## CHECKLIST FOR THE REVIEW OF RCRA PART B PERMIT APPLICATIONS

	CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS SECTION A. PART A GENERAL INFORMATION REQUIREMENTS								
		Pennsylvania (25 Pa. Code)							
	Section and Requirement	or Incorporated Federal (40 CFR) Regulation	Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>				
A-1	Description of Activities Conducted which Require Facility to Obtain a Permit under the Resource Conservation and Recovery Act (RCRA), and Brief Description of Nature of the Business	270.13(a),(m)	Form 2510-PM-BWM0004 - relating to Instructions for Completing the Hazardous Waste Treatment, Storage and Disposal Permit Application (Part B Permit Application). See Form HW-C relating to History - 2540-FM- BWM0058.						
A-2	Name, Mailing Address, and Location of Facility for which the Application is Submitted, including a Topographic Map	270.13(b),(l)							
A-3	Up to Four Standard Industrial Classification Codes which Best Reflect the Products or Services Provided by the Facility	270.13(c)							
A-4	Operator/Owner's Name, Address, Telephone Number, and Ownership Status	270.13(d),(e)	Ownership status must include status as federal, state, private, public, or other entity.						
A-5	Facility is New, Existing, or Located on Indian Lands	270.13(f),(g)	Description must include information on whether this is a first or revised application with date of last signed permit application.						
A-6	Description of Processes to be Used for Treating, Storing, and Disposing of Hazardous Waste	270.13(i)	Description must include design capacity for these items.						
A-7	Specification of the Hazardous Wastes Listed or Designated Under 261	270.13(j)	Specifications must include estimate on quantity of waste to be treated, stored, or disposed of.						

	CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS SECTION A. PART A GENERAL INFORMATION REQUIREMENTS								
	Section and Requirement	Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>				
A-8	Listing of all Permits or Construction Approvals Received or Applied for	270.13(k)	Permits include the following programs: Hazardous Waste Management under RCRA; Underground Injection Control under the Solid Waste Disposal Act; Prevention of Significant Deterioration, Nonattainment Program, and National Emissions Standards for Hazardous Pollutants under the Clean Air Act; ocean dumping permits under the Marine Protection Research and Sanctuaries Act; dredge and fill permits under Section 404 of the Clean Water Act; or other relevant environmental permits including state permits. See Form HW-E relating to Contractual Consent of Landowner - 2510-FM-BWM0229.						
A-9	Complying with siting criteria in Chapter 269a (relating to siting)	264a.18, 270a.13							

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.

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.

d Listed Federal regulatory citations refer to provisions of Title 40 of the Code of Federal Regulations (40CFR) that have been incorporated by reference into Title 25 of the Pennsylvania Code (25 Pa. Code). Citations containing a small letter "a" refer to provisions of 25 Pa. Code that contain additions to, deletions from, or modifications of the Federal regulations that have been incorporated.

Facility Name:

	CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS								
	Section and Requirement	SECTION B. FA Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	CILITY DESCRIPTION Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>				
B-1	General Description	270.14(b)(1)							
В-2	Topographic Map	270.14	Show a distance of 1,000 feet around the unit at a scale of 1 inch to not more than 200 feet (multiple maps may be submitted at this scale), and should be similar to Part A topographic map.						
B-2a	General Requirements	270.14(b)(19)							
	Scale and Date	270.14(b)(19)(i)	Other scales may be used if justified.						
	The 100-Year Flood Plain Area	270.14(b)(19)(ii)							
	Surface Waters	270.14(b)(19)(iii)							
	Surrounding Land Use	270.14(b)(19)(iv)							
	Wind Rose	270.14(b)(19)(v)							
	Map Orientation	270.14(b)(19)(vi)							
	Legal Boundaries	270.14(b)(19)(vii)							
	Access Control	270.14(b)(19)(viii)							
	Injection and Withdrawal Wells (On Site and Off Site)	270.14(b)(19)(ix)							
	Buildings and Other Structures	270.14(b)(19)(x)	270.14(b)(19)(x) for example list.						
	Drainage and Flood Control Barriers	270.14(b)(19)(xi)							
	Location of the Treatment or Disposal Unit(s) and Decontamination Areas	270.14(b)(19)(xii)							
	Location of Solid Waste Management Units	270.14(d)(1)(i)							

SECTB.WPD

	CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS									
	Section and Requirement	SECTION B. FA Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	ACILITY DESCRIPTION         Review         Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>					
B-2b	Additional Information on the Topographic Map for Land Disposal Facilities	270.14(c)(3)			Number					
	Uppermost Aquifer and Hydraulically Connected Aquifers Beneath Facility Property	270.14(c)(2)								
	Groundwater Flow Direction	270.14(c)(2)								
	Waste Management Areas	270.14(c)(3)								
	Property Boundaries	270.14(c)(3)								
	Point of Compliance Location	270.14(c)(3); 264.95	Point of compliance is defined in 264.95.							
	Location of Groundwater Monitoring Wells	270.14(c)(3); 264.97								
	Extent of any Groundwater Contaminant Plume	270.14(c)(4)(i)								
В-3	Facility Location Information	270.14(b)(11); 264.18								
B-3a	Seismic Requirements	270.14(b)(11)(i), (ii); 264.18(a)	Seismic requirements applicable only to new facilities.							
	Political Jurisdiction in which Facility is Proposed to be Located	270.14(b)(11)(i)								
	Indication of Whether Facility is Listed in Appendix VI of 264 (New Facilities)	270.14(b)(11)(i)								

	CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS								
	Section and Requirement	SECTION B. FA Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	CILITY DESCRIPTION Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>				
	New Facility must be Located at Least 200 feet from a Fault which has had Displacement in Holocene Time	270.14(b)(11)(ii); 264.18(a)	If facility location is listed in Appendix VI of 264, this information is required.						
B-3b	Flood Plain Requirements	270.14(b)(11)(iii), (iv); 264.18(b)							
	Copy of Federal Insurance Administration or other Flood Map	270.14(b)(11)(iii)	Reference source used to determine whether facility is located in 100-year flood plain.						
B-3b(1)	Demonstration that Facility is Designed, Constructed, Operated, and Maintained to Prevent Washout, or Detailed Description of Procedures to be Followed to Remove Hazardous Waste to Safety before Facility is Flooded	270.14(b)(11)(iv); 264.18(b)	Flood plain requirements applicable if facility is located in 100-year flood plain.						
B-3b(1)(a)	Engineering Analysis to Indicate the Various Hydrodynamic and Hydrostatic Forces Expected to Result from the 100-Year Flood Plain	270.14(b)(11)(iv); 264.18(b)	Flood plain requirements applicable if facility is located in 100-year flood plain.						
	Demonstration that no Adverse Effects will Result from Failure to Remove Waste by Providing:	270.14(b)(11)(iv); 264.18(b)(ii)	Flood plain requirements applicable if facility is located in 100-year flood plain.						
	Volume and Physical and Chemical Characteristics of the Waste in the Facility	270.14(b)(11)(iv); 264.18(b)(ii)(A)	Flood plain requirements applicable if facility is located in 100-year flood plain.						

	CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS SECTION B. FACILITY DESCRIPTION								
	Section and Requirement	Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>				
	Concentration of Hazardous Constituents that Would Potentially Affect Surface Waters as a Result of Washout	270.14(b)(11)(iv); 264.18(b)(ii)(B)	Flood plain requirements applicable if facility is located in 100-year flood plain.						
	Impact of such Concentration on Current or Potential uses of, and Water Quality Standards Established for, the Affected Surface Waters	270.14(b)(11)(iv); 264.18(b)(ii)(C)	Flood plain requirements applicable if facility is located in 100-year flood plain.						
	Impact of Hazardous Constituents on the Sediments of Affected Surface Waters, or the Soils of the 100-Year Flood Plain, that could Result from Washout	270.14(b)(11)(iv); 264.18(b)(ii)(D)	Flood plain requirements applicable if facility is located in 100-year flood plain.						
	Plan and Schedule for Future Compliance	270.14(b)(11)(v)	Flood plain requirements applicable if facility is located in 100-year flood plain and not in compliance with 264.18(b).						
B-4	Traffic Patterns	270.14(b)(10)	Show turns across traffic lanes and stacking lanes, if appropriate.						
	Estimate of Number and Types of Vehicles around the Facility	270.14(b)(10)							
	Traffic Control Signs and Signals	270.14(b)(10)							
	Road Surface Composition and Load- Bearing Capacity	270.14(b)(10)							

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.
- 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.
- d Listed Federal regulatory citations refer to provisions of Title 40 of the Code of Federal Regulations (40CFR) that have been incorporated by reference into Title 25 of the Pennsylvania Code (25 Pa. Code). Citations containing a small letter "a" refer to provisions of 25 Pa. Code that contain additions to, deletions from, or modifications of the Federal Regulations that have been incorporated.

	CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS SECTION C. WASTE CHARACTERISTICS								
	Section and Requirement	Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>				
C-1	Chemical and Physical Analyses	270.14(b)(2); 264.13(a); 264a.13	Data generated by testing the waste, published data on the waste, or data gathered from similar processes may be used.						
C-1a	Containerized Waste	270.15(b)(1); 264.172	Demonstrate that waste is compatible with container construction materials.						
C-1b	Waste in Tank Systems	270.16(a); 264a.191; 264.190(a); 264.191(b)(2); 264.192(a)(2)	Demonstrate that tank construction materials are compatible with waste stored in tank.						
C-1c	Waste in Piles	270.18(a); 264.250(c)(1),(4)							
C-1d	Landfilled Wastes	270.21(a); 264.13(c)(3); 264.314;	Demonstrate that sorbent materials are non- biodegradable.						
C-1e	Wastes Incinerated and Wastes used in Performance Tests	270.19(c); 270a.62; 270.62(b);264.341							
C-1f	Wastes to be Land Treated	270.20(b)(4); 264.271(a)(1), (2); 264.272; 264.276, Part 261 Appendix VIII; 264a.276	If food-chain crops will be grown in or on treatment zone, identify hazardous constituents reasonably expected to be in or derived from waste.						
C-1g	Wastes in Miscellaneous Treatment Units	270.23(d)							
C-1h	Wastes in Boilers and Industrial Furnaces	270.66(c); 270a.66; 266.102(b);							

	CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS SECTION C. WASTE CHARACTERISTICS								
	Section and Requirement	Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>				
C-1i	Wastes on Drip Pads	270.26; 264.570; 264a.570							
C-2	Waste Analysis Plan	270.14(b)(3); 264.13(b),(c)							
C-2a	Parameters and Rationale	270.14(b)(3); 264.13(b)(1)							
C-2b	Test Methods	270.14(b)(3); 264.13(b)(2)							
C-2c	Sampling Methods	270.14(b)(3); 264.13(b)(3)	If a sampling method described in 261 Appendix I is not used, facility must provide detailed description of proposed method and demonstrate its equivalency.						
C-2d	Frequency of Analyses	270.14(b)(3); 264.13(b)(4)							
C-2e	Additional Requirements for Wastes Generated Off Site	270.14(b)(3); 264.13 (b)(5), (c); 264.73(b)	Describe statistical method used to determine a representative sample of incoming waste.						
C-2f	Additional Requirements for Ignitable, Reactive, or Incompatible Wastes	270.14(b)(3); 264.13(b)(6); 264.17							
C-2g	Additional Requirements Pertaining to BIF Facilities	270.22; 266.102(e)(6)(ii) (C),(e)(6)(iii)							
C-2h	Additional Requirements Pertaining to Containment Buildings	270.14(b)(3); 264.1100; 264a.1100							

	CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS SECTION C. WASTE CHARACTERISTICS									
	Section and Requirement	SECTION C. WAS Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>					
C-3	Waste Analysis Requirements Pertaining to Land Disposal Restrictions	270.14(b)(3); 264.13; 264.73; Part 268; 264a.13; 268a.1								
C-3a	Waste Analysis	270.14(a); 264.13(a)(1); 264a.13;268a.1 268.1; 268.7; 268.9; 268.32 - 268.37; 268.41 - 268.43	Waste that was newly identified or newly listed as hazardous after 11/08/84 for which the U.S. Environmental Protection Agency has not promulgated land disposal prohibitions or treatment standards are not subject to land disposal provisions.							
C-3a(1)	Spent Solvent and Dioxin Wastes	270.14(a);264.13(a)( 1); 268.2(f)(1); 268.7; 268.30; 268.31								
C-3a(2)	California List Wastes	270.14(a);264.13(a)( 1); 268.7; 268.32; 268.42(a); RCRA Section 3004(d)								
C-3a(3)	Listed Wastes	270.14(a);264.13(a)( 1); 268.7; 268.33 - 268.36; 268.41 - 268.43; 268a.1	Arsenic-containing nonwastewater may use the extraction procedure (EP) toxicity test to determine compliance with treatment standards.							

CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS								
		SECTION C. WAST	<b>FE CHARACTERISTICS</b>					
	Section and Requirement	Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>			
C-3a(4)	Characteristic Wastes	270.14(a); 264.13(a)(1); 268.7, 268.9; 268.37; Part 268 Appendix I, IX	Characteristic D008 lead nonwastewater and D004 arsenic nonwastewater may use EP toxicity test to determine compliance with treatment standards.					
C-3a(5)	Radioactive Mixed Waste	270.14(a); 264.13(a); 268.7; 268.35(c),(d); 268.36(d); 268.42(d)	Hazardous debris containing radioactive waste must comply with treatment standards specified in 268.45.					
C-3a(6)	Leachates	270.14(a); 264.13(a);268.35(a)	Leachate that originates from newly identified waste is not coded as F039 waste, but is labeled with newly listed waste code from which it is derived.					
C-3a(7)	Lab Packs	270.14(a); 264.13(a); 268.7(a)(7),(8); 268.42(c); Part 268 Appendix IV	Lab packs containing California list polychlorinated biphenyls (PCB) or dioxins must be treated according to special incineration requirements detailed in 268.42(a).					
C-3a(8)	Contaminated Debris	270.13(n); 268.2(g); 268.7; 268.9; 268.36; 268.45						
C-3a(9)	Waste Mixtures and Wastes with Overlapping Requirements	270.14(a); 264.13(a)(1); 268.7; 268.9; 268.41; 268.43; 268.45(a)	Waste that carries more than one characteristic or listed waste code must be treated to the most stringent treatment requirement for each hazardous waste constituent of concern.					
C-3a(10)	Dilution and Aggregation of Wastes	270.14(a); 268.3						

CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS SECTION C. WASTE CHARACTERISTICS								
	Section and Requirement	Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>			
C-3b	Notification, Certification, and Recordkeeping Requirements	270.14(a); 264.13; 264.73; 268.7; 268.9(d);264a.13						
C-3b(1)	Retention of Generator Notices and Certifications	270.14(a); 264.13; 268.7(a)						
C-3b(2)	Notification and Certification Requirements for Treatment Facilities	270.14(a); 264.13; 268.7(b);264a.13						
C-3b(3)	Notification and Certification Requirements for Land Disposal Facilities	270.14(a); 264.13; 268.7(c)(1)264a.13						
C-3b(4)	Wastes Shipped to Subtitle C Facilities	270.14(a); 264.13; 268.7(a),(b)(6); 264a.13						
C-3b(5)	Wastes Shipped to Subtitle D Facilities	270.14(a); 264.13; 268.7(d); 268.9(d)						
C-3b(6)	Recyclable Materials	270.14(a); 264.13; 268.7(b)(7)						
C-3b(7)	Recordkeeping	270.14(a); 264.13; 264.73; 268.7(a) (5),(a)(6),(a)(7), (d)	Recycling facilities must keep records of name and location of each entity receiving hazardous waste-derived product.					
C-3c	Requirement Pertaining to the Storage of Restricted Wastes	270.14(a); 264.73; 268.50						
C-3c(1)	Restricted Wastes Stored in Containers	270.14(a); 264.73; 268.50(a)(2)(i)						

	CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS SECTION C. WASTE CHARACTERISTICS								
	Section and Requirement	Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>				
C-3c(2)	Restricted Wastes Stored in Tanks	270.14(a); 264.73; 268.50(a)(2)(ii)							
C-3c(3)	Storage of Liquid PCB Wastes	270.14(a); 264.73; 268.50(f)							
C-3d	Exemptions, Extensions, and Variances to Land Disposal Restrictions								
C-3d(1)	Case-by-Case Extensions to an Effective Date	270.14(b)(21)							
C-3d(2)	Exemption from Prohibition	270.14(b)(21);							
C-3d(3)	Variance from a Treatment Standard	270.14(a); 264.73; 268.7							
C-3d(4)	Requirements for Surface Impoundments Exempted from Land Disposal Restrictions	270.14(a); 264.13(b)(7); 268.4; 268.14							
C-3d(4)(a)	Exemption for Newly Identified or Listed Wastes	270.14(a); 264.13; 268.14	If owner/operator continues to treat newly listed or characteristic hazardous waste after 48 months from promulgation of new waste listing or characteristic, surface impoundment must be in compliance with 268.4.						
C-3d(4)(b)	Treatment of Wastes	270.14(a); 264.13; 268.4(a)(1),(b); 264a.13							

	CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS SECTION C. WASTE CHARACTERISTICS								
	Section and Requirement	Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>				
C-3d(4)(c)	Sampling and Testing	270.14(a); 264.13(b)(6); 268.4(a)(2)(i),(iv)							
C-3d(4)(d)	Annual Removal of Residues	270.14(a); 264.13(b)(7)(iii); 268.4(a)(2)(ii)							
C-3d(4)(e)	Design Requirements	270.14(a); 264.13; 268.4(a)(3),(4); 264a.13							

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.

