

# **Hazardous Waste Facility Permit**

## **Application Instructions**

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## GENERAL INSTRUCTIONS TO APPLY FOR A HAZARDOUS WASTE FACILITY PERMIT

### WHO MUST FILE

All persons who own or operate, or who intend to construct or close a hazardous waste treatment, storage, or disposal facility as identified in Chapter 62-730, Florida Administrative Code (F.A.C.), must apply for a hazardous waste facility permit, unless exempted in accordance with Rule 62-730.270, F.A.C. The format discussed herein and referenced in Chapter 62-730, Part IV, Hazardous Waste Permitting, must be used when filing for any type of hazardous waste facility permit. All applicants are encouraged to arrange for a pre-application conference with the Department before completing their hazardous waste permit application. Applicants are also encouraged to obtain the checklists the Department uses for reviewing applications for guidance in preparing their hazardous waste permit applications.

### HOW TO FILE

Send the appropriate number of complete permit application packages with all attachments to the following locations (The DEP District Office that serves the area where the hazardous waste management facility is located).

<u>Permit Type</u>	<u>Minimum Number of Copies</u>		
	<u>DEP District</u>	<u>DEP Tallahassee</u>	<u>EPA Region IV</u>
Temporary Operation (treatment/storage)	2	1	1
Temporary Operation (disposal)	1	2	1
Construction (treatment/storage)	2	1	1
Construction (disposal)	1	2	1
Operation (treatment/storage)	2	1	1
Operation (disposal)	1	2	1
Closure (treatment/storage)	2	1	1
Closure (disposal)	1	2	1
Research, Development and Demonstration	1	2	1

Provide a header with revision number, page number and date on each page of the application. DEP offices are located in Pensacola, Jacksonville, Orlando, Tampa, West Palm Beach, and Ft. Myers.

The Department may require additional copies. Contact the Department for the correct number of copies to submit. **Include a Certification [DEP Form 62-730.900(2)(d)] with original signatures with each copy of the application.**

The Department will review and comment on the completeness of the application within 60 days of receipt of the application. If it is not complete, the Department will send the applicant a Notice of Deficiency (NOD) within the prescribed time and will ask the applicant to send additional information or correct apparent errors or omissions. The applicant must send four (4) certified copies with the additional information by the time specified in the NOD. Again, include a Certification [DEP Form 62-730.900(2)(d)] with each copy. Provide a header with the revision number, page number and date on each page of the additional information so that it can be put into the application in the proper place.

## TYPES OF PERMITS

### Temporary Operation Permit (TOP)

Rule 62-730.231, F.A.C., describes how to apply for a TOP. The application fee for a TOP is listed in Rule 62-4.050(4)(l), F.A.C. The fee is 20% over the fee for the operation permit for the activity to be permitted. The fees for operation permits are listed in Rule 62-4.050(4)(i)(6) through (10), F.A.C. **Send the application fee with the application.**

#### **Complete the following to apply for a TOP:**

Part I - Entire Part [DEP Form 62-730.900(2)(a)]  
Certification [DEP Form 62-730.900(2)(d)]

### Construction Permit

Rule 62-730.250, F.A.C., describes how to apply for a construction permit. The application fee for a construction permit varies with the type of facility to be constructed. Rule 62-4.050(4)(i)(1) through (5), F.A.C., lists the application fees. **Send the application fee with the construction permit application** to construct a new hazardous waste facility or to modify an existing hazardous waste facility. (See also Specific Instructions, page 4.)

#### **Complete the following to apply for a construction permit:**

Part I - Entire part [DEP Form 62-730.900(2)(a)]  
Part II - Section A and Sections B through J, T and U - as appropriate for the specific facility operation  
Part II - Section K, L and P  
Part II - Section M and O as appropriate  
Part II - Section Q, R and S  
Certification [DEP Form 62-730.900(2)(d)]

### Operation Permit (OP)

Rule 62-730.240, F.A.C., describes how to apply for an operation permit. The application fee for an operation permit varies with the type of facility to be operated. Rule 62-4.050(4)(i)(6) through (10) lists the application fees. **Send the application fee with the application.** To renew an operation permit, file an application in accordance with Rule 62-730.300, F.A.C. (See also Specific Instructions, page 4.)

#### **Complete the following to apply for a operation permit:**

Part I - Entire part [DEP Form 62-730.900(2)(a)]  
Part II - Section A and Sections B through J, T and U - as appropriate for the specific facility operation  
Part II - Section K and P  
Part II - Section M and O as appropriate  
Part II - Section Q, R and S  
Certification [DEP Form 62-730.900(2)(d)]

### Closure Permit

Rule 62-730.260, F.A.C., describes how to apply for a closure permit. The application fee for a closure permit varies with the type of facility to be closed. Rule 62-4.050(4)(i)(11) through (15) lists the application fees. **Send the application fee with the application.** To renew a closure permit, file an application in accordance with Rule 62-730.300, F.A.C. (See also Specific Instructions, page 4.)

## General Instructions

**Complete the following to apply for a closure permit:**

- Part I - Entire part [DEP Form 62-730.900(2)(a)]
- Part II - Section A and Sections B through J, T and U - as appropriate
- Part II - Section K and P
- Part II - Section L and M as appropriate
- Part II - Section O (for post-closure only)
- Part II - Sections Q, R and S
- Certification [DEP Form 62-730.900(2)(d)]

**Research, Development and Demonstration Permit (RD&D)**

Rule 62-730.330, F.A.C., describes how to apply for a RD&D permit. Rule 62-4.050(4)(i)(16), F.A.C., lists the fee for an RD&D permit as \$4000. **Send the application fee with the application and each renewal.**

**Complete the following to apply for a RD&D permit:**

- Part I - Entire part [DEP Form 62-730.900(2)(a)]
- Part II - Section A and Sections B through , T and U - as appropriate for specific facility operation
- Part II - Section K and L
- Part II - Section M and O as appropriate
- Part II - Section N
- Part II - Sections Q, R and S
- Certification [DEP Form 62-730.900(2)(d)]

**Equivalency Demonstrations**

Rule 62-730.220, F.A.C., describes the procedure for applying for an Equivalency Demonstration. The application fee for previously closed units required to demonstrate clean closure is found in Rule 62-4.050(4)(j)(13). **Send the application fee with the Equivalency Demonstration.**

**Complete the following to apply for an Equivalency Demonstration:**

- Part I - Entire part [DEP Form 62-730.900(2)(a)]
- Part II - Section A and Sections B through J as appropriate
- Part II - Section K and M
- Part II - Section P and Q
- Part II - Section X
- Certification [DEP Form 62-730.900(2)(d)]

**RENEWAL OF PERMITS**

The owner or operator must apply for a renewal of the permit prior to 180 days before the expiration of a hazardous waste operating permit or a closure permit which includes post-closure requirements. If a facility has operated under the existing permit without any facility or regulatory changes, then the owner or operator must submit (1) a letter stating that there are no changes to the facility; (2) the Certification [DEP Form 62-730.900(2)(d)]; and (3) the permit renewal fee.

However, if there are any changes to the facility plan, its operation, or regulatory changes that affect its operation, then the owner or operator must submit a new application for a permit . Applicants are encouraged to arrange for a pre-application conference to discuss the renewal application.

## **COMPLETION OF THE APPLICATION**

Type or print the application. Answer all questions in the applicable parts. Provide a header with revision number, date, and page number on each page of the application. Mark any questions that are not applicable "N/A." Type, print or sketch all necessary attachments on 8 1/2" x 11" paper (except for the attached maps and scale drawings). Clearly present the attachments with the appropriate part of the application in a standard 3-ring or D-ring binder. Use the **exact format** as presented in these Permit Application Instructions as required in Rule 62-730.220(10), F.A.C. (e.g. the Closure Plan will be in Part II.K of the application, the Container information will be in Part II.B etc.).

## **SPECIFIC INSTRUCTIONS TO APPLY FOR A HAZARDOUS WASTE FACILITY PERMIT**

The hazardous waste facility permit application consists of two parts:

### **PART I - General Facility Information**

This part contains general information on the facility, site, land use, operation, facility security, and financial responsibility. The information requested in this part is applicable to all types of hazardous waste management facilities and is intended to be equivalent to the §270.13 requirements. Submit this part at the earlier of: (1) six months after the date the rule is filed or (2) thirty (30) days after an existing facility is first subject to the rule amendment that requires the facility to obtain a hazardous waste permit [Rule 62-730.231(1)(b), F.A.C. Be sure this information is as complete as possible. The facility must comply with 40 CFR Part 265 and Part 266, Subpart H standards.

