before receiving waste. The owner or operator of each facility submitting notice must file a Part B application within six months of the commissioner's receipt of the notice.

*[For text of subps 2 to 4, see M.R.]*

**Subp. 5. Inspections.** The owner or operator shall inspect:

*[For text of item A, see M.R.]*

B. the surface impoundment, including dikes and vegetation surrounding the dike, at least once a week to detect any leaks, deterioration, or failures in the impoundment. As required by part 7045.0556, subpart 5, the owner or operator shall remedy any deterioration or malfunction found.

*[For text of subp 6, see M.R.]*

**Subp. 7. Special requirements for ignitable or reactive wastes.** Ignitable or reactive waste must not be placed in a surface impoundment unless the waste and the impoundment satisfy all applicable requirements of parts 7045.1300 to 7045.1380, and:

*[For text of items A and B, see M.R.]*

*[For text of subp 8, see M.R.]*

**Statutory Authority:** MS s 116.07; 116.37

**History:** 15 SR 1877; 16 SR 2239

#### **7045.0632 WASTE PILES.**

*[For text of subps 1 to 4, see M.R.]*

**Subp. 4a. Design requirements.** The owner or operator of a waste pile is subject to the requirements for liners and leachate collection and removal systems provided in part 7045.0534, subpart 3, with respect to each new unit, replacement of an existing unit, or lateral expansion of an existing unit that is within the area identified in Part A permit application, and with respect to waste received beginning May 8, 1985.

**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 parts 7045.1300 to 7045.1380:

*[For text of items A and B, see M.R.]*

*[For text of subps 6 and 7, see M.R.]*

**Statutory Authority:** MS s 116.07; 116.37

**History:** 15 SR 1877; 16 SR 2239

#### **7045.0634 LAND TREATMENT.**

*[For text of subps 1 and 2, see M.R.]*

Subp. 3. **Waste analysis.** In addition to the waste analyses required by part 7045.0564 before placing a hazardous waste in or on a land treatment facility, the owner or operator shall:

A. determine the concentrations in the waste of any substances which equal or exceed the maximum concentrations contained in part 7045.0131, subpart 8, that cause a waste to exhibit the toxicity characteristic;

*[For text of items B and C, see M.R.]*

*[For text of subps 4 to 6, see M.R.]*

Subp. 7. **Special requirements for ignitable or reactive waste.** Ignitable or reactive wastes must not be land treated, unless the waste and treatment zone meet all applicable requirements of parts 7045.1300 to 7045.1380, and the waste is immediately incorporated into the soil so that the resulting waste, mixture, or dissolution of material no longer meets the definition of ignitable or reactive waste under parts 7045.0131, subpart 2 or 5; and 7045.0562, subpart 2 is complied with.

*[For text of subp 8, see M.R.]*

**Statutory Authority:** *MS s 116.07; 116.37*

**History:** *15 SR 1878; 16 SR 2239*

#### 7045.0638 LANDFILLS.

*[For text of subpart 1, see M.R.]*

Subp. 1a. **Design requirements.** Design requirements are as follows:

A. The owner or operator of a landfill must install two or more liners and leachate collection systems according to part 7045.0538, subpart 3, items A to K, with respect to each new unit, replacement of an existing unit, or lateral expansion of an existing unit that is within the area identified in the part A permit application, with respect to waste received beginning May 8, 1985.

B. The owner or operator of each unit referred to in item A must notify the commissioner at least 60 days before receiving waste. The owner or operator of each facility submitting notice must file a part B application within six months of the commissioner's receipt of the notice.

*[For text of subps 2 to 4, see M.R.]*

Subp. 5. **Special requirements for ignitable or reactive waste.** Special requirements for ignitable or reactive waste are as follows:

A. Except as provided in item B, and subparts 7 and 9, ignitable or reactive waste must not be placed in a landfill unless the waste and landfill meet all applicable requirements of parts 7045.1300 to 7045.1380, and the resulting waste, mixture, or dissolution of material no longer meets the definition of ignitable or reactive waste under part 7045.0131, subpart 2 or 5, and compliance with part 7045.0562, subpart 2, is maintained.

B. Except for prohibited wastes which remain subject to treatment standards in parts 7045.1350 to 7045.1360, ignitable wastes in containers may be landfilled without meeting the requirements of item A if the wastes are disposed so that they are protected from any material or conditions which may cause them to ignite. Ignitable wastes must be disposed in nonleaking containers which are carefully handled and placed so as to avoid heat, sparks, rupture, or any other condition that might cause ignition of the wastes; must be covered daily with soil or other noncombustible material to minimize the potential for ignition of the wastes; and must not be disposed in cells that contain or will contain other wastes which may generate heat sufficient to cause ignition of the wastes.

*[For text of subp 6 to 8, see M.R.]*

Subp. 9. **Special requirements for disposal of laboratory packs.** Small containers of hazardous waste in overpacked drums, or laboratory packs, may be placed in a landfill if the requirements of items A to F are met:

*[For text of items A to E, see M.R.]*

F. The disposal complies with parts 7045.1300 to 7045.1380. Persons who incinerate lab packs according to part 7045.1360 may use fiber drums in place of metal outer containers. The fiber drums must meet the United States Department of Transportation specifications in Code of Federal Regulation, title 49, section 173.12, and be overpacked according to item B.

**Statutory Authority:** *MS s 116.07; 116.37*

**History:** *15 SR 1877; 16 SR 2239*

#### **7045.0647 FEDERAL AIR EMISSION STANDARDS FOR PROCESS VENTS AT INTERIM STATUS FACILITIES.**

Subpart 1. **Federal regulation adopted.** If the applicant proposes to treat, store, or dispose of hazardous waste in an interim status facility that uses process vents as defined in Code of Federal Regulations, title 40, section 264.1031, as amended, the applicant must comply with the air emission standards for process vents in Code of Federal Regulations, title 40, subpart AA, sections 265.1030 to 265.1049, as amended.

Subp. 2. **Exceptions to adopted federal regulation.** Exceptions to the federal regulation adopted in subpart 1 are as follows:

A. references in the adopted regulation to other federal regulations also refer to the corresponding Minnesota rules; and

B. references in the adopted regulation to "regional administrator" mean "agency commissioner."

**Statutory Authority:** *MS s 116.07*

**History:** *16 SR 2321*

#### **7045.0648 FEDERAL AIR EMISSION STANDARDS FOR EQUIPMENT LEAKS AT INTERIM STATUS FACILITIES.**

Subpart 1. **Federal regulation adopted.** If the applicant proposes to treat, store, or dispose of hazardous waste in an interim status facility that uses equipment as defined in Code of Federal Regulations, title 40, section 264.1031, as amended, the applicant must comply with the air emission standards for equipment leaks in Code of Federal Regulations, title 40, subpart BB, sections 265.1050 to 265.1079, as amended.

Subp. 2. **Exceptions to adopted federal regulation.** Exceptions to the federal regulation adopted in subpart 1 are as follows:

A. references in the adopted regulation to other federal regulations also refer to the corresponding Minnesota rules; and

B. references in the adopted regulation to "regional administrator" mean "agency commissioner."

**Statutory Authority:** *MS s 116.07*

**History:** *16 SR 2321*

#### **7045.0655 GENERAL FACILITY STANDARDS.**

*[For text of subps 1 to 5, see M.R.]*

Subp. 6. **Closure.** At closure, the owner or operator of an elementary neutralization unit, pretreatment unit, or wastewater treatment unit shall remove all hazardous waste and hazardous waste residues from the unit.



At closure, the owner or operator of a combustion waste facility shall analyze the waste present in the facility according to parts 7045.0100 to 7045.0143 and shall submit the waste analysis results and proposed closure methods to the commissioner. Based on the waste analysis and proposed closure methods, the agency shall determine which closure standards from parts 7045.0450 to 7045.0544, if any, apply to the facility.

**Subp. 7. Treated wastes.** Treated waste generated by an elementary neutralization unit, pretreatment unit, or wastewater treatment unit is subject to regulation under parts 7045.0100 to 7045.0320.

**Statutory Authority:** *MS s 116.07*

**History:** *16 SR 2102*

#### **7045.0665 USE CONSTITUTING DISPOSAL.**

**Subpart 1. Scope.** Items A and B apply to hazardous wastes that are used in a manner constituting disposal.

A. For the purposes of this part, use constituting disposal means the application or placement of recyclable wastes in or on the land without mixing with other substances or after mixing or combining with any other substances.

B. Hazardous wastes are not used in a manner constituting disposal if:

(1) they are a product produced for the general public's use;

(2) they contain recyclable hazardous wastes; and if the recyclable hazardous wastes have undergone a chemical reaction in the course of producing the products so as to become inseparable by physical means; and

(3) the products meet the applicable treatment standards in parts 7045.1350 to 7045.1360 or applicable prohibition levels in part 7045.1330 or RCRA section 3004(d) where no treatment standards have been established, for each recyclable material that they contain.

Commercial fertilizers that are produced for the general public's use that contain recyclable materials also are not presently subject to regulation provided they meet the same treatment standards or prohibition levels for each recyclable material that they contain. However, zinc-containing fertilizers using hazardous waste K061 that are produced for the general public's use are not presently subject to regulation.

*[For text of subp 1a, see M.R.]*

**Subp. 2. Standards applicable to generators of wastes used in a manner that constitutes disposal.** Generators of wastes that are used in a manner that constitutes disposal are subject to the requirements of parts 7045.0205 to 7045.0320.

*[For text of subps 3 and 4, see M.R.]*

**Statutory Authority:** *MS s 116.07; 116.37*

**History:** *16 SR 2102; 16 SR 2239*

#### **7045.0675 RECYCLABLE HAZARDOUS WASTE USED FOR PRECIOUS METAL RECOVERY.**

*[For text of subpart 1, see M.R.]*

**Subp. 2. Requirements for generators.** Generators of recyclable hazardous waste regulated under this part are subject to the requirements of parts 7045.0205 to 7045.0320.

*[For text of subps 3 and 4, see M R ]*

**Statutory Authority:** *MS s 116.07*

**History:** *16 SR 2102*

**7045.0685 SPENT LEAD-ACID BATTERIES BEING RECLAIMED.**

Subpart 1. **Scope.** The requirements of this part apply to persons who generate, transport, collect, store, or reclaim spent lead-acid batteries that are recyclable. Except as provided in subpart 2, persons who generate, transport, or collect spent batteries, or who store spent batteries but do not reclaim them, are not subject to regulation under parts 7045.0205 to 7045.0685 and chapter 7001 for the generation, transportation, and storage of spent batteries. For the purpose of this part, indoor storage is storage within a permanently constructed building consisting of at least a roof and three walls permanently affixed to an impermeable floor placed on the ground.

*[For text of subps 2 and 3, see M.R.]*

**Statutory Authority:** *MS s 116.07*

**History:** *16 SR 2102*

**7045.0686 SPECIAL REQUIREMENTS FOR MANAGEMENT OF SPENT OR WASTE HOUSEHOLD BATTERIES.**

Subpart 1. **Scope.** The requirements of this part apply to operators who collect, store, transport, or reclaim spent or waste household batteries as a part of a household battery management program.

A. "Household battery management program" means:

(1) a program established to accept or collect spent or waste household batteries;

(2) a program established by a resource recovery facility to segregate spent or waste household batteries from household waste; or

(3) a program established by a solid waste disposal facility to segregate spent or waste household batteries from household waste during processing activities.

B. Operators who collect, transport, or store spent or waste household batteries which are sent for recycling but who do not reclaim them are subject to regulation under subparts 2 and 3, but are not otherwise subject to regulation under parts 7045.0205 to 7045.1380, and chapter 7001 for such collection, transportation, and storage.