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.

d. Listed Federal regulatory citations refer to provisions of Title 40 of the Code of Federal Regulations (40CFR) that have been incorporated by reference into Title 25 of the Pennsylvania Code (25 Pa. Code). Citations containing a small letter "a" refer to provisions of 25 Pa. Code that contain additions to, deletions from, or modifications of the Federal Regulations that have been incorporated.

	CHECKLI	ST FOR REVIEW O	F RCRA PART B PERMIT APPLICATIONS		
	SE		SS INFORMATION - CONTAINERS		
	Section and Requirement	Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>
D-1	Containers	270.15; 264.170			
D-la	Containers with Free Liquids	270.15; 264.175(a),(b)	Containers storing waste with free liquids must meet secondary containment requirements of 264.175(b).		
D-1a(1)	Description of Containers	270.14(b)(1); 264.171,172	Specify numbers of containers, sizes, and specifications.		
D-1a(2)	Container Management Practices	270.14(a); 264.173 264a.173	Containers must be kept closed and must not be handled in any manner, which could cause them to rupture or leak. Specify aisle space and stacking height.		
D-1a(3)	Secondary Containment System Design and Operation	270.15(a)(1); 264.175(a),(d)	Provide detailed design and profile drawings showing container storage areas.		
D-1a(3)(a)	Requirement for the Base or Liner to Contain Liquids	270.15; 264.175(b)(1)	Demonstrate that base is impervious to waste stored and precipitation.		
D-1a(3)(b)	Containment System Drainage	270.15(a)(2); 264.175(b)(2)	Containment system must be designed and operated to remove liquids resulting from leaks, spills, or precipitation.		
D-1a(3)(c)	Containment System Capacity	270.15(a)(3); 264.175(b)(3)	Containment system must have capacity to hold 10 percent of container volume or volume of the largest container, whichever is greater.		
D-1a(3)(d)	Control of Runon	270.15(a)(4); 264.175(b)(4)	Runon from storm water must be prevented unless containment system has sufficient excess capacity.		
D-1a(3)(e)	Removal of Liquids from Containment System	270.15(a)(5); 264.175(b)(5)	Accumulated liquids must be removed in timely manner to prevent containment system from overflowing.		
D-1b	Containers without Free Liquids				

	CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS SECTION D. PROCESS INFORMATION - CONTAINERS								
	Section and Requirement	Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>				
D-1b(1)	Test for Free Liquids	270.15(b)(1)	Documentation that waste does not contain free liquids must be provided by test results or other information.						
D-1b(2)	Description of Containers	270.14(a); 264.171; 264.172	Describe numbers, sizes, and specifications of containers.						
D-1b(3)	Container Management Practices	270.14(a); 264.173; 264a.173	Same comment as D-1a(2).						
D-1b(4)	Container Storage Area Drainage	270.15(b)(2); 264.175(c)	Same comment as D-1a(3)(b).						
D-1b(15)	Weighing or Measuring Facilities	264a.180	Describe facilities if required.						

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.

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.

d. Listed Federal regulatory citations refer to provisions of Title 40 of the Code of Federal Regulations (40CFR) that have been incorporated by reference into Title 25 of the Pennsylvania Code (25 Pa. Code). Citations containing a small letter "a" refer to provisions of 25 Pa. Code that contain additions to, deletions from, or modifications of the Federal Regulations that have been incorporated.

	CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS								
	Section and Requirement	SECTION D. PRO Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	CESS INFORMATION - TANKS Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>				
D-2	Tank Systems	270.16; 264.191 -194; 264a.191, 193, 194							
D-2a	Tank Systems Descriptions	270.14(b)(1)	Describe type (aboveground, underground) and specific location of each tank.						
D-2a(1)	Dimensions and Capacity of each Tank	270.16(b)							
D-2a(2)	Description of Feed Systems, Safety Cutoff, Bypass Systems, and Pressure Controls	270.16(c); 264.194(b)							
D-2a(3)	Diagram of Piping, Instrumentation, and Process Flow	270.16(d)							
D-2a(4)	Ignitable, Reactive, and Incompatible Wastes	270.16(j); 264.17(b); 264.198,199	Demonstrate that waste is stored or treated in a way that protects against ignition or reaction.						
D-2b	Existing Tank Systems								
D-2b(1)	Assessment of Existing Tank System's Integrity	270.16(a); 264.191; 264a.191	A written tank assessment must be certified by an independent, qualified, registered professional engineer.						
D-2c	New Tank System								
D-2c(1)	Assessment of New Tank System's Integrity	270.16(a),(e); 264.192(a)	A written tank assessment must be certified by an independent, qualified, registered professional engineer.						

	CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS								
	Section and Requirement	SECTION D. PRO Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	CESS INFORMATION - TANKS Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>				
D-2c(2)	Description of Tank System Installation and Testing Plans and Procedures	270.16(f); 264.192(b) - (e)	A new tank installation must be inspected by an independent, qualified, installation inspector or registered professional engineer.						
D-2d	Containment and Detection of Releases	270.16(g); 264.193; 264a.193	Leak detection system must be capable of detecting leaks within 24 hours.						
D-2d(1)	Plans and Description of the Design, Construction, and Operation of the Secondary Containment System	270.16(g); 264.193(b) - (f)							
D-2d(1)(a)	Tank Age Determination	270.16(g); 264.193(a); 264a.193	Age of each tank must be accurately determined to ascertain when secondary containment requirements apply.						
D-2d(1)(b)	Requirements for Secondary Containment and Leak Detection	270.16(g); 264.193(b),(c);264.1 101(b)(3)(iii)	A detailed description of the construction, installation, and operation of the secondary containment system is required.						
D-2d(1)(c)	Requirements for External Liner, Vault, Double-walled Tank or Equivalent Device	270.16(g); 264.193(d),(e)	Secondary containment must consist of liner, vault, double-walled tank, or equivalent device approved by regional administrator.						
D-2d(1)(d)	Secondary Containment and Leak Detection Requirements for Ancillary Equipment	270.16(g); 264.193(f)	Secondary containment is required for ancillary equipment except as provided in 264.193(f).						
D-2d(1)(e)	Containment Buildings Used as Secondary Containment for Tank Systems	270.16(g); 264.1101(b)(3)(iii)	A containment building can serve as secondary containment for a tank system provided it meets requirements of 264.193(b),(c)(1&2),(d)(1).						

	CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS SECTION D. PROCESS INFORMATION - TANKS								
	Section and Requirement	Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>				
D-2d(2)	Requirements for Tank Systems until Secondary Containment is Implemented	270.16(h); 264.193(i)	Annual leak tests are required until secondary containment is provided.						
D-2d(3)	Variance from Secondary Containment Requirements	270.16(h); 264.193(g)							
D-2d(3)(a)	Variance Based on a Demonstration of Equivalent Protection of Groundwater and Surface Water	270.16(h)(1); 264.193(g)(1),(h)	Detailed plans and engineering and hydrogeologic reports are required to demonstrate equivalent protection of groundwater and surface water.						
D-2d(3)(b)	Variance Based on a Demonstration of No Substantial Present or Potential Hazard	270.16(h)(2); 264.193(g)(2),(h)	Provide detailed assessment of substantial present or potential hazards posed to human health or the environment, should a release enter the environment.						
D-2d(3)(c)	Exemption Based on No Free Liquids and Location Inside a Building	270.16(h); 264.190(a)	Demonstrate that tanks used to treat or store hazardous waste contain no free liquid as defined by Paint Filter Test (SW-846 Method 9095).						
D-2e	Controls and Practices to Prevent Spills and Overflows	270.16(i); 264.194(a),(b);264.1 95;264a.195	Provide detailed description of controls and practices used to prevent spills and overflows.						

## RCRA I.D. No.:

Facility Name:

## 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.
- 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.
- d. Listed Federal regulatory citations refer to provisions of Title 40 of the Code of Federal Regulations (40CFR) that have been incorporated by reference into Title 25 of the Pennsylvania Code (25 Pa. Code). Citations containing a small letter "a" refer to provisions of 25 Pa. Code that contain additions to, deletions from, or modifications of the Federal Regulations that have been incorporated.

	CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS									
	Section and Requirement	SECTION D. PROCE Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	SS INFORMATION - WASTE PILES Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>					
D-3	Waste Piles	270.18; 264.250 - 259;264a.251								
D-3a	List of Wastes	270.18(a)	List all hazardous waste to be placed in waste piles.							
D-3b	Liner Exemption	270.18(b)								
D-3b(1)	Enclosed Dry Piles	270.18(b); 264.250(c)	Demonstrate that neither runoff, nor leachate is generated from the pile.							
D-3b(1)(a)	Protection from Precipitation	270.18(b); 264.250(c)	Demonstrate that pile is inside or under structure that provides complete protection from precipitation.							
D-3b(1)(b)	Free Liquids	270.18(b); 264.250(c)(1)	Demonstrate that neither liquids, nor materials containing free liquids are placed in the pile.							
D-3b(1)(c)	Runon Protection	270.18(b); 264.250(c)(2)	Demonstrate that pile is protected from surface water runon.							
D-3b(1)(d)	Wind Dispersal Control	270.18(b); 264.250(c)(3)	Demonstrate that pile design and operation controls wind dispersal of waste.							
D-3b(1)(e)	Leachate Generation	270.18(b); 264.250(c)(4)	Demonstrate that pile will not generate leachate through decomposition or other reactions.							
D-3b(2)	Exemption for Monofills	270.18(b); 264.251(e)	This exemption applies only to waste generated from foundry furnace emission controls or metal casting molding sand that are not hazardous waste for reasons other than toxicity characteristics.							

	CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS								
	Section and Requirement	Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	SS INFORMATION - WASTE PILES Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>				
D-3b(3)	Alternate Design/No Migration	270.18(c)(1); 264.251(b)	This exemption from liner requirements is based on documenting that design, operating practices, and local aspects will prevent migration of hazardous constituents into groundwater or surface water in the future.						
D-3b(4)	Exemption Based on Alternative Design and Location	270.18(c)(1); 264.251(d)	Document that alternative design and operating practices, together with location characteristics, will prevent migration of any hazardous constituent into groundwater or surface water at least as effectively as a double liner with leachate detection system, and will allow detection of hazardous constituents through the top liner as least as effectively.						
D-3b(5)	Exemption for Replacement Waste Piles	270.18(c); 264.251(f)	Demonstrate (1) that existing unit was constructed in compliance with design standards of Sections 3004(o)(1)(A)(i) and 3004(o)(5) of Resource Conservation and Recovery Act, and (2) there is no reason to believe that liner is not functioning as designed.						
D-3c	Liner System	270.18(c)(1); 264.251(a)(1)(i),(c); 264a.251	Describe liner system and demonstrate that flow of liquids through liner will be prevented.						

	CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS								
	Section and Requirement	Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	SS INFORMATION - WASTE PILES Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>				
D-3c(1)	Liner Description	270.18(c)(1); 264.251(a)(1)(i),(c); 264a.251	Describe and draw liner system to demonstrate that any flow of liquids through the liner will be prevented.						
D-3c(1)(a)	Synthetic Liners	270.18(c)(1); 264.251(a)(1),(c)(1); 264a.251	Describe type, thickness, material, and brand name and manufacturer of liner.						
D-3c(1)(b)	Soil Liner	270.18(c)(1); 264.251(a),(c)(1)(i) (B); 264a.251(i)	Describe bottom composite liner including its classification, thickness, and hydraulic conductivity.						
D-3c(2)	Liner Location Relative to High Water Table	270.18(c)(1); 264.251(a)(1)(i)	Provide data showing seasonal fluctuations in depth to water table and the location of seasonal high water table in relation to liner system.						
D-3c(3)	Calculation of Required Soil Liner Thickness	270.18(c)(1); 264.251(a)(1)(i)	Calculations using either numerical simulation techniques (unsaturated flow conditions) or Darcy Law-derived transit time equations (saturated flow conditions) must be provided.						
D-3c(4)	Liner Strength Requirements	270.18(c)(1); 264.251(a)(1)(i)	Provide calculations showing minimum strength requirements for liners considering pressure gradients, installation and operating stresses, and climatic change stresses.						
D-3c(5)	Liner Strength Demonstration	270.18(c)(1); 264.251(a)(1)(i)	Demonstrate that liner exceeds minimum strength requirements.						

	CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS SECTION D. PROCESS INFORMATION - WASTE PILES								
	Section and Requirement	Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>				
D-3c(6)	Liner/Waste Compatibility Testing Results	270.18(c)(1); 264.251(a)(1)(i)	Demonstrate that liner material is compatible with both waste and leachate.						
D-3c(7)	Liner Installation	270.18(c)(1); 264.251(a)(1)(i)	Describe procedures for installing liner.						
D-3c(7)(a)	Synthetic Liner Seaming	270.18(c)(1); 264.251(a)(1)(i)	Describe techniques to be used to bond membrane liner seams and the strength and chemical compatibility of seams with waste and leachate.						
D-3c(7)(b)	Soil Liner Compaction	270.18(c)(1); 264.251(a)(1)(i)	Describe procedures for installing soil liner and compacting liner to achieve desired permeability. Include maximum height of lifts to be placed.						
D-3c(7)(c)	Installation Inspection/testing Programs	270.18(c)(1); 264.254(a)	Describe quality assurance/quality control procedures to be used during liner installation.						
D-3c(8)	Liner Coverage	270.18(c)(1); 264.251(a)(1)(iii)	Demonstrate that liner will be installed to cover all surrounding earth likely to be in contact with waste or leachate.						
D-3c(9)	Liner Exposure Prevention	270.18(c)(1); 264.251(a)(1)(i)	Demonstrate that either the liner is protected from, or is resistant to, exposure to climatic conditions.						
D-3c(10)	Synthetic Liner Bedding	270.18(c)(1); 264.251(a)(1)(i)	Demonstrate that sufficient bedding will be provided above and below liner to prevent rupture during installation and operation.						
D-3d	Liner Foundation Report								

D3\_WP.WPD

CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS								
	Section and Requirement	CTION D. PROCE Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	SS INFORMATION - WASTE PILES Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>			
D-3d(1)	Liner Foundation Design Description	270.18(c)(1); 264.251(a)(1)(ii)	Describe liner foundation design and materials of construction and ability to withstand expected static and dynamic loadings.					
D-3d(2)	Subsurface Exploration Data	270.18(c)(1); 264.251(a)(1)(ii)	Verify engineering characteristics of foundation materials through subsurface exploration.					
D-3d(3)	Laboratory Testing Data	270.18(c)(1); 264.251(a)(1)(ii)						
D-3d(4)	Engineering Analyses	270.18(c)(1); 264.251(a)(1)(ii)						
D-3d(4)(a)	Settlement Potential	270.18(c)(1); 264.251(a)(1)(ii)						
D-3d(4)(b)	Bearing Capacity and Stability	270.18(c)(1); 264.251(a)(1)(ii)						
D-3d(4)(c)	Potential for Bottom Heave or Blow-Out	270.18(c)(1); 264.251(a)(1)(ii)						
D-3d(4)(d)	Construction and Operational Loading	270.18(c)(1); 264.251(a)(1)(ii)						
D-3d(5)	Foundation Installation Procedures	270.18(c)(1); 264.251(a)(1)(ii)						
D-3d(6)	Foundation Installation Inspection Program	270.18(c)(1); 264.251(a)(1)(ii)	Describe quality assurance/quality control procedures to be used during foundation installation.					

CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS SECTION D. PROCESS INFORMATION - WASTE PILES									
	Section and Requirement	Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>				
D-3e	Leachate Collection and Removal System	270.18(c); 264.251(a)(2),(c)(2)	Describe design and operation of system to collect and remove leachate from new portions of existing waste piles and from new waste piles.						
D-3e(1)	Upper Leachate Collection and Removal System	270.18(c)(1); 264.251(a)(2),(c)(2)	Describe design and operating conditions to ensure that leachate depth over the liner does not exceed 1 foot.						
D-3e(2)	Leachate Detection System	270.18(c)(1); 264.251(a)(2),(c)(3)	Describe design and operating features of leachate detection system.						
D-3e(2)(a)	Grading and Drainage	270.18(c)(1); 264.251(a)(2); 264.221(c)(2)(ii)	Demonstrate that leak detection system design meets or exceeds specifications described in referenced regulations.						
D-3e(3)	Chemical Resistance	270.18(c); 264.251(a)(2)(i)(A); 264.251(c)(3)	Demonstrate that all leachate collection and removal system components are chemically resistant to waste managed in the pile and the leachate expected to be generated.						
D-3e(4)	Strength of Materials	270.18(c); 264.251(a)(2)(i)(B); 264.251(c)(3)	Demonstrate that system components are of sufficient strength and thickness to prevent collapse under expected static and dynamic loadings.						
D-3e(5)	Prevention of Clogging	270.18(c); 264.251(a)(2)(ii); 264.251(c)(3)	Demonstrate that leachate collection and removal system's design and operation will prevent clogging throughout active life and post-closure period of waste pile.						

	CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS SECTION D. PROCESS INFORMATION - WASTE PILES							
	Section and Requirement	Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>			
D-3e(6)	Installation	270.18(c); 264.251(a)(2)	Describe installation methods and construction quality assurance/quality control procedures.					
D-3e(7)	Maintenance	270.18(c); 264.251(a)(2)	Describe anticipated maintenance activities that will be used to assure proper leachate management system operation throughout pile's expected active life.					
D-3e(8)	Liquid Removal	270.18(c); 264.251(c)(3)	Describe leachate removal system, including sumps and other equipment, and fate of the collected leachate.					
D-3e(9)	Location Relative to Water Table	270.18(c); 264.251(c)(4)	Demonstrate that operation of leak detection system will not be adversely affected by presence of groundwater.					
D-3f	Action Leakage Rate	270.18(c)(1)(v); 264.252	Action leakage rate must be approved by regional administrator based on system design.					
D-3f(1)	Determination of Action Leakage Rate	270.18(c)(1)(v); 264.252(a)	Determine action leakage rate for waste pile units subject to 264.251(c),(d). Include adequate safety margin to allow for uncertainties in design, construction, operation, and location of leak detection system, waste and leachate characteristics, sources of other liquids in system, and proposed response actions.					
D-3f(2)	Monitoring of Leakage	270.18(c)(1)(v); 264.252(b)	Weekly leachate flow rate data must be converted to average daily flow rate.					

	CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS							
	Section and Requirement	SECTION D. PROCE Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	SS INFORMATION - WASTE PILES Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>			
D-3g	Leakage Response Action Plan	270.18(c)(1)(v); 264.253						
D-3g(1)	Response Action	270.18(c)(1)(v); 264.253(a)	Provide response action plan to describe actions to be taken if flow rate into leak detection system exceeds action leakage rate.					
D-3g(2)	Leak and/or Remedial Determinations	270.18(c)(1)(v); 264.253(b),(c)	Response action plan must describe actions to be taken to comply with 264.223(b),(c) if the action leakage rate is exceeded.					
D-3g(3)	Notifications	270.18(c)(1)(v); 264.253(b)	Response action plan must indicate that regional administrator will be (1) notified in writing within 7 days of determining that action leakage rate has been exceeded, (2) provided with preliminary assessment and action plan within 14 days of initial determination that action leakage rate has been exceeded, and (3) provided with status report within 30 days after original notification that action leakage rate has been exceeded. Regional administrator must receive monthly status reports for as long as flow rate exceeds action leakage rate.					
D-3h	Runon Control System	270.18(c)(2); 264.251(g)	Describe system that will be used to prevent runon into active portions of piles.					

	CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS SECTION D. PROCESS INFORMATION - WASTE PILES							
	Section and Requirement	Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>			
D-3h(1)	Calculation of Peak Flow	270.18(c)(2); 264.251(g)	Identify peak surface water flow expected to result from 25-year design storm. Describe data sources and methods used to make peak flow calculation.					
D-3h(2)	Design and Performance	270.18(c)(2); 264.251(g)	Demonstrate that runon control system design will prevent runon from reaching active portions of unit.					
D-3h(3)	Construction	270.18(c)(2); 264.251(g)	Describe runon control system construction methods and any construction quality assurance/quality control procedures.					
D-3h(4)	Maintenance	270.18(c)(2); 264.251(g)	Describe any maintenance activities required to assure continued proper runon system operation throughout unit's active life.					
D-3i	Runoff Control System	270.18(c)(3); 264.251(h)	Describe the runoff control system to be used to collect and control runoff from active portions.					
D-3i(1)	Calculation of Peak Flow	270.18(c)(3); 264.251(h)	Identify the total runoff volume expected to result from a 24-hour, 25-year storm, and include data sources and methods used to make peak flow calculation.					
D-3i(2)	Design and Performance	270.18(c)(3); 264.251(h)	Demonstrate that system has sufficient capacity to collect and hold total runoff volume calculated in D-3i(1).					

	CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS SECTION D. PROCESS INFORMATION - WASTE PILES							
	Section and Requirement	Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>			
D-3i(3)	Construction	270.18(c)(3); 264.251(h)	Describe runoff system construction methods and any construction quality assurance/quality control procedures.					
D-3i(4)	Maintenance	270.18(c)(3); 264.251(h)	Describe any maintenance activities required to assure continued proper runoff system operation throughout unit's active life.					
D-3j	Management of Collection and Holding Units	270.18(c)(4); 264.251(i)	Describe how collection and holding facilities will be managed to maintain system design capacity.					
D-3k	Control of Wind Dispersal	270.18(c)(5); 264.251(j)	Describe how pile is covered or otherwise managed to control wind dispersal.					
D-31	Groundwater Monitoring Exemption	270.18(b); 264.90(b)(2)	To receive exemption from groundwater monitoring requirements of Subpart F, conditions specified in D-3l(1) through D-3l(7) must be met.					
D-31(1)	Engineered Structure	270.18(b); 264.90(b)(2)(i)	Provide design data showing that unit is engineered structure.					
D-31(2)	No Liquid Wastes	270.18(b); 264.90(b)(2)(ii)	Describe procedures for ensuring that no liquid waste or waste containing free liquids will be received by, or contained in, unit.					
D-31(3)	Exclusion of Liquids	270.18(b); 264.90(b)(2)(iii)	Demonstrate how liquids, precipitation, and other runon and runoff will be excluded from unit.					

	CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS SECTION D. PROCESS INFORMATION - WASTE PILES								
	Section and Requirement	Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>				
D-31(4)	Containment System	270.18(b); 264.90(b)(2)(iv)	Describe containment system (both inner and outer layers) that will enclose waste.						
D-31(5)	Leak Detection System	270.18(b); 264.90(b)(2)(v)	Describe design and operating data demonstrating leak detection system built into each containment layer.						
D-31(6)	Operation of Leak Detection System	270.18(b); 264.90(b)(2)(vi)	Demonstrate means for ensuring continuing operation and maintenance of leak detection systems during active life of unit and closure and post-closure care periods.						
D-3(7)	No Migration	270.18(b); 264.90(b)(2)(vii)	Demonstrate to reasonable degree of certainty that unit will not allow hazardous constituents to migrate beyond outer layer of containment system prior to end of post-closure care period.						
D-3m	Treatment Within the Pile	270.18(e)	If any treatment is conducted in pile, provide descriptions specified in D-3m(1) through D-3m(3).						
D-3m(1)	Treatment Process Description	270.18(e)	Describe the process by which wastes are treated and the effect of the treatment on the wastes.						
D-3m(2)	Equipment Used	270.18(e)	Describe any equipment or other materials required to initiate or promote treatment.						
D-3m(3)	Residuals Description	270.18(e)	Describe nature and quantity of waste remaining in pile after treatment is complete.						

	CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS SECTION D. PROCESS INFORMATION - WASTE PILES								
	Section and Requirement	Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>				
D-3n	Special Waste Management Plan for Piles Containing Wastes F020, F021, F022, F023, F026, and F027	270.18(i); 264.259	If waste pile is not enclosed, provide plan describing how pile will be designed, constructed, operated, and maintained in order to protect human health and environment.						
D-3n(1)	Waste Description	270.18(i)(1); 264.259(a)(1)	Identify volume, physical, and chemical characteristics of waste, including potential to migrate through soil or volatilize or escape into atmosphere.						
D-3n(2)	Soil Description	270.18(i)(2); 264.259(a)(2)	Describe attenuative properties of underlying and surrounding soils or other materials.						
D-3n(3)	Mobilizing Properties	270.18(i)(3); 264.259(a)(3)	Describe mobilizing properties of other materials codisposed of with this waste.						
D-3n(4)	Additional Management Techniques	270.18(i)(4); 264.259(a)(4)	Document effectiveness of additional treatment, design, operating, or monitoring techniques.						
D-30	Construction Quality Assurance Program	270.18(c)(iv); 264.19	Provide written construction quality assurance program to comply with regulations found in 264.19.						

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.

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.

d. Listed Federal regulatory citations refer to provisions of Title 40 of the Code of Federal Regulations (40CFR) that have been incorporated by reference into Title 25 of the Pennsylvania Code (25 Pa. Code). Citations containing a small letter "a" refer to provisions of 25 Pa. Code that contain additions to, deletions from, or modifications of the Federal Regulations that have been incorporated.

	CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS SECTION D. PROCESS INFORMATION - SURFACE IMPOUNDMENTS								
	Section and Requirement	Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>				
D-4	Surface Impoundments								
D-4a	List of Wastes	270.17(a)	Provide list of all hazardous waste placed, or to be placed, in surface impoundments.						
D-4b	Liner System Exemption Requests	270.17(b)							
D-4b(1)	Exemption Based on Existing Portion	270.17(b)(1); 264.221(c); 264a.221	Existing portions of surface impoundments with waste in place on November 8, 1994, and having only vertical expansion are exempted from liner system requirements. New units, lateral expansion of existing units, and replacement units at existing facilities are not exempt. Provide plan indicating limits of existing portions.						
D-4b(2)	Exemption Based on Alternative Design and Location	270.17(b)(1); 264.221(d)							
D-4b(3)	Exemption for Replacement Surface Impoundments	270.17(b); 264.221(f)							
D-4c	Liner System, General Items	270.17(b)(1)	Provides discussion of the following items that apply to liner system as a whole.						

	CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS SECTION D. PROCESS INFORMATION - SURFACE IMPOUNDMENTS								
	Section and Requirement	Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>				
D-4c(1)	Liner System Description	270.17(b)(1)	Provide detailed description of liner system, demonstrating that any flow of liquids into and through liners will be prevented. The liner system includes liner foundation, bottom composite liner, leachate detection system, top synthetic liner, and any protective layer placed to protect top synthetic liner.						
D-4c(2)	Liner System Location Relative to High Water Table	270.17(b)(1), (3); 264.221(a); 264a.221	Provide geological cross sections showing groundwater levels with seasonal fluctuations and liner foundation elevations.						
D-4c(3)	Load on Liner System	270.17(b)(1); 264.221(a)(1),(b)	Provide results of calculations defining maximum loads or stresses that will be placed on liner system.						
D-4c(4)	Liner System Coverage	270.17(b)(1); 264.221(a)(1), (b)	Demonstrate that liner system will be installed to cover all surrounding earth likely to be in contact with waste or leachate.						
D-4c(5)	Liner System Exposure Prevention	270.17(b)(1); 264.221(a)(1), (b)	Demonstrate that liner system will not be exposed to elements, or that if exposed, exposure will not result in unacceptable degradation of system.						
D-4d	Liner System Foundation								
D-4d(1)	Foundation Description	270.17(b)(1); 264.221(a)(2)	Describe foundation for liner system, including materials, and indicate bearing elevations and any load-bearing embankments placed to support liner system.						

	CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS SECTION D. PROCESS INFORMATION - SURFACE IMPOUNDMENTS							
	Section and Requirement	Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>			
D-4d(2)	Subsurface Exploration Data	270.17(b)(1); 264.221(a)(2)	The engineering characteristics of liner system foundation materials should be verified through subsurface explorations. Provide information to fully describe these efforts.					
D-4d(3)	Laboratory Testing Data	270.17(b)(1); 264.221(a)(2)	Provide index testing results to classify site materials and lab test data to evaluate engineering properties of foundation materials. Provide references to standard test procedures.					
D-4d(4)	Engineering Analyses	270.17(b)(1); 264.221(a)(2)	Provide engineering analyses based on subsurface exploration and laboratory testing data. Include discussion of methods used, assumptions, copies of calculations, and appropriate references.					
D-4d(4)(a)	Settlement Potential	270.17(b)(1); 264.221(a)(2)	Provide estimates of total and differential settlement of liner system foundation.					
D-4d(4)(b)	Bearing Capacity	270.17(b)(1); 264.221(a)(2)	Provide analysis of allowable bearing capacity of liner system foundation.					
D-4d(4)(c)	Potential for Excess Hydrostatic or Gas Pressure	270.17(b)(1); 264.221(a)(2)	Provide estimates of potential or bottom heave or blow-out of liner system or line foundation due to unequal hydrostatic or gas pressures.					
D-4e	Liner System, Liners							

	CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS SECTION D. PROCESS INFORMATION - SURFACE IMPOUNDMENTS									
	Section and Requirement	Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>					
D-4e(1)	Synthetic Liners	270.17(b)(1); 264.221(a),(c) 264a.221	For each synthetic liner in system or under consideration, provide the following general information: thickness; type; material; brand name; and manufacturer.							
D-4e(1)(a)	Synthetic Liner Compatibility Data	270.17(b)(1); 264.221(a)(1)	Provide summary and discussion of test results and conclusions as to suitability of synthetic liner based on liner/waste compatibility testing.							
D-4e(1)(b)	Synthetic Liner Strength	270.17(b)(1); 264.221(a)(1)	Provide data showing that synthetic liners, including seams, have sufficient strength after exposure to waste and waste leachate.							
D-4e(1)(c)	Synthetic Liner Bedding	270.17(b)(1); 264.221(a)(2)	Demonstrate that sufficient bedding will be provided above and below the synthetic liners to prevent rupture during installation and operation. Synthetic membrane of bottom composite liner should be placed directly on soil portion.							
D-4e(2)	Soil Liners	270.17(b)(1); 264.221(a); (c)(1)	Describe soil portion of bottom composite liner, including classification, thickness, hydraulic conductivity, and material specifications.							
D-4e(2)(a)	Material Testing Data	270.17(b)(1); 264.221(c) 264a.221	Provide complete results for index tests, laboratory and/or in situ permeability tests, strength tests, consolidation tests, and shrink- swell properties of soil liner material. Discuss potential for dispersion and piping of soil due to flow of liquid through soil liner layer.							

	CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS SECTION D. PROCESS INFORMATION - SURFACE IMPOUNDMENTS									
	Section and Requirement	Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>					
D-4e(2)(b)	Soil Liner Compatibility Data	270.17(b)(1); 264.221(a)(1)	Provide complete results of permeability testing of soil liner material using representative of leachate from surface impoundment.							
D-4e(2)(c)	Soil Liner Strength	270.17(b)(1); 264.221(a)(1)	Demonstrate that soil liner has sufficient strength to support loads/stresses computed in item $D-4c(3)$ .							
D-4f	Liner System, Leachate Detection System	270.17(b)(1); 264.221(c)(2)								
D-4f(1)	Systems Operation and Design	270.17(b)(1); 264.221(c)(2),(4); 264a.221	Describe design features of leachate detection system and how system will function to detect any leakage through either liner in timely manner.							
D-4f(2)	Drainage Material	270.17(b)(1); 264.221(c)(2)(ii)	Describe leachate detection system drainage material.							
D-4f(3)	Grading and Drainage	270.17(b)(1); 264.221(c)(2)	Indicate slopes of leachate detection system and provide contour plan for system along with plan showing layout and spacing of piping system and any sumps, pumps, etc. Demonstrate that leak detection system is appropriately graded to assure that leakage at any point in liner system is detected in timely manner.							
D-4f(4)	System Compatibility	270.17(b)(1); 264.221(c)(2)(iii)								
D-4f(5)	System Strength									

	CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS SECTION D. PROCESS INFORMATION - SURFACE IMPOUNDMENTS									
	Section and Requirement	Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>					
D-4f(5)(a)	Stability of Drainage Layers	270.17(b)(1); 264.221(c)(2)(iii)	Demonstrate that drainage layer of leachate detection system has sufficient soil-bearing capacity to support loads. Provide calculations showing that drainage layer placed on sloped surfaces of surface impoundment or foundations will be stable during construction.							
D-4f(5)(b)	Strength of Piping	270.17(b)(1); 264.221(c)(2)(iii)	Demonstrate that pipes used in piping systems have sufficient strength to support loads as computed in item $D-4c(3)$ .							
D-4f(6)	Prevention of Clogging	270.17(b)(1); 264.221(c)(2)(iv)								
D-4f(7)	Liquid Removal	270.17(b)(1); 264.221(c)(2)(v), (c)(3)	Indicate fate of collected leachate, which is considered hazardous waste.							
D-4f(8)	Location Relative to Water Table	270.17(b)(3); 264.221(c)(4); 264a.221								
D-4g	Liner System, Construction and Maintenance									
D-4g(1)	Material Specifications	270.17(b)(1);264. 221(a); 264a.221								
D-4g(1)(a)	Synthetic Liners	270.17(b)(1); 264.221(a); 264a.221	Provide detailed material specifications for specific synthetic liner(s) to be used.							

	CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS SECTION D. PROCESS INFORMATION - SURFACE IMPOUNDMENTS								
	Section and Requirement	Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>				
D-4g(1)(b)	Soil Liners	270.17(b)(1); 264.221(a); 264a.221	For soil liners constructed of borrowed material, provide specifications; for soil liners using in- place soil, provide specifications to be used to assure that all existing materials meet requirements of liner design.						
D-4g(1)(c)	Leachate Detection System	270.17(b)(1); 264.221(a); 264a.221	Provide material specifications for drainage layer material, filter fabric or filter layer, piping, and sumps.						
D-4g(2)	Construction Specifications								
D-4g(2)(a)	Liner System Foundation	270.17(b)(1); 264.221(a); 264a.221	For installed foundations, provide construction specifications of foundation installation procedures. For units that use the in-place material for liner system foundation, provide construction specifications for preparation.						
D-4g(2)(b)	Soil Liner	270.17(b)(1); 264.221(a),(a)(2); 264a.221	Describe procedures for installing soil liner.						
D-4g(2)(c)	Synthetic Liners	270.17(b)(1); 264.221(a); 264a.221; 264.226(a)(1)	Provide construction specifications for placement of synthetic liners.						
D-4g(2)(d)	Leachate Detection System	270.17(b)(1); 264.221(a); 264a.221	Provide construction specifications for placement of leachate detection system components, including drainage layers, piping, filter layers, sumps, pumps, etc.						

	CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS SECTION D. PROCESS INFORMATION - SURFACE IMPOUNDMENTS									
	Section and Requirement	Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>					
D-4g(3)	Construction Quality Assurance (CQA) Program	270.17(b)(1),(4); 270.30(k)(2); 264.19; 264.226(a)	Provide complete details of CQA program to be used during construction of liner system to assure that it is built as designed.							
D-4g(4)	Maintenance Procedures for Leachate Detection System	270.17(b)(1); 264.221(a); 264a.221	Describe anticipated maintenance activities that will be used to assure proper operation of leachate detection systems throughout surface impoundment's expected life.							
D-4g(5)	Liner Repairs During Operations	270.17(b)(1); 264.221(a); 264a.221	Describe methods that will be used to repair any damage to liner that occurs while surface impoundment is in operation (such as a drag line ripping the liner during cleaning operations).							
D-4h	Action Leakage Rate	270.17(b)(5); 264.222								
D-4h(1)	Determination of Action Leakage Rate	270.17(b)(5); 264.222(a)	Identify action leakage rate for surface impoundment units subject to liner system provisions of 264.221(c) and 264.221(d).							
D-4h(2)	Monitoring of Leakage	270.17(b)(5); 264.222(b)								
D-4i	Leakage Response Action Plan	270.17(b)(5); 264.223								
D-4i(1)	Response Action	270.17(b)(5); 264.223(a)								

	CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS SECTION D. PROCESS INFORMATION - SURFACE IMPOUNDMENTS									
	Section and Requirement	Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>					
D-4i(2)	Leak and/or Remedial Determinations	270.17(b)(5); 264.223(b),(c)								
D-4i(3)	Notifications	270.17(b)(5); 264.223(b)								
D-4j	Prevention of Overtopping	270.17(b)(6); 264.221(g)	Describe design and/or operating procedures that will protect against impoundment overtopping/overflow.							
D-4j(1)	Design Features	270.17(b)(6); 264.221(g)	Describe design features used to prevent overtopping, such as spillways or weirs for flow- through systems, automatic or manual controls, and sensors and alarms.							
D-4j(2)	Operating Procedure	270.17(b)(6); 264.221(g)	If operating procedures are instrumental to preventing overtopping, describe those procedures.							
D-4j(3)	Overtopping Prevention	270.17(b)(6); 264.221(g)	Unless foolproof controls are used to prevent overtopping, provide results of calculations showing that adequate freeboard will be available following 100-year, 24-hour storm event.							

	CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS SECTION D. PROCESS INFORMATION - SURFACE IMPOUNDMENTS								
	Section and Requirement	Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation		Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>				
D-4j(4)	Freeboard Requirements	270.17(b); 264.221(g)	Freeboard requirements associated with normal and extreme wind activity should be determined unless automatic controls are used and freeboard equals or exceeds 2 feet.						
D-4j(5)	Outflow Destination	270.17(b); 264.221(g)	Describe fate of liquids released through flow control devices. Identify location to which waste would be moved in event of emergency.						
D-4k	Dike Stability								
D-4k(1)	Engineer's Certification	270.17(d); 264.226(c)							
D-4k(2)	Dike Design Description	270.17(b)(7); 264.221(h)	Provide data and/or drawings specifying design layout of the dikes and their components, including materials of construction. Determine capability of dikes to withstand failure from expected static and dynamic loadings and effects of erosion.						
D-4k(3)	Erosion and Piping Protection	270.17(b); 264.221(h)	Demonstrate that dikes are designed and constructed to minimize erosion and piping, and to prevent failure due to excessive erosion. Describe procedures for correcting erosion problems identified during unit's operating life.						

	CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS SECTION D. PROCESS INFORMATION - SURFACE IMPOUNDMENTS									
	Section and Requirement	Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation		Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>					
D-4k(4)	Subsurface Soil Conditions	270.17(b)(7); 264.221(h)	Engineering characteristics of dike foundation materials should be verified through testing and subsurface explorations, as necessary. These explorations may include: test borings; test pits or trenches; in situ tests; and geophysical exploration methods.							
D-4k(5)	Stability Analysis	270.17(b); 264.221(h)	Describe stability analyses and results for the following conditions, as appropriate: foundation soil bearing failure of settlement; failure in dike slopes; failure of impoundment cut slopes; build- up of hydrostatic pressure due to failure of drainage system, dike cover, and liner; and rapid drawdown.							
D-4k(6)	Strength and Compressibility Test Results	270.17(b); 264.221(h)	Provide results of strength and consolidation tests on dike materials together with description of sampling procedures and test methods.							
D-4k(7)	Dike Construction Procedures	270.17(b); 264.221(h)	Describe methods to be used to construct dikes at new units.							
D-4k(8)	Dike Construction Inspection Program	270.17(b); 264.221(h)	Describe inspection, monitoring, sampling and testing methods, and frequencies to be used during dike construction to assure that new dikes meet design requirements.							

	CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS SECTION D. PROCESS INFORMATION - SURFACE IMPOUNDMENTS									
	Section and Requirement	Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>					
D-41	Special Waste Management Plan for Surface Impoundments Containing Wastes F020, F021, F022, F023, F026, and F027	270.17(i); 264.231(a)								

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.

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.

d. Listed Federal regulatory citations refer to provisions of Title 40 of the Code of Federal Regulations (40CFR) that have been incorporated by reference into Title 25 of the Pennsylvania Code (25 Pa. Code). Citations containing a small letter "a" refer to provisions of 25 Pa. Code that contain additions to, deletions from, or modifications of the Federal Regulations that have been incorporated.

	CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS SECTION D. PROCESS INFORMATION - INCINERATORS									
	Section and Requirement	Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>					
D-5	Incinerators	270.19; 264.340; 264.351								
D-5a	Justification for Exemption	270.19(a)	To justify exemption under 264.340(b) or (c), document the following: (1) waste contains no, or insignificant, concentrations of Part 261, Appendix VIII materials; and (2) waste is considered hazardous solely because it is (a) ignitable and/or corrosive, or (b) reactive.							
D-5b	Trial Burn	270.19(b)								
D-5b(1)	Trial Burn Plan	270.19(b)	Submit trial burn plan or results of trial burn, including all required determinations.							
D-5b(1)(a)	Detailed Engineering Description of Incinerator	270.62(b)(2)(ii); 270.19(c)(2)	Provide information per regulatory citation. Also, include process and instrumentation diagram.							
D-5b(1)(b)	Sampling and Monitoring Procedures	270.62(b)(2)(iii)	Describe sampling and monitoring procedures during trial burn per regulatory citation. Sampling and analysis methods approved by the U.S. Environmental Protection Agency (EPA) must be used or, alternatively, a demonstration of equivalence with EPA-approved methods must be made.							
D-5b(1)(c)	Trial Burn Schedule	270.62(b)(2)(iv)								
D-5b(1)(d)	Test Protocols	270.62(b)(2)(v)								

	CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS									
	SE Section and Requirement	CTION D. PROCES Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	SS INFORMATION - INCINERATORS Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>					
D-5b(1)(e)	Pollution Control Equipment Operation	270.62(b)(2)(vi)								
D-5b(1)(f)	Shutdown Procedures	270.62(b)(2)(vii)								
D-5b(1)(g)	Incinerator Performance	270.62(a)								
D-5b(2)	New Incinerator Conditions	270.62(a)								
D-5b(2)(a)	Startup	270.62(a)								
D-5b(2)(b)	Shakedown	264.344(c)(1)								
D-5b(2)(c)	Post-trial Burn Operation	270.62(c)								
D-5b(2)(d)	Incinerator Performance	270.62(a)								
D-5c	Data Submitted in Lieu of Trial Burn	270.19(c)	Provide information per regulatory citation in lieu of trial burn plan.							
D-5c(1)	Detailed Engineering Description of Incinerator	270.19(c)(2)	Provide information per regulatory citation. Also, include process and instrumentation diagram.							
D-5c(2)	Expected Incinerator Operation	270.19(c)(6)								
D-5c(3)	Design and Operating Conditions	270.19(c)(4)								
D-5c(4)	Previous Trial Burn Results	270.19(c)(5)	Describe results from all previously conducted, approved trial burns.							
D-5d	Determinations	270.62(b)(7)								

Facility Name:

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.
- 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.
- d. Listed Federal regulatory citations refer to provisions of Title 40 of the Code of Federal Regulations (40CFR) that have been incorporated by reference into Title 25 of the Pennsylvania Code (25 Pa. Code). Citations containing a small letter "a" refer to provisions of 25 Pa. Code that contain additions to, deletions from, or modifications of the Federal Regulations that have been incorporated.

	CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS SECTION D. PROCESS INFORMATION - LANDFILLS									
	Section and Requirement	Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>					
D-6	Landfills	270.21; 264.300 - 264.317; 264a.301								
D-6a	List of Wastes	270.21(a)								
D-6b(1)	Exemption Based on Existing Portion	270.21(b)(1); 264.301(a); 264a.301	Existing portions of landfills that have waste in place on November 8, 1984, and will have only vertical expansion are exempted from liner system requirements. Provide plan showing limits of existing portion.							
D-6b(2)	Exemption Based on Alternative Design and Location	270.21(b)(1); 264.301(d)								
D-6b(3)	Exemption for Replacement Landfill Unit	270.21(b)(1); 264.301(f)								
D-6b(4)	Exemption for Monofills	270.21(b)(1); 264.301(e)								
D-6b(5)	Groundwater Monitoring Exemption	270.21(c); 264.90(b)(2)	If exemption from Subpart F groundwater monitoring requirements is sought, provide data demonstrating that the following conditions are met.							
D-6b(5)(a)	Engineered Structure	270.21(c); 264.90(b)(2)(i)	Provide design data showing that unit for which exemption is sought is an engineered structure.							
D-6b(5)(b)	No Liquid Waste	270.21(c); 264.90(b)(2)(ii)	Describe procedures for ensuring that no liquid waste or waste containing free liquids will be received by, or contained, in the unit.							

	CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS SECTION D. PROCESS INFORMATION - LANDFILLS								
	Section and Requirement	Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>				
D-6b(5)(c)	Exclusion of Liquids	270.21(c); 264.90(b)(2)(iii)	Provide design and operating data demonstrating how liquids, precipitation, and other runon and runoff will be excluded from the unit.						
D-6b(5)(d)	Containment System	270.21(c); 264.90(b)(2)(iv)	Describe containment system (both inner and outer layers) that will enclose waste.						
D-6b(5)(e)	Leak Detection System	270.21(c); 264.90(b)(2)(v)	Describe design and operating data demonstrating leak detection system built into each containment layer.						
D-6b(5)(f)	Operation of Leak Detection System	270.21(c); 264.90(b)(2)(vi)	Demonstrate means for ensuring continuing operation and maintenance of leak detection systems during active life of unit and closure and post-closure care periods.						
D-6b(5)(g)	No Migration	270.21(c); 264.90(b)(2)(vii)	Demonstrate that unit will not allow hazardous constituents to migrate beyond outer layer of containment system prior to end of post-closure care period.						
D-6c	Liner System, General Items	270.21(b)(1); 264.301(a),(c); 264a.301	Discuss the items that apply to liner system as a whole.						

	CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS SECTION D. PROCESS INFORMATION - LANDFILLS								
	Section and Requirement	Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>				
D-6c(1)	Liner System Description	270.21(b)(1); 264.301(a),(c); 264a.301	Provide detailed description of liner system, demonstrating that any flow of liquids into and through liners will be prevented. Liner system includes liner foundation, bottom composite liner, leachate detection system, top synthetic liner, and any protective layer placed to protect leachate collection system from damage.						
D-6c(2)	Liner System Location Relative to High Water Table	270.21(b)(1); 264.301(a)(1)(i); 264a.301	Provide geological cross sections showing groundwater levels with seasonal fluctuations and liner foundation elevations.						
D-6c(3)	Loads on Liner System	270.21(b)(1); 264.301(a)(1)(i)	<ul> <li>Provide results of calculations defining maximum loads or stresses that will be placed on liner system considering: both static and dynamic loads, stresses due to installation or construction stresses resulting from operating equipment stresses due to maximum quantity of waste, cover, and proposed post-closure land use stresses resulting from settlement, subsidence, or uplift internal and external pressure gradients.</li> </ul>						
D-6c(4)	Liner System Coverage	270.21(b)(1); 264.301(a)(1)(iii)							

\_\_\_\_\_

	CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS SECTION D. PROCESS INFORMATION - LANDFILLS								
	Section and Requirement	Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>				
D-6c(5)	Liner System Exposure Prevention	270.21(b)(1); 264.301(a)(1)(i)	Demonstrate that the liner system will not be exposed to wind or sunlight or, if exposure to any part of the system is to be permitted, that such exposure will not result in unacceptable degradation of that portion of the system.						
D-6d	Liner System, Foundation								
D-6d(1)	Foundation Description	270.21(b)(1); 264.301(a)(1)(ii); 264a.301	Describe foundation for liner system, including foundation materials and indicate bearing elevations on geological and construction drawings. Indicate any load-bearing embankments placed to support liner system.						
D-6d(2)	Subsurface Exploration Data	270.21(b)(1); 264.301(a)(1)(ii)	Verify engineering characteristics of liner system foundation materials through subsurface explorations. Provide information to fully describe these efforts.						
D-6d(3)	Laboratory Testing Data	270.21(b)(1); 264.301(a)(1)(ii)	Provide index testing results to classify site materials and lab test data to evaluate engineering properties of foundation materials. Provide references to standard test procedures.						
D-6d(4)	Engineering Analyses	270.21(b)(1); 264.301(a)(1)(ii)	Provide engineering analyses based on subsurface exploration and laboratory testing data. Include discussion of methods used, assumptions, copies of calculations, and appropriate references.						

CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS SECTION D. PROCESS INFORMATION - LANDFILLS								
	Section and Requirement	Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>			
D-6d(4)(a)	Settlement Potential	270.21(b)(1); 264.301(a)(1)(ii)	Provide estimates of total and differential settlement of liner system foundation. Consider stresses imposed by liner system and applicable stresses computed in item D-6c(3).					
D-6d(4)(b)	Bearing Capacity	270.21(b)(1); 264.301(a)(1)(ii)	Provide analysis of allowable bearing capacity of liner system foundation.					
D-6d(4)(c)	Stability of Landfill Slopes	270.21(b)(1); 264.301(a)(1)(ii)	• Provide, as appropriate, analyses of stability of: excavated slopes for units constructed below grade embankment slopes for units constructed with earthen dikes or berms, landfill slopes consisting of liner system or cover system placed on waste.					
D-6d(4)(d)	Potential for Excess Hydrostatic or Gas Pressure	270.21(b)(1); 264.301(a)(1)(ii)	Provide estimates of potential for bottom heave or blow-out of liner system due to unequal hydrostatic or gas pressures.					
D-6e	Liner System, Liners							
D-6e(1)	Synthetic Liners	270.21(b)(1); 264.301(a)(1)(ii),(c); 264a.301	For each synthetic liner in system or under consideration, provide following general information: thickness; type; material; brand name; and manufacturer.					
D-6e(1)(a)	Synthetic Liner Compatibility Data	270.21(b)(1); 264.301(a)(1)(i)	Provide summary and discuss test results and conclusions as to suitability of synthetic liner based on liner/waste compatibility testing.					

CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS SECTION D. PROCESS INFORMATION - LANDFILLS								
	Section and Requirement	Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>			
D-6e(1)(b)	Synthetic Liner Strength	270.21(b)(1); 264.301(a)(1)(i)	Provide data showing that synthetic liners, including seams, have sufficient strength after exposure to waste and waste leachate.					
D-6e(1)(c)	Synthetic Liner Bedding	270.21(b)(1); 264.301(a)(1)(ii); 264a.301	Demonstrate that sufficient bedding will be provided above and below synthetic liners to prevent rupture during installation and operation. Synthetic membrane of bottom composite liner should be placed directly on soil portion.					
D-6e(2)	Soil Liners	270.21(b)(1); 264.301(a),(c); 264a.301	Provide description of soil portion of bottom composite liner, including its classification, thickness, hydraulic conductivity, and material specifications.					
D-6e(2)(a)	Material Testing Data	270.21(b)(1); 264.301(c); 264a.301	Provide complete results for index tests, laboratory and/or in situ permeability tests, strength tests, consolidation tests, and shrink- swell properties of soil liner material. Discuss potential for dispersion and piping of soil due to flow of liquid through soil liner layer.					
D-6e(2)(b)	Soil Liner Compatibility Data	270.21(b)(1); 264.301(a)(1)(i); 264.301(c)(3)(iii)	Provide complete test results of permeability testing of soil liner material using representative of leachate from surface impoundment.					

CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS SECTION D. PROCESS INFORMATION - LANDFILLS								
	Section and Requirement	SECTION D. PROCE Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>			
D-6e(2)(c)	Soil Liner Strength	270.21(b)(1); 264.301(a)(1)(i); 264.301(c)(3)(iii)	Demonstrate that soil liner has sufficient strength to support loads/stresses computed in item D-4c(3).					
D-6f	Liner System, Leachate Collection/Detection Systems	270.21(b)(1); 264.301(a)(2); 264.301(c)(2),(3)						
D-6f(1)	System Operation and Design	270.21(b)(1); 264.301(a)(2); 264.301(c)(2),(3)	Describe design features of leachate detection system and how system will function to detect any leakage through either liner in timely manner.					
D-6f(2)	Drainage Material	270.21(b)(1); 264.301(a)(2),(c)(3) (ii)	Describe leachate detection system drainage material.					
D-6f(3)	Grading and Drainage	270.21(b)(1); 264.301(a)(2),(c)(2), (3)	Indicate slopes of leachate detection system and provide contour plan for system along with plan showing layout and spacing of piping system and any sumps, pumps, etc. Demonstrate that leak detection system is appropriately graded to assure that leakage at any point in liner system is detected in timely manner.					
D-6f(4)	Maximum Leachate Head	270.21(b)(1); 264.301(a)(2),(c)(2)						

	CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS									
	Section and Requirement	Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	ESS INFORMATION - LANDFILLS Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>					
D-6f(5)	Systems Compatibility	270.21(b)(1); 264.301(a)(2)(i)(A), (c)(3)(iii)								
D-6f(6)	Systems Strength	270.21(b)(1); 264.301(a)(2)(i)(B), (c)(3)(iii)								
D-6f(6)(a)	Stability of Drainage Layers	270.21(b)(1); 264.301(a)(2)(i)(B), (c)(3)(iii)								
D-6f(6)(b)	Strength of Piping	270.21(b)(1); 264.301(a)(2)(i)(B), (c)(3)(iii)	Demonstrate that pipe used in piping systems have sufficient strength to support loads as computed in item D-6c(3).							
D-6f(7)	Prevention of Clogging	270.21(b)(1); 264.301(a)(2)(ii), (c)(3)(iv)								
D-6f(8)	Liquid Removal	270.21(b)(1); 264.301(c)(3)(v),(4)								
D-6f(9)	Location Relative to Water Table	270.21(b)(1)(iii); 264.301(c)(5); 264a.301								
D-6g	Liner System, Construction and Maintenance									
D-6g(1)	Material Specifications									

	CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS								
	Section and Requirement	SECTION D. PROCE Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	ESS INFORMATION - LANDFILLS Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>				
D-6g(1)(a)	Synthetic Liners	270.21(b)(1); 264.301(a)(1); 264a.301	Provide detailed material specifications for specific synthetic liner or liners to be used.						
D-6g(1)(b)	Soil Liners	270.21(b)(1); 264.301(a)(1); 264a.301	For soil liners constructed of borrowed material, provide specifications. For soil liners using in-place soil, provide specifications to be used to assure that all existing materials meet requirements of liner design.						
D-6g(1)(c)	Leachate Collection/Detection Systems	270.21(b)(1); 264.301(a),(c)	Provide material specifications for drainage layer material, filter fabric or filter layer, piping, and sumps.						
D-6g(2)	Construction Specifications								
D-6g(2)(a)	Liner System Foundation	270.21(b)(1); 264.301(a)(1); 264.303(a); 264a.301	Provide construction specifications of foundation installation procedures. For units that use in-place material for liner system foundation, provide construction specifications for preparation of foundation.						
D-6g(2)(b)	Soil Liner	264a.301; 270.21(b)(1); 264.301(a)(1); 264.303(a)(2)	Describe procedures for installing soil liner.						
D-6g(2)(c)	Synthetic Liners	270.21(b)(1); 264a.301; 264.301(a)(1); 264.303(a)(1)	Provide construction specifications for placement of synthetic liners.						

	CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS SECTION D. PROCESS INFORMATION - LANDFILLS								
	Section and Requirement	Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>				
D-6g(2)(d)	Leachate Collection/Detection Systems	270.31(b)(1); 264.301(a),(c)	Provide construction specifications for placement of all components of leachate collection/detection systems.						
D-6g(3)	Certified Quality Auditor (CQA) Program	270.21(b)(1); 270.30(k)(2); 264.19; 264.303(a)	Provide complete details of CQA program to be used during construction of liner system to assure that it is built as designed.						
D-6g(4)	Maintenance Procedures for Leachate Collection/Detection Systems	270.21(b)(1); 264.301(a),(c)	Describe anticipated maintenance activities that will be used to assure proper operation of leachate collection/detection systems throughout landfill's expected life.						
D-6g(5)	Liner Repairs During Operations	270.21(b)(1); 264.301(a)	Describe methods that will be used to repair any damage to liner that occurs while landfill is in operation during placement of waste (such as a dozer ripping the liner).						
D-6h	Action Leakage Rate	270.21(b)(1)(v); 264.302							
D-6h(1)	Determination of the Action Leakage Rate	270.21(b)(1)(v); 264.302(a)							

	CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS SECTION D. PROCESS INFORMATION - LANDFILLS									
	Section and Requirement	Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>					
D-6h(2)	Monitoring the Leakage	270.21(b)(1)(v); 264.302(b)	To determine if action leakage rate has been exceeded, owner/operator must convert required leachate flow rate monitoring data to average daily flow rate for each sump. This average daily flow rate must be calculated weekly during active life of facility and closure period, and monthly during post-closure care period.							
D-6i	Leakage Response Action Plan	270.21(b)(1)(v); 264.304								
D-6i(1)	Response Actions	270.21(b)(1)(v); 264.304(a)								
D-6i(2)	Leak and/or Remedial Determinations	270.21(b)(1)(v); 264.304(b),(c)								
D-6i(3)	Notifications	270.21(b)(1)(v); 264.304(b)								
D-6j	Runon and Runoff Control Systems									
D-6j(1)	Runon Control System	270.21(b)(2); 264.301(g)	Describe system that will be used to prevent runon onto active portions of landfills.							
D-6j(1)(a)	Design and Performance	270.21(b)(2); 264.301(g)	Describe runon control system design and how that design prevents runon from reaching active portions of site. Provide plan view.							

	CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS SECTION D. PROCESS INFORMATION - LANDFILLS								
	Section and Requirement	Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>				
D-6j(1)(b)	Calculation of Peak Flow	270.21(b)(1); 264.301(g)	Identify peak surface water flow expected to result from 2-year design storm. Provide copies of calculations and data.						
D-6j(2)	Runoff Control System	270.21(b)(3); 264.301(h)	Describe runoff control system to be used to collect and control runoff from active portions.						
D-6j(2)(a)	Design and Performance	270.21(b)(3); 264.301(h)	Describe runoff collection and control system design. Indicate fate of collected runoff that is considered hazardous waste until tested and/or treated.						
D-6j(2)(b)	Calculation of Peak Flow	270.21(b)(3); 264.301(h)	Identify total runoff volume expected to result from at least a 24-hour, 25-year storm event. Provide copies of calculations and data.						
D-6j(3)	Management of Collection and Holding Units	270.21(b)(4); 264.301(i)	Describe how collection and holding facilities associated with runon and runoff control systems will be emptied or otherwise managed expeditiously after storms to maintain system design capacity. Describe fate of liquids discharged from these systems.						
D-6j(4)	Construction	270.21(b)(2),(3); 264.301(g),(h)	Provide detailed construction and material specifications for runon and runoff control systems.						
D-6j(5)	Maintenance	270.21(b)(2),(3); 264.301(g),(h)	Describe any maintenance activities required to assure continued proper operations of runon and runoff control systems throughout active life of unit.						

D6\_LNDFI.WPD

	CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS SECTION D. PROCESS INFORMATION - LANDFILLS								
	Section and Requirement	Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>				
D-6k	Control of Wind Dispersal	270.21(b)(5); 264.301(j)							
D-6L	Liquids in Landfills								
D-6L(1)	Bulk or Noncontainerized Free Liquids	270.21(h); 264.314	Describe procedures that will be used to ensure that no bulk or noncontainerized liquid hazardous waste or waste with free liquids will be placed in landfill. Demonstrate, by paint filter test, Method 9095, that no free liquids will be placed in landfill.						
D-6L(2)	Containers Holding Free Liquids	270.21(h); 264.314(d)	For facilities that intend to dispose of containers holding free liquids, describe how free liquids will be removed from containers or stabilized within container before container is placed in landfill. If liquid is removed, container must be backfilled or crushed.						
D-6L(3)	Restriction to Small Containers	270.21(h); 264.314(d)(2)	If small containers are to be disposed of in landfill, demonstrate by indicating container volume, that containers will be very small (such as ampules).						
D-6L(4)	Nonstorage Containers	270.21(h); 264.314(d)(3)	If nonstorage containers are to be disposed of in landfill, demonstrate by describing the containers designed to hold free liquids for use other than storage (e.g., batteries, capacitors).						

CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS SECTION D. PROCESS INFORMATION - LANDFILLS							
	Section and Requirement	Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>		
D-6L(5)	Lab Packs	270.21(h); 264.314(d)(4)	Describe how it will be assured that lab packs to be landfilled containing free liquids meet requirements for lab packs.				
D-6L(5)(a)	Inside Containers	270.21(h); 264.314(d)(4); 264.316(a)					
D-6L(5)(b)	Overpack	270.21(h); 264.314(d)(4); 264.316(b)	Demonstrate that overpacking consists of metal, Department of Transportation (DOT) containers, metal DOT containers, with open heads no larger than 110 gallons; and sufficient sorbent material determined to be non- biodegradable to completely sorb all liquid contents of inside container.				
D-6L(5)(c)	Sorbent Material	270.21(h); 264.314(d)(4),(e) 264.316	Demonstrate that sorbent materials used are no capable of reacting dangerously with, being decomposed by, or being ignited by contents of inside containers.				
D-6L(5)(d)	Incompatible Wastes	270.21(h); 264.314(d)(4); 264.316(d)	Demonstrate that incompatible waste will not be placed in same outside containers.				
D-6L(5)(e)	Reactive Wastes	270.21(h); 264.314(d)(4); 264.316(d)	Demonstrate that incompatible waste will not be placed in same outside containers.				
D-6m	Containerized Wastes	270.21(i); 264.315					

CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS SECTION D. PROCESS INFORMATION - LANDFILLS							
	Section and Requirement	Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>		
D-6n	Special Waste Management Plan for Landfills Containing Wastes F020, F021, F022, F023, F026, and F027	270.21(j); 264.317	Provide plan for waste management in this special facility. Plan must address the following factors.				
D-6n(1)	Waste Descriptions	270.21(j)(1); 264.317(a)(1)	Identify volume, physical, and chemical characteristics of waste, including potential to migrate through soil or volatilize or escape into atmosphere.				
D-6n(2)	Soil Description	270.21(j)(2); 264.317(a)(2)	Describe attenuative properties of underlying and surrounding soils or other materials.				
D-6n(3)	Mobilizing Properties	270.21(j)(2); 264.317(a)(2)	Describe mobilizing properties of other materials codisposed of with this waste.				