### **PART II - Specific Facility Information**

Part II consists of several sections containing information relating to specific operational units at the facility which are used for treatment, storage, or disposal of hazardous waste. Part II is equivalent to the §270.14 through 270.26 requirements which are designed to bring the facility into compliance with 40 CFR Parts 264 and Part 266, Subpart H standards before the Department makes a final determination on issuance of a permit. These 40 CFR Part 264 and Part 266, Subpart H standards are adopted by reference in Chapter 62-730, F.A.C.

Submit Part II within one year of the effective date of the rule. Include a copy of the most recent revision of the Part I which was submitted to the Department.

Complete the following sections which are applicable:

- A. General
- B. Containers
- C. Tanks
- D. Surface Impoundments
- E. Waste Piles
- F. Land Treatment
- G. Landfills
- H. Incinerators
- I. Miscellaneous Units

- J. Containment Building
- K. Closure
- L. Compliance Schedule
- M. Ground Water Protection

Section M contains the additional ground water protection requirements applicable to hazardous waste disposal facilities. For units not exempted in 40 CFR 264.90(b), complete Section M when applying for a permit for a hazardous waste tank (unless exempted), surface impoundment, waste pile (unless exempted), land treatment unit, landfill, miscellaneous unit, or facility that is subject to post-closure requirements [See section Part II, K.2.]. In addition, any facility which discharges to ground water must also comply with Chapters 62-3 and 62-4, F.A.C.

- N Research, Development and Demonstration (RD&D)
- O. Exposure Information
- P. Information Regarding Potential Releases from Solid Waste Management Units (SWMU)
- Q. Information Requirements for Solid Waste Management Units

Sections P. and Q. on SWMU information are not required for an OP or closure permit where post-closure is required, if the Department or EPA have already completed a RCRA Facility Assessment (RFA).

- R. Process Vents
- S. Requirements for Equipment Leaks
- T. Boilers and Industrial Furnaces
- U. Requirements for Drip Pads

#### **CERTIFICATION**

This part contains the facility operator's, facility owner's, land owner's, and engineer's certification of the application and all attachments as required in Rule 62-730.220(6), (7) and (8), F.A.C. Include a new certification with original signatures with each copy of each new submittal.

#### **CONFIDENTIAL INFORMATION**

Information submitted to the Department relating to secret processes, methods of manufacture or production, or confidential records may be claimed by the applicant to be of a confidential nature. Claims of confidentiality must be submitted as described in Rule 62-730.310, F.A.C.

#### **WASTE MINIMIZATION**

The facility must have a program in place to reduce the volume and toxicity of hazardous waste generated by the facility as required by 40 CFR 262.41(a)(6) -(a)(7), 264.73(b)(9), 264.75(i) and 265.75(h) - (i).

**LINE-BY-LINE  
INSTRUCTIONS FOR COMPLETING THE APPLICATION  
FOR A HAZARDOUS WASTE FACILITY PERMIT**

**Part I - General Facility Information**

**A. General Information**

1. Enter an "X" in the appropriate block for each type of facility and operational unit for which the applicant is filing a permit application.
2. Enter an "X" in the appropriate block for the type of permit application.
3. Enter the revision number. (The initial application revision number is 0.)
4. Enter the date operation began or the proposed date of the start of operation.
5. Enter the full legal name of the facility.
6. Enter the facility's identification number DEP or EPA assigned when originally notified.
7. Enter the location or street address of the facility. If the facility lacks a street name or route number, give the most accurate alternative geographic information.
8. Enter the complete mailing address of the facility.
9. Enter the name, title, mailing address and telephone number of an employee who is thoroughly familiar with the operation of the facility and who the Department can contact about the application.
10. Enter the full legal name of the operator if different from number 9.
11. Enter the full mailing address of the operator if different from number 9.
12. If the facility owner or operator are not the same person, enter the name and telephone number of the owner.
13. If applicable, enter the mailing address of the facility owner.
14. Enter an "X" in the appropriate block to indicate the facility's legal status.
15. If applicable, enter the name of the county and state.
16. If applicable, enter the state of incorporation.
17. If applicable, provide the name and mailing address of all owners.
18. Enter an "X" in the appropriate block, and provide other appropriate information relating to site ownership.



19. Provide the name of the engineer who will certify the application along with his registration number and address. If the engineer is associated with a firm, provide the firm's name.
20. Enter an "X" in the appropriate block indicating whether the facility is on Indian land.
21. Provide the name, agency, permit number, date issued, and expiration date of all existing federal, state, and local environmental permits currently held by the facility. If issuance of an environmental permit is pending, indicate the agency and type of permit applied for. If necessary, list additional permit information on a separate sheet of paper.

#### **B. Site Information**

1. Enter the county name and the nearest community to the facility. Provide the latitude and longitude, and section, township and range to the approximate geographic center of the facility. Take this information from the most recent USGS topographic map available. Also provide the Universal Transverse Mercator Grid number (UTM #). This is a 15 digit number in the following format: 00/000000/0000000. The first 2 digits are the zone number, the middle 6 digits are the easting and the final 7 digits are the northing.
2. Enter the area in acres of the facility site. A facility site includes all contiguous land and structures, other appurtenances, and improvements on the land used for treating, storing, or disposing of hazardous waste. A facility site may consist of several treatment, storage, or disposal operational units.
3. Attach a scale drawing and photographs of the facility showing the location of all past, present, and future treatment, storage, and disposal areas.
4. Attach a topographic map of the area extending one mile beyond the property boundaries of the facility site. The map should have a 1 inch to 2000 feet scale and show the following:
  - a. Map scale and date
  - b. 100-year floodplain area
  - c. Orientation of the map
  - d. Surface water bodies within 1/4 mile of the facility property boundary (e.g., intermittent streams and springs)
  - e. Surrounding land uses
  - f. Legal boundaries of the facility
  - g. Injection wells used by the facility within one mile of the facility property boundaries
  - h. Drinking water wells listed in public records or otherwise known to the applicant within 1/4 mile of the facility property boundary
  - i. Intake and discharge structures within one mile (e.g., NPDES outfalls, cooling water intake)
5. Enter an "X" in the appropriate block.

#### **C. Land Use Information**

1. Enter the present zoning of the site.
2. In those cases where a zoning change is needed, identify the zoning required.

3. Enter the present land use of the site (e.g. agricultural, commercial, residential, industrial, recreational).

#### **D. Operating Information**

1. Enter an "X" in the appropriate block. List, in descending order of significance, the 4-digit standard industrial classification (SIC) codes which best describe your facility in terms of the principal products or services produced or provided.

SIC code numbers are descriptions which may be found in the "Standard Industrial Classification Manual" prepared by the federal Office of Management and Budget, or in the "Directory of Florida Industries" published by the Florida Chamber of Commerce.

2. Attach a clear and concise description of the facility operation including a general description of the facility, the nature of the business, and the activities that generate, treat, store or dispose of hazardous waste at your facility. If receiving hazardous waste from off-site, identify the types of industries generating or supplying the waste. Describe the various steps and items of equipment employed from receipt of waste to ultimate disposition of the waste. Show calculations which illustrate the capacity of the site and the estimated life of the operation.

3. Enter the following information in the table provided: For each process that is involved in treating, storing, or disposing of the hazardous waste, list applicable process codes, design capacities, and units of measure for the regulated unit to which the process applies, the code of the hazardous waste(s) involved in the process (from 40 CFR Part 261), and the expected annual quantity and unit of measure for each hazardous waste code. If listing process code "TO4" for other processes, be specific. Include the type of boilers or industrial furnaces as follows:

boilers:

industrial  
utility  
nonindustrial

industrial furnaces:

cement kilns  
lime kilns  
aggregate kilns (including light weight aggregate kiln and aggregate drying kilns used in the asphaltic concrete industry)  
phosphate kilns  
coke ovens  
blast furnaces  
smelting, melting and refining furnaces  
titanium dioxide chloride process oxidation reactors  
methane reforming furnaces  
pulping liquor recovery furnaces  
combustion devices used in the recovery of sulfur values from spent sulfuric acid  
halogen acid furnaces (HAFs) that do not produce steam (HAFs producing steam are defined as boilers.)