C. Operators who collect, transport, or store spent or waste household batteries which are not recycled are subject to regulation under subpart 3 and part 7045.0310.

D. Operators who collect, transport, store, and also reclaim spent or waste household batteries are subject to regulation under subparts 2 to 4.

**Subp. 2: Notification.** An operator who intends to establish or operate all or part of a household battery management program shall ensure that the information required in items A to K is submitted to the commissioner at least 30 days before initiating the household battery management program. If household batteries are speculatively accumulated as defined in part 7045.0020, a permit is required under chapter 7001 instead of this notification.

The notification shall provide a complete description of the program including, as applicable:

A. the name, address, and telephone number of the operators establishing the program;

B. the location of all household battery collection sites;

C. the duration and operating hours of the program;

D. the intended program service area;

E. the manner in which household batteries will be collected, stored, and disposed of or recycled;

F. the amount of time the operator intends to store household batteries at individual collection sites;

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G. a description of the containers used to collect and store household batteries;

H. the name and address of all facilities which will dispose of or recycle the household batteries;

I. a description of how the operator will manage cracked or leaking household batteries;

J. a description of how the operator will clean up spills resulting from leaking household batteries; and

K. any other information necessary to describe all aspects of the program.

Operators who submit a notification and subsequently change any aspect of the program as described in the notification must submit, within 30 days of making the change, an amended notification to the commissioner fully describing the program changes.

**Subp. 3. Standards for storage.** Spent or waste household batteries must be stored according to items A to C.

A. Storage of spent or waste household batteries shall be in vented, corrosion resistant containers.

B. Storage of containers of spent or waste household batteries shall be subject to the requirements of part 7045.0526, subparts 2 to 6 and 9.

C. If the storage of spent or waste batteries meets the criteria of speculative accumulation as defined in part 7045.0020, the storage is also subject to the following requirements: parts 7045.0452 to 7045.0456; 7045.0460 to 7045.0470; 7045.0478 to 7045.0534; 7045.0544; 7045.0552 to 7045.0562; 7045.0566 to 7045.0578; 7045.0584 to 7045.0632; and the permitting requirements of chapter 7001 for hazardous waste storage facilities.

**Subp. 4. Standards for operators of facilities that store spent or waste household batteries before reclaiming.** The operators of facilities that store batteries before reclaiming them are subject to regulation under parts 7045.0452 to 7045.0456; 7045.0460 to 7045.0470; 7045.0478 to 7045.0534; 7045.0544; 7045.0552 to 7045.0562; 7045.0566 to 7045.0578; 7045.0584 to 7045.0632; and the permitting requirements of chapter 7001 for hazardous waste storage facilities.

**Statutory Authority:** *MS s 116.07*

**History:** *15 SR 1877*

**7045.0692 HAZARDOUS WASTE BURNED FOR ENERGY RECOVERY.**

**Subpart 1. Scope.** This part applies to hazardous wastes that are burned for energy recovery in a boiler or industrial furnace that is not regulated by the thermal treatment standards in part 7045.0542 or 7045.0640, except:

*[For text of items A to C, see M.R.]*

D. Mixtures of used oil and waste that is hazardous solely for the characteristic of ignitability in part 7045.0131, subpart 2, provided the waste is generated by a person who in a calendar month generates no more than 100 kilograms of hazardous waste. This mixture is regulated as provided in part 7045.0102, subpart 3. If the waste is generated by a person who in a calendar month generates more than 100 kilograms of hazardous waste, part 7045.0102, subpart 3, item A, applies.

*[For text of item E, see M.R.]*

*[For text of subp 2, see M.R.]*

**Subp. 3. Standards applicable to generators of hazardous waste fuel.** Genera-

tors of hazardous waste that is used as a fuel or used to produce a fuel are subject to parts 7045.0205 to 7045.0320. Generators who market hazardous waste fuel to a burner are also subject to subpart 5. Generators who are burners are also subject to subpart 6.

*[For text of subp 4, see M.R.]*

**Subp. 5. Standards applicable to marketers of hazardous waste fuel.** Marketers are subject to the requirements in items A to F.

*[For text of items A and B, see M.R.]*

**C.** If a marketer is a generator, or becomes a generator by initiating a shipment of hazardous waste fuel, the marketer must comply with parts 7045.0205 to 7045.0320. If the marketer operates a facility, the marketer must comply with parts 7045.0450 to 7045.0534. If the marketer is operating a facility under interim status, the marketer must comply with parts 7045.0552 to 7045.0632. If the marketer stores hazardous waste, the marketer must comply with the agency's permitting procedures in chapter 7001 for storage of hazardous waste.

*[For text of items D and E, see M.R.]*

**F.** In addition to the applicable record keeping requirements of parts 7045.0205 to 7045.0320, 7045.0450 to 7045.0534, and 7045.0552 to 7045.0632, a marketer must keep a copy of each certification notice received or sent for three years from the date the marketer last engaged in a hazardous waste fuel marketing transaction with the person who sent or received the certification notice.

**Subp. 6. Standards applicable to burners of hazardous waste fuel.** Owners and operators of industrial furnaces and boilers identified in subpart 2, item B, that burn hazardous fuel are subject to the requirements in items A to F.

*[For text of items A to C, see M.R.]*

**D.** Generators who accumulate hazardous waste fuel before burning on site within the accumulation time period allowed in part 7045.0292 must comply with that part. Small quantity generators who accumulate hazardous waste fuel before burning on site within the accumulation time period allowed in part 7045.0292 must comply with that part. Burning by the generator of a hazardous waste that is a sludge or is or contains a waste listed in part 7045.0135 for reasons other than ignitability or is or contains a waste that is toxic under part 7045.0131, subpart 6, is subject to the additional requirements of item E, subitem (2).

*[For text of items E and F, see M.R.]*

**Statutory Authority:** *MS s 116 07*

**History:** *16 SR 2102*

**7045.1020 EFFECT OF AGENCY APPROVAL OF COUNTY ORDINANCE.**

If a county has adopted a hazardous waste ordinance that is approved in writing by the agency:

**A.** each generator who produces a hazardous waste within the county must obtain a generator license and must submit reports to the county as required by the county ordinance in lieu of submission to the agency unless specifically requested in writing by the commissioner to submit a copy of the license application or license renewal report to the commissioner;

**B.** each collection program operator who operates a collection program under part 7045.0310 or 7045.0320 within the county must obtain a program license and must submit reports to the county as required by the county ordinance in lieu of submission to the agency unless specifically requested in writing

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by the commissioner to submit a copy of the license or license renewal report to the commissioner; and

C. all persons shall comply with all other requirements of this chapter, the agency's permitting procedures, and all requirements of the county ordinance.

**Statutory Authority:** *MS s 116.07*

**History:** *16 SR 2102*

## 7045.1030 COUNTY ACTIONS.

*[For text of subps 1 and 2, see M.R.]*

**Subp. 3. Reporting.** A county shall submit to the commissioner, upon request, a copy of any information submitted under parts 7045.0225 to 7045.0250 (generator licenses), 7045.0310, and 7045.0320 (collection programs), manifest, exception report, or other document that has been submitted to the county in lieu of submission to the agency pursuant to part 7045.1020. A county shall submit to the commissioner, upon request but not to exceed semiannually, summary data based on the documents cited in this subpart.

**Subp. 4.** [Repealed, 16 SR 2102]

**Statutory Authority:** *MS s 116.07*

**History:** *16 SR 2102*

## 7045.1300 LAND DISPOSAL RESTRICTIONS; APPLICABILITY AND EXEMPTIONS.

**Subpart 1. Applicability.** This part identifies hazardous wastes that are restricted from land disposal and defines those limited circumstances under which an otherwise prohibited waste may continue to be land disposed.

Except as specifically provided in subpart 2 or parts 7045.0100 to 7045.0143, the requirements of this part apply to persons who generate or transport hazardous waste and owners and operators of hazardous waste treatment, storage, and disposal facilities. For purposes of this part, a certification statement that complies with Code of Federal Regulations, title 40, part 268, also complies with the certification statement requirements under this part.

**Subp. 2. Exemptions for restricted wastes.** Restricted wastes may continue to be land disposed under the following conditions:

A. if an extension has been granted from the effective date of a prohibition under part 7045.0075, subpart 8, with respect to those wastes covered by the extension; and

B. if an exemption has been granted from a prohibition as a result of a petition under part 7045.0075, subpart 9, with respect to those wastes and units covered by the petition.

**Subp. 3. Other exemptions.** The following hazardous wastes are not subject to parts 7045.1300 to 7045.1380:

A. waste generated by small quantity generators of less than 100 kilograms of nonacute hazardous waste per month, or less than one kilogram of acute hazardous waste per month, as defined in part 7045.0206;

B. waste pesticides that a farmer disposes of according to part 7045.0213; and

C. waste identified or listed as hazardous after November 8, 1984, for which no land disposal prohibitions or treatment standards have been adopted.

**Subp. 4. Waivers.** The requirements of this part shall not affect the availability of a waiver under section 121(d)(4) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980.

**Statutory Authority:** *MS's 116.07; 116.37*

**History:** *16 SR 2102; 16 SR 2239*

**7045.1305 DILUTION PROHIBITED AS A SUBSTITUTE FOR TREATMENT.**

A. Except as provided in item B, no generator, transporter, handler, or owner or operator of a treatment, storage, or disposal facility shall in any way dilute a restricted waste or the residual from treatment of a restricted waste as a substitute for adequate treatment to achieve compliance with parts 7045.1350 to 7045.1360, to circumvent the effective date or otherwise avoid a prohibition in parts 7045.1320 to 7045.1330, or to circumvent a land disposal prohibition imposed by RCRA section 3004.

B. Dilution of wastes that are hazardous only because they exhibit a characteristic in a treatment system that treats wastes subsequently discharged to a water of the United States pursuant to a permit issued under section 402 of the Clean Water Act (CWA), or that treats wastes for purposes of pretreatment requirements under section 307 of the CWA is not impermissible dilution for purposes of this part unless a method has been specified as the treatment standard in part 7045.1360.

**Statutory Authority:** *MS s 116.07; 116.37*

**History:** *16 SR 2239*

**7045.1309 SPECIAL RULES REGARDING WASTES THAT EXHIBIT A CHARACTERISTIC.**

Subpart 1. **Applicable treatment standards.** The initial generator of a solid waste must determine each EPA hazardous waste number applicable to the waste to determine the applicable treatment standards under parts 7045.1350 to 7045.1360. For purposes of parts 7045.1300 to 7045.1380, the waste will carry the waste code for any applicable listing under part 7045.0135 and also one or more waste codes under part 7045.0131 where the waste exhibits a characteristic, except when the treatment standard for the waste code listed in part 7045.0135 operates in lieu of the standard for the waste code under part 7045.0131 as provided in subpart 2.

Subp. 2. **Conditions of meeting treatment standards.** When a prohibited waste is listed under part 7045.0135 and exhibits a characteristic under part 7045.0131, the treatment standard for the waste code listed in part 7045.0135 will operate in lieu of the standard for the waste code under part 7045.0131, provided that the treatment standard for the waste includes a treatment standard for the constituent that causes the waste to exhibit the characteristic. Otherwise, the waste must meet the treatment standards for all applicable listed and characteristic waste codes.

Subp. 3. **Land disposal.** In addition to any applicable standards determined from the initial point of generation, no prohibited waste that exhibits a characteristic under part 7045.0131 may be land disposed unless the waste complies with the treatment standards under parts 7045.1350 to 7045.1360.

