KEY (for internal Agency use only)
▶ = Permitting/Corrective Action
▶ = Engineering
▶ = Chemistry
▶ = Financial Assurance
▶ = Geology

Hazardous Waste "Part B" Operating Permit Application
Container Module

The following links to guidance are for informational purposes only. Please do not include guidance with the permit application submittal.

Introduction to Containers

Containment System Guidance for Permitted Container Storage Areas

Add the permit application module information below where designated in the base checklist (sequentially).

C. WASTE CHARACTERISTICS

C-1a ▶ ▶ Containerized Waste: 40 CFR 264.172, 270.15(b)(1)

Identify the container construction materials and demonstrate that waste is compatible with container construction materials.

Indicate that containers of waste with free liquids will be stored in areas with an adequate secondary containment system. For owners and operators that store containers of waste without a secondary containment system, provide the test procedures and results, or other documentation or information, which show that the wastes do not contain free liquids. A suggested test for free liquids is the Paint Filter Liquids Test, Method 9095B in "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods, " EPA Publication No. SW-846.

C-3a(6) ▶ Leachates: 40 CFR 260.10, 268.35(a)

Describe procedures that will be used to determine whether a single-source leachate meets the applicable treatment standards or to demonstrate that the waste has been treated by the appropriate specified treatment technology. Single-source leachate generated from liquids percolating through a single waste (e.g., a monofill), is subject to the land disposal restrictions of the listed waste from which is derived. Single-source leachate cannot be combined to produce multi-source leachates. Multi-source leachates derived solely from dioxin-containing wastes (i.e., F020-F023 and F026-F028) are handled as though they are single-source leachates and must meet the treatment standards for dioxin-containing waste.

Describe procedures that will be used to determine whether F039 multi-source leachate meets the applicable treatment standards prior to land disposal. Multi-source leachate F039 derives from liquids that percolate through land-disposed listed wastes. Multi-source leachate is subject to the treatment standards of P- and U-wastes from which the leachate may be derived. [Note that it is not necessary to test for every hazardous constituent that may comprise F039 multi-source leachate. EPA guidance requires an initial analysis of all regulated constituents in F039 and based on the results of the analysis, development of a reduced list of constituents to be monitored on a regular basis. The testing scheme must be supplemented with less-frequent, broader analyses to monitor for any changes in the chemical composition of the leachate.]

Leachate that originates from newly identified waste (i.e., those without treatment standards), is not coded as F039 waste but is labeled with the newly listed waste codes from which it is derived.

C-3a(7) ▶ Lab Packs: 40 CFR 268.7(a)(7), 268.7(a)(8), 268.42(c), Part 268 Appendix IV, Part 268 Appendix V

Prior to being land disposed, the wastes contained in a lab pack must meet all applicable treatment standards for each waste type. Describe procedures that will be used to determine whether lab pack wastes meet the applicable treatment standards or to demonstrate that the waste has been treated by the appropriate specified treatment technology. Process knowledge can be used to make this determination. Discuss procedures to ensure lab pack wastes will meet land disposal requirements.

Alternatively, a generator can establish two general lab pack categories: (1) organometallic lab packs and (2) organic lab packs. Permissible waste code components of these two lab pack categories are listed in Appendix IV and Appendix V of Part 268. Treatment of organic lab packs requires incineration. Treatment of organometallic lab packs requires incineration followed by treatment of residue to meet D004, D005, D006, D007, D008, D010, and D011 characteristic waste treatment standards. Discuss procedures to ensure that lab pack wastes will meet land disposal requirements.

If lab pack hazardous waste is combined with non-lab pack hazardous waste prior to or during treatment, indicate that the entire mixture will be treated to meet the most stringent treatment standard for each waste constituent before being land disposed.

C-3c(1) ▶ ▶ Restricted Wastes Stored in Containers: 40 CFR 268.50(a)(2)(i)

If wastes are stored in containers, the owner/operator must demonstrate that each container will be clearly marked to identify its contents and the date each period of accumulation begins.

D. ► PROCESS INFORMATION

D-1 Containers: 40 CFR 270.15, 264.170 through 264.178

D-1a Containers with Free Liquids

D-1a(1) Description of Containers: 40 CFR 264.171, 264.172, 270.14(b)(2)

Provide the following information about the containers used to treat/store hazardous waste: approximate number of each type of container, construction materials, dimensions and usable volumes, DOT specifications or other manufacturer specifications, liner specifications (if applicable), container condition (new, used, reconditioned), and markings and labels.

D-1a(2) Container Management Practices: 40 CFR 264.173

Describe the container management practices used to ensure that hazardous waste containers are always kept closed during storage, except when adding or removing waste, and are not opened, handled, or stored in a manner that may cause them to rupture or to leak. Include a discussion of procedures for transporting containers across the facility.

Indicate the aisle space maintained between rows of containers and provide the maximum number, volume, and stacking height of containers for each area in which containers are stored.

D-1a(3) Secondary Containment System Design and Operation: 40 CFR 270.15(a)(1), 264.175(a), 264.175(d)

Provide design and profile drawings of the existing or planned container storage area(s), showing the secondary containment system. Indicate on the drawings the areas in which incompatible wastes will be stored. The secondary containment system requirements also apply to storage areas holding wastes F020, F021, F022, F023, F026, and F027, whether or not the wastes contain free liquids.