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.

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.

d. Listed Federal regulatory citations refer to provisions of Title 40 of the Code of Federal Regulations (40CFR) that have been incorporated by reference into Title 25 of the Pennsylvania Code (25 Pa. Code). Citations containing a small letter "a" refer to provisions of 25 Pa. Code that contain additions to, deletions from, or modifications of the Federal Regulations that have been incorporated.

CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS SECTION D. PROCESS INFORMATION - LAND TREATMENT						
	Section and Requirement	Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>	
D-7	Land Treatment	270.20; 264.270 - 264.283;264a.273; 264a.276				
D-7a	Treatment Demonstration	270.20(a); 264.272				
D-7a(1)	Demonstration Wastes	270.20(a)(1); 264.272(a),(c)(1)(i)	Describe waste used in demonstration and waste to be treated during normal operation. Identify concentrations of all hazardous constituents reasonably expected to be present in both wastes.			
D-7a(2)	Demonstration Data Sources	270.20(a)(2); 264.272(b)	Describe source of data used for treatment demonstration and provide available determinations.			
D-7a(2)(a)	Existing Literature	270.20(a)(2); 264.272(b)	If existing literature is used to demonstrate treatment, submit brief written review of scientific literature and previous studies that contain pertinent information. Information sources should be properly referenced. In general, existing literature will not be acceptable as demonstration unless it can be shown that site and waste characteristics are identical to those in literature.			
D-7a(2)(b)	Operating Data	270.20(a)(2); 264.272(b)	Provide any operating data gathered from units to be permitted, including application rate data and operating records.			

CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS							
	Section and Requirement	ION D. PROCESS Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	INFORMATION - LAND TREATMENT Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>		
D-7a(3)	Laboratory/Field Testing Programs	270.20(a)(3); 264.272(b),(c)	Field and laboratory tests to be used for demonstration must be thoroughly described. Include interpretive discussions as appropriate.				
D-7a(3)(a)	Toxicity Testing	270.20(a)(2); 264.272(b)	Describe acute toxicity test procedures used to estimate impact of waste application or waste constituents on soil biota responsible for waste treatment.				
D-7a(3)(b)	Field Plot Testing	270.20(a)(2),(3); 264.272(b),(c)	Describe field plot studies used to demonstrate treatability of waste(s) or waste constituents.				
D-7a(3)(c)	Laboratory Testing	270.20(b)(2),(3); 264.272(b),(c)	Describe laboratory test methods used to demonstrate treatability of waste(s) or waste constituents.				
D-7b	Land Treatment Program	270.20(b); 264.271	Describe characteristics and operating conditions of land treatment unit(s) to be permitted.				
D-7b(1)	List of Wastes	270.20(b)(1); 264.271(b)					
D-7b(2)	Operating Procedures	270.20(b)(2); 264.273(a); 264a.273	Describe operating procedures used to assure uniform and complete degradation, transformation, and immobilization.				

CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS							
	SECT Section and Requirement	ION D. PROCESS Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	INFORMATION - LAND TREATMENT Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>		
D-7b(2)(a)	Waste Application Rates	270.20(b)(2)(i); 264.273(a)(1)	Identify rate and frequency of waste application and concentration of limiting constituents in waste.				
D-7b(2)(b)	Waste Application Methods	270.20(b)(2)(i); 264.273(a)(1); 264a.273	Describe method(s) used to apply and incorporate waste into treatment zone.				
D-7b(2)(c)	Control of Soil pH	270.20(b)(2)(ii); 264.273(a)(2)	Identify acceptable limits of soil pH and describe rationale for those limits. Describe how soil pH will be measured and adjusted, including a schedule for the same.				
D-7b(2)(d)	Enhancement of Microbial or Chemical Reactions	270.20(b)(2)(iii); 264.273(a)(3)	Describe measures used to enhance treatment, including method and frequency of such measures (e.g., fertilization, microbial inoculations, soil aeration).				
D-7b(2)(e)	Control of Soil Moisture	270.20(b)(2)(iv); 264.273(a)(4); 264a.273(2),(3)	Identify limits on soil moisture content. Describe how soil moisture will be monitored and adjusted, if necessary.				
D-7c	Unsaturated Zone Monitoring Plan	270.20(b)(3); 264.278	Submit unsaturated zone monitoring plan describing measures used to determine if hazardous wastes have migrated from treatment zone.				
D-7c(1)	Soil-Pore Liquid Monitoring	270.20(b)(3); 264.278	Describe program for sampling and analysis of soil-pore liquid to detect migration of dissolved constituents below treatment zone.				

CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS SECTION D. PROCESS INFORMATION - LAND TREATMENT							
	Section and Requirement	Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>		
D-7c(1)(a)	Sampling Location	270.20(b)(3)(ii); 264.278(b), (d)	Identify sampling locations and indicate that samples will be collected immediately below treatment zone.				
D-7c(1)(b)	Sampling Frequency	270.20(b)(3)(i); 264.278(e)	Provide schedule for sampling soil-pore liquid.				
D-7c(1)(c)	Sampling Equipment	270.20(b)(3)(i); 264.278(e)	Identify equipment used to obtain soil-pore liquid samples.				
D-7c(1)(d)	Sampling Equipment Installation	270.20(b)(3)(i); 264.278(e)	Describe procedures used to install soil-pore liquid monitoring devices.				
D-7c(1)(e)	Sampling Procedures	270.20(b)(3)(i); 264.278(e)(1),(2)					
D-7c(1)(f)	Analytical Procedures	270.20(b)(3)(iii); 264.278(e)(3)	Identify analytical procedures used to determine concentration of hazardous constituents in soil-pore liquid samples.				
D-7c(1)(g)	Chain of Custody	270.20(b)(3)(iv); 264.278(e)(4)					
D-7c(1)(h)	Background Values	270.20(b)(3)(v); 264.278(c)	Describe sampling and analytical program used to establish background soil-pore liquid concentrations of hazardous constituents. Provide background data, if available.				
D-7c(1)(i)	Statistical Methods	270.20(b)(3)(vi); 264.278(f)	Describe statistical methods that will be used to determine differences between background and treatment zone concentrations of hazardous constituents.				

	CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS SECTION D. PROCESS INFORMATION - LAND TREATMENT						
	Section and Requirement	Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>		
D-7c(1)(j)	Justification of Principle Hazardous Constituents	270.20(b)(3)(vii); 264.278(a)(2)	Provide suggested list of 261 Appendix VIII hazardous constituents to be monitored for in soil-pore liquids.				
D-7c(2)	Soil Core Monitoring	270.20(b)(3); 264.278	Describe program for monitoring soil cores to detect migration of hazardous constituents below treatment zone.				
D-7c(2)(a)	Sampling Location	270.20(b)(3)(ii); 264.278(b),(d)	Identify sampling locations and indicate that soil cores will be collected immediately below treatment zone.				
D-7c(2)(b)	Sampling Frequency	270.20(b)(3)(i); 264.278(e)	Provide schedule for sampling soil.				
D-7c(2)(c)	Sampling Equipment	270.20(b)(3)(i); 264.278(e)	Identify equipment used to sample soil cores.				
D-7c(2)(d)	Sampling Procedures	270.20(b)(3)(i); 264.278(e)(1),(2)					
D-7c(2)(e)	Analytical Procedures	270.20(b)(3)(iii); 264.278(e)(3)	Identify analytical methods used to determine concentration of hazardous constituents in soil core samples.				
D-7c(2)(f)	Chain of Custody	270.20(b)(3)(iv); 264.278(e)(4)					
D-7c(2)(g)	Background Values	270.20(b)(3)(v); 264.278(c)	Describe sampling and analytical program used to establish background soil core concentrations of hazardous constituents. Provide background data, if available.				

CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS SECTION D. PROCESS INFORMATION - LAND TREATMENT						
	Section and Requirement	Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>	
D-7c(2)(h)	Statistical Methods	270.20(b)(3)(vi); 264.278(f)	Describe statistical methods that will be used to determine differences between background and treatment zone concentrations of hazardous constituents.			
D-7c(2)(i)	Justification of Principal Hazardous Constituents	270.20(b)(3)(vii); 264.278(a)(2)	Provide suggested list of 261 Appendix VIII hazardous constituents to be monitored for in soil core samples.			
D-7d	Treatment Zone Description	270.20(b)(5); 264.271(c)	Identify dimensions of treatment zone.			
D-7d(1)	Horizontal and Vertical Dimensions	270.20(b)(5); 264.271(c)				
D-7d(2)	Soil Survey	270.20(b)(2); 264.272(c)(1)(iv)	Provide map or plat plan delineating horizontal boundaries of treatment zone and all soil series occurring within treatment zone.			
D-7d(3)	Soil Series Descriptions	270.20(b)(2); 264.272(c)(1)(iv)	Submit description of each soil series identified within treatment zone.			
D-7d(4)	Soil Sampling Data	270.20(b)(2); 264.272(1)(iv)				
D-7d(5)	Seasonal High Water Table	270.20(b); 264.271(c)(2)	Identify depth to seasonal high water table and source of that data.			
D-7e	Unit Design, Construction, Operation, and Maintenance	270.20(c); 264.273; 264a.273	Describe design, construction, operation, and maintenance of runon, runoff, and wind dispersal controls.			

	CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS							
	Section and Requirement	ION D. PROCESS Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	INFORMATION - LAND TREATMENT Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>			
D-7e(1)	Runon Control	270.20(c)(1); 264.273(c)	Submit scale drawing of unit showing any runon controls used.					
D-7e(2)	Runoff Control	270.20(c)(1); 264.273(c)	Describe runoff collection and control system.					
D-7e(3)	Minimizing Hazardous Constituent Runoff	270.20(c)(3); 264.273(b)						
D-7e(4)	Management of Accumulated Runon and Runoff	270.20(c)(4); 264.273(e); 264a.273(2)	Describe fate of collected surface water, including sampling and analysis protocols for determining contaminant levels.					
D-7e(5)	Control of Wind Dispersal	270.20(c)(6); 264.273(f)						
D-7f	Food-Chain Crops	270.20(d); 264.276; 264a.276	Demonstrate that there is no substantial risk to human health or environment caused by growth of food-chain crops on unit.					
D-7f(1)	Food-Chain Crop Demonstration	270.20(d); 264.276(a)(1); 264a.276						
D-7f(1)(a)	Demonstration Basis	270.20(d)(1),(2); 264.276(a)(3)(i); 264a.276	Show that demonstration results will be representative of unit to be permitted.					
D-7f(1)(b)	Test Procedures	270.20(d)(3); 264.276(a)(3)(ii)	Describe procedures used in any tests referenced or conducted.					

CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS SECTION D. PROCESS INFORMATION - LAND TREATMENT							
	Section and Requirement	Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>		
D-7f(2)	Cadmium-Bearing Wastes	270.20(e); 264.276(b); 264a.276					
D-7f(2)(a)	Crops for Human Consumption	270.20(e); 264.276(b)(1); 264a.276	If crops are to be grown for human consumption, provide: soil pH; soil pH controls; cadmium-loading rate; and soil cation exchange capacity.				
D-7f(2)(b)	Animal Feed	270.20(e); 264.276(b)(2)	If only animal feed is to be grown, provide soil pH and soil pH controls. Provide copy of operating plan demonstrating how animal feed will be distributed to preclude ingestion by humans, including control of alternative land use.				
D-7g	Special Waste Management Plan for Land Treatment Units Containing Wastes F020, F021, F022, F023, F026, and F027	270.20(i); 264.283	Provide plan describing how land treatment units containing referenced waste are, or will be, designed, constructed, operated, and maintained to protect human health and environment.				
D-7g(1)	Waste Description	270.20(i)(1); 264.283(a)(1)					
D-7g(2)	Soil Description	270.20(i)(2); 264.283(a)(2)					
D-7g(3)	Mobilizing Properties	270.20(i)(3); 264.283(a)(3)					

CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS SECTION D. PROCESS INFORMATION - LAND TREATMENT							
	Section and Requirement	Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>		
D-7g(4)	Additional Management Techniques	270.20(i)(4); 264.283(a)(4)					
D-7h	Incompatible Wastes	270.20(h); 264.282	Indicate that incompatible waste will not be placed in, or on, the same treatment zone.				

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.
- 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.
- d. Listed Federal regulatory citations refer to provisions of Title 40 of the Code of Federal Regulations (40CFR) that have been incorporated by reference into Title 25 of the Pennsylvania Code (25 Pa. Code). Citations containing a small letter "a" refer to provisions of 25 Pa. Code that contain additions to, deletions from, or modifications of the Federal Regulations that have been incorporated.

	CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS SECTION D. PROCESS INFORMATION - MISCELLANEOUS TREATMENT Pennsylvania									
	Section and Requirement	(25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>					
D-8	Miscellaneous Units	270.23; 264.601	• Identify all miscellaneous units that treat, store, or dispose of hazardous waste at facility, but do not fit current definition of container, tank, surface impoundment, etc. These units may include: geologic repositories, deactivated missile silos, thermal treatment units other than incinerators, boilers, or industrial furnaces units, open burning and open detonating explosive waste certain chemical/physical/biological treatment units.							
D-8a	Description of Miscellaneous Units	270.23(a)								
D-8b	Waste Characterization	270.23; 264.601(a)(1), (b)(1),(c)(1)	Provide information on volume and concentration of waste in order to determine release potential.							
D-8c	Treatment Effectiveness	270.23(d)								
D-8d	Environmental Performance Standards for Miscellaneous Units		Environmental performance standards must be established and maintained to protect human health and environment.							
D-8d(1)	Protection of Groundwater and Subsurface Environment	270.23(b),(c); 264.601(a)								

CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS SECTION D. PROCESS INFORMATION - MISCELLANEOUS TREATMENT									
	Section and Requirement	Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>				
D-8d(1)(a)	Environmental Assessment	270.23(b),(c); 264.601(a)	Applicant must conduct assessment of potential for releases to groundwater or the subsurface environment. Both saturated and unsaturated zones must be considered in evaluating potential for subsurface migration.						
D-8d(1)(b)	Performance Standards	270.23(b); 264.601	Based on assessments, performance standards must be developed and maintained.						
D-8d(2)	Protection of Surface Water, Wetlands, and Soil Surfaces	270.23(b),(c); 264.601(b)							
D-8d(2)(a)	Environmental Assessment	270.23(b),(c); 264.601(b)	Applicant must conduct assessment of potential for releases to surface water, wetlands, or soil surface.						
D-8d(2)(b)	Performance Standards	270.23; 264.601	Based on assessments, performance standards must be developed and maintained.						
D-8d(3)	Protection of the Atmosphere	270.23(b),(c); 264.601							
D-8d(3)(a)	Environmental Assessment	270.23(b),(c); 264.601(c)	Applicant must conduct assessment of potential for release to air.						
D-8d(3)(b)	Performance Standards	270.23; 264.601	Based on assessments, performance standards must be developed and maintained.						
D-8e	Monitoring, Analysis, Inspection, Response, Reporting, and Corrective Action	270.23(a); 264.602							

	CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS SECTION D. PROCESS INFORMATION - MISCELLANEOUS TREATMENT								
	Section and Requirement	Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>				
D-8e(1)	Elements of a Monitoring Program	270.23(a); 264.602	Monitoring program must include procedures for sampling, analysis, and evaluation of data, suitable response procedures, and a regular inspection schedule.						
D-8e(2)	Air Monitoring Alternatives	270.23(a); 264.602	For situations in which ambient air monitoring would be unsafe or impractical, possible alternatives may include analysis of waste, emissions measurements, and periodic monitoring with portable detectors.						