**Subp. 4. Waste analysis.**

A. Wastes that exhibit a characteristic under part 7045.0131 are also subject to the requirements of part 7045.1315, except that when the waste is no longer hazardous, for each shipment of the wastes to a solid waste facility under chapter 7035, the initial generator or the treatment facility need not send a notification as required in part 7045.1315 to the facility. In those circumstances, a notification and certification must be sent to the commissioner.

B. The notification must include the following information:

(1) the name and address of the solid waste facility receiving the waste shipment under chapter 7035;

(2) a description of the waste as initially generated, including the applicable EPA hazardous waste numbers, the applicable wastewater or non-wastewater category as defined in part 7045.0020, and the subdivisions made within a waste code based on waste specific criteria; and

(3) the treatment standards applicable to the waste at the initial point of generation.

C. The certification must be signed by an authorized representative, and must use the following statement:

"I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification and that, based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the treatment process has been operated and maintained properly and complies with the performance levels in parts 7045.1350 to 7045.1360 and all applicable prohibitions in part 7045.1330 or RCRA section 3004(d) without impermissible dilution of the prohibited waste. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."

**Statutory Authority:** *MS s 116.07; 116.37*

**History:** *16 SR 2239*

#### **7045.1310 TREATMENT SURFACE IMPOUNDMENT EXEMPTION.**

**Subpart 1. Conditions.** Wastes that are otherwise prohibited from land disposal under parts 7045.1300 to 7045.1380 may be treated in a surface impoundment or series of impoundments if:

A. treatment of the wastes occurs in the impoundments;

B. the following conditions are met:

(1) For wastes with treatment standards in parts 7045.1350 to 7045.1360 or prohibition levels in parts 7045.1320 to 7045.1350 or RCRA section 3004(d), the residues from treatment are analyzed, as specified in part 7045.1315 or 7045.1330 to determine if they meet the applicable treatment standards, or, where no treatment standards have been established for the waste, the applicable prohibition levels. The sampling method, specified in the waste analysis plan under part 7045.0458 or 7045.0564 must be designed so the representative samples of the sludge and the supernatant are tested separately rather than mixed to form homogeneous samples.

(2) The following treatment residues, including any liquid waste, must be removed at least annually: residues that do not meet the treatment standards adopted under parts 7045.1350 to 7045.1360; residues that do not meet the prohibition levels adopted under parts 7045.1320 to 7045.1350, or imposed by statute where no treatment standards have been established; residues that are from the treatment of wastes prohibited from land disposal under parts 7045.1320 to 7045.1350 where no treatment standards have been established and no prohibition levels apply; or residues from managing listed wastes that are not delisted under part 7045.0075, subpart 2. However, residues that are the subject of a valid certification under Code of Federal Regulations, title 40, section 268.8, made no later than one year after placement of the wastes in an impoundment are not required to be removed annually. If the volume of liquid flowing through the impoundment or series of impoundments annually is greater than the volume of the impoundment or impoundments, the flow-through constitutes removal of the supernatant for the purpose of this requirement.

(3) Treatment residues may not be placed in any other surface impoundment for subsequent management unless the residues are the subject of a valid certification under Code of Federal Regulations, title 40, section 268.8,

that allows disposal in surface impoundments meeting the requirements of Code of Federal Regulations, title 40, section 268.8.

(4) The procedures and schedule for the sampling of impoundment contents, the analysis of test data, and the annual removal of residues that do not meet the treatment standards, or, prohibition levels where no treatment standards have been established, or that are from the treatment of wastes prohibited from land disposal under parts 7045.1320 to 7045.1350 where no treatment standards have been established and no prohibition levels apply, must be specified in the facility's waste analysis plan as required under parts 7045.0458 and 7045.0564;

C. the impoundment meets the design requirements of Code of Federal Regulations, title 40, section 264.221(c) or 265.221(a), and complies with applicable groundwater monitoring requirements of part 7045.0484 or 7045.0590;

D. the owner or operator submits to the commissioner a written certification that the requirements of item C have been met and a copy of the waste analysis plan required under item B. The certification must be signed by an authorized representative, and must use the following statement:

"I certify under penalty of law that the requirements of part 7045.1310, subpart 1, item C, have been met for all surface impoundments being used to treat restricted wastes. I believe that the information submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

*[For text of subp 2, see M.R.]*

**Statutory Authority:** *MS s 116.07; 116.37*

**History:** *16 SR 2239*

#### **7045.1315 WASTE ANALYSIS FOR RESTRICTED WASTES.**

**Subpart 1. Applicability.** Except as provided in part 7045.1330 or 7045.1358, if a waste is listed in part 7045.0135, the generator must test the waste, or test an extract using the test method described in Code of Federal Regulations, title 40, part 261, Appendix II, or use knowledge of the waste, to determine if the waste is restricted from land disposal. Except as specified in part 7045.1330, if a generator's waste exhibits one or more of the characteristics in part 7045.0131, the generator must test an extract using the test method in Code of Federal Regulations, title 40, part 268, Appendix IX, or use knowledge of the waste to determine if the waste is restricted from land disposal under this part.

A. If a generator is managing a restricted waste and the waste does not meet the applicable treatment standards or exceeds the applicable prohibition levels in part 7045.1330 or RCRA section 3004(d), with each shipment of waste the generator must notify the treatment or storage facility in writing of the appropriate treatment standards in parts 7045.1350 to 7045.1360 and any applicable prohibition levels in part 7045.1330 or RCRA section 3004(d). The notice must include the following information:

(1) EPA Hazardous Waste Number;

(2) the corresponding treatment standards for wastes F001-F005, F039, and wastes prohibited under part 7045.1330 or RCRA section 3004(d). Treatment standards for all other restricted wastes must either be included, or be referenced by including on the notification the applicable wastewater or non-wastewater category as defined in part 7045.0020, the applicable subdivisions made within a waste code based on waste specific criteria, and Code of Federal Regulations sections and paragraphs where the applicable treatment standard appears. Where the applicable treatment standards are expressed as specified technologies in part 7045.1360, the applicable five-letter treatment code in part 7045.1360 also must be listed on the notification;



- (3) the manifest number associated with the shipment of waste; and
- (4) waste analysis data, where available.

B. If a generator is managing a restricted waste and determines that the waste can be land disposed without further treatment, with each shipment of waste the generator must submit, to the treatment, storage, or land disposal facility, a notice and a certification stating that the waste meets the applicable treatment standards in parts 7045.1350 to 7045.1360 and the applicable prohibitions in part 7045.1330 or RCRA section 3004(d).

- (1) The notice must include the following information:

- (a) EPA Hazardous Waste Number;
- (b) the corresponding treatment standards for wastes F001-F005, F039, and wastes prohibited under part 7045.1330 or RCRA section 3004(d). Treatment standards for all other restricted wastes must either be included, or be referenced by including on the notification the applicable wastewater or nonwastewater category as defined in part 7045.0020, the applicable subdivisions made within a waste code based on waste specific criteria, and Code of Federal Regulations sections and paragraphs where the applicable treatment standard appears. Where the applicable treatment standards are expressed as specified technologies in part 7045.1360, the applicable five-letter treatment code in part 7045.1360 also must be listed on the notification;

- (c) the manifest number associated with the shipment of waste; and

- (d) waste analysis data, where available.

- (2) The certification must be signed by an authorized representative and must state the following:

“I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that the waste complies with the treatment standards in parts 7045.1350 to 7045.1360 and all applicable prohibitions in part 7045.1330 or RCRA section 3004(d). I believe that the information submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting a false certification, including the possibility of a fine and imprisonment.”

C. If a generator's waste is subject to an exemption from a prohibition on the type of land disposal method used for the waste, including, but not limited to, a case-by-case extension under part 7045.0075, subpart 8, an exemption under part 7045.0075, subpart 9, or a nationwide capacity variance under Code of Federal Regulations, title 40, part 268, subpart C, with each shipment of wastes, the generator must submit a notice to the facility receiving the waste, stating that the waste is not prohibited from land disposal. The notice must include the following information:

- (1) the EPA Hazardous Waste Number;
- (2) the corresponding treatment standards for wastes F001-F005, F039, and wastes prohibited in part 7045.1330 or RCRA section 3004(d). Treatment standards for all other restricted wastes must either be included, or be referenced by including on the notification the applicable wastewater or nonwastewater category as defined in part 7045.0020, the applicable subdivisions made within a waste code based on waste specific criteria, and Code of Federal Regulations sections and paragraphs where the applicable treatment standard appears. Where the applicable treatment standards are expressed as specified technologies in part 7045.1360, the applicable five-letter treatment code in part 7045.1360 also must be listed on the notification;
- (3) the manifest number associated with the shipment of waste;
- (4) waste analysis data, where available; and

(5) the date the waste is subject to the prohibitions.

D. If a generator is managing a prohibited waste in tanks or containers under part 7045.0292, and is treating the waste in tanks or containers to meet applicable treatment standards under parts 7045.1350 to 7045.1360, the generator must develop and follow a written waste analysis plan that describes the procedures the generator will carry out to comply with the treatment standards. The plan must be kept on-site in the generator's records, and the following requirements must be met:

(1) the waste analysis plan must be based on a detailed chemical and physical analysis of a representative sample of the prohibited wastes being treated, and contain all information necessary to treat the wastes according to parts 7045.1300 to 7045.1380, including the selected testing frequency;

(2) the plans must be filed with the commissioner at least 30 days before treatment activity, with delivery verified; and

(3) wastes shipped off-site must comply with the notification requirements of subpart 1:

E. If a generator determines that a waste is restricted based solely on the generator's knowledge of the waste, all supporting data used to make this determination must be retained on-site in the generator's files. If a generator determines that a waste is restricted based on testing the waste or an extract developed using the test method described in Code of Federal Regulations, title 40, part 261, Appendix II, all waste analysis data must be retained on-site in the generator's files.

F. If a generator determines that the generator is managing a restricted waste that is excluded from the definition of hazardous or solid waste or exempt from hazardous waste regulation under Code of Federal Regulations, title 40, sections 261.2 to 261.6, subsequent to the point of generation, the generator must place a one-time notice stating the generation, subsequent exclusion from the definition of hazardous or solid waste, or exemption from the hazardous waste regulation, and the disposition of the waste in the facility's file.

G. Generators must retain on-site a copy of all notices, certifications, demonstrations, waste analysis data, and other documentation produced under this part for at least five years from the date that the waste that is the subject of the documentation was last sent to on-site or off-site treatment, storage, or disposal. The five-year record retention period is automatically extended during the course of any unresolved enforcement action regarding the regulated activity or as requested by the commissioner. The requirements of this item apply to solid wastes even when the hazardous characteristic is removed before disposal or when the waste is excluded from the definition of hazardous or solid waste or exempted from hazardous waste regulation, subsequent to the point of generation.

H. If a generator is managing a lab pack that contains wastes identified under part 7045.1380 and wishes to use the alternative treatment standard under part 7045.1360, with each shipment of waste, the generator must submit a notice to the treatment facility according to this subpart. The generator must also submit the following certification, which must be signed by an authorized representative:

"I certify under penalty of law that I personally have examined and am familiar with the waste and that the lab pack contains only the wastes specified in Code of Federal Regulations, title 40, part 268, Appendix IV, or solid wastes not subject to regulation under Code of Federal Regulations, title 40, part 261. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine or imprisonment."

