

US EPA ARCHIVE DOCUMENT

CHECKLIST FOR REVIEW OF FEDERAL RCRA PERMIT APPLICATIONS

SECTION F. PROCEDURES TO PREVENT HAZARDS

	Section and Requirement	Federal Regulation	Review Consideration^a	Location in Application^b	See Attached Comment Number^c
F-1	Security	270.14(b)(4); 264.14			
F-1a	Security Procedures and Equipment	270.14(b)(4); 264.14	Unless waiver is granted, facility must have surveillance system or a barrier to entry.		
F-1a(1)	24-Hour Surveillance System	270.14(b)(4); 264.14	Monitor/camera, guards, or personnel must continuously monitor or control access to active parts of facility.		
F-1a(2)(a)	Barrier	270.14(b)(4); 264.14	This item required if 24-hour surveillance system is not feasible. Describe artificial or natural barrier.		
F-1a(2)(b)	Means to Control Entry	270.14(b)(4); 264.14	This item required if 24-hour surveillance system is not feasible.		
F-1a(3)	Warning Signs	270.14(b)(4); 264.14	Signs in english must be posted at each entrance, and be legible from 25 feet.		
F-1b	Waiver	270.14(b)(4); 264.14	Owner/operator must prevent unknowing entry, and minimize unauthorized entry of persons or livestock unless can demonstrate:		
F-1b(1)	Injury to Intruder	270.14(b)(4); 264.14	Assure physical contact with waste, structure, or equipment will not injure unknowing intruder.		
F-1b(2)	Violation Caused by Intruder	270.14(b)(4); 264.14	Assure disturbance of waste or equipment by unauthorized intruder will not cause a violation.		
F-2	Inspection Schedule	270.14(b)(5); 264.15	Inspection is required for monitoring equipment, safety emergency equipment, communication and alarm systems,		

CHECKLIST FOR REVIEW OF FEDERAL RCRA PERMIT APPLICATIONS				
SECTION F. PROCEDURES TO PREVENT HAZARDS				
Section and Requirement	Federal Regulation	Review Consideration ^a	Location in Application ^b	See Attached Comment Number ^c
		decontamination equipment, security devices, and operating and structural equipment.		
F-2a	General Inspection Requirements	270.14(b)(5); 264.15(a),(b); 264.33		
F-2a(1)	Types of Problems	270.14(b)(5); 264.15(b)(3)	Inspection checklist must identify types of problem.	
F-2a(2)	Frequency of Inspections	270.14(b)(5); 264.15(b)(4)	Based on rate of deterioration of equipment and probability of environmental or human health incident.	
F-2a(3)	Schedule of Remedial Action	270.14(b)(5); 264.15(c)	Owner/operator must immediately remedy any deterioration or malfunction of equipment or structures to ensure problem does not lead to environmental or human health hazard.	
F-2a(4)	Inspection Log	270.14(b)(5); 264.15(d)	Provide example log or summary.	
F-2b	Specific Process Inspection Requirements	270.14(b)(5)		
F-2b(1)	Container Inspection	270.14(b)(5); 264.174	Inspect at least weekly.	
F-2b(2)	Tank System Inspection	270.14(b)(5); 264.195	Owner/operator must develop schedule and inspect at least once daily.	
F-2b(2)(a)	Tank System External Corrosion and Releases	270.14(b)(5); 264.195(b)(1)	Owner/operator must inspect that aboveground portion and check for corrosion.	