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.

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.

d. Listed Federal regulatory citations refer to provisions of Title 40 of the Code of Federal Regulations (40CFR) that have been incorporated by reference into Title 25 of the Pennsylvania Code (25 Pa. Code). Citations containing a small letter "a" refer to provisions of 25 Pa. Code that contain additions to, deletions from, or modifications of the Federal Regulations that have been incorporated.

	CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS SECTION D. PROCESS INFORMATION - BOILERS/INDUSTRIAL FURNACES								
	Section and Requirement	Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>				
D-9	Boilers and Industrial Furnaces (BIF)								
D-9a	Waivers/Exemptions	270.22(a)(2)(i); 266.104(a)(4); 266.110	If applying for waiver or exemption, provide information demonstrating compliance with requirements outlined in this section.						
D-9a(1)	Waiver of Destruction and Removal Efficiency (DRE) Trial Burn for Boilers	270.22(a)(2)(i); 266.104(a)(4); 266.110							
D-9a(2)	Low Risk Waste Exemption	270.22(a)(2)(ii); 266.104(a)(5); 266.109(a)	The DRE standard for a BIF may be waived provided certain criteria listed in regulatory citation are met and documented.						
D-9a(3)	Waiver of Particulate Matter Standard	270.22(a)(4); 266.109(b)	The particulate matter standard of 266.105 and trial burn for particulate matter may be waived if: the BIF complies with Tier I or Adjusted Tier I metals feed rate screening limits under 266.106(b) or (e) and submits documentation showing conformance with trial burn waiver under checklist Section D- 9a(4) below; and BIF meets requirements of low risk waste exemption under checklist Section D-9a(2) above.						
D-9a(4)	Waiver of Trial Burn for Metals	270.22(a)(3); 266.106(b),(e)							
D-9a(5)	Waiver of Trial Burn for Hydrogen Chloride (HCl)/Cl <sub>2</sub>	270.22(a)(5); 266.107(b),(e)							

D9\_BIF.WPD

	CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS									
	Section and Requirement	PROCESS INFORM Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	IATION - BOILERS/INDUSTRIAL FURNAC Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>					
D-9b	Pretrial Burn Requirements for New BIFs	270.66(b)(1); 266.102(d)(4)(i); 266.102(e)	Time required to bring new BIF to point of operational readiness for trial burn must be minimum necessary and cannot exceed 720 hours, or up to 1,440 hours if applicant shows good cause for requiring an extension.							
D-9b(1)	Pretrial Burn Requirements for New BIFs - Organic Emission Standards	270.66(b)(1)(i); 266.102(e)(2); 266.104(d),(e)								
D-9b(2)	Pretrial Burn Requirements for New BIFs - Particle Matter Emissions Standards	270.66(b)(1)(i); 266.105								
D-9b(3)	Pretrial Burn Requirements for New BIFs - Metal Emissions Standards	270.66(b)(1)(i); 266.102(e)(4)(i), (ii); 266.106								
D-9b(4)	Pretrial Burn Requirements for New BIFs - Alternative Metals Approach	270.66(b); 266.102(e)(4)(iii); 266.106(f)	For conformance with alternative metals approach, description of operating conditions must: describe approach that will be used to comply; specify how approach ensures compliance with metals emissions standards of 266.106(c) and (d); specify how approach can be effectively implemented and monitored; and provide such other information as necessary to ensure that the standards of 266.106(c) or (d) are met.							

	CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS									
Section and Requirement		PROCESS INFORM Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	IATION - BOILERS/INDUSTRIAL FURNAG Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>					
D-9b(5)	Pretrial Burn Requirements for New BIFs - Hydrogen Chloride/Chlorine Emission Standards	270.66(b)(1)(i); 266.102(e)(5)(i); 266.107								
D-9b(6)	Pretrial Burn Requirements for New BIFs - Fugitive Emissions	270.66(b)(1)(i); 266.102(e)(7)(i)	Description of operating conditions must thoroughly describe method by which fugitive emissions will be controlled.							
D-9b(7)	Pretrial Burn Requirements for New BIFs - Automatic Waste Feed Cutoff	270.66(b)(1)(i); 266.102(e)(7)(ii), (iii)								
D-9b(8)	Pretrial Burn Requirements for New BIFs - Monitoring Requirements	270.66(b)(1)(i); 266.102(e)(8),(10)								
D-9c	Trial Burn Plan Requirements for All BIFs	270.66(b)(2),(c), (e); 266.102(d)(4)(ii)								
D-9d	Trial Burn Results	270.22(a)(6); 270.66(d),(f) 270a.66	Results of trial burn, as specified in regulatory citation, must be submitted within 90 days of completing trial burn. The submittal must be certified on behalf of applicant by signature of a person authorized to sign a permit application or a report under 270.11.							

	CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS SECTION D. PROCESS INFORMATION - BOILERS/INDUSTRIAL FURNACES								
	Section and Requirement	Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>				
D-9e	Post-Trial Burn Requirements for New BIFs	270.66(b)(3)(ii); 266.102(d)(4)(iii),(e)	• Post-trial burn requirements for new BIFs are the same as pretrial burn requirements for new BIFs with the following exceptions: No documentation of total burn hours is required; no limit to length of time for burning. Must submit statement identifying conditions necessary to operate in compliance. Must submit statement specifying that BIF will stop burning when changes in combustion properties or feed rates or BIF design or operating conditions deviate from approved post-trial burn period.						
D-9f	Data in Lieu of Trial Burn	270.22(a)(6); 270.66(c)(3)	A BIF may seek exemption from trial burn requirements by submitting information provided by previous compliance testing of same device, or from compliance testing or trial or operational burns of similar BIFs burning similar hazardous waste under similar conditions.						
D-9g	Alternative Hydrocarbons (HC) Limit for Industrial Furnaces with Organic Matter in Raw Materials	270.22(b); 266.104(f)							

	CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS SECTION D. PROCESS INFORMATION - BOILERS/INDUSTRIAL FURNACES									
	Section and Requirement	Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>					
D-9h	Alternative Metals Implementation Approach	270.22(c); 266.106(f)	• For conformance with an alternative metals implementation approach, the information must: Describe approach that will be used to comply. Specify how approach ensures compliance with the metals emissions standards of 266.106(c) and (d). Specify how approach can be effectively implemented and monitored. Provide such other information as necessary to ensure that standards are met.							
D-9i	Monitoring Requirements	270.22; 266.102(e)(6),(8)	Various parameters must be continuously monitored per 266.102(e)(6) while burning hazardous waste. Data must be maintained in operating record until closure of facility.							
D-9j	Automatic Waste Feed Cutoff System	270.22(d); 266.102(e)(7)(ii)	All facilities must submit description of automatic waste feed cutoff system, including any pre-alarm systems that may be used.							
D-9k	Direct Transfer Standards	270.22(e); 266.111; Part 264 Subparts I and J; Part 264a Subparts I and J	BIFs that directly feed hazardous waste from a transport vehicle to a BIF without use of a storage unit must submit a description of the direct transfer procedures that will be used, along with other information as specified in regulatory citation.							

	CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS SECTION D. PROCESS INFORMATION - BOILERS/INDUSTRIAL FURNACES									
	Section and Requirement	Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>					
D-9k(1)	Direct Transfer Standards - Containment System	270.22(e); 264.175	In areas where direct transfer vehicles are located, a complete description of containment system must be provided.							
D-9k(2)	Direct Transfer Standards - Condition of Containers	270.22(e); 264.171								
D-9k(3)	Direct Transfer Standards - Compatibility of Waste with Container	270.22(e); 264.172								
D-9k(4)	Direct Transfer Standards - Management of Containers	270.22(e); 264.173; 264a.173								
D-9k(5)	Direct Transfer Standards - Special Requirements of Ignitable or Reactive Waste	270.22(e); 264.176	Provide documentation of location of all containers holding ignitable/reactive waste.							
D-9k(6)	Direct Transfer Standards - Special Requirements of Incompatible Wastes	270.22(e); 264.177	Provide statement and description of procedures to ensure compliance with management standards for incompatible waste.							
D-9k(7)	Direct Transfer Standards - Closure	270.22(e); 264.178	Describe how all hazardous waste and hazardous waste residues will be removed from containment system at closure.							
D-9k(8)	Direct Transfer Standards - Secondary Containment Requirements	270.22(e); 266.111(e)	Owners/operators must submit documentation demonstrating conformance with secondary containment requirements of 265.193(b),(c), and (f) - (h).							

	CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS SECTION D. PROCESS INFORMATION - BOILERS/INDUSTRIAL FURNACES							
	Section and Requirement	Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>			
D-9L	Bevill Residues	270.22(f); 266.112; Part 266 Appendices VII and IX						

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.

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.

d. Listed Federal regulatory citations refer to provisions of Title 40 of the Code of Federal Regulations (40CFR) that have been incorporated by reference into Title 25 of the Pennsylvania Code (25 Pa. Code). Citations containing a small letter "a" refer to provisions of 25 Pa. Code that contain additions to, deletions from, or modifications of the Federal Regulations that have been incorporated.

CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS SECTION D. PROCESS INFORMATION - CONTAINMENT BUILDINGS									
	Section and Requirement	Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>				
D-10	Containment Buildings	270.14(a),(b); 270a.14; 264.1100 - 264.1102; 264a.1100; 264a.1101							
D-10a	Containment Building Description	270.14(a),(b); 264a.1100; 264.1100(a); 264.1101(a)							
D-10a(1)	Construction	270.14(a),(b); 264a.1100; 264.1100(a); 264.1101(a)	Provide description of unit; include dimensions and materials of construction.						
D-10a(2)	Strength Requirements	270.14(a),(b); 264a.1100; 264.1100(a); 264.1101(a)	Provide results of calculations defining maximum loads or stresses that will be placed on containment building system.						
D-10a(3)	Design Requirements for Units Not Managing Liquids	270.14(a),(b) 264.1100(b); 264.1101(d)							
D-10a(3)(a)	Primary Barrier	270.14(a),(b) 264.1100(a),(b); 264.1101(a)(4); 264a.1100	Provide detailed description of primary barrier, and demonstrate that it is sufficiently durable to withstand movement of personnel, waste, and handling equipment within unit.						

	CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS									
	Section and Requirement	D. PROCESS INFC Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	ORMATION - CONTAINMENT BUILDINGS         Review         Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>					
D-10a(4)	Design Requirements for Units Managing Liquids	270.14(a),(b) 264.1100(c); 264.1101(a)(4),(b)								
D-10a(4)(a)	Primary Barrier	270.14(a),(b) 264.1100(c)(1); 264.1101(b)(1)	Describe how primary barrier is designed and constructed to prevent migration of hazardous constituents into barrier.							
D-10a(4)(b)	Liquid Collection System	270.14(a),(b) 264.1100(c)(2); 264.1101(b)(3)	Describe in detail liquid collection system that must be designed and constructed of materials to minimize accumulation of liquid on primary barrier.							
D-10a(4)(c)	Secondary Containment System	270.14(a),(b) 264.1100(c)(3)								
D-10a(4)(c)(i)	Leak Detection System	270.14(a),(b) 264.1100(c)(3); 264.1101(a),(b)(3)	Describe design and operating features of leak detection system.							
D-10a(4)(C)(ii)	Secondary Barrier	270.14(a),(b) 264.1100(b)(3); 264.1101(b)(3)	Describe how secondary barrier is designed and constructed to prevent migration of hazardous constituents into barrier.							
D-10a(4)(d)	Temporary Variance from Secondary Containment Requirements	270.14(a),(b) 264.1101(b)(4); 264a.1101(i)								
D-10a(4)(e)	Waiver of Secondary Containment Requirements	270.14(a),(b) 264.1101(e)								

	CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS SECTION D. PROCESS INFORMATION - CONTAINMENT BUILDINGS									
	Section and Requirement	Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>					
D-10a(5)	Design of Units Managing Both Liquids and Nonliquids in the Same Unit	270.14(a),(b) 264.1101(d)	Identify areas of containment building that are constructed both with and without secondary containment, if applicable.							
D-10a(6)	Compatibility of Structure with Wastes	270.14(a),(b) 264.1101(a)(2), (b)(3)(iii)	Demonstrate that all surfaces in contact with hazardous waste, collected liquids, or leachate must be chemically compatible with those wastes.							
D-10a(7)	Fugitive Dust Emissions	270.14(a),(b) 264.1100(d); 264.1101(c)(1)(iv); Part 60 Appendix A								
D-10a(8)	Structural Integrity Requirements	270.14(a),(b) 264.1101(a)(2)								
D-10a(9)	Certification of Design	270.14(a),(b) 264.1101(c)(2); 264a.1101(c)(2)								
D-10b	Containment Building Operations	270.14(a),(b) 264.1101(c)								
D-10b(1)	Primary Barrier Integrity	270.14(a),(b) 264.1101(b)(2)(ii), (c)(1)(i)								
D-10b(2)	Volume of Waste	270.14(a),(b) 264.1101(c)(1)(ii)	Describe how owner/operator will maintain level of stored and/or treated hazardous waste within containment walls of unit so that height of any containment wall is not exceeded.							

D10\_CONB.WPD

	CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS SECTION D. PROCESS INFORMATION - CONTAINMENT BUILDINGS									
	Section and Requirement	Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>					
D-10b(3)	Tracking of Waste Out of Unit	270.14(a),(b) 264.1100(e); 264.1101(c)(1)(iii)								
D-10b(4)	Liquids Removal	270.14(a),(b) 264.1101(b)(2)(ii), (b)(3)	Describe sumps and liquid removal methods for liquids collection and leak detection systems. Indicate fate of collected liquids and leachates, which are considered hazardous waste.							
D-10b(5)	Management of Incompatible Wastes	270.14(a),(b) 264.1101(a)(3)	Indicate whether incompatible waste or treatment reagents will be placed in the unit or its secondary containment system.							
D-10b(6)	Management of Liquids and Nonliquids in the Same Unit	270.14(a),(b) 264.1101(d)(2),(3)	For containment buildings that contain areas both with and without secondary containment, describe measures to prevent release of liquids or wet materials into areas without secondary containment.							
D-10b(7)	Fugitive Dust Emissions	270.14(a),(b) 264.1100(d); 264.1101(c)(1)(iv); Part 60 Appendix A								
D-10b(8)	Treatment of Wastes	270.14(a),(b); 264.1101(b)(3)(ii)	If treatment of waste is conducted in containment building, describe how treatment will be conducted to prevent release of liquids, wet materials, or liquid aerosols to other portions of building.							

Г

	CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS SECTION D. PROCESS INFORMATION - CONTAINMENT BUILDINGS								
	Section and Requirement	Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>				
D-10b(9)	Equipment Decontamination	270.14(a),(b) 264.1101(c)(1)(iii)	Identify area used to decontaminate equipment and collect and manage any rinsate from decontamination. Identify fate of decontamination residues.						
D-10c	Containment Buildings as Tank Secondary Containment	270.14(a),(b) 264.1101(b)(3)(iii)	Indicate whether containment building is intended to serve as a secondary containment system for a tank placed in the building. The unit must meet the requirements of 264.193(b), 264.193(c)(1), 264.193(c)(2), and 264.193(d)(1).						

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.

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.

d. Listed Federal regulatory citations refer to provisions of Title 40 of the Code of Federal Regulations (40CFR) that have been incorporated by reference into Title 25 of the Pennsylvania Code (25 Pa. Code). Citations containing a small letter "a" refer to provisions of 25 Pa. Code that contain additions to, deletions from, or modifications of the Federal Regulations that have been incorporated.

	CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS SECTION D. PROCESS INFORMATION - DRIP PADS							
	Section and Requirement	Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>			
D-11	Drip Pads	270.26; 264.570 - .575; 264a.570						
D-11a	Drip Pad Description	270.26(c); 264.573(a)						
D-11a(1)	Construction	270.26(c); 264.573(a)(1) - (4); 264.573(b)(1) - (3)	Provide a description of the unit including dimensions and materials of construction. Drip pads must: be constructed of nonearthen materials; be sloped to free-drain treated wood drippage, rain and other waters or wastes to the associated collection system; and, have a curb or berm around the perimeter.					
D-11a(1)(a)	Existing Drip Pads	270.26(c); 264.572(a); 264.573(a)(4)	Existing drip pads must have a hydraulic conductivity of less than or equal to $1 \times 10^{-7}$ centimeters per second. Provide a copy of the most recent written assessment of the drip pad. This assessment must be reviewed and certified by an independent, qualified registered professional engineer (PE). The assessment must be reviewed, updated and recertified annually.					
D-11a(1)(b)	New Drip Pads	270.26(c); 264.572(b); 264.573(b)	New drip pads must have a synthetic liner installed below the pad. The liner must be constructed of materials that will prevent waste from being absorbed into the liner. A leakage detection system and a leakage collection system are also required.					

	CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS SECTION D. PROCESS INFORMATION - DRIP PADS								
	Section and Requirement	Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>				
D-11b(1)	Preventive Maintenance	270.26(c); 264.573(c)	Drip pads must be maintained to remain free of cracks, gaps, corrosion, etc., which could cause a release of hazardous waste.						
D-11b(2)	Prevent Runon and Runoff	270.26(c); 264.573(d), (e), (L)	The drip pad and associated collection system must be operated to prevent runoff. Unless protected by a structure, the runon and runoff control systems must have the capacity to prevent flow onto the drip pad from a 24-hour, 25-year storm. All collection systems must be emptied as soon as possible after storms to maintain design capacity.						
D-11b(3)	Certification	270.26(c); 264.573(g)	Provide certification from a qualified, registered PE stating the drip pad meets the requirements of section 264.573.						
D-11b(4)	Maintaining Collection System	270.26(c); 264.573(h)	Provide plan for removal of drippage and accumulated precipitation from collection system as necessary to prevent overflow.						
D-11b(5)	Cleaning Drip Pad Surface	270.26(c); 264.573(i),(j)	Drip pad surface must be cleaned appropriately to allow weekly inspection of the entire surface and to minimize tracking of hazardous waste or hazardous waste constituents off the drip pad.						
D-11b(6)	Recordkeeping	270.26(c); 264.573(k)	Maintain records sufficient to document that all treated wood is held on the pad following treatment in accordance with the requirements of this section.						

Facility Name: \_\_\_\_\_

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.
- 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.
- d. Listed Federal regulatory citations refer to provisions of Title 40 of the Code of Federal Regulations (40CFR) that have been incorporated by reference into Title 25 of the Pennsylvania Code (25 Pa. Code). Citations containing a small letter "a" refer to provisions of 25 Pa. Code that contain additions to, deletions from, or modifications of the Federal Regulations that have been incorporated.

	CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS SECTION E. GROUNDWATER MONITORING								
	Section and Requirement	Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>				
E-1	Exemption from Groundwater Protection Requirements	270.14(c)							
E-1a	Waste Piles	270.18(b); 264.90(b)(2), (5)							
E-1b	Landfill	270.14(c); 264.90(b)(2)							
E-1c	No Migration	270.14(c); 264.90(b)(4)							
E-1d	Drip Pad	270.26(b); 264.90(b)(2)							
E-2	Interim Status Groundwater Monitoring Data	270.14(c)(1)							
E-2a	Description of Wells	270.14(c)(1)	A copy of topographic map provided for 270.14(b) on which location and identification of each interim status monitoring well is indicated. Details of design and construction of each interim status monitoring well.						
E-2b	Description of Sampling and Analysis Procedures	270.14(c)(1); 265.92	A copy of facility's groundwater sampling and analysis plan. See Form 2510-FM-BWM0091 relating to the Hazardous Waste Monitoring Semi-Annual Report. See Form 2510-FM-BWM0062 relating to Commercial Hazardous Waste Facility Private Water Supply.						
E-2c	Monitoring Data	270.14(c)(1); 265.92	Provide all interim status monitoring results.						

	CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS SECTION E. GROUNDWATER MONITORING								
	Section and Requirement	Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>				
E-2d	Statistical Procedures	270.14(c)(1); 265.93	Provide information relating to statistical procedures.						
E-2e	Groundwater Assessment Plan	270.14(c)(1); 265.93(d)(2)	If required, based on statistical comparison results, provide specific plan for groundwater quality assessment program along with results obtained from implementation of plan.						
E-3	General Hydrogeologic Information	270.14(c)(2)	Include description of regional and site-specific geologic and hydrogeological setting.						
E-4	Topographic Map Requirements	270.14(c)(2), (3),(4)(i)							
E-5	Contaminant Plume Description	270.14(c)(2), (4),(7)	In some cases, contaminant plumes may be defined under groundwater quality assessment programs carried out during interim status period which may not address complete list of Appendix VIII constituents as required under 270.14(c)(4). Additional monitoring may be required to identify concentration of each Appendix VIII constituent in plume.						
E-6	General Monitoring Program Requirements	270.14(c)(5); 264.90(b)(4); 264.97; 264a.97	See Form 2510-FM-BWM0092 relating to Hazardous Waste Monitoring Quarterly Report.						
E-6a	Description of Wells	270.14(c)(5); 264.97(a),(b),(c)							
E-6b	Description of Sampling and Analysis Procedures	270.14(c)(5); 264.97(d),(e),(f)							

	SECTION E. GROUNDWATER MONITORING								
	Section and Requirement	Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>				
Е-6с	Procedures for Establishing Background Quality	270.14(c)(5); 264.97(a)(1),(g); 264a.97	See Form 2510-FM-BWM0033 relating to Hazardous Waste Monitoring Initial Background Report.						
E-6d	Statistical Procedures	270.14(c)(5); 264.97(h), (i)(1),(5),(6)							
E-6d(1)	Parametric Analysis of Variance (ANOVA)	270.14(c)(5); 264.97(h)(1), (i)(2)							
E-6d(2)	Nonparametric ANOVA (based on ranks)	270.14(c)(5); 264.97(h)(2), (i)(2)							
E-6d(3)	Tolerance or Prediction Interval Procedure	270.14(c)(5); 264.97(h)(3), (i)(4)							
E-6d(4)	Control Chart Approach	270.14(c)(5); 264.97(h)(4), (i)(3)							
E-6d(5)	Alternative Approach	270.14(c)(5); 264.97(h)(5),(i)							
E-7	Detection Monitoring Program	270.14(c)(6); 264.91(a)(4); 264.98							

	CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS SECTION E. GROUNDWATER MONITORING									
	Section and Requirement	Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>					
E-7a	Indicator Parameters, Waste Constituents, Reaction Products to be Monitored	270.14(c)(6)(i); 264.98(a)								
E-7b	Groundwater Monitoring System	270.14(c)(6)(ii); 264.97(a)(2),(b), (c); 264.98(b); 264a.97	Identify number, location, and depth of each well, and describe well construction materials.							
E-7c	Background Groundwater Concentration Values for Proposed Parameters	270.14(c)(6)(iii); 264.97(g); 264.98(c), (d); 264a.97								
E-7d	Proposed Sampling and Analysis Procedures	270.14(c)(6)(iv); 264.97(d),(e),(f); 264.98(d),(e), (f); 264a.97	See Form 2510-FM-BWM0091 relating to Hazardous Waste Monitoring Semi-Annual Report.							
E-7e	Statistically Significant Increase in any Constituent or Parameter Identified at any Compliance Point Monitoring Well	270.14(c)(6); 264.98(g); Part 264 Appendix IX								
E-8	Compliance Monitoring Program	270.14(c)(7); 264.99								
E-8a	Waste Description	270.14(c)(7)(i)	Description must include historical records of volumes, types, and chemical composition of waste placed in units in waste management areas.							

	CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS SECTION E. GROUNDWATER MONITORING								
	Section and Requirement	Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>				
E-8b	Characterization of Contaminated Groundwater	270.14(c)(7)(ii)	For each well at point of compliance and for each background well, provide concentrations of each constituent in 261 Appendix VIII, major cations and anions, and constituents listed in Table 1 of 264.94, if not already mentioned above.						
E-8c	Hazardous Constituents to be Monitored in Compliance Program	270.14(c)(7)(iii); 264.98(g)(3); 264.99(a)(1)							
E-8d	Concentration Limits	270.14(c)(7)(iv); 264.94, 264.97(g),(h); 264.99(a)(2); 264a.97							
E-8e	Alternate Concentration Limits	270.14(c)(7)(iv); 264.94(b); 264.99(a)(2)	Provide justification for establishing alternate concentration limits. Justification must address the following two factors.						
E-8e(1)	Adverse Effects on Groundwater Quality	270.14(c)(7)(iv); 264.94(b)(1)							
E-8e(2)	Potential Adverse Effects	270.14(c)(7)(iv); 264.94(b)(2)							
E-8f	Engineering Report Describing Groundwater Monitoring Systems	270.14(c)(7)(v); 264.95; 264.97(a)(2), (b),(c); 264.99(b)	Provide details supporting representative nature of groundwater quality at background monitoring points and compliance monitoring point.						

	CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS SECTION E. GROUNDWATER MONITORING								
	Section and Requirement	Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>				
E-8g	Proposed Sampling and Statistical Analysis Procedures for Groundwater Data	270.14(c)(7)(vi); 264.97(d),(e),(f); 264a.97; 264.99(c) - (g)							
E-8h	Groundwater Protection Standard Exceeded at Compliance Point Monitoring Well	270.14(c)(8); 264.99(h),(i)							
E-9	Corrective Action Program	270.14(c)(8); 264.99(j); 264.100							
E-9a	Characterization of Contaminated Groundwater	270.14(c)(8)(i)	For each well at point of compliance and for each background well, provide concentrations of each constituent in 261 Appendix VIII, major cations and anions, and constituents listed in Table 1 of 264.94, if not already determined by the above.						
E-9b	Concentration Limits	270.14(c)(8)(ii); 264.94; 264.100(a)(2)							
E-9c	Alternate Concentration Limits	270.14(c)(8)(ii); 264.94(b); 264.100(a)(2)	Provide justification for establishing alternate concentration limits. Justification must address the following two factors.						
E-9c(1)	Adverse Effects on Groundwater Quality	270.14(c)(8); 264.94(b)(1)							
E-9c(2)	Potential Adverse Effects	270.14(c)(8); 264.94(b)(2)							

			RCRA PART B PERMIT APPLICATIONS INDWATER MONITORING Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>
E-9d	Corrective Action Plan	270.14(c)(8)(iii); 264.100(b)	Provide detailed plans and engineering report on corrective actions proposed for facility, including maps of engineered structures, construction details, plans for removing waste, description of treatment technologies, effectiveness of correction program, description of reinjection system, additional hydrogeologic data, operation and maintenance plans, and closure and post-closure plans.		
E-9e	Groundwater Monitoring Program	270.14(c)(8)(iv); 264.100(d)			
E-9e(1)	Description of Monitoring System	270.14(c)(7)(v),(8)			
E-9e(2)	Description of Sampling and Analysis Procedures	270.14(c)(7)(v),(8)			
E-9e(3)	Monitoring Data and Statistical Analysis Procedures	270.14(c)(7)(v),(8)			
E-9e(4)	Reporting Requirements	270.14(c)(7); 264.100(g)			

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.

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.

d. Listed Federal regulatory citations refer to provisions of Title 40 of the Code of Federal Regulations (40CFR) that have been incorporated by reference into Title 25 of the Pennsylvania Code (25 Pa. Code). Citations containing a small letter "a" refer to provisions of 25 Pa. Code that contain additions to, deletions from, or modifications of the Federal Regulations that have been incorporated.

	CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS SECTION F. PROCEDURES TO PREVENT HAZARDS							
	Section and Requirement	Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>			
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.					

	CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS SECTION F. PROCEDURES TO PREVENT HAZARDS						
	Section and Requirement	Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>		
F-2	Inspection Schedule	270.14(b)(5); 264.15; 264a.15	Inspection is required for monitoring equipment, safety emergency equipment, communication and alarm systems, decontamination equipment, security devices, and operating and structural equipment.				
F-2a	General Inspection Requirements	270.14(b)(5); 264.15(a),(b); 264.33; 264a.15					
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.				

	CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS SECTION F. PROCEDURES TO PREVENT HAZARDS						
	Section and Requirement	Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>		
F-2b(2)	Tank System Inspection	270.14(b)(5); 264.195; 264a.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.				
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.				

CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS SECTION F. PROCEDURES TO PREVENT HAZARDS						
	Section and Requirement	Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>	
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); 264.226(b)	Describe how surface impoundment will be 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.			

	CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS SECTION F. PROCEDURES TO PREVENT HAZARDS						
	Section and Requirement	Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>		
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 System	270.14(b)(5); 264.303(b)(3),(c)	In properly functioning double liner system, 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); 264a.273(2)					
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; 264a.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.				

	CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS SECTION F. PROCEDURES TO PREVENT HAZARDS						
	Section and Requirement	Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>		
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 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.				

		Pennsylvania (25 Pa. Code) or	DURES TO PREVENT HAZARDS		
	Section and Requirement	Incorporated Federal (40 CFR) Regulation	Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>
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 Alarm System	270.14(b); 264.34	When waste is being hauled, all personnel 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.		

	CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS SECTION F. PROCEDURES TO PREVENT HAZARDS							
	Section and Requirement	Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>			
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 eliminate possibility of these hazards.					
F-4(b)	Runoff	270.14(b)(8)(ii)	Describe procedure used to prevent runoff from hazardous waste handling areas.					
F-4(c)	Water Supplies	270.14(b)(8)(iii)	Describe procedure, structures, equipment used to prevent contamination of water supply.					
F-4(d)	Equipment and Power Failure	270.14(b)(8)(iv)	Describe procedure used to mitigate the effects of equipment failure and power outages.					
F-4(e)	Personnel Protection Procedures	270.14(b)(8)(v)	Describe procedure, structures, equipment used to prevent contamination of personnel to hazardous waste.					
F-4(f)	Procedures to Minimize Releases to the Atmosphere	270.14(b)(8)(vi)	Describe procedure, structures, equipment used to prevent hazardous waste releases to the atmosphere.					

	CHECKLIST FOR REVIEW OF RCRA PART B PERMIT APPLICATIONS SECTION F. PROCEDURES TO PREVENT HAZARDS						
	Section and Requirement	Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>		
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)	Waste must be protected from sources of ignition or reaction. Describe precautions taken by facility to prevent actual ignition, including sources of spontaneous ignition and radiant heat. Owner/operator must designate safe areas for smoking and open flames. Post signs where hazard exists.				
F-5b	General Precautions for Handling Ignitable or Reactive Waste and Mixing of Incompatible Waste	270.14(b)(9); 264.17(a)	Describe precautions taken by facility to prevent reactions that generate heat, 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.				

	Section and Requirement	Pennsylvania (25 Pa. Code) or Incorporated Federal (40 CFR) Regulation	DURES TO PREVENT HAZARDS Review Consideration <sup>a</sup>	Location in Application <sup>b</sup>	See Attached Comment Number <sup>c</sup>
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 Reactive Wastes in Surface Impoundments	270.17(h); 264.229	If waste is reactive or ignitable, describe 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-51	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-50	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.
- 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.
- d. Listed Federal regulatory citations refer to provisions of Title 40 of the Code of Federal Regulations (40CFR) that have been incorporated by reference into Title 25 of the Pennsylvania Code (25 Pa. Code). Citations containing a small letter "a" refer to provisions of 25 Pa. Code that contain additions to, deletions from, or modifications of the Federal Regulations that have been incorporated.