I. If a generator is managing a lab pack that contains organic wastes and

wishes to use the alternate treatment standards in part 7045.1360, with each shipment of waste, the generator must submit a notice to the treatment facility according to this subpart. The generator also must submit the following certification, which must be signed by an authorized representative:

"I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste and that the lab pack contains only organic waste specified in Code of Federal Regulations, title 40, part 268, Appendix V, or solid wastes not subject to regulation under Code of Federal Regulations, title 40, part 261. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine or imprisonment."

J. Small quantity generators with tolling agreements must comply with the applicable notification and certification requirements of this subpart for the initial shipment of the waste subject to the agreement. The generators must retain on-site a copy of the notification and certification, together with the tolling agreement, for at least three years after termination or expiration of the agreement. The three-year record retention period is automatically extended during the course of any unresolved enforcement action regarding the regulated activity or as requested by the commissioner.

**Subp. 2. Testing of wastes.** Treatment facilities must test their wastes according to the frequency specified in their waste analysis plans under part 7045.0458 or 7045.0564. The testing must be performed as provided in items A to C.

A. For wastes with treatment standards expressed as concentrations in the waste extract in part 7045.1355, the owner or operator of the treatment facility must test the treatment residues or an extract of the residues developed using the test method described in Code of Federal Regulations, title 40, part 261, Appendix II, to assure that the treatment residues or extract meet the applicable treatment standards.

B. For wastes prohibited under part 7045.1330 or RCRA section 3004(d) which are not subject to any treatment standards under parts 7045.1350 to 7045.1360, the owner or operator of the treatment facility must test the treatment residues according to the generator testing requirements in part 7045.1330 to assure that the treatment residues comply with the applicable prohibitions.

C. For wastes with treatment standards expressed as concentrations in the waste under part 7045.1358, the owner or operator of the treatment facility must test the treatment residues, not an extract of the residues, to assure that the treatment residues meet the applicable treatment standards.

D. A notice must be sent with each waste shipment to the land disposal facility that includes the following information:

(1) the EPA Hazardous Waste Number;

(2) the corresponding treatment standards for wastes F001-F005, F039, and wastes prohibited under part 7045.1330 or RCRA section 3004(d). Treatment standards for all other restricted wastes must either be included, or be referenced by including on the notification the applicable wastewater or non-wastewater category as defined in part 7045.0020, the applicable subdivisions made within a waste code based on waste specific criteria, and Code of Federal Regulations sections and paragraphs where the applicable treatment standard appears. Where the applicable treatment standards are expressed as specified technologies in part 7045.1360, the applicable five-letter treatment code in part 7045.1360 also must be listed on the notification;

(3) the manifest number associated with the shipment of waste; and

(4) waste analysis data, where available.

E. The treatment facility must submit a certification with each shipment of waste or treatment residue of a restricted waste to the land disposal facility

stating that the waste or treatment residue has been treated in compliance with the applicable performance standards in parts 7045.1350 to 7045.1360 and the applicable prohibitions in part 7045.1330 or RCRA section 3004(d).

(1) For wastes with treatment standards expressed as concentrations in the waste extract or in the waste, under part 7045.1355 or 7045.1358, or for wastes prohibited under part 7045.1330 or RCRA section 3004(d) that are not subject to any treatment standards under parts 7045.1350 to 7045.1360, the certification must be signed by an authorized representative and must state the following:

“I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operations of the treatment process used to support this certification and that, based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the treatment process has been operated and maintained properly and complies with the performance levels in parts 7045.1350 to 7045.1360 and all applicable prohibitions in part 7045.1330 or RCRA section 3004(d) without impermissible dilution of the prohibited waste. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.”

(2) For wastes with treatment standards expressed as technologies in part 7045.1360, the certification must be signed by an authorized representative and must state the following:

“I certify under penalty of law that the waste has been treated according to part 7045.1360. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.”

(3) For wastes with treatment standards expressed as concentrations in the waste under part 7045.1358, if compliance with the treatment standards in parts 7045.1350 to 7045.1360 is based in whole or in part on the analytical detection limit alternative specified in part 7045.1358, the certification must be signed by an authorized representative and must state the following:

“I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification and that, based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the nonwastewater organic constituents have been treated by incineration in units operated according to Code of Federal Regulations, title 40, part 264, subpart O, or part 265, subpart O, or by combustion in fuel substitution units operating according to applicable technical requirements, and I have been unable to detect the nonwastewater organic constituents despite having used my best good faith efforts to analyze for the constituents. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.”

F. If the waste or treatment residue will be further managed at a different treatment or storage facility, the treatment, storage, or disposal facility sending the waste or treatment residue off-site must comply with the notice and certification requirements applicable to generators under this part.

G. When the wastes are recyclable materials used in a manner constituting disposal subject to part 7045.0665, subpart 1, item C, regarding treatment standards and prohibition levels, the owner or operator of a treatment facility is not required to notify the receiving facility under item D. With each shipment of the wastes, the owner or operator of the recycling facility must submit the certification in item E, and a notice that includes the information in item D, except

the manifest number, to the commissioner's delegated representative. The recycling facility also must keep records of the name and location of each entity receiving the hazardous waste-derived product.

**Subp. 3. Facility requirements.** Except when the owner or operator is disposing of waste that is a recyclable material used in a manner constituting disposal under part 7045.0665, subpart 1, the owner or operator of a land disposal facility disposing any waste subject to restrictions under parts 7045.1300 to 7045.1380 must:

A. have copies of the notice and certifications specified in subpart 1 or 2 and the certification specified in Code of Federal Regulations, title 40, section 268.8, if applicable; and

B. test the waste, or an extract of the waste or treatment residue developed using the test method in Code of Federal Regulations, title 40, part 261, Appendix II, or using any methods required by generators under part 7045.1330, to assure that the wastes or treatment residues are in compliance with the applicable treatment standards in parts 7045.1350 to 7045.1360 and all applicable prohibitions in part 7045.1330 or RCRA section 3004(d). The testing must be performed according to the frequency specified in the facility's waste analysis plan as required in part 7045.0458 or 7045.0564.

**Statutory Authority:** *MS s 116.07; 116.37*

**History:** *16 SR 2239*

#### **7045.1320 WASTE SPECIFIC PROHIBITIONS; SOLVENT WASTES.**

**Subpart 1. Applicability.** Effective November 8, 1986, the spent solvent wastes specified in part 7045.0135 as Hazardous Waste Nos. F001, F002, F003, F004, and F005 are prohibited from land disposal unless one or more of the following conditions apply:

A. the generator of the solvent waste is a small quantity generator;

B. the solvent waste is generated from any response action taken under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), or any corrective action taken under the Resource Conservation and Recovery Act (RCRA), except where the waste is contaminated soil or debris;

C. the initial generator's solvent waste is a solvent-water mixture, solvent-containing sludge or solid, or solvent-contaminated soil (non-CERCLA or RCRA corrective action) containing less than one percent total F001-F005 solvent constituents listed in part 7045.1355, subpart 3; or

D. the solvent waste is a residue from treating a waste described in items A to C; or the solvent waste is a residue from treating a waste not described in items A to C, provided the residue belongs to a different treatability group than the waste as initially generated and wastes belonging to the treatability group are described in item C.

**Subp. 2. Effective date.** Effective November 8, 1988, the F001-F005 solvent wastes listed in subpart 1, items A to D, are prohibited from land disposal. Effective November 8, 1990, the F001-F005 solvent wastes that are contaminated soil and debris resulting from a response action taken under section 104 or 106 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 or a corrective action required under RCRA, subtitle C, and the residues from treating these wastes are prohibited from land disposal. Between November 8, 1988, and November 8, 1990, these wastes may be disposed of in a landfill or surface impoundment only if the unit is in compliance with the requirements of part 7045.0532.

**Subp. 3. Exceptions.** The requirements of subparts 1 and 2 do not apply if:

A. the wastes meet the standards of parts 7045.1350 to 7045.1360;

B. persons have been granted an exemption from a prohibition pursuant to a petition under part 7045.0075, with respect to those wastes and units covered by the petition; or

C. persons have been granted an extension to the effective date of a prohibition under part 7045.0075, subpart 6, with respect to those wastes and units covered by the extension.

**Statutory Authority:** *MS s 116.07; 116.37*

**History:** *16 SR 2239*

#### **7045.1325 WASTE SPECIFIC PROHIBITION; DIOXIN-CONTAINING WASTES.**

Subpart 1. **Applicability.** Effective November 8, 1988, the dioxin-containing wastes specified in part 7045.0135 as Hazardous Waste Nos. F020, F021, F022, F023, F026, F027, and F028 are prohibited from land disposal.

Subp. 2. **Exceptions.** The requirements of subpart 1 do not apply if:

A. the wastes meet the standards of parts 7045.1350 to 7045.1360;

B. persons have been granted an exemption from a prohibition under part 7045.0075, subpart 9, with respect to those wastes or units covered by the petition;

C. persons have been granted an extension to the effective date of a prohibition under part 7045.0075, subpart 8, with respect to those wastes covered by the extension; or

D. the F020-F023 and F026-F028 dioxin-containing wastes are contaminated soil and debris resulting from a response action taken under section 104 or 106 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, or a corrective action taken under RCRA, subtitle C.

Subp. 3. **Effective date.** Effective November 8, 1990, the F020-F023 and F026-F028 dioxin-containing wastes in subpart 2, item D, are prohibited from land disposal. Between November 8, 1988, and November 8, 1990, wastes included in subpart 2, item A, may be disposed of in a landfill or surface impoundment only if the unit is in compliance with the requirements of part 7045.0532 and all other applicable requirements of parts 7045.0450 to 7045.0642.

**Statutory Authority:** *MS s 116.07; 116.37*

**History:** *16 SR 2239*

#### **7045.1330 WASTE SPECIFIC PROHIBITIONS; CALIFORNIA LIST WASTES.**

Subpart 1. **Application.** Effective July 8, 1987, the following hazardous wastes are prohibited from land disposal:

A. liquid hazardous wastes having a pH less than or equal to two;

B. liquid hazardous wastes containing polychlorinated biphenyls (PCB's) at concentrations greater than or equal to 50 ppm;

C. liquid hazardous wastes that are primarily water and contain halogenated organic compounds (HOC's) in total concentration greater than or equal to 1,000 mg/l and less than 10,000 mg/l HOC's;

D. liquid hazardous wastes that contain HOC's in total concentration greater than or equal to 1,000 mg/l and are not prohibited under item C; and

E. nonliquid hazardous wastes containing HOC's in total concentration greater than or equal to 1,000 mg/kg and are not wastes described in subpart 2, items A and B.

Subp. 2. **Exceptions.** The requirements of subpart 1, items A to E, do not apply until:

A. July 8, 1989, where the wastes are contaminated soil or debris not resulting from a response action taken under section 104 or 106 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 or a corrective action taken under RCRA, subtitle C. Between July 8, 1987, and July 8, 1989, the wastes may be disposed of in a landfill or surface impoundment only if the disposal is in compliance with the requirements of part 7045.0532.

B. November 8, 1990, where the wastes are contaminated soil or debris resulting from a response action taken under section 104 or 106 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 or a corrective action taken under RCRA, subtitle C. Between November 8, 1988, and November 8, 1990, the wastes may be disposed of in a landfill or surface impoundment only if the unit is in compliance with the requirements of part 7045.0532.

C. Between July 8, 1987, and November 8, 1988, the wastes included in subpart 1, items D and E, may be disposed of in a landfill or surface impoundment only if the unit is in compliance with the requirements of part 7045.0532.

*[For text of item D, see M.R.]*

E. The prohibitions and effective dates in subpart 1, items C to E, and subpart 2, items A and B, do not apply where the waste is subject to an effective date and prohibition under parts 7045.1320 to 7045.1330 for a specified HOC, such as a hazardous waste chlorinated solvent.