CHECKLIST FOR REVIEW OF FEDERAL RCRA PERMIT APPLICATIONS

SECTION F. PROCEDURES TO PREVENT HAZARDS

	Section and Requirement	Federal Regulation	Review Consideration^a	Location in Application^b	See Attached Comment Number^c
F-2b(2)(b)	Tank System Construction Materials and Surrounding Area	270.14(b)(5); 264.195(b)(3)	Observe construction materials and area around external portion for signs of release of hazardous waste.		
F-2b(2)(c)	Tank System Overfilling Control Equipment	270.14(b)(5); 264.195(a)	Develop and follow schedule for inspection of overfill controls.		
F-2b(2)(d)	Tank System Monitoring and Leak Detection Equipment	270.14(b)(5); 264.195(b)(2)	Analyze data gathered from monitoring equipment to ensure tank is operating according to design.		
F-2b(2)(e)	Tank System Cathodic Protection	270.14(b)(5); 264.195(c)	Inspect according to schedule.		
F-2b(3)	Waste Pile Inspection	270.14(b)(5); 270.18(d); 264.254(b)	Describe how waste pile will be inspected daily and after storms.		
F-2b(3)(a)	Runon and Runoff Control System	270.14(b)(5); 264.254(b)(1)	Inspections should identify deterioration, malfunction, or improper operation of control system.		
F-2b(3)(b)	Wind Dispersal System	270.14(b)(5); 264.254(b)(2)	Facility should inspect proper function of wind dispersal system.		
F-2b(3)(c)	Leachate Collection and Removal System	270.14(b)(5); 270.18 (d); 264.254(b)(3), (c)	Determine whether there is leachate present in functioning double liner system.		
F-2b(4)	Surface Impoundment Inspection	270.14(b)(5); 270.17(c); 264.226(b),(c)	Describe how each surface impoundment will be inspected to meet requirements of monitoring and inspection and waiver requirement.		
F-2b(4)(a)	Condition Assessment	270.14(b)(5);	Describe how surface impoundment will be		

CHECKLIST FOR REVIEW OF FEDERAL RCRA PERMIT APPLICATIONS

SECTION F. PROCEDURES TO PREVENT HAZARDS

Section and Requirement	Federal Regulation	Review Consideration ^a	Location in Application ^b	See Attached Comment Number ^c
	264.226(b)	inspected weekly and after storms.		
F-2b(4)(a)(1)	Overtopping Control System	270.14(b)(5); 264.226(b)(1)	Inspect for deteriorating, malfunction, or improper operation of control system.	
F-2b(4)(a)(2)	Impoundment Contents	270.14(b)(5); 264.226(b)(2)	Inspect for sudden drop in level of impoundment contents.	
F-2b(4)(a)(3)	Dikes and Containment Devices	270.14(b)(5); 264.226(b)(3)	Inspect for severe erosion in containment devices.	
F-2b(4)(b)	Structural Integrity	270.14(b)(5); 264.226(c)	Specify procedure for assessing integrity of surface impoundments.	
F-2b(4)(c)	Leak Detection System	270.14(b)(5); 270.17(c); 264.226(d)	Describe how double liner system and leak detection system will be inspected.	
F-2b(5)(a)	Incinerator and Associated Equipment	270.14(b)(5); 264.347(b)	Describe procedures for daily visual inspection of incinerator and associated equipment.	
F-2b(5)(b)	Incinerator Waste Feed Cutoff System and Alarms	270.14(b)(5); 264.347(c)	Describe procedure and frequency of testing emergency waste feed cutoff system.	
F-2b(6)	Landfill Inspection	270.14(b)(5); 264.303(b)	For operating landfill, describe how it will be inspected weekly and after storms.	
F-2b(6)(a)	Runon and Runoff Control System	270.14(b)(5); 264.303(b)(1)	Deterioration, malfunction, or improper operation of runon and runoff control system.	
F-2b(6)(b)	Wind Dispersal Control System	270.14(b)(5); 264.303(b)(2)	Proper functioning of wind dispersal control systems, where present.	
F-2b(6)(c)	Leachate Collection and Removal	270.14(b)(5);	In properly functioning double liner system,	

CHECKLIST FOR REVIEW OF FEDERAL RCRA PERMIT APPLICATIONS

SECTION F. PROCEDURES TO PREVENT HAZARDS

Section and Requirement	Federal Regulation	Review Consideration ^a	Location in Application ^b	See Attached Comment Number ^c
System	264.303(b)(3), (c)	is there a presence of leachate? Leak detection required under 264.301(c) or 264.301(d) must record amount of leakage from each system weekly.		
F-2b(7)	Land Treatment Facility Inspection	270.14(b)(5); 264.273(g)		Describe how land treatment facility will be inspected weekly and after storms.
F-2b(7)(a)	Runon and Runoff Control System	270.14(b)(5); 264.273(g)(1)		
F-2b(7)(b)	Wind Dispersal Control System	270.14(b)(5); 264.273(g)(2)		
F-2b(8)	Miscellaneous Unit Inspections	270.14(b)(5); 264.602		Provide inspection program that ensures compliance with standards in 264.601 and 270.23.
F-2b(9)	Boilers and Industrial Furnaces (BIF) Inspection	270.14(b)(5); 264.15; 266.102(a)(2)(ii),(e)(8); 266.111(e)(3)		Demonstrate that BIF will be visually inspected daily, automatic waste feed cutoff inspected at least weekly, and direct transfer area at least once an hour when waste is being transferred.
F-2b(10)	Containment Building Inspection	270.14(b)(5); 264.1101(c)(3), (4)		Demonstrate owner/operator will inspect and document at least weekly, monitoring equipment, leak detection equipment, containment building, and surrounding areas for waste releases.
F-2b(11)	Drip Pad Inspection	270.14(b)(5); 264.574		Demonstrate that the drip pad owner/operator will inspect and document at least weekly and after storms, the leak detection and collection equipment, the drip pad surface, and the runon and runoff