D-1a(3)(a) Requirement for the Base or Liner to Contain Liquids: 40 CFR 264.175(b)(1)

Demonstrate the capability of the base to contain liquids, including:

- Statement that base is free of cracks or gaps;
- Demonstration of imperviousness of base to wastes and precipitation;
- Base design and materials of construction;
- Engineering evaluation of structural integrity of base; and
- Documentation of compatibility of base with wastes.

D-1a(3)(b) Containment System Drainage: 40 CFR 270.15(a)(2), 264.175(b)(2)

The base must be sloped or the containment system must be otherwise designed and operated to drain and remove liquids resulting from leaks, spills, or precipitation, unless the containers are elevated or are otherwise protected from contact with accumulated liquids.

D-1a(3)(c) Containment System Capacity: 40 CFR 270.15(a)(3), 264.175(b)(3)

Provide calculations that demonstrate that the containment system will have sufficient capacity to contain 10% of the volume of the containers or the volume

of the largest container, whichever is greater. This demonstration must discuss the volume of largest container, total volume of containers, containment structure capacity, and volume displaced by containers and other structures in the containment system.

D-1a(3)(d) Control of Run-on: 40 CFR 270.15(a)(4), 264.175(b)(4)

Run-on into the containment system must be prevented, unless the collection system has sufficient excess capacity in addition to that required in the above paragraph to contain any run-on that might enter the system. Describe the dikes, berms, drainage system, etc., used to prevent run-on, **or** provide calculations demonstrating that the containment system has sufficient excess capacity to contain run-on. (A 24-hour, 25-year storm event can be used as the basis for the calculations).

D-1a(3)(e) Removal of Liquids from Containment System: 40 CFR 270.15(a)(5), 264.175(b)(5)

Spilled or leaked waste and accumulated precipitation must be removed from the sump or collection area in a timely manner to prevent overflow of the containment system. Describe the procedures and equipment used during liquids removal. Provide sump, pump, and piping drawings, if applicable. Specify the methods for determining whether the removed material is a hazardous waste and for handling it as such.

D-1b Containers Without Free Liquids

D-1b(1) Test for Free Liquids: 40 CFR 270.15(b)(1)

Submit the test procedures and results or other documentation or information to show that the waste to be stored in the container storage area does not contain free liquids.

D-1b(2) Description of Containers: 40 CFR 264.171, 264.172

Provide the following information about the containers used to treat/store hazardous waste: approximate number of each type of container, construction materials, dimensions and usable volumes, DOT specifications or other manufacturer specifications, liner specifications (if applicable), container condition (new, used, reconditioned), and marking and labels.

D-1b(3) Container Management Practices: 40 CFR 264.173

Describe the container management practices used to ensure that hazardous waste containers are always kept closed during storage, except when adding or removing waste, and are not opened, handled, or stored in a manner that may cause them to rupture or to leak. Include a discussion of procedures for transporting containers across the facility. Indicate the aisle space maintained between rows of containers and provide the maximum number, volume, and stacking height of containers for each area in which containers are stored.

D-1b(4) Container Storage Area Drainage: 40 CFR 270.15(b)(2), 264.175(c)

Describe how the storage area is designed or operated to drain and remove liquids unless containers are otherwise kept from contact with standing liquids.

F. ▶ ▶ PROCEDURES TO PREVENT HAZARDS

F-2b Specific Process Inspection Requirements: 40 CFR 270.14(b)(5), 264.15(b)(4)

F-2b(1) Container Inspection: 40 CFR 264.174

Demonstrate that the containers and the container storage area will be inspected weekly for leaks, spills and deterioration caused by corrosion or other factors.

F-5c Management of Ignitable or Reactive Wastes in Containers: 40 CFR 270.15(c), 264.176

Provide sketches, drawings, or data demonstrating that containers of ignitable or reactive waste are located at least 15 meters (50 feet) from the facility's property line.

F-5d Management of Incompatible Wastes in Containers: 40 CFR 270.15(d), 264.177

Describe the procedures used to ensure that incompatible wastes and materials are not placed in the same containers or in unwashed containers that previously held incompatible waste. If a storage container holds hazardous waste that is incompatible with any waste or other materials stored nearby in other containers, piles, open tanks, or surface impoundments, document that the waste is separated from other materials or protected from them by a dike, wall or other device.

G. ▶ CONTINGENCY PLAN

G-4i Container Spills and Leakage: 40 CFR 264.52, 264.171

Specify procedures to be used when responding to container spills or leakage, including procedures and timing for expeditious removal of spilled waste and repair or replacement of the container(s).

I. CLOSURE PLANS, POST-CLOSURE PLANS, AND FINANCIAL REQUIREMENTS

I-1e(4) ▶ ▶ ▶ Closure of Containers: 40 CFR 264.178, 264.112(b)(3), 270.14(b)(13)

Show that at closure, all hazardous waste and hazardous waste residues will be removed from the containment system, and how remaining containers, liners, bases, and soil containing or contaminated with hazardous waste or hazardous waste residues will be decontaminated or removed. The description should address the following:

- Hazardous waste removal and disposal;
- Container decontamination and disposal;
- Site decontamination and disposal including liners, soil and washes;
- Verification of decontamination; and
- Maximum inventory.