*[For text of subp 3, see M.R.]*

**Statutory Authority:** *MS s 116.07, 116.37*

**History:** *16 SR 2239*

### **7045.1333 WASTE SPECIFIC PROHIBITIONS; FIRST ONE-THIRD OF REGULATED WASTES.**

**Subpart 1. Application.** The hazardous wastes in items A to D are prohibited from land disposal.

A. Effective August 8, 1988, the wastes specified as EPA Hazardous Waste Nos. F006 (nonwastewater) in part 7045.0135; K001 and K004 wastes specified in part 7045.1358, subpart 1; K008 wastes specified in part 7045.1358, subpart 1; K016, K018, K019, K020 and K021 wastes specified in part 7045.1358, subpart 1; K022 (nonwastewater), K024, and K025 nonwastewaters specified in part 7045.1358, subpart 1; K030, K036 (nonwastewater), K037, K044, K045, nonexplosive K046 (nonwastewater), K047, K060 (nonwastewater), K061 (nonwastewaters containing less than 15 percent zinc), K062, non CaSO<sub>4</sub>, K069 (nonwastewaters), K086 (solvent washes), K087, K099, and K100 nonwastewaters specified in part 7045.1358, subpart 1; K101 (wastewater), K101 (nonwastewater, low arsenic subcategory less than one percent total arsenic), K102 (wastewater), K102 (nonwastewater, low arsenic subcategory less than one percent total arsenic), K103, and K104 are prohibited from land disposal.

B. Effective August 8, 1988, and continuing until August 7, 1990, K061 wastes containing 15 percent zinc or greater are prohibited from land disposal under the treatment standards specified in part 7045.1355 applicable to K061 wastes that contain less than 15 percent zinc.

C. Effective August 8, 1990, the waste specified in part 7045.0135, subpart 3, as EPA Hazardous Waste No. K071 is prohibited from land disposal.

D. Effective August 8, 1990, the wastes specified in Code of Federal Regulations, title 40, section 268.10, having a treatment standard in parts 7045.1350 to 7045.1360 based on incineration that are contaminated soil and debris are prohibited from land disposal.

**Subp. 2. Exceptions to subpart 1.** Items A and B are exceptions from the prohibitions in subpart 1.

A. Between November 8, 1988, and August 8, 1990, wastes included in subpart 1, items C and D may be disposed of in a landfill or surface impoundment only if the unit is in compliance with the requirements of part 7045.0532.

B. The requirements of this subpart and subpart 1 do not apply if:

- (1) the wastes meet the applicable standards in part 7045.1355;
- (2) persons have been granted an exemption to an effective date of a prohibition under part 7045.0075, subpart 7, with respect to those wastes and units covered by the petition; or
- (3) persons have been granted an extension to an effective date of a prohibition under part 7045.0075, subpart 6, with respect to those wastes covered by the extension.

**Subp. 3. Applicability between August 8, 1988, and May 8, 1990.** Between August 8, 1988, and May 8, 1990, the wastes specified in Code of Federal Regulations, title 40, section 268.10, for which treatment standards under part 7045.1355 have not been adopted, including wastes that are subject to the statutory prohibitions of RCRA section 3004(d) or codified prohibitions under part 7045.0135, subpart 3, but not including wastes subject to a treatment standard under part 7045.1360, are prohibited from disposal in a landfill or surface impoundment unless a demonstration and certification have been submitted.

**Subp. 4. Waste analysis.** To determine whether a hazardous waste listed in Code of Federal Regulations, title 40, section 268.10, exceeds the applicable treatment standards in parts 7045.1355 and 7045.1358, the initial generator must test a representative sample of the waste extract or the entire waste depending on whether the treatment standards are expressed as concentrations in the waste extract or the waste, or the generator may use knowledge of the waste. If the waste contains constituents in excess of the applicable subpart D levels, the waste is prohibited from land disposal and all requirements of parts 7045.1300 to 7045.1380 are applicable, except as otherwise specified.

**Statutory Authority:** *MS s 116.07; 116.37*

**History:** *16 SR 2239*

#### **7045.1334 WASTE SPECIFIC PROHIBITION; SECOND ONE-THIRD OF REGULATED WASTES.**

**Subpart 1. Application.** The wastes in items A to E are prohibited from land disposal.

A. Effective June 8, 1989, the wastes specified in part 7045.0135 as EPA Hazardous Waste Nos. F010; F024; K005; K007; K009 (nonwastewaters); K010; K023; K027; K028; K029 (nonwastewaters); K036 (wastewaters); K038; K039; K040; K043; K093; K094; K095 (nonwastewaters); K096 (nonwastewaters); K113; K114; K115; K116; P013; P021; P029; P030; P039; P040; P041; P043; P044; P062; P063; P071; P074; P085; P089; P094; P097; P098; P099; P104; P106; P109; P111; P121; U028; U058; U069; U087; U088; U102; U107; U221; U223; and U235 are prohibited from land disposal.

B. Effective June 8, 1989, the wastes specified in part 7045.0135 as EPA Hazardous Waste Nos. K009 (wastewaters); K011 (nonwastewaters); K013 (nonwastewaters); and K014 (nonwastewaters) are prohibited from land disposal.

C. Effective July 8, 1989, the wastes specified in part 7045.0135 as EPA Hazardous Waste Nos. F006—cyanide (nonwastewater); F008; F009; F011 (wastewaters); and F012 (wastewaters) are prohibited from land disposal.

D. Effective July 8, 1989, the waste specified in Code of Federal Regulations, title 40, section 261.31, as EPA Hazardous Waste No. F007 is prohibited from land disposal.

E. Effective July 8, 1989 through December 8, 1989, F011 (nonwastewaters) and F012 (nonwastewaters) are prohibited from land disposal pursuant



to the treatment standards in parts 7045.1355 and 7045.1358 applicable to EPA Hazardous Waste Nos. F007, F008, and F009 nonwastewaters. Effective December 8, 1989, F011 (nonwastewaters) and F012 (nonwastewaters) are prohibited from land disposal pursuant to the treatment standards in parts 7045.1355 and 7045.1358 applicable to F011 (nonwastewaters) and F012 (nonwastewaters).

**Subp. 2. Exceptions.** Items A to D are exceptions from the prohibitions in subpart 1.

A. Effective June 8, 1991, the wastes specified in this part, having a treatment standard in parts 7045.1350 to 7045.1360 based on incineration, that are contaminated soil and debris are prohibited from land disposal.

B. Between June 8, 1989, and June 8, 1991, (for EPA Hazardous Waste Nos. F007, F008, F009, F011, and F012 between June 8, 1989; and July 8, 1989) wastes included in item A and subpart 1, item C, may be disposed of in a landfill or surface impoundment only if the unit is in compliance with the technical requirements of part 7045.0532.

C. The requirements of item A and subpart 1, items A to C, do not apply if:

(1) the wastes meet the applicable standards in parts 7045.1350 to 7045.1360;

(2) an exemption has been granted from a prohibition as a result of a petition under part 7045.0075, subpart 7, with respect to wastes and units covered by the petition; or

(3) an extension to the effective date of a prohibition under part 7045.0075, subpart 7, has been granted with respect to wastes covered by the extension.

D. Between June 8, 1989, and May 8, 1990, the wastes specified in Code of Federal Regulations, title 40, section 268.11, for which treatment standards under parts 7045.1350 to 7045.1360 are not applicable, including California list wastes subject to the statutory prohibitions of RCRA section 3004(d) or codified prohibitions under part 7045.0135, subpart 3, are prohibited from disposal in a landfill or surface impoundment unless the wastes are the subject of a valid demonstration and certification under Code of Federal Regulations, title 40, section 268.8.

**Subp. 3. Waste analysis.** To determine whether a hazardous waste listed in Code of Federal Regulations, title 40, sections 268.10 to 268.12, exceeds the applicable treatment standards specified in parts 7045.1355 and 7045.1358, the initial generator must test a representative sample of the waste extract or the entire waste, depending on whether the treatment standards are expressed as concentrations in the waste extract or the waste, or the generator may use knowledge of the waste. If the waste contains constituents in excess of the applicable levels specified in parts 7045.1350 to 7045.1360, the waste is prohibited from land disposal and all requirements of parts 7045.1300 to 7045.1380 are applicable, except as otherwise specified.

**Statutory Authority:** *MS s 116.07; 116.37*

**History:** *16 SR 2239*

### **7045.1335 WASTE SPECIFIC PROHIBITIONS; THIRD ONE-THIRD OF REGULATED WASTES.**

**Subpart 1. Applicability as of August 8, 1990.** Effective August 8, 1990, the following wastes are prohibited from land disposal:

A. wastes specified in part 7045.1325 as EPA Hazardous Waste Nos. F002 (1,1,2-trichloroethane); F005 (benzene); F005 (2-ethoxy ethanol); F005 (2-nitropropane); F006 (wastewaters); F019; F025; and F039 (wastewaters);

B. wastes specified in part 7045.1330 as EPA Hazardous Waste Nos.

K002; K003; K004 (wastewaters); K005 (wastewaters); K006; K008 (wastewaters); K011 (wastewaters); K013 (wastewaters); K014 (wastewaters); K015 (nonwastewaters); K017; K021 (wastewaters); K022 (wastewaters); K025 (wastewaters); K026; K029 (wastewaters); K031 (wastewaters); K032; K033; K034; K035; K041; K042; K046 (wastewaters, reactive nonwastewaters); K048 (wastewaters); K049 (wastewaters); K050 (wastewaters); K051 (wastewaters); K052 (wastewaters); K060 (wastewaters); K061 (wastewaters and high zinc subcategory > 15 percent zinc); K069 (wastewaters, calcium sulfate nonwastewaters); K073; K083; K084 (wastewaters); K085; K095 (wastewaters); K096 (wastewaters); K097; K098; K100 (wastewaters); K101 (wastewaters); K102 (wastewaters); K105; and K106 (wastewaters);

C. wastes specified in part 7045.1333, subpart 2, as EPA Hazardous Waste Nos. P001; P002; P003; P004; P005; P006; P007; P008; P009; P010 (wastewaters); P011 (wastewaters); P012 (wastewaters); P014; P015; P016; P017; P018; P020; P022; P023; P024; P026; P027; P028; P031; P033; P034; P036 (wastewaters); P037; P038 (wastewaters); P042; P045; P046; P047; P048; P049; P050; P051; P054; P056; P057; P058; P059; P060; P064; P065 (wastewaters); P066; P067; P068; P069; P070; P072; P073; P075; P076; P077; P078; P081; P082; P084; P088; P092 (wastewaters); P093; P095; P096; P101; P102; P103; P105; P108; P110; P112; P113; P114; P115; P116; P118; P119; P120; P122; and P123;

D. wastes specified in part 7045.1333, subpart 3, as EPA Hazardous Waste Nos. U001; U002; U003; U004; U005; U006; U007; U008; U009; U010; U011; U012; U014; U015; U016; U017; U018; U019; U020; U021; U022; U023; U024; U025; U026; U027; U029; U030; U031; U032; U033; U034; U035; U036; U037; U038; U039; U041; U042; U043; U044; U045; U046; U047; U048; U049; U050; U051; U052; U053; U055; U056; U057; U059; U060; U061; U062; U063; U064; U066; U067; U068; U070; U071; U072; U073; U074; U075; U076; U077; U078; U079; U080; U081; U082; U083; U084; U085; U086; U089; U090; U091; U092; U093; U094; U095; U096; U097; U098; U099; U101; U103; U105; U106; U108; U109; U110; U111; U112; U113; U114; U115; U116; U117; U118; U119; U120; U121; U122; U123; U124; U125; U126; U127; U128; U129; U130; U131; U132; U133; U134; U135; U136 (wastewaters); U137; U138; U140; U141; U142; U143; U144; U145; U146; U147; U148; U149; U150; U151 (wastewaters); U152; U153; U154; U155; U156; U157; U158; U159; U160; U161; U162; U163; U164; U165; U166; U167; U168; U169; U170; U171; U172; U173; U174; U176; U177; U178; U179; U180; U181; U182; U183; U184; U185; U186; U187; U188; U189; U191; U192; U193; U194; U196; U197; U200; U201; U202; U203; U204; U205; U206; U207; U208; U209; U210; U211; U213; U214; U215; U216; U217; U218; U219; U220; U222; U225; U226; U227; U228; U234; U236; U237; U238; U239; U240; U243; U244; U246; U247; U248; and U249; and

E. the following wastes identified as hazardous based on a characteristic alone: D001; D002; D003; D004 (wastewaters); D005; D006; D007; D008 (except for lead materials stored before secondary smelting); D009 (wastewaters); D010; D011; D012; D013; D014; D015; D016; and D017.