CHECKLIST FOR REVIEW OF FEDERAL RCRA PERMIT APPLICATIONS

SECTION F. PROCEDURES TO PREVENT HAZARDS

Section and Requirement	Federal Regulation	Review Consideration ^a	Location in Application ^b	See Attached Comment Number ^c
		control systems for evidence of deterioration, malfunction, improper operation, or leakage of hazardous waste.		
F-3	Waiver or Documentation of Preparedness and Prevention Requirements	270.14(b)(6) 264.32(a) - (d)		Facility must submit justification for any waiver to requirements of this section.
F-3(a)	Equipment Requirements	270.14(b); 264.32		
F-3(a)(1)	Internal Communication	270.14(b); 264.32(a)		Describe internal communication or alarm system used to provide immediate emergency instruction to personnel.
F-3(a)(2)	External Communication	270.14(b); 264.32(b)		Describe device for summoning emergency assistance from local police, fire, or state/local emergency response.
F-3(a)(3)	Emergency Equipment	270.14(b); 264.32(c)		Demonstrate that portable fire extinguishers, fire control equipment, spill control equipment, and decontamination equipment are available.
F-3(a)(4)	Water and Fire Control	270.14(b); 264.32(d)		Demonstrate facility has adequate fire control systems, water volume and pressure, foaming equipment, automatic sprinklers, etc.
F-3(a)(5)	Testing and Maintenance of Equipment	270.14(b); 264.33		Demonstrate communication, alarm, fire control equipment, spill control equipment, and decontamination equipment are tested and maintained.
F-3(a)(6)	Access to Communication or	270.14(b);		When waste is being hauled, all personnel

CHECKLIST FOR REVIEW OF FEDERAL RCRA PERMIT APPLICATIONS

SECTION F. PROCEDURES TO PREVENT HAZARDS

	Section and Requirement	Federal Regulation	Review Consideration^a	Location in Application^b	See Attached Comment Number^c
	Alarm System	264.34	must have access to internal alarm or communication device.		
F-3(b)	Aisle Space Requirement	270.14(b); 264.35	Aisle space is required for unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment in case of emergency.		
F-3(c)	Documentation of Arrangements with:	270.14(b); 264.37	Owner/operator must make arrangements, as appropriate, with type of waste and hazard potential, for the potential need for services.		
F-3(c)(1)	Police/Fire Department	270.14(b); 264.37(a)(1)	Arrange to familiarize local fire department and police with facility.		
F-3(c)(2)	Emergency Response Teams	270.14(b); 264.37(a)(2), (a)(3)			
F-3(c)(3)	Local Hospitals	270.14(b); 264.37(a)(4)	Arrange to familiarize local hospital with properties of hazardous waste and possible types of injury or illness to expect.		
F-3(c)(4)	Document Agreement Refusal	270.14(b); 264.37(b)	Document refusal to enter into a coordination agreement.		
F-4	Prevention Procedures, Structures, and Equipment	270.14			
F-4(a)	Unloading Procedures	270.14(b)(8)(i)	Describe procedure used to prevent hazards in unloading operations. Identify possible loading and unloading hazards, and document steps taken to minimize or		