Applicable process codes and units of measure are as follows:

<b>PROCESS</b>	<b>PROCESS CODE</b>	<b>APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY</b>
<b>1. Storage:</b>		
container (barrel, drum, etc.)	S01	gallons (G) or liters (L)
tank	S02	gallons (G) or liters (L)
waste pile	S03	cubic yards (Y) or cubic meters (C)
surface impoundment	S04	gallons (G) or liters (L)
miscellaneous unit	S05	gallons (G), liters (L), cubic yards (Y) or cubic meters (C)
drip pads	S06	acres (B) or hectares (Q)
<b>2. Treatment:</b>		
<b>(a) Thermal Treatment</b>		
liquid injection incinerator	T06	tons per hour (D) or metric tons per hour (W); gallons per hour (E) or liters per hour (H)
rotary kiln incinerator	T07	tons per hour (D) or metric tons per hour (W); gallons per hour (E) or liters per hour (H)
fluidized bed incinerator	T08	tons per hour (D) or metric tons per hour (W); gallons per hour (E) or liters per hour (H)
multiple hearth incinerator	T09	tons per hour (D) or metric tons per hour (W); gallons per hour (E) or liters per hour (H)
infrared furnace incinerator	T10	tons per hour (D) or metric tons per hour (W); gallons per hour (E) or liters per hour (H)
molten salt destructor	T11	tons per hour (D) or metric tons per hour (W); gallons per hour (E) or liters per hour (H)
pyrolysis	T12	tons per hour (D) or metric tons per hour (W); gallons per hour (E) or liters per hour (H)
wet air oxidation	T13	tons per hour (D) or metric tons per hour (W); gallons per hour (E) or liters per hour (H)
calcination	T14	tons per hour (D) or metric tons per hour (W); gallons per hour (E) or liters per hour (H)

<b>PROCESS</b>	<b>PROCESS CODE</b>	<b>APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY</b>
microwave discharge	T15	tons per hour (D) or metric tons per hour (W); gallons per hour (E) or liters per hour (H)
cement kiln	T16	tons per hour (D) or metric tons per hour (W); gallons per hour (E) or liters per hour (H)
lime kiln	T17	tons per hour (D) or metric tons per hour (W); gallons per hour (E) or liters per hour (H)
Other (specify)	T18	
<b>(b) Chemical Treatment</b>		
absorption mound	T19	gallons per day (U) or liters per day (V)
absorption field	T20	gallons per day (U) or liters per day (V)
chemical fixation	T21	gallons per day (U) or liters per day (V)
chemical oxidation	T22	gallons per day (U) or liters per day (V)
chemical precipitation	T23	gallons per day (U) or liters per day (V)
chemical reduction	T24	gallons per day (U) or liters per day (V)
chlorination	T25	gallons per day (U) or liters per day (V)
chlorinolysis	T26	gallons per day (U) or liters per day (V)
cyanide destruction	T27	gallons per day (U) or liters per day (V)
degradation	T28	gallons per day (U) or liters per day (V)
detoxification	T29	gallons per day (U) or liters per day (V)
ion exchange	T30	gallons per day (U) or liters per day (V)
neutralization	T31	gallons per day (U) or liters per day (V)
ozonation	T32	gallons per day (U) or liters per day (V)
photolysis	T33	gallons per day (U) or liters per day (V)
other (specify)	T34	

<b>PROCESS</b>	<b>PROCESS CODE</b>	<b>APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY</b>
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**( c ) Physical Treatment**

**(1) Separation of Components**

centrifugation	T35	gallons per day (U) or liters per day (V)
clarification	T36	gallons per day (U) or liters per day (V)
coagulation	T37	gallons per day (U) or liters per day (V)
decanting	T38	gallons per day (U) or liters per day (V)
encapsulation	T39	gallons per day (U) or liters per day (V)
filtration	T40	gallons per day (U) or liters per day (V)
flocculation	T41	gallons per day (U) or liters per day (V)
flotation	T42	gallons per day (U) or liters per day (V)
foaming	T43	gallons per day (U) or liters per day (V)
sedimentation	T44	gallons per day (U) or liters per day (V)
thickening	T45	gallons per day (U) or liters per day (V)
ultrafiltration	T46	gallons per day (U) or liters per day (V)
other (specify)	T47	

**(2) Removal of Specific Components**

absorption-molecular sieve	T48	gallons per day (U) or liters per day (V)
activated carbon	T49	gallons per day (U) or liters per day (V)
blending	T50	gallons per day (U) or liters per day (V)
catalysis	T51	gallons per day (U) or liters per day (V)
crystallization	T52	gallons per day (U) or liters per day (V)
dialysis	T53	gallons per day (U) or liters per day (V)
distillation	T54	gallons per day (U) or liters per day (V)
electrodialysis	T55	gallons per day (U) or liters per day (V)

<b>PROCESS</b>	<b>PROCESS CODE</b>	<b>APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY</b>
electrolysis	T56	gallons per day (U) or liters per day (V)
evaporation	T57	gallons per day (U) or liters per day (V)
high-gradient magnetic separation	T58	gallons per day (U) or liters per day (V)
leaching	T59	gallons per day (U) or liters per day (V)
liquid ion exchange	T60	gallons per day (U) or liters per day (V)
liquid-liquid extraction	T61	gallons per day (U) or liters per day (V)
reverse osmosis	T62	gallons per day (U) or liters per day (V)
solvent recovery	T63	gallons per day (U) or liters per day (V)
stripping	T64	gallons per day (U) or liters per day (V)
sand filter	T65	gallons per day (U) or liters per day (V)
other (specify)	T66	
<b>(d) Biological Treatment</b>		
activated sludge	T67	
aerobic lagoon	T68	gallons(G) or liters (L)
aerobic tank	T69	gallons per day (U) or liters per day (V)
anaerobic lagoon	T70	gallons(G) or liters (L)
composting	T71	
septic tank	T72	gallons(G) or liters (L)
spray irrigation	T73	
thickening filter	T74	
waste stabilization pond	T75	gallons (G) liters (L)
other (specify)	T76	
[reserved]	T77-79	

<b>PROCESS</b>	<b>PROCESS CODE</b>	<b>APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY</b>
<b>3. Disposal</b>		
underground injection well	D80	gallons (G) liters (L)
landfill	D81	acre-feet (A) (the volume that would cover one acre to a depth of one foot) or hectare-meter (F)
land treatment	D82	acres (B) or hectares (Q)
ocean disposal	D83	gallons per day (U) or liters per day (V)
surface impoundment (to be closed as a landfill)	D84	gallons (G) or liters (L)
other (specify)	D85	
miscellaneous unit	D86	gallons (G), liters (L), gallons per day (U) or liters per day (V)

## **PART II - SPECIFIC FACILITY INFORMATION**

The requirements for Sections A through U correspond to the final hazardous waste facility operation standards promulgated in 40 CFR Part 264. These standards referenced in the application are adopted as state rules in Chapter 62-730, F.A.C., [Rule 62-730.180, Standards Applicable to Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities]. The applicant must submit the required information to establish compliance with these adopted standards and must include it with the application for it to be complete.

### **CERTIFICATION**

The appropriate parties must sign the certification section in order to certify all the information included in the application. For purposes of the application, the appropriate parties for the operator, facility owner, and landowner certification include the following individuals or their authorized representatives.

- (1) For a corporation: a principal executive officer of at least the level of vice president;
- (2) For a partnership or sole proprietorship: a general partner or the proprietor, respectively; or
- (3) For a municipality, state, federal, or other public agency: either a principal executive officer or ranking elected official.

Include a letter of authorization from one of the individuals described in (1), (2) or (3) for certifications by an authorized representative.

A professional engineer registered in Florida must certify the application and must include his registration number and seal.

A professional geologist registered in Florida must certify the application and must include his registration number and seal.



# APPLICATION FOR A HAZARDOUS WASTE PERMIT PART II

## A. General

1. a. Attach a topographic map showing a distance of 1000 feet around the hazardous waste management area at a scale of 1 inch to 200 feet. Contours must be shown on the map with intervals sufficient to clearly show the pattern of surface water flow in the vicinity of and from each operational unit of the facility (e.g., contour intervals of 5 feet if relief is greater than 20 feet or an interval of 2 feet if relief is less than 20 feet). The map should clearly show the following:

- (1) Map scale and date
- (2) 100-year flood plain area
- (3) Orientation of the map
- (4) Access control (fences, gates)
- (5) Injection and withdrawal wells both on-site and off-site
- (6) Buildings and other structures (recreational areas; access and internal roads; storm, sanitary and process sewerage systems; fire control facilities; etc.)
- (7) Contours sufficient to show surface water flow
- (8) Loading and unloading areas
- (9) Drainage or flood control barriers
- (10) Hazardous waste units including clean-up areas
- (11) Runoff control system

**Topographic maps may be obtained at the following address:**

Branch of Distribution  
U.S.G.S.  
1200 South EADS  
Arlington, Virginia 22202  
Telephone: (703) 557-2751

**Information on latitudes and longitudes may be obtained from the U.S.G.S. National Cartographic Information Center at (703) 860-6336.**

b. Include a wind rose indicating the local prevailing wind speed and direction, legend, and date with the maps or as a separate item.

c. Traffic information - Include the information required in §270.14(b)(10).