Subp. 2. **Applicability as of November 8, 1990.** Effective November 8, 1990, the wastes specified in part 7045.1330 as EPA Hazardous Waste Nos. K048 (nonwastewaters); K049 (nonwastewaters); K050 (nonwastewaters); K051 (nonwastewaters); and K052 (nonwastewaters) are prohibited from land disposal.

Subp. 3. **Applicability as of May 8, 1992.** Effective May 8, 1992, the following wastes are prohibited from land disposal:

A. waste specified in part 7045.1325 as EPA Hazardous Waste No. F039 (nonwastewaters);

B. wastes specified in part 7045.1330 as EPA Hazardous Waste Nos.

K031 (nonwastewaters); K084 (nonwastewaters); K101 (nonwastewaters); K102 (nonwastewaters); and K106 (nonwastewaters);

C. wastes specified in part 7045.1333, subpart 2, as EPA Hazardous Waste Nos. P010 (nonwastewaters); P011 (nonwastewaters); P012 (nonwastewaters); P036 (nonwastewaters); P038 (nonwastewaters); P065 (nonwastewaters); P087; and P092 (nonwastewaters);

D. wastes specified in part 7045.1333, subpart 3, as EPA Hazardous Waste Nos. U136 (nonwastewaters); and U151 (nonwastewaters); and

E. the following wastes identified as hazardous based on a characteristic alone: D004 (nonwastewaters); D008 (lead materials stored before secondary smelting), and D009 (nonwastewaters); inorganic solids debris as defined in part 7045.0020, subpart 45a (which also applies to chromium refractory bricks carrying the EPA Hazardous Waste Nos. K048-K052); and RCRA hazardous wastes that contain naturally occurring radioactive materials.

**Subp. 4. Mixed radioactive/hazardous wastes.** Effective May 8, 1992, hazardous wastes listed in Code of Federal Regulations, title 40, sections 268.10, 268.11, and 268.12, that are mixed radioactive/hazardous wastes, and soil or debris contaminated with the hazardous wastes, are prohibited from land disposal.

**Subp. 5. Contaminated soil or debris.** Effective May 8, 1992, the wastes specified in this part having a treatment standard in parts 7045.1350 to 7045.1360 based on incineration, mercury retorting, vitrification, acid leaching followed by chemical precipitation, or thermal recovery of metals, and which are contaminated soil or debris, are prohibited from land disposal.

**Subp. 6. Exceptions between May 8, 1990, and August 8, 1990.** Between May 8, 1990, and August 8, 1990, the wastes in subpart 1 may be disposed of in a landfill or surface impoundment only if the unit is in compliance with the requirements of part 7045.0532.

**Subp. 7. Exceptions between May 8, 1990, and November 8, 1990.** Between May 8, 1990, and November 8, 1990, the wastes in subpart 2 may be disposed of in a landfill or surface impoundment only if the unit is in compliance with the requirements of part 7045.0532.

**Subp. 8. Exceptions between May 8, 1990, and May 8, 1992.** Between May 8, 1990, and May 8, 1992, the wastes in subparts 3 to 5 may be disposed of in a landfill or surface impoundment only if the unit is in compliance with the requirements of part 7045.0532.

**Subp. 9. General exceptions.** The requirements of subparts 1 to 5 do not apply if:

A. the wastes meet the applicable standards in parts 7045.1350 to 7045.1360;

B. persons have been granted an exemption from a prohibition pursuant to a petition under part 7045.0075, subpart 9, with respect to wastes and units covered by the petition;

C. the wastes meet the applicable alternate standards established pursuant to a petition granted under Code of Federal Regulations, title 40, section 268.44; and

D. persons have been granted an extension to the effective date of a prohibition under part 7045.0075, subpart 8, with respect to wastes covered by the extension.

**Subp. 10. Waste analysis.** To determine whether a hazardous waste listed in Code of Federal Regulations, title 40, sections 268.10, 268.11, and 268.12, exceeds the applicable treatment standards in parts 7045.1355 and 7045.1358, the initial generator must test a representative sample of the waste extract or the entire waste, depending on whether the treatment standards are expressed as con-

centrations in the waste extract or the waste, or the generator may use knowledge of the waste. If the waste contains constituents in excess of the applicable levels listed in parts 7045.1350 to 7045.1360, the waste is prohibited from land disposal and all requirements of parts 7045.1300 to 7045.1380 are applicable, except as otherwise specified.

**Statutory Authority:** *MS s 116.07, 116.37*

**History:** *16 SR 2239*

#### **7045.1339 EFFECTIVE DATES OF SURFACE DISPOSED WASTES REGULATED IN THE LAND DISPOSAL RESTRICTIONS.**

The comprehensive list of effective dates of surface disposed wastes regulated in the land disposal restrictions is found in Code of Federal Regulations, title 40, section 268, Appendix VII, Tables 1 and 2. This table does not include mixed radioactive wastes which are receiving a national capacity variance until May 8, 1992, for all applicable treatment technologies.

**Statutory Authority:** *MS s 116.07, 116.37*

**History:** *16 SR 2239*

#### **7045.1350 TREATMENT STANDARDS.**

**Subpart 1. Concentration standard for waste extract.** A restricted waste identified in part 7045.1355 may be land disposed only if an extract of the waste or of the treatment residue of the waste developed using the test method in Code of Federal Regulations, title 40, part 261, Appendix II, does not exceed the value shown in Code of Federal Regulations, title 40, part 268.41, Table CCWE, for any hazardous constituent listed for that waste, with the following exceptions: D004; D008; K031; K084; K101; K102; P010; P011; P012; P036; P038; and U136. These wastes may be land disposed only if an extract of the waste or of the treatment residue of the waste developed using either the test method in Code of Federal Regulations, title 40, part 261, Appendix II, or the test method in Code of Federal Regulations, title 40, part 268, Appendix I, does not exceed the concentrations shown in Code of Federal Regulations, title 40, part 268.41, Table CCWE, for any hazardous constituent listed for that waste.

*[For text of subp 2, see M.R.]*

**Subp. 3. Concentration standard for waste or treatment residue.** Except as otherwise specified in part 7045.1358, a restricted waste identified in part 7045.1358 may be land disposed only if the constituent concentrations in the waste or treatment residue of the waste do not exceed the value shown in Code of Federal Regulations, title 40, part 268.43, Table CCW, for any hazardous constituents listed for that waste.

**Statutory Authority:** *MS s 116.07; 116.37*

**History:** *16 SR 2239*

#### **7045.1355 TREATMENT STANDARDS EXPRESSED AS CONCENTRATIONS IN WASTE EXTRACT.**

**Subpart 1. Applicability.** Code of Federal Regulations, title 40, part 268.41, Table CCWE, identifies the restricted wastes and the concentrations of their associated constituents that may not be exceeded by the extract of a waste or waste treatment residual developed using the test method in Code of Federal Regulations, title 40, part 261, Appendix II, for the allowable land disposal of such wastes, with the exception of EPA Hazardous Waste Nos. D004, D008, K031, K084, K101, K102, P010, P011, P012, P036, P038, and U136. Table CCWE also identifies the restricted EPA Hazardous Waste Nos. D004, D008, K031, K084, K101, K102, P010, P011, P012, P036, P038, and U136 and the concentrations of their associated constituents which may not be exceeded by the extract of a

waste or waste treatment residual developed using the test method in Code of Federal Regulations, title 40, part 261, Appendix II, for the allowable land disposal of such wastes. Code of Federal Regulations, title 40, part 268, Appendix II, provides agency guidance on treatment methods that have been shown to achieve the Table CCWE levels for the respective wastes. This guidance is provided to assist generators and owners or operators in their selection of appropriate treatment methods. Compliance with these concentrations is required based on grab samples.

*[For text of subp 2, see M.R.]*

**Subp. 3. Constituent concentrations in waste extract.** Constituents in waste extracts are listed with the applicable concentration limits in Code of Federal Regulations, title 40, part 268.41, Table CCWE.

**Statutory Authority:** *MS s 116.07; 116.37*

**History:** *16 SR 2239*

#### **7045.1358 TREATMENT STANDARDS EXPRESSED AS WASTE CONCENTRATIONS.**

**Subpart 1. Applicability.** Subpart 3 identifies the restricted wastes and the concentrations of their associated hazardous constituents that may not be exceeded by the waste or treatment residual, not an extract of the waste or residual, for the allowable land disposal of the waste or residual. Compliance with these concentrations is required based on grab samples, unless otherwise noted in subpart 3. Limits are expressed in milligrams per kilogram (mg/kg) for non-wastewaters and in milligrams per liter (mg/l) for wastewaters.

**Subp. 2. Combined wastes.** When wastes with differing treatment standards for a constituent of concern are combined for purposes of treatment, the treatment residue must meet the lowest treatment standard for the constituent of concern.

**Subp. 3. Constituent concentrations in wastes.** Constituent concentrations in wastes are listed with the applicable concentration limits in Code of Federal Regulations, title 40, section 268.43, Table CCW.

**Subp. 4. No land disposal.** The nonwastewater forms of the following wastes generated by the processes described in the waste listing description applies only to wastes generated and disposed after the dates shown, if a date is shown, and not generated in the course of treating wastewater forms of these wastes based on no generation, except as noted, are prohibited from land disposal:

- A. K004, after August 17, 1988;
- B. K005, after June 8, 1989;
- C. K007, after June 8, 1989;
- D. K008, after August 17, 1988;
- E. K015, after May 8, 1990, based on no ash;
- F. K021, after August 17, 1988;
- G. K025, after August 17, 1988;
- H. K036, after August 17, 1988;
- I. K044, based on reactivity;
- J. K045, based on reactivity;
- K. K047, based on reactivity;
- L. K060, after August 17, 1988;
- M. K061 - high zinc subcategory, greater than or equal to 15 percent total zinc, after August 17, 1990, based on recycling, effective August 8, 1990;
- N. K069 - noncalcium sulfate subcategory, after August 17, 1988, based on recycling;

O. K083 - no ash subcategory, less than 0.01 percent total ash, after May 8, 1990, based on no ash; and

P. K100, after August 17, 1988.

**Subp. 5. Demonstrating compliance with treatment standards for organic constituents.** Notwithstanding the prohibitions in subpart 1, treatment and disposal facilities may demonstrate, and certify under part 7045.1315, subpart 2, item E, compliance with the treatment standards for organic constituents specified by a footnote in Code of Federal Regulations, title 40, section 268.43, Table CCW, provided the following conditions are satisfied:

A. the treatment standards for the organic constituents were established based on incineration in units operated according to the technical requirements of part 7045.0542 or 7045.0640, or based on combustion in fuel substitution units operating in accordance with applicable technical requirements;

B. the treatment or disposal facility has used the methods referenced in item A to treat the organic constituents; and

C. the treatment or disposal facility has been unable to detect the organic constituents despite using its best good faith efforts as defined by applicable guidance or standards. Until the guidance or standards are developed, the treatment or disposal facility may demonstrate such good faith efforts by achieving detection limits for the regulated organic constituents that do not exceed an order of magnitude of the treatment standards specified in this part.

