

PART B REVIEW CHECKLIST

SECTION D - PROCESS INFORMATION - CONTAINER STORAGE

Last updated: February 2005

Facility/ID #		Date	
Reviewer		DO	

Relevant Guidance Documents: *None*

	YES	NO	NA	Page #	Notes - NOD Comment #	Include on Inspection Checklist?
D-1 <u>Containers</u>						
D-1a <u>Description of Containers</u> OAC 3745-55-71, 3745-55-72						
Does the application provide the following information about the containers used to treat/store hazardous waste:						
(1) approximate number of each type of container?						
(2) construction materials, dimensions and usable volumes?						
(3) DOT specifications or other manufacturer specifications?						
(4) liner specifications (if applicable)?						
(5) compatibility with the container?						
(6) markings and labels?, and						
(7) container condition (new, used, reconditioned)?						
D-1b <u>Container Management Practices</u> OAC 3745-54-35, 3745-55-71, 3745-55-73, 3745-55-74						

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Does the application indicate the aisle space maintained between rows of containers in order to allow unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of the facility operation in an emergency unless it can be satisfactorily demonstrated in the permit application that aisle space is not needed for any of these purposes?						
Does the application 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?						
Does the application include a discussion of procedures for transporting containers across the facility?						
Does the application indicate that the owner or operator will inspect areas where containers are stored, looking for leaking containers and for deterioration of containers and the containment system caused by corrosion or other factors, at least weekly?						
Does the application state that if a container holding a hazardous waste is not in good condition (e.g., severe rusting, apparent structural defects) or if it begins to leak, that the owner or operator will transfer the hazardous waste from such container to a container that is in good condition?						
D-1c <u>Special Requirements for Ignitable, Reactive or Incompatible Wastes</u> OAC 3745-55-76, 3745-55-77, 3745-54-17						
Does the application state that containers holding ignitable or reactive waste must be located at least fifteen meters (fifty feet) from the facility's property line?						

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Does the application state that ignitable or reactive waste will be separated and protected from sources of ignition or reaction including: open flames, smoking, cutting and welding, hot surfaces, frictional heat, sparks, spontaneous ignition, and radiant heat?						
Does the application state that a storage container holding a waste that is incompatible with any waste or other materials stored nearby will be separated from the other materials or protected from them (by means of a dike, berm, wall, or other device)?						
Does the application state that incompatible wastes, or incompatible wastes and materials, will not be placed in the same container or in an unwashed container that previously held an incompatible waste or material?						
Does the application state that waste analyses, trial tests or other documentation will be used to show that the facility will take precautions to prevent reactions of ignitable or reactive waste, or between incompatible wastes or incompatible wastes and other materials?						
D-1d <u>Containers Without Free Liquids</u> OAC 3745-50-44 (C)(1)(b), 3745-55-75(C)						
Does the application describe the test procedures and results or other documentation or information to show that the wastes to be stored in the containers storage area do not contain free liquids?						
Does the application describe how the storage area is designed and operated to drain and remove liquid resulting from precipitation?						
Does the application describe how the containers are elevated or otherwise protected from contact with accumulated liquid?						

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Does the application state that containers that do not contain free liquids will contain the waste codes F020, F021, F022, F023, F026, and F027? If yes , the storage area must have a containment system that meets the requirements in the remainder of this checklist.						
D-1e Containers with Free Liquids						
D-1e(1) Secondary Containment System Design and Operation OAC 3745-50-44 (C)(1)(a)(i), 3745-50-44 (C)(1)(c)&(d), 3745-55-75 (A) & (D)						
Does the application provide design and profile drawings of the existing or planned container storage area(s), showing the secondary containment system? Note that 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.						
Does the application indicate on the drawings the areas in which incompatible wastes will be stored and/or the location or buffer zone for containers holding ignitable or reactive wastes?						
Does the application provide the maximum number, volume, and stacking height of containers for each area in which containers are stored? Does the stacking height allow for leaks to be maintained in the secondary containment?						
D-1e(1)(a) Requirement for the Base or Liner to Contain Liquids OAC 3745-55-75 (B)(1), 3745-50-44 (C)(1)(a)(i)						
Does the application demonstrate the capability of the base to contain liquids, including:						
(1) statement that base is free of cracks or gaps?						
(2) demonstration of imperviousness of base to wastes and precipitation?						

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(3) base design and materials of construction?						
(4) engineering evaluation of structural integrity of base?, and						
(5) discussion of compatibility of base with wastes? Note, this may be important for reactive wastes that may form shock sensitive wastes when mixed with the metallic salts that may be found in concrete.						
D-1e(1)(b) <u>Containment System Drainage</u> OAC 3745-50-44 (C)(1)(a)(ii), 3745-55-75 (B)(2)						
Does the application submit information demonstrating that the base is sloped or the containment system is 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-1e(1)(c) <u>Containment System Capacity:</u> OAC 3745-50-44 (C)(1)(a)(iii), 3745-55-75 (B)(3)						
Does the application provide calculations which demonstrate that the containment system will have sufficient capacity to contain 10 percent 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. Containers that do not contain free liquids (as demonstrated by the facility) need not be considered in this determination.						
D-1e(1)(d) <u>Control of Run-on:</u> OAC 3745-50-44 (C)(1)(a)(iv), 3745-55-75 (B)(4)						
Does the application provide information that states that run-on into the containment system is 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? (A 24-hour 25-year storm event can be used as the basis for the calculations).						

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Does the application 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—see http://hdsc.nws.noaa.gov/hdsc/pfds/orb/oh_pfds.html).						
D-1e(1)(e) <u>Removal of Liquids from Containment System:</u> OAC 3745-50-44 (C)(1)(a)(v), 3745-55-75 (B)(5)						
Does the application state that spilled or leaked waste and accumulated precipitation will be removed from the sump or collection area in a timely manner to prevent overflow of the containment system (timely manner should be defined by the facility)?						
Does the application describe the procedures and equipment used during liquids removal? Does the facility provide sump, pump, and piping drawings, if applicable?						
Does the application specify the methods for determining whether the removed material is a hazardous waste and for handling it as such?						