2. Financial responsibility information:

a. Attach the most recent closure cost estimates for the facility [§264.142] and a copy of the financial mechanism used to establish financial assurance for closure of the facility [§264.143 and §270.14(b)(15)]. Use DEP Forms 17-730.900(4)(a), (b), (c), (d), (e), (f), (g), (h), (i) or (j) only. Retyped documents are not acceptable. Send the originally signed documents to: Financial Coordinator, Solid Waste Section, Mail Station 4565, Bureau of Solid and Hazardous Waste, Department of Environmental Protection, 2600 Blair Stone Road, Tallahassee, Florida, 32399-2400.

b. If applicable, attach the most recent post-closure care cost estimate for the facility [§264.144] and a copy of the financial mechanism used to establish financial assurance for post-closure care of the facility [§264.145, §264.146 and §270.14(b)(16)]. Use DEP Forms 62-730.900(4)(a), (b), (c), (d), (e), (f), (g), (h), (i) or (j) only. Retyped documents are not acceptable. Send the originally signed documents to the address in 2.a. above.

c. If corrective action under 40 CFR 264.100 or 264.101 is required at the facility, comply with Rule 62-730.180(6), F.A.C.

d. Attach a copy of the documents used to demonstrate liability coverage [§264.147]. Use DEP Forms 62-730.900(4)(b), (d), (k), (l), (m) or (n) only. Retyped documents are not acceptable. Send the originally signed documents to the address in 2.a. above.

3. Attach a flood map. The Federal Insurance Administration (FIA) of the Federal Emergency Management Agency produces flood maps that have information on flood areas. If a FIA flood map is not available for an area, use an equivalent mapping technique to determine whether the facility is within the 100-year floodplain, and if so, what the 100-year flood elevation is. The U.S. Geological Survey, the Soil Conservation Service, the Water Management Districts, and the Regional Planning Councils also have information requested in this section.

If the site is located in the 100-year floodplain, identify the 100-year flood level and any other special flooding factors (e.g., wave action) which must be considered in designing, constructing, operating, or maintaining the facility to withstand washout from a 100-year flood. Additionally, provide the following information:

a. An engineering analysis indicating the various hydrodynamic and hydrostatic forces expected to occur at the site as a consequence of a 100-year flood.

b. Structural or other engineering studies showing the design of operational units (i.e., tanks, incinerators) and flood protection devices (i.e., floodwalls, dikes) at the facility and how these will prevent washout.

c. If applicable, and in lieu of paragraphs 3.a. and 3.b. above, a detailed description of the procedures to be followed to remove hazardous waste to safety before the facility is flooded, including:

(1) Timing of such movement relative to flood levels, including the estimated time to move the waste to show that such movement can be completed before floodwaters reach the facility;

(2) A description of the location(s) to which the waste will be moved and a demonstration that those facilities will be eligible to receive hazardous waste in accordance with the regulations under 40 CFR Parts 264 and 265;

(3) The planned procedures, equipment, and personnel to be used and the means to ensure that such resources will be available in time for use; and

(4) The potential for accidental discharges of the waste during movement.

If the site is not located in the 100-year floodplain, provide the source of data for such a determination and include a copy of the relevant FIA flood map or the calculations and maps used where a FIA map is not available.

4. Facility security information:

a. Attach a description of the security procedures and equipment required by §264.14. [§270.14(b)(4)]

b. Attach a copy of the contingency plan required by 40 CFR Part 264, Subpart D. [§270.14(b)(7)]

c. Attach a description of procedures, structures, or equipment used at the facility to:

- (1) Mitigate effects of equipment failure and power outages;
- (2) Prevent hazards in unloading operations (i.e., ramps, special forklifts);
- (3) Prevent undue exposure of personnel to hazardous waste (i.e., protective clothing);
- (4) Prevent contamination of water supplies;
- (5) Prevent run-off from hazardous waste handling areas to other areas of the facility or environment, or to prevent flooding (i.e., berms, dikes, trenches);
- (6) Prevent releases to atmosphere; and
- (7) Prevent accidental ignition or reaction of ignitable, reactive, or incompatible wastes. [§270.14(b)(9)]

d. Attach a description of the preparedness and prevention procedures required by 40 CFR Part 264, Subpart C, including design and operation of the facility, required equipment, testing and maintenance of equipment, access to communications or alarm system, required aisle space, and arrangements with local authorities [§270.14(b)(6)].

e. Attach an outline of both the introductory and continuing training programs used to prepare persons to operate or maintain the hazardous waste management facility in a safe manner to demonstrate compliance with §264.16 [270.14(b)(12)] and a brief description of how training will be designed to meet actual job tasks [§264.16(a)(3)].

5. Attach a copy of the reports of the chemical and physical analyses of the hazardous wastes and hazardous debris handled at the facility, including all information which must be known to treat, store, or dispose of the wastes in accordance with §264.13. [§270.14(b)(2)]

6. Attach a copy of the waste analysis plan required by §264.13(b) [§270.14(b)(3)] and, if applicable, §264.13(c) . Include the following:

- a. Parameters for which each hazardous waste will be analyzed and the rationale for the selection of these parameters;
- b. Test methods used;
- c. Sampling methods used;
- d. Frequency of analysis to ensure accuracy;
- e. Waste analyses that generators supply;
- f. Methods used to meet additional waste analysis requirements; and, if applicable,
- g. For off-site facilities, the procedures used to inspect and ensure that the wastes received match the accompanying manifest.

7. Attach a copy of the procedures used to comply with §264.12 and 40 CFR Part 264, Subpart E (Manifest System, Recordkeeping, and Reporting).

8. Indicate all other federal laws that may apply to the issuance of the permit according to §270.3.

## B. Containers

The applicant must provide the following information in accordance with 40 CFR Part 264, Subpart I. [§270.15]

1. Attach the requirements of either a. or b.:

a. Demonstrate compliance with §264.175(c) by attaching:

- (1) Test procedures and results or other documentation or information to show that the wastes do not contain free liquids; and
- (2) A description of how the storage area is designed or operated to drain and remove liquids or how containers are kept from contact with standing liquids.

b. Demonstrate compliance with §264.175(b) by attaching a description of the containment system which includes:

- (1) Basic design parameters, dimensions, and materials of construction;
- (2) How the design promotes drainage or how containers are kept from contact with standing liquids in the containment system;
- (3) Capacity of the containment system relative to the number and volume of containers to be stored;
- (4) Provisions for preventing or managing run-on; and
- (5) How accumulated liquids can be analyzed and removed to prevent overflow.

2. Attach sketches, drawings, or data demonstrating compliance with §264.176 (Special requirements for ignitable or reactive wastes) and §264.177 (Special requirements for incompatible wastes) where applicable.

3. Where incompatible wastes are stored or otherwise managed in containers, attach a description of the procedures used to ensure compliance with §264.177(a) and (b) (Special requirements for incompatible waste) and §264.17(b) and (c) (General requirements for ignitable, reactive, or incompatible waste).

4. Attach a description of the procedures used to comply with §264.171 (Condition of containers), §264.172 (Compatibility of waste with containers), and §264.173 (Management of containers).

5. Attach a copy of the inspection procedures as required in §264.174 (Inspections) and §264.15 (General inspection requirements). [§270.14(b)(5)]

6. Attach a copy of the closure plan and where applicable the post-closure plan as required by §§264.112, 264.118 and 264.178. [§270.14(b)(13)]

7. Attach a copy of the most recent closure cost estimate [§270.14(b)(15)] and where applicable the post-closure cost estimate [§270.14(b)(16)].

## C. Tank Systems

The applicant must provide the following information in accordance with 40 CFR Part 264, Subpart J. [§270.16]

1. Provide a written assessment that is reviewed and certified by an independent, qualified, registered professional engineer as to each tank system's structural integrity and suitability for handling hazardous waste, as required under §§264.191 and 264.192.
2. Describe the dimensions and capacity of each tank.
3. Provide a description of feed systems, safety cutoff, bypass systems, and pressure controls (e.g., vents).
4. Attach a diagram of piping, instrumentation, and process flow for each tank system.
5. Provide a description of materials and equipment used to provide external corrosion protection, as required under §264.192(a)(3)(ii) .
6. For new tank systems, provide a detailed description of how the tank system(s) will be installed in compliance with §264.192(b), (c), (d), and (e).
7. Attach detailed plans and description of how the secondary containment system for each tank system is or will be designed, constructed, and operated to meet the requirements of §264.193(a), (b), (c), (d), (e), and (f).
8. For tank systems for which a variance from the requirements of §264.193 is sought as provided by §264.193(g) attach:
  - a. Detailed plans, engineering reports, and hydrogeologic reports, as appropriate, describing alternate design and operating practices that will, in conjunction with location aspects, prevent the migration of any hazardous wastes or hazardous constituents into the ground water or surface water during the life of the facility; or
  - b. A detailed assessment of the substantial present or potential hazards posed to human health or the environment should a release enter the environment.
9. Attach a description of controls and practices to prevent spills and overflows, as required under §264.194(b).
10. For tank systems in which ignitable, reactive, or incompatible wastes are to be stored or treated, provide a description of how operating procedures, tank system design, and facility design will achieve compliance with the requirements of §§264.198 and 264.199.11.
11. Attach a schedule and procedure for meeting the inspection requirements in §§264.15 and 264.195. [§270.14(b)(5)]
12. Attach a copy of the plan for the response to leaks or spills and disposition of leaking or unfit-for-use tank systems as required by §264.196.