**Statutory Authority:** *MS s 116.07; 116.37*

**History:** *16 SR 2239*

#### **7045.1360 TREATMENT STANDARDS EXPRESSED AS SPECIFIED TECHNOLOGIES.**

**Subpart 1. Applicability.** The wastes in items A and B and subparts 4 and 5 must be treated using the technology or technologies specified in items A to C and subpart 3.

*[For text of item A, see M.R.]*

B. Nonliquid hazardous wastes containing halogenated organic compounds (HOC's) in total concentration greater than or equal to 1,000 mg/kg and liquid HOC-containing wastes that are prohibited under part 7045.1330, subpart 1, item D, must be incinerated in accordance with the requirements of part 7045.0542 or 7045.0640. These treatment standards do not apply if the waste is subject to a treatment standard in parts 7045.1350 to 7045.1360 for a specific HOC.

C. A mixture consisting of wastewater, the discharge of which is subject to regulation under either section 307(b) or 402 of the Clean Water Act, and de minimis losses of materials from manufacturing operations in which these materials are used as raw materials or are produced as products in the manufacturing process, and that meet the criteria of the D001 ignitable liquids containing greater than ten percent total organic constituents (TOC) subcategory, is subject to the DEACT treatment standard described in subpart 3. For purposes of this item, de minimis losses include those from normal material handling operations such as spills from the unloading or transfer of materials from bins or other containers, leaks from pipes, valves, or other devices used to transfer materials; minor leaks from process equipment, storage tanks, or containers; leaks from well-maintained pump packings and seals; sample purgings; and relief device discharges.

**Subp. 2. Alternative technology.** A person may submit an application to the commissioner demonstrating that an alternative treatment method can achieve a measure of performance equivalent to that achievable by methods specified in subpart 1. The applicant must submit information demonstrating that the alter-

native treatment method complies with federal, state, and local requirements and is protective of human health and the environment. On the basis of all available information, the commissioner may approve the use of the alternative treatment method if the commissioner finds that the alternative treatment method provides a measure of performance equivalent to that achieved by methods specified in subpart 1. An approval must be stated in writing and contain provisions and conditions the commissioner considers appropriate. The person to whom the approval is issued must comply with all limitations contained in the determination.

**Subp. 3. Technology codes and description of technology-based standards.** The items in this subpart list the five-letter technology codes for use in notifications and the description of each technology-based standard.

When a combination of these technologies, called a treatment train, is specified as a single treatment standard, the order of application is specified in subpart 4 by indicating the five-letter technology code that must be applied first, then the designation "fb," which is an abbreviation for "followed by," then the five-letter technology code for the technology that must be applied next, and so on.

When more than one technology or treatment train are specified as alternative treatment standards, the five-letter technology codes or the treatment trains are separated by a semicolon (;) with the last technology preceded by the word "OR." This indicates that any one of these BDAT technologies or treatment trains can be used for compliance with the standard.

**A. ADGAS:** venting of compressed gases into an absorbing or reacting media (i.e., solid or liquid). Venting can be accomplished through physical release using valves/piping; physical penetration of the container; or penetration through detonation.

**B. AMLGM:** amalgamation of liquid, elemental mercury contaminated with radioactive materials using inorganic reagents such as copper, zinc, nickel, gold, and sulfur that result in a nonliquid, semisolid amalgam and thereby reducing potential emissions of elemental mercury vapors to the air.

**C. BIODG:** biodegradation of organics or nonmetallic inorganics (i.e., degradable inorganics that contain the elements of phosphorus, nitrogen, and sulfur) in units operated under either aerobic or anaerobic conditions so that a surrogate compound or indicator parameter has been substantially reduced in concentration in the residuals (e.g., total organic carbon can often be used as an indicator parameter for the biodegradation of many organic constituents that cannot be directly analyzed in wastewater residues).

**D. CARBN:** carbon adsorption (granulated or powdered) of nonmetallic inorganics, organometallics, and/or organic constituents, operated so that a surrogate compound or indicator parameter has not undergone breakthrough (e.g., total organic carbon can often be used as an indicator parameter for the adsorption of many organic constituents that cannot be directly analyzed in wastewater residues). Breakthrough occurs when the carbon has become saturated with the constituent (or indicator parameter) and substantial change in adsorption rate associated with that constituent occurs.

**E. CHOXD:** chemical or electrolytic oxidation using the following oxidation reagents (or waste reagents) or combinations or reagents:

- (1) hypochlorite (e.g., bleach);
- (2) chlorine;
- (3) chlorine dioxide;
- (4) ozone or ultraviolet light assisted ozone;
- (5) peroxides;
- (6) persulfates;
- (7) perchlorates;

(8) permanganates; and/or

(9) other oxidizing reagents of equivalent efficiency, performed in units operated so that a surrogate compound or indicator parameter has been substantially reduced in concentration in the residuals (e.g., total organic carbon can often be used as an indicator parameter for the oxidation of many organic constituents that cannot be directly analyzed in wastewater residues). Chemical oxidation specifically includes what is commonly referred to as alkaline chlorination.

F. CHRED: chemical reduction using the following reducing reagents (or waste reagents) or combinations of reagents:

(1) sulfur dioxide;

(2) sodium, potassium, or alkali salts of sulfites, bisulfites, metabisulfites, and polyethylene glycols (e.g., NaPEG and KPEG);

(3) sodium hydrosulfide;

(4) ferrous salts; and/or

(5) other reducing reagents of equivalent efficiency, performed in units operated such that a surrogate compound or indicator parameter has been substantially reduced in concentration in the residuals (e.g., total organic halogens can often be used as an indicator parameter for the reduction of many halogenated organic constituents that cannot be directly analyzed in wastewater residues). Chemical reduction is commonly used for the reduction of hexavalent chromium to the trivalent state.

G. DEACT: deactivation to remove the hazardous characteristics of a waste due to its ignitability, corrosivity, and/or reactivity.

H. FSUBS: fuel substitution in units operated according to applicable technical operating requirements.

I. HLVT: vitrification of high level mixed radioactive wastes in units in compliance with all applicable radioactive protection requirements under control of the Nuclear Regulatory Commission.

J. IMERC: incineration of wastes containing organics and mercury in units operated according to the technical operating requirements of parts 7045.0542 and 7045.0640. All wastewater and nonwastewater residues derived from this process must comply with the corresponding treatment standards per waste code with consideration of any applicable subcategories (e.g., high or low mercury subcategories).

K. INCIN: incineration units operated according to the technical operating requirements of parts 7045.0542 and 7045.0640.

L. LLEXT: liquid-liquid extraction (often referred to as solvent extraction) of organics from liquid wastes into an immiscible solvent for which the hazardous constituents have a greater solvent affinity, resulting in an extract high in organics that must undergo either incineration, reuse as a fuel, or other recovery/reuse and a raffinate (extracted liquid waste) proportionately low in organics that must undergo further treatment as specified in the standard.

M. MACRO: macroencapsulation with surface coating materials such as polymeric organics (e.g., resins and plastics) or with a jacket of inert inorganic materials to substantially reduce surface exposure to potential leaching media. Macroencapsulation specifically does not include any material that would be classified as a tank or container according to part 7045.0020.

N. NEUTR: neutralization with the following reagents (or waste reagents) or combinations of reagents:

(1) acids;

(2) bases; or

(3) water (including wastewaters) resulting in a pH greater than two but less than 12.5 as measured in the aqueous residuals.



O. NLDBR: no land disposal based on recycling.

P. PRECP: chemical precipitation of metals and other inorganics as insoluble precipitates of oxides, hydroxides, carbonates, sulfides, sulfates, chlorides, fluorides, or phosphates. The following reagents (or waste reagents) are typically used alone or in combination:

- (1) lime (i.e., containing oxides and/or hydroxides of calcium and/or magnesium);
- (2) caustic (i.e., sodium and/or potassium hydroxides);
- (3) soda ash (i.e., sodium carbonate);
- (4) sodium sulfide;
- (5) ferric sulfate or ferric chloride;
- (6) alum; or
- (7) sodium sulfate.

Additional flocculating, coagulation, or similar reagents/processes that enhance sludge dewatering characteristics are not precluded from use.

Q. RBERY: thermal recovery of beryllium.

R. RCGAS: recovery/reuse of compressed gases including techniques such as reprocessing of the gases for reuse/resale; filtering/adsorption of impurities; remixing for direct reuse of resale; and use of the gas as a fuel source.

S. RCORR: recovery of acids or bases using one or more of the following recovery technologies:

- (1) distillation (i.e., thermal concentration);
- (2) ion exchange;
- (3) resin or solid adsorption;
- (4) reverse osmosis; and/or
- (5) incineration for the recovery of acid.

Note: this does not preclude the use of other physical phase separation or concentration techniques such as decantation, filtration (including ultrafiltration), and centrifugation, when used in conjunction with the recovery technologies in sub-items (1) to (5).

T. RLEAD: thermal recovery of lead in secondary lead smelters.

U. RMERC: retorting or roasting in a thermal processing unit capable of volatilizing mercury and subsequently condensing the volatilized mercury for recovery. The retorting or roasting unit or facility must be subject to one or more of the following:

(1) a National Emissions Standard for Hazardous Air Pollutants (NESHAP) for mercury;

(2) a Best Available Control Technology (BACT) or a Lowest Achievable Emission Rate (LAER) standard for mercury imposed pursuant to a Prevention of Significant Deterioration (PSD) permit; or

(3) a state permit that establishes emission limitations for mercury within meaning of section 302 of the Clean Air Act. All wastewater and nonwastewater residues derived from this process must comply with the corresponding treatment standards per waste code with consideration of any applicable subcategories (e.g., high or low mercury subcategories).

V. RMETL: recovery of metals or inorganics using one or more of the following direct physical/removal technologies:

- (1) ion exchange;
- (2) resin or solid (i.e., zeolites) adsorption;
- (3) reverse osmosis;
- (4) chelation/solvent extraction;

- (5) freeze crystallization;
- (6) ultrafiltration; and/or
- (7) simple precipitation (i.e., crystallization).

NOTE: This does not preclude the use of other physical phase separation or concentration techniques such as decantation, filtration (including ultrafiltration), and centrifugation, when used in conjunction with the recovery technologies in subitems (1) to (7).

W. RORGS: recovery of organics using one or more of the following technologies:

- (1) distillation;
- (2) thin film evaporation;
- (3) steam stripping;
- (4) carbon adsorption;
- (5) critical fluid extraction;
- (6) liquid-liquid extraction;
- (7) precipitation/crystallization (including freeze crystallization); or
- (8) chemical phase separation techniques (i.e., addition of acids,

bases, demulsifiers, or similar chemicals).

NOTE: This does not preclude the use of other physical phase separation techniques such as decantation, filtration (including ultrafiltration), and centrifugation, when used in conjunction with the recovery technologies in subitems (1) to (8).