CHECKLIST FOR REVIEW OF FEDERAL RCRA PERMIT APPLICATIONS

SECTION F. PROCEDURES TO PREVENT HAZARDS

Section and Requirement	Federal Regulation	Review Consideration ^a	Location in Application ^b	See Attached Comment Number ^c
F-4(b)	Runoff	270.14(b)(8)(ii)		
F-4(c)	Water Supplies	270.14(b)(8)(iii)		
F-4(d)	Equipment and Power Failure	270.14(b)(8)(iv)		
F-4(e)	Personnel Protection Procedures	270.14(b)(8)(v)		
F-4(f)	Procedures to Minimize Releases to the Atmosphere	270.14(b)(8)(vi)		
F-5	Prevention of Reaction of Ignitable, Reactive, and Incompatible Waste	270.14(b)(9)		
F-5a	Precautions to Prevent Ignition or Reaction of Ignitable or Reactive Wastes	270.14(b)(9); 264.17(a),(b)		
F-5b	General Precautions for Handling Ignitable or Reactive Waste and	270.14(b)(9); 264.17(a)		

CHECKLIST FOR REVIEW OF FEDERAL RCRA PERMIT APPLICATIONS

SECTION F. PROCEDURES TO PREVENT HAZARDS

	Section and Requirement	Federal Regulation	Review Consideration^a	Location in Application^b	See Attached Comment Number^c
	Mixing of Incompatible Waste		produce flammable byproducts, cause risk of fire or explosion, threaten structural integrity, or pose threat to human life or the environment.		
F-5b(1)	Documentation of Adequacy of Procedures	270.14(b); 264.17(c)	Published literature, trial test, waste analyses, or similar processes may be used.		
F-5c	Management of Ignitable or Reactive Wastes in Containers	270.15(c); 264.176	Demonstrate that ignitable containers are at least 15 meters from facility property line.		
F-5d	Management of Incompatible Wastes in Containers	270.15(d); 264.177	Describe procedures that ensure incompatible wastes and materials are not placed in same container.		
F-5e	Management of Ignitable or Reactive Wastes in Tank Systems	270.16(j); 264.198	Describe operation procedures and how facility treats waste so it is no longer ignitable or how facility stores ignitable or reactive waste.		
F-5f	Management of Incompatible Wastes in Tank Systems	270.16(j); 264.199	Demonstrate that incompatible waste and materials are not stored in same tank.		
F-5g	Management of Ignitable or Reactive Wastes Placed in Waste Piles	270.18(g); 264.256	If waste is reactive or ignitable, describe how handling process will render waste pile nonreactive and/or nonignitable.		
F-5h	Management of Incompatible Wastes Placed in Waste Piles	270.18(h); 264.257	Document how hazardous waste piles of incompatible materials are separated to render them nonreactive.		
F-5i	Management of Ignitable or	270.17(h);	If waste is reactive or ignitable, describe		

CHECKLIST FOR REVIEW OF FEDERAL RCRA PERMIT APPLICATIONS					
SECTION F. PROCEDURES TO PREVENT HAZARDS					
	Section and Requirement	Federal Regulation	Review Consideration ^a	Location in Application ^b	See Attached Comment Number ^c
	Reactive Wastes in Surface Impoundments	264.229	how handling process will render surface impoundments nonreactive and/or nonignitable.		
F-5j	Management of Incompatible Wastes in Surface Impoundments	270.17(h); 264.230	Document how hazardous surface impoundments of incompatible materials are separated to render them nonreactive.		
F-5k	Management of Ignitable or Reactive Wastes Placed in Landfills	270.21(f); 264.312	If waste is reactive or ignitable, describe how handling process will prevent reaction or ignition to landfills.		
F-5l	Management of Incompatible Wastes Placed in Landfills	270.21(g); 264.313	Document how hazardous landfills of incompatible materials are separated to render them nonreactive.		
F-5m	Management of Ignitable or Reactive Wastes Placed in Land Treatment Units	270.20(g); 264.281	If waste is reactive or ignitable, describe how handling process will render land treatment units nonreactive and/or nonignitable.		
F-5n	Management of Incompatible Wastes Placed in Land Treatment Units	270.20(h); 264.282	Document how land treatment unit piles of incompatible materials are separated to render them nonreactive.		
F-5o	Management of Incompatible Wastes Placed in Containment Buildings	270.14(a); 264.1101(a)(3)	Subsections include design, primary and secondary containment, barriers to prevent migration, leak detection, and facility logs.		

Notes:

^a Considerations in addition to the requirements presented in the regulations.

^b For each requirement, this column must indicate one of the following: NA for not applicable, IM for information missing, or the exact location of the information in the application.

RCRA I.D. No.: _____
F-10

Facility Name: _____

^c If application is deficient in an area, prepare a comment describing the deficiency, attach it to the checklist, and reference the comment in this column.