13. For tank systems that do not presently meet the containment requirements of §264.193, provide a leak test or other approved method according to §264.193(i)(1), (2) and (3).

14. Attach a copy of the closure and post-closure plan as required by §§264.112, 264.118 and 264.197. [§270.14(b)(14)]

15. Attach a copy of the most recent closure cost estimate [§270.14(b)(15)] and post-closure cost estimate [§270.14(b)(16)].

## **D. Surface Impoundments**

The applicant must provide the following information in accordance with 40 CFR Part 264, Subpart K. [§270.17]

1. Provide a list of the hazardous wastes placed or to be placed in each surface impoundment.

2. Attach detailed plans and an engineering report describing how the surface impoundment is or will be designed, constructed, operated, and maintained to meet the requirements of §§264.19, 264.221, 264.222 and 264.223. Address the following items:

a. The liner system (except for an existing portion of a surface impoundment). §264.221(b) allows an exemption from the requirement for a liner. To apply for the exemption, submit detailed plans, engineering reports, and hydrogeologic reports, as appropriate, which describe alternate design and operation practices that will, in conjunction with location aspects, prevent the migration of any hazardous constituents into the ground water or surface water at any future time;

b. The double liner and leak (leachate) detection, collection, and removal system, if the surface impoundment must meet the requirements of §264.221(c). If an exemption from the requirement is sought per §264.221(d), (e) or (f), submit appropriate information.

c. If the leak detection system is in the saturated zone, explain the leak detection system design and operation and the location of the saturated zone in relation to the leak detection system.

d. The construction quality assurance (CQA) plan if required under §264.19.

e. Proposed action leakage rate, with rationale, if required under §264.222 and response action plan if required under §264.223.

f. Prevention of overtopping; and

g. Structural integrity of dikes.

3. Attach a description of how each surface impoundment, including the double liner system, leak detection system, cover systems and appurtenances for control of overtopping, will be inspected in order to meet the requirements of §§264.226(a), (b) and (d). Include the inspection plan required under §270.14(b)(5) in this information.

4. Attach a certification by a qualified engineer which attests to the structural integrity of each dike, as required under §264.226(c). For new units, the owner or operator must submit a statement by a qualified engineer that he will provide such a certification upon completion of construction in accordance with the plans and specifications.
5. Attach a description of the procedure to be used for removing a surface impoundment from service, as required under §§264.227(b) and (c). Include this information in the contingency plan submitted under §270.14(b)(7).
6. Attach a description of how hazardous waste residues and contaminated materials will be removed from the unit at closure, as required under §264.228(a)(1). For any wastes not to be removed from the unit upon closure, the owner or operator must submit detailed plans and an engineering report describing how §§264.228(a)(2) and (b) will be complied with. Include the closure plan and, where applicable, the post-closure plan required under §§264.112, 264.118 and 264.228 with this information. [§270.14(b)(13)]
7. If placing ignitable or reactive wastes in a surface impoundment, attach an explanation of how the applicant will comply with §§264.229 and 264.17.
8. If placing incompatible wastes or incompatible wastes and materials in a surface impoundment, attach an explanation of how the applicant will comply with §§264.230 and 264.17.
9. Attach a copy of the notice placed in the deed or other instrument as required by §264.119. [§270.14(b)(14)]
10. If applicable, attach a waste management plan for EPA Hazardous Waste Numbers F020, F021, F022, F023, F026, and F027 describing how the surface impoundment is or will be designed, constructed, operated, and maintained to meet the requirements of §264.231. Address the following items as specified in §264.231:
  - a. The volume and the physical and chemical characteristics of the wastes, including their potential to migrate through soil or to volatilize or escape into the atmosphere;
  - b. The attenuative properties of underlying and surrounding soils or other materials;
  - c. The mobilizing properties of other materials co-disposed with these wastes; and
  - d. The effectiveness of additional treatment, design, or monitoring techniques.
11. Attach a schedule and procedure for meeting the inspection requirements of §§264.15 and 264.226. [§270.14(b)(5)]
12. Attach the information described in Part II, M. - Ground Water Protection [§270.14(c)].
13. Attach the information described in Part II, O. - Exposure Information [§270.10(j)].
14. If applicable, attach the information required in §268.4 to qualify for an exemption for treatment in a surface impoundment of land disposal restricted wastes. [§270.14(b)(21)]
15. Attach a copy of the most recent closure cost estimate [§270.14(b)(15)] and post-closure cost estimate [§270.14(b)(16)].

## E. Waste Piles

The applicant must provide the following information in accordance with 40 CFR Part 264, Subpart L. [§270.18]

1. Attach a list of hazardous wastes placed or to be placed in each waste pile.
2. To apply for an exemption to §264.251 and Subpart F of Part 264, as provided by §264.250(c) or §264.90(b), attach either an explanation of how the requirements of §264.250(c) will be complied with or detailed plans and an engineering report describing how the requirement of §264.90(b)(2) will be met.
3. Attach detailed plans and an engineering report describing how the waste pile is or will be designed, constructed, operated and maintained to meet the requirements of §§264.19, 264.251, 264.252 and 264.253. Address the following items:
  - a. The liner system (except for an existing portion of a waste pile). To apply for an exemption from the requirement for a liner as provided by §264.251(b), the owner or operator must submit detailed plans, engineering reports, and hydrogeologic reports, as appropriate, describing alternate design and operating practices that will, in conjunction with location aspects, prevent the migration of any hazardous constituents into the ground water or surface water at any future time;
  - b. The double liner and leak (leachate) detection, collection, and removal system, if the waste pile must meet the requirements of §264.251(c). If the applicant is seeking an exemption from the requirement as described in §264.251(d), (e) or (f), submit appropriate information.
  - c. If the leak detection system is in the saturated zone, explain the leak detection system design and operation and the location of the saturated zone in relation to the leak detection system.
  - d. The construction quality assurance (CQA) plan if required under §264.19.
  - e. Proposed action leakage rate, with rationale, if required under §264.252 and response action plan if required under §264.253.
  - f. Control of run-on;
  - g. Control of run-off;
  - h. Management of collection and holding units associated with run-on and run-off control systems; and
  - i. Control of wind dispersal of particulate matter, where applicable.
4. Attach a description of how each waste pile, including the double liner system, leachate collection and removal system, leak detection system, cover system and appurtenances for control of run-on and run-off, will be inspected in order to meet the requirements of §§264.254(a), (b) and (c). Include this information in the inspection plan required under §264.15.
5. If treating hazardous waste on or in the pile, attach details of the process and equipment used, and the nature and quality of the residuals.



6. If placing ignitable or reactive wastes in a waste pile, attach an explanation of how the applicant will comply with the requirements of §§264.256 and 264.17.
7. If placing incompatible wastes or incompatible wastes and materials in a waste pile, attach an explanation of how the applicant will comply with §§264.257 and 264.17.
8. Attach a description of how hazardous waste residues and contaminated materials will be removed from the waste pile at closure, as required under §264.258(a). For all waste not to be removed from the waste pile upon closure, the owner or operator must submit detailed plans and an engineering report describing how §264.310(a) and (b) will be complied with. Include the closure plan and, where applicable, the post-closure plan required under §§264.112, 264.118 and 264.258 in this information. [§270.14(b)(13)]
9. If applicable, attach a copy of the notice placed in the deed or other instrument required by §264.119. [§270.14(b)(14)]
10. If applicable, attach a waste management plan for EPA hazardous wastes nos. F020, F021, F022, F023, F026, and F027 describing how a waste pile that is not enclosed, as defined in §264.250(c), is or will be designed, constructed, operated, and maintained to meet the requirements of §264.259. Address the following items as specified in §264.259:
  - a. The volume and the physical and chemical characteristics of the wastes to be disposed in the waste pile, including their potential to migrate through soil or to volatilize or escape into the atmosphere;
  - b. The attenuative properties of underlying and surrounding soils or other materials;
  - c. The mobilizing properties of other materials co-disposed with these wastes; and
  - d. The effectiveness of additional treatment, design, or monitoring techniques.
11. Attach a schedule and procedure for meeting the inspection requirements of §§264.15 and 264.254. [§270.14(b)(5)]
12. Attach the information described in Part II, M. - Ground Water Protection. [§270.14(c)]
13. Attach a copy of the most recent closure cost estimate [§270.14(b)(15)] and post-closure cost estimate [§270.14(b)(16)].