X. RTHRM: thermal recovery of metals or inorganics from nonwastewaters in units defined in part 7045.0020, under the definition of industrial furnaces.

Y. RZINC: remelting for the purpose of recovery of zinc high temperature metal recovery units.

Z. STABL: stabilization with the following reagents (or waste reagents) or combinations of reagents:

- (1) portland cement; or
- (2) lime/pozzolans (e.g., fly ash and cement kiln dust).

NOTE: This does not preclude the addition of reagents (e.g., iron salts, silicates, and clays) designed to enhance the set/cure time and/or compressive strength, or to overall reduce the leachability of the metal or inorganic.

AA. SSTRP: steam stripping of organics from liquid wastes using direct application of steam to the wastes operated so that liquid and vapor flow rates and temperature and pressure ranges have been optimized, monitored, and maintained. These operating parameters are dependent on the design parameters of the unit, such as the number of separation stages and the internal column design, thus resulting in a condensed extract high in organics that must undergo incineration, reuse as a fuel, or other recovery/reuse and an extracted wastewater that must undergo further treatment as specified in the standard.

BB. WETOX: wet air oxidation performed in units operated so that a surrogate compound or indicator parameter has been substantially reduced in concentration in the residuals (e.g., total organic carbon can often be used as an indicator parameter for the oxidation of many organic constituents that cannot be directly analyzed in wastewater residues).

CC. WTRRX: controlled reaction with water for highly reactive inorganic or organic chemicals with precautionary controls for protection of workers from potential violent reactions and precautionary controls for potential emissions of toxic/ignitable levels of gases released during the reaction.

Subp. 4. **Technology-based standards by RCRA waste code.** Governed by technology-based standards listed in Code of Federal Regulations, title 40, part 268.42, Table 2.

**Subp. 5. Technology-based standards for specific radioactive hazardous mixed waste.** Governed by standards listed in Code of Federal Regulations, title 40, part 268.42, Table 3.

**Subp. 6. Application for alternative treatment methods.** A person may submit an application to the commissioner demonstrating that an alternative treatment method can achieve a measure of performance equivalent to that achievable by methods specified in subparts 1, 7, and 8. The applicant must submit information demonstrating that the applicant's treatment method complies with federal, state, and local requirements and is protective of human health and the environment. On the basis of all available information, the commissioner may approve the use of an alternative treatment method. The approval must be stated in writing and contain provisions and conditions the commissioner considers appropriate. The person to whom the approval is issued must comply with all limitations contained in the determination.

**Subp. 7. Exceptions for lab packs.** As an alternative to the otherwise applicable treatment standards under parts 7045.1350 to 7045.1360, lab packs are eligible for land disposal, provided the following requirements are met:

A. the lab packs comply with parts 7045.0538 and 7045.0638;

B. all hazardous wastes contained in the lab packs are specified in subpart 9 or 10;

C. the lab packs are incinerated according to part 7045.0542 or 7045.0640; and

D. any incinerator residues from lab packs containing D004, D005, D006, D007, D008, D010, and D011 are treated in compliance with the applicable treatment standards specified for the wastes in parts 7045.1350 to 7045.1360.

**Subp. 8. Exceptions for radioactive hazardous mixed wastes.** Radioactive hazardous mixed wastes with treatment standards specified in subpart 5 are not subject to any treatment standards specified in subpart 4 or part 7045.1355 or 7045.1358. Radioactive hazardous mixed wastes not subject to treatment standards in subpart 1 remain subject to all applicable treatment standards specified in subpart 4 and parts 7045.1355 and 7045.1358.

**Subp. 9. Organometallic lab packs.** Hazardous waste with the following EPA Hazardous Waste Nos. may be placed in an organometallic lab pack: P001; P002; P003; P004; P005; P006; P007; P008; P009; P013; P014; P015; P016; P017; P018; P020; P022; P023; P024; P025; P026; P027; P028; P031; P034; P036; P037; P038; P039; P040; P041; P042; P043; P044; P045; P047; P048; P049; P050; P051; P054; P056; P057; P058; P059; P060; P062; P063; P064; P065; P066; P067; P068; P069; P070; P071; P072; P073; P074; P075; P077; P081; P082; P084; P085; P087; P088; P089; P092; P093; P094; P095; P096; P097; P098; P099; P101; P102; P103; P104; P105; P108; P109; P110; P112; P113; P114; P115; P116; P118; P119; P120; P122; P123; U001; U002; U003; U004; U005; U006; U007; U008; U009; U010; U011; U012; U014; U015; U016; U017; U018; U019; U020; U021; U022; U023; U024; U025; U026; U027; U028; U029; U030; U031; U032; U033; U034; U035; U036; U037; U038; U039; U041; U042; U043; U044; U045; U046; U047; U048; U049; U050; U051; U052; U053; U055; U056; U057; U058; U059; U060; U061; U062; U063; U064; U066; U067; U068; U069; U070; U071; U072; U073; U074; U075; U076; U077; U078; U079; U080; U081; U082; U083; U084; U085; U086; U087; U088; U089; U090; U091; U092; U093; U094; U095; U096; U097; U098; U099; U101; U102; U103; U105; U106; U107; U108; U109; U110; U111; U112; U113; U114; U115; U116; U117; U118; U119; U120; U121; U122; U123; U124; U125; U126; U127; U128; U129; U130; U131; U132; U133; U134; U135; U136; U137; U138; U139; U140; U141; U142; U143; U144; U145; U146; U147; U148; U149; U150; U152; U153; U154; U155; U156; U157; U158; U159; U160; U161; U162; U163; U164; U165;

U166; U167; U168; U169; U170; U171; U172; U173; U174; U176; U177; U178; U179; U180; U181; U182; U183; U184; U185; U186; U187; U188; U189; U190; U191; U192; U193; U194; U196; U197; U200; U201; U202; U203; U204; U205; U206; U207; U208; U209; U210; U211; U213; U214; U215; U216; U217; U218; U219; U220; U221; U222; U223; U225; U226; U227; U228; U234; U235; U236; U237; U238; U239; U240; U243; U244; U246; U247; U248; U249; U328; U353; U359; F001; F002; F003; F004; F005; F006; F010; F020; F021; F023; F024; F026; F027; F028; K001; K002; K008; K009; K010; K011; K013; K014; K015; K016; K017; K018; K019; K020; K021; K022; K023; K024; K025; K026; K027; K028; K029; K030; K031; K032; K033; K034; K035; K036; K037; K038; K039; K040; K041; K042; K043; K044; K045; K046; K047; K048; K049; K050; K051; K052; K054; K060; K061; K064; K065; K066; K069; K071; K073; K083; K084; K085; K086; K087; K093; K094; K095; K096; K097; K098; K099; K101; K102; K103; K104; K105; K111; K112; K113; K114; K115; K116; K117; K118; K123; K124; K125; K126; K136; D001; D002; D003; D004; D005; D006; D007; D008; D010; D011; D012; D013; D014; D015; D016; and D017.

**Subp. 10. Organic lab packs.** Hazardous wastes with the following EPA Hazardous Waste Nos. may be placed in an organic lab pack: P001; P002; P003; P004; P005; P006; P007; P008; P009; P013; P014; P015; P016; P017; P018; P020; P022; P023; P024; P025; P026; P027; P028; P031; P034; P036; P037; P038; P039; P040; P041; P042; P043; P044; P045; P046; P047; P048; P049; P050; P051; P054; P057; P058; P059; P060; P062; P063; P064; P065; P066; P067; P068; P069; P070; P071; P072; P073; P074; P075; P077; P081; P082; P084; P085; P087; P088; P089; P092; P093; P094; P095; P096; P097; P098; P099; P101; P102; P103; P104; P105; P108; P109; P110; P111; P112; P113; P114; P115; P116; P118; P119; P120; P122; P123; U001; U002; U003; U004; U005; U006; U007; U008; U009; U010; U011; U012; U014; U015; U016; U017; U018; U019; U020; U021; U022; U023; U024; U025; U026; U027; U028; U029; U030; U031; U033; U034; U035; U036; U037; U038; U039; U041; U042; U043; U044; U045; U046; U047; U048; U049; U050; U051; U052; U053; U055; U056; U057; U058; U059; U060; U061; U062; U063; U064; U066; U067; U068; U069; U070; U071; U072; U073; U074; U075; U076; U077; U078; U079; U080; U081; U082; U083; U084; U085; U086; U087; U088; U089; U090; U091; U092; U093; U094; U095; U096; U097; U098; U099; U101; U102; U103; U105; U106; U107; U108; U109; U110; U111; U112; U113; U114; U115; U116; U117; U118; U119; U120; U121; U122; U123; U124; U125; U126; U127; U128; U129; U130; U131; U132; U133; U135; U137; U138; U139; U140; U141; U142; U143; U147; U148; U149; U150; U153; U154; U155; U156; U157; U158; U159; U160; U161; U162; U163; U164; U165; U166; U167; U168; U169; U170; U171; U172; U173; U174; U176; U177; U178; U179; U180; U181; U182; U183; U184; U185; U186; U187; U188; U189; U190; U191; U192; U193; U194; U196; U197; U200; U201; U202; U203; U205; U206; U207; U208; U209; U210; U211; U213; U214; U218; U219; U220; U221; U222; U223; U225; U226; U227; U228; U234; U235; U236; U237; U238; U239; U240; U243; U244; U246; U247; U248; U249; U328; U353; U359; F001; F002; F003; F004; F005; F010; F020; F021; F023; F024; F026; F027; F028; K001; K009; K010; K011; K013; K014; K015; K016; K017; K018; K019; K020; K021; K022; K023; K024; K025; K026; K027; K029; K030; K031; K032; K033; K034; K035; K036; K037; K038; K039; K040; K041; K042; K043; K044; K045; K046; K047; K048; K049; K050; K051; K052; K054; K060; K065; K073; K083; K084; K085; K086; K087; K093; K094; K095; K096; K097; K098; K099; K101; K102; K103; K104; K105; K111; K112; K113; K114; K115; K116; K117; K118; K123; K124; K125; K126; K136; D001; D012; D013; D014; D015; D016; and D017.

**Subp. 11. Recommended technologies to achieve deactivation of characteristics.** The treatment standard for many subcategories of the EPA Hazardous

Waste Nos. D001, D002, D003, K044, K045, and K047 wastes is listed simply as "Deactivation to remove the characteristics of ignitability, corrosivity, and reactivity." EPA has determined that many technologies, when used alone or in combination, can achieve this standard. The following appendix presents a partial list of these technologies, using the five-letter technology codes established in subpart 3. Use of these specific technologies is not mandatory and does not preclude direct reuse, recovery, or the use of other pretreatment technologies, provided deactivation is achieved and these alternative methods are not performed in units designated as land disposal.

**Statutory Authority:** *MS s 116.07; 116.37*

**History:** *16 SR 2239*

#### **7045.1380 PROHIBITIONS ON STORAGE OF RESTRICTED WASTES.**

*[For text of subps 1 to 3, see M.R.]*

**Subp. 4. Exemptions.** If a generator's waste is exempt from a prohibition on the type of land disposal used for the waste, because of an approved case-by-case extension under part 7045.0075, subpart 6, an approved petition under part 7045.0075, subparts 8 and 9, or a national capacity variance under parts 7045.1320 to 7045.1330, the prohibition in subpart 1 does not apply during the period of the exemption.

*[For text of subps 5 and 6, see M.R.]*

**Statutory Authority:** *MS s 116.07; 116.37*

**History:** *16 SR 2239*