## **F. Land Treatment**

The applicant must provide the following information in accordance with 40 CFR Part 264, Subpart M. [§270.20]

1. Attach a description of plans to conduct a treatment demonstration as required under §264.272. Include the following information:
  - a. The wastes for which the applicant is making the demonstration and the potential hazardous constituents in the wastes;

b. The data sources the applicant is using to make the demonstration (e.g., literature, laboratory data, field data, or operating data); and

c. Any specific laboratory or field test the applicant conduct, including:

- (1) The type of test (e.g., column leaching, degradation);
- (2) Materials and methods including analytical procedures;
- (3) Expected time for completion; and
- (4) Characteristics of the unit that will be simulated in the demonstration including treatment zone characteristics, climatic conditions, and operating practices.

2. Attach a description of a land treatment program, as required under §264.271. Submit this information with the plans for the treatment demonstration and update it following the treatment demonstration. Address the following items:

a. The wastes to be land treated;

b. Design measures and operating practices necessary to maximize treatment in accordance with §264.273(a) including:

- (1) Waste application method and rate;
- (2) Measures to control soil pH;
- (3) Enhance microbial or chemical reactions; and
- (4) Control moisture content.

c. Provisions for unsaturated zone monitoring including:

- (1) Sampling equipment, procedures, and frequency;
- (2) Procedures for selecting sampling locations;
- (3) Analytical procedures;
- (4) Chain of custody control;
- (5) Procedures for establishing background values;
- (6) Statistical methods for interpreting results;
- (7) The justification for any hazardous constituents recommended for selection as principal hazardous constituents, in accordance with the criteria for such selection in §264.278(a).

d. A list of hazardous constituents reasonably expected to be in, or derived from, the wastes to be land treated based on waste analysis performed pursuant to §264.13; and

e. The proposed dimensions of the treatment zone.

3. Attach a description of how the unit is or will be designed, constructed, operated, and maintained in order to meet the requirements of §264.273. Address the following items:

a. Control of run-on;

b. Collection and control of run-off;

c. Minimization of run-off of hazardous constituents from the treatment zone;

d. Management of collection and holding facilities associated with run-on and run-off control systems;

- e. Periodic inspection of the unit. Include a copy of the inspection procedures required under §§264.15 and 270.14(b)(5); and
  - f. Control of wind dispersal of particulate matter, if applicable.
4. If the applicant will grow food-chain crops in or on the treatment zone of the land treatment unit, attach a description of how the applicant will conduct the demonstration required under §264.276(a) including:
- a. Characteristics of the food-chain crop for which the demonstration will be made;
  - b. Characteristics of the waste, treatment zone, and waste application method and rate to be used in the demonstration;
  - c. Procedures for crop growth, sample collection, sample analysis, and data evaluation; and
  - d. Characteristics of the comparison crop including the location and conditions under which it was or will be grown.
5. If the applicant will grow food-chain crops and cadmium is present in the land-treated waste, attach a description of how the applicant will comply with the requirements of §264.276(b).
6. Attach a description of the vegetative cover to be applied to the closed portions of the facility and a plan for maintaining such cover during the post-closure care period, as required under §264.280(a)(8) and §264.280(c)(2). Include the closure plan in this information and, where applicable, the post-closure care plan required under §§264.112, 264.118 and 264.280. [§270.14(b)(13)]
7. If the applicant will place ignitable or reactive wastes in or on the treatment zone, attach an explanation of how the applicant will comply with the requirements of §§264.281 and 264.17.
8. If the applicant will place incompatible wastes or incompatible wastes and materials in or on the same treatment zone, attach an explanation of how the applicant will comply with §§264.282 and 264.17.
9. If applicable, attach a waste management plan for EPA Hazardous Waste Numbers F020, F021, F022, F023, F026, and F027 which describes how a land treatment facility is or will be designed, constructed, operated, and maintained to meet the requirements of §264.283. Address the following items as specified in §264.283:
- a. The volume and the physical and chemical characteristics of the wastes, including their potential to migrate through soil or to volatilize or escape into the atmosphere;
  - b. The attenuative properties of underlying and surrounding soils or other materials;
  - c. The mobilizing properties of other materials co-disposed with these wastes; and
  - d. The effectiveness of additional treatment, design, or monitoring techniques.
10. Attach an unsaturated zone monitoring program as required by §264.278.
11. Attach a statement of how the applicant will satisfy the recordkeeping requirement in §264.279.
12. Attach the information described in Part II, M. - Ground Water Protection. [§270.14(c)]

13. Attach a copy of the most recent closure cost estimate [§270.14(b)(15)] and post-closure cost estimate [§270.14(b)(16)].

14. If appropriate, attach evidence of an approved extension under §268.5 or an approved petition under §268.6. [§270.14(b)(21)]

## **G. Landfills**

The applicant must provide the following information in accordance with 40 CFR Part 264, Subpart N. [§270.21]

1. Attach a list of the hazardous wastes placed or to be placed in each landfill or landfill cell.

2. Attach detailed plans and an engineering report describing how the landfill is or will be designed, constructed, operated, and maintained to comply with the requirements of §§264.19, 264.301, 264.302, and 264.303. Address the following items:

a. The liner system and leachate collection and removal system (except for an existing portion of a landfill). If the applicant is seeking an exemption from the requirements for a liner and a leachate collection and removal system as provided by §264.301(b); submit detailed plans, engineering reports, and hydrogeologic reports, as appropriate; describing alternate design and operating practices that will, in conjunction with location aspects, prevent the migration of any hazardous constituent into the ground water or surface water at any future time;

b. The double liner and leak (leachate) detection, collection, and removal system, if the landfill must meet the requirements of §264.301(c). If the applicant is seeking an exemption from the requirement as described in §264.301(d), (e) or (f), submit appropriate information.

c. If the leak detection system is in the saturated zone, explain the leak detection system design and operation and the location of the saturated zone in relation to the leak detection system.

d. The construction quality assurance (CQA) plan if required under §264.19.

e. Proposed action leakage rate, with rationale, if required under §264.302 and response action plan if required under §264.303.

f. Control of run-on;

g. Control of run-off;

h. Management of collection and holding facilities associated with run-on and run-off control systems; and

i. Control of wind dispersal of particulate matter, where applicable.

3. If the applicant is seeking an exemption from Subpart F of Part 264 as provided by §264.90(b), submit detailed plans and an engineering report explaining the location of the saturated zone in relation to the landfill, the design of a double-liner system that incorporates a leak detection system between the liners, and a leachate collection and removal system above the liners.

4. Attach a description of how the applicant will inspect each landfill, including the double liner system, leachate collection and removal system, cover systems, and appurtenances for control of run-on and run-off, in order to meet requirements of §§264.303(a), (b) and (c). Include this information in the inspection plan required under §264.15.
5. Attach detailed plans and an engineering report describing the final cover which will be applied to each landfill or landfill cell at closure in accordance with §264.310(a). Attach a description of how the applicant will maintain and monitor each landfill after closure in accordance with §264.310(b). Include the closure and post-closure plans required under §§264.112, 264.118 and 264.310. [§270.14(b)(13)]
6. If the applicant will place ignitable or reactive wastes in the landfill, attach an explanation of how the applicant will comply with the requirements of §§264.312 and 264.17.
7. If the applicant will place incompatible wastes, or incompatible wastes and materials in the landfill, attach an explanation of how the applicant will comply with §§264.313 and 264.17.
8. If the applicant will place bulk or non-containerized liquid waste or waste containing free liquids in the landfill, attach an explanation of how the applicant will comply with the requirements of §264.314(a).
9. If the applicant will place containers of hazardous waste in the landfill, attach an explanation of how the applicant will comply with the requirements of §§264.315 or 264.316, as applicable.
10. Attach a copy of the notice the applicant placed in the deed or other instrument as required by §264.119. [§270.14(b)(14)]
11. If applicable, attach a waste management plan for EPA Hazardous Waste Numbers F020, F021, F022, F023, F026, and F027 which describes how a landfill is or will be designed, constructed, operated, and maintained to meet the requirements of §264.317. Address the following items as specified in §264.317:
  - a. The volume and the physical and chemical characteristics of the wastes, including their potential to migrate through soil or to volatilize or escape into the atmosphere;
  - b. The attenuative properties of underlying and surrounding soils or other materials;
  - c. The mobilizing properties of other materials co-disposed with these wastes; and
  - d. The effectiveness of additional treatment, design, or monitoring techniques.
12. Attach a statement of how the applicant will comply with the surveying and recordkeeping requirements of §264.309.
13. Attach the information described in Part II, M. - Ground Water Protection. [§270.14(c)]
14. Attach the information described in Part II, O. - Exposure Information. [§270.10(j)]
15. If applicable, attach a copy of the approved extension under §268.5 or the approved petition under §268.6. [§270.14(b)(21)]

## H. Incinerators

The applicant must provide the following information in accordance with 40 CFR Part 264, Subpart O. [§270.19]

1. The applicant must fulfill the requirements of either section a., b., or c.:

a. When seeking an exemption under §264.340(b) or (c) (ignitable, corrosive or reactive wastes only), attach documentation showing:

(1) That the waste is listed as a hazardous waste in 40 CFR Part 261, Subpart D, solely because it is ignitable (Hazard Code I), corrosive (Hazard Code C), or both; or

(2) That the waste is listed as a hazardous waste in 40 CFR Part 261, Subpart D, solely because it is reactive (Hazard Code R) for characteristics other than those listed in §261.23(a)(4) and (5), and will not be burned when other hazardous wastes are present in the combustion zone; or

(3) That the waste is a hazardous waste solely because it possesses the characteristic of ignitability, corrosivity, or both, as determined by the tests for characteristics of hazardous wastes under 40 CFR Part 261, Subpart C; or

(4) That the waste is a hazardous waste solely because it possesses the reactivity characteristics listed in §261.23(a)(1), (2), (3), (6), (7), or (8); and that it will not be burned when other hazardous wastes are present in the combustion zone.

b. Submit the results of a trial burn conducted in accordance with and including all the determinations required by the following:

(1) The trial burn must be conducted in accordance with a trial burn plan prepared by the applicant and approved by the Department. Conditions in the permit will be based on results of the trial burn. The trial burn plan will include the following information:

(a) An analysis of each waste, or mixture of wastes, to be burned which includes:

(i) Heat value of the waste in the form and composition in which it will be burned;

(ii) Viscosity (if applicable), or description of the physical form of the waste;

(iii) An identification of any hazardous organic constituents listed in 40 CFR Part 261, Appendix VIII, which are present in the waste to be burned, except that the applicant need not analyze for constituents listed in 40 CFR Part 261, Appendix VIII, which would reasonably not be expected to be found in the waste. Identify the constituents excluded from analysis and state the basis for their exclusion. Use the analytical techniques specified in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" or their equivalent for the waste analysis; and

(iv) An approximate quantification of the hazardous constituents identified in the waste, within the precision produced by the analytical methods specified in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" or their equivalent;

(b) A detailed engineering description of the incinerator for which the applicant is seeking the permit, including:

(i) Manufacturer's name and model number of the incinerator (if available);

(ii) Type of incinerator;

(iii) Linear dimensions of the incinerator unit including the cross sectional area of combustion chamber;

(iv) Description of the auxiliary fuel system (type/feed);

(v) Capacity of prime mover;

(vi) Description of automatic waste feed cut-off system(s);

(vii) Stack gas monitoring and pollution control equipment;

(viii) Nozzle and burner design;

(ix) Construction materials; and

(x) Location and description of temperature, pressure, and flow indicating and control devices.

(c) A detailed description of sampling and monitoring procedures, including sampling and monitoring locations in the system, the equipment to be used, sampling and monitoring frequency, and planned analytical procedures for sample analysis;

(d) A detailed test schedule for each waste for which the applicant is planning the trial burn including date(s), duration, quantity of waste to be burned, and other factors relevant to the Department's decision under paragraph 1.b.(4) of this section;

(e) A detailed test protocol, including, for each waste identified, the ranges of temperature, waste feed rate, combustion gas velocity, use of auxiliary fuel, and any other relevant parameters that will be varied to affect the destruction and removal efficiency of the incinerator;

(f) A description of, and planned operating conditions for, any emission control equipment which will be used;

(g) Procedures for rapidly stopping waste feed, shutting down the incinerator, and controlling emissions in the event of an equipment malfunction; and

(h) Such other information as the Department reasonably finds necessary to determine whether to approve the trial burn plan in light of the purposes of this paragraph and the criteria in paragraph 1.b.(4) of this section.

(2) The Department will evaluate the sufficiency of the information provided in the trial burn plan and may require the applicant to supplement this information to achieve the purposes of this section.

(3) The Department will specify trial principal organic hazardous constituents (trial POHCs) based on the waste analysis data in the trial burn plan. The trial POHCs are those constituents for which the applicant must calculate destruction and removal efficiencies during the trial burn. The Department will specify these trial POHCs based on its estimate of the difficulty incinerating the constituents identified in the waste analysis, their concentration or mass in the waste feed, and the hazardous waste organic constituent or constituents identified as the basis for listing a waste in Appendix VII of 40 CFR Part 261, Subpart D.

(4) The Department shall approve a trial burn plan if it finds that:

(a) The trial burn is likely to determine whether the applicant can meet the incinerator performance standard required by §264.343;

(b) The trial burn itself will not present an imminent hazard to human health or the environment;

(c) The trial burn will help the Department to determine operating requirements to specify under §264.345; and

(d) The information sought in paragraphs 1.b.(4)(a) and (b) of this section cannot reasonably be developed through other means.

(5) The applicant must make the following determinations during each approved trial burn or as soon after the trial burn as is practicable:

(a) A quantitative analysis of the trial POHCs in the waste feed to the incinerator;

(b) A quantitative analysis of the exhaust gas for the concentration and mass emissions of the trial POHCs, oxygen (O<sub>2</sub>) and hydrogen chloride (HCl);

(c) A quantitative analysis of the scrubber water (if any), ash residues, and other residues for the purpose of estimating the fate of trial POHCs;

(d) A computation of destruction and removal efficiency (DRE) in accordance with the DRE formula specified in §264.343(a);

(e) If the HCl emission rate exceeds 1.8 kilograms of HCl per hour (4 pounds per hour), a computation of HCl removal efficiency in accordance with §264.343(b);

(f) A computation of particulate emissions in accordance with §264.343(c);

(g) An identification of sources of fugitive emissions and their means of control;

(h) A measurement of average, maximum, and minimum temperatures, and combustion gas velocity;

(i) A continuous measurement of carbon monoxide (CO) in the exhaust gas; and

(j) Such other information as the Department may specify as necessary to ensure that the trial burn will determine compliance with the performance standard in §264.343 and to establish the operating conditions required by §264.345 as necessary to meet that



performance standard.

6) The applicant shall submit to the Department the results of all the determinations required in paragraph 1.b.(5) of this section and a certification that the trial burn has been carried out in accordance with the approved trial burn plan. Send the certification and the results to the Department no later than 90 days from the completion of the trial burn unless the Department approves a later date.

(7) After the trial burn is completed, submit all data collected during the trial burn to the Department.

(8) A person authorized to sign a permit application or a report shall certify all submissions required by this section on behalf of the applicant.

c. In lieu of a trial burn, the applicant may submit the following information:

(1) An analysis of each waste or mixture of wastes to be burned including:

(a) Heat value of the waste in the form and composition in which it will be burned;

(b) Viscosity (if applicable) or a description of the physical form of the waste;

(c) An identification of any hazardous organic constituents listed in 40 CFR Part 261, Appendix VIII, which are present in the waste to be burned, except that the applicant need not analyze for constituents listed in 40 CFR Part 261, Appendix VIII, which would reasonably not be expected to be found in the waste. Identify the constituents excluded from analysis and state the basis for their exclusion. Use the analytical techniques specified in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" or their equivalent for the waste analysis;

(d) An approximate quantification of the hazardous constituents identified in the waste, within the precision produced by the analytical methods specified in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" or their equivalent; and

(e) A quantification of those hazardous constituents in the waste which may be designated as POHCs based on data submitted from other trial or operational burns which demonstrate compliance with the performance standard in §264.343.

(2) A detailed engineering description of the incinerator, including:

(a) Manufacturer's name and model number of the incinerator;

(b) Type of incinerator;

(c) Linear dimension of the incinerator unit including cross sectional area of the combustion chamber;

(d) Description of auxiliary fuel system (type/feed);

(e) Capacity of prime mover;

(f) Description of automatic waste feed cutoff system(s);

- (g) Stack gas monitoring and pollution control monitoring system;
- (h) Nozzle and burner design;
- (i) Construction materials; and
- (j) Location and description of temperature, pressure, and flow indicating devices and control devices.

(3) A description and analysis of the waste to be burned compared with the waste for which the applicant provided data from operational or trial burns to support the contention that a trial burn is not needed. Include those items listed in this section in the data. Specify in this analysis the POHCs which the applicant has identified in the waste for which the applicant is seeking a permit, and any differences from the POHCs in the waste for which the applicant provided burn data.

(4) The design and operating conditions of the incinerator unit to be used, compared with that for which comparative burn data are available.

(5) A description of the results submitted from any previously conducted trial burn(s), including:

- (a) Sampling and analysis techniques used to calculate the performance standards in §264.343;
- (b) Methods and results of monitoring temperatures, waste feed rates, carbon monoxide, and an appropriate indicator of combustion gas velocity (including a statement concerning the precision and accuracy of this measurement); and
- (c) The certification and results required by paragraph 1.b.(6) of this section.

(6) The expected incinerator operation information to demonstrate compliance with §§264.343 and 264.345, including:

- (a) Expected carbon monoxide (CO) level in the stack exhaust gas;
- (b) Waste feed rate;
- (c) Combustion zone temperature;
- (d) Indication of combustion gas velocity;
- (e) Expected stack gas volume, flow rate, and temperature;
- (f) Computed residence time for waste in the combustion zone;
- (g) Expected hydrochloric acid removal efficiency;
- (h) Expected fugitive emissions and their control procedures; and
- (i) Proposed waste feed cut-off limits based on the identified significant operating parameters.

(7) Such supplemental information as the Department finds necessary to achieve the purposes of this section.

(8) Waste analysis data, including that submitted in paragraph 1.b.(1)(a) of this section, sufficient to allow the Department to specify permit principal organic hazardous constituents (permit POHCs). Permit POHCs are those constituents for which the applicant must provide destruction and removal efficiencies.

(9) The Department will approve a permit application without a trial burn if it finds that:

(a) The wastes are sufficiently similar; and

(b) The incinerator units are sufficiently similar, and the data from other trial burns are adequate to specify (under §264.345) operating conditions that will ensure that the incinerator will meet the performance standards in §264.343.

2. Attach a copy of the inspection schedule which demonstrates compliance with §264.15 (General inspection requirements). Include a demonstration of compliance with §264.347 (Monitoring and inspections) unless the applicant is exempted in accordance with §264.340. [§270.14(b)(5)]

3. Attach a copy of the closure plan and post-closure plan as required in §§264.112, 264.118 and 264.351. [§270.14(b)(13)]

4. Attach a copy of the closure cost estimate [§270.14(b)(14)] and post-closure cost estimate [§270.14(b)(15)].

## **I. Miscellaneous Units**

The applicant must provide the following information in accordance with 40 CFR Part 264, Subpart X. [§270.23]

1. Attach a detailed description of the unit in use or proposed for use, including the following:

a. Physical characteristics, materials of construction, and dimensions of the unit;

b. Detailed plans and engineering reports describing how the unit will be located, designed, constructed, operated [§264.73], maintained [§264.33], monitored, inspected [§264.15], and closed [§264.112] to comply with the requirements of §§264.601 and 264.602; and

c. For disposal units, a detailed description of the plans to comply with the post-closure requirements of §§264.603 and 264.118.

2. Attach detailed hydrologic, geologic, and meteorologic assessments and land-use maps for the region surrounding the site that address and ensure compliance of the unit with each factor in the environmental performance standards in §264.601.

3. Attach information on the potential pathways of exposure of humans or environmental receptors to hazardous waste or hazardous constituents and on the potential magnitude and nature of such exposures as per §§264.601(a)(8), (b)(10) and (c)(6).

4. Attach a report on a demonstration of the effectiveness of the treatment of each treatment unit based on laboratory or field data.

5. If placing ignitable, reactive, or incompatible wastes in the miscellaneous unit, attach an explanation of how the applicant will comply with the requirements of §264.17.

6. Submit the information described in Part II, K. - Closure, including Closure and Post-closure plans as required.

7. Submit the information described in Part II, M. - Ground Water Protection, if applicable. [§270.14(c)]

8. Submit the information described in Part II, O. - Exposure Information. [§264.601(a)(8)]
9. Submit all additional information the Department determines to be necessary for evaluation of the unit's compliance with the environmental performance standards of §264.601.
10. Attach a copy of the closure cost estimate [§270.14(b)(14)] and the post-closure cost estimate [§270.14(b)(15)].
11. Attach a schedule and procedure for meeting the inspection requirement of §264.15.

## **J. Containment Buildings**

The applicant must provide the following information in accordance with 40 CFR Part 264, Subpart DD. [§270.13(n) and 270.14(b)(2)]

1. Attach a list of the hazardous wastes placed or to be placed in each containment building.
2. Attach detailed plans and an engineering report describing how the containment building is or will be designed, constructed, operated, and maintained to comply with the requirements of §§264.1101.
3. If applicable attach a copy of the demonstration that existing units (other than 90-day generators units) substantially meets the standards of Subpart DD.
4. At closure of a containment building attach closure plan, closure activities, cost estimates for closure, and financial responsibility for containment buildings. These must meet all of the requirements specified in 264.310 and Subparts G and H of 40 CFR Part 264 .
5. Attach a copy of the closure cost estimate [§270.14(b)(14)] and the post-closure cost estimate [§270.14(b)(15)].
6. Attach a schedule and procedure for meeting the inspection requirement of §264.15.

## **K. Closure**

The applicant must provide the following information in accordance with 40 CFR Part 264, Subpart G. [§270.14(b)(13)]

1. Attach the following information to meet the closure performance standard of 40 CFR 264.111. 40 CFR 264.111 requires controlling, minimizing, or eliminating to the extent necessary to protect human health and the environment, post-closure escape of hazardous waste, hazardous constituents, leachate, contaminated run-off, or hazardous waste decomposition products to the ground water, surface waters or to the atmosphere. The closure plan [§264.112] must include all of the information required in Part II, Sections A through I [§270.14(b)(13)]:
  - a. A description of how the applicant will close each hazardous waste management unit at the facility in accordance with 40 CFR 264.111;
  - b. A description of how the applicant will conduct final closure of the facility in accordance with 40 CFR 264.111. The description must identify the maximum extent of the operations during the active life of the facility;
  - c. An estimate of the maximum inventory of wastes ever onsite over the active life of the facility and a detailed

description of the methods to be used during partial closures and final closure. The methods include but are not limited to, methods for removing, transporting, treating, storing, or disposing of all hazardous wastes. Identify the type(s) of the offsite hazardous waste management units the applicant will use, if applicable;

d. A detailed description of the steps needed to remove or decontaminate all hazardous waste residues and contaminated containment system components, equipment, structures, and soils during partial and final closure. The steps include but are not limited to, procedures for cleaning equipment and removing contaminated soils, methods for sampling and testing surrounding soils, and criteria for determining the extent of decontamination required to satisfy the closure performance standard;

e. A detailed description of other activities necessary during the closure period to ensure that all partial closures and final closure satisfy the closure performance standards, including but not limited to, ground water monitoring, leachate collection, and run-on and run-off control; and

f. A schedule for closure of each hazardous waste management unit and for final closure of the facility. The schedule must include, at a minimum, the total time required to close each hazardous waste management unit and the time required for intervening closure activities which will allow tracking of the progress of partial and final closure.

g. For facilities that use trust funds to establish financial assurance under §264.143 or §264.145 and that are expected to close prior to the expiration of the operation permit, an estimate of the expected year of final closure.

2. Attach, if required, a post-closure plan as described in §264.118. The post-closure plan must include all information required by Part II, Sections A through I [§270.14(b)(13)]. The post-closure plan must contain the following information for each hazardous waste management unit at the facility subject to the requirements of 40 CFR Part 264:

a. The activities which will be carried on after closure for each disposal unit and the frequency of these activities;

b. A description of the planned monitoring activities and frequencies at which they will be performed to comply with Subparts F, J, K, L, M, and N of 40 CFR Part 264 during the post-closure care period;

c. A description of the planned maintenance activities and frequencies at which they will be performed. These activities are to ensure the integrity of the cap and final cover or other containment systems in accordance with the requirements of Subparts J, K, L, M and N of 40 CFR Part 264 and to ensure the function of the monitoring equipment in accordance with the requirements of Subparts F, J, K, L, M, and N of 40 CFR Part 264; and

d. The name, address, and phone number of the person or office to contact about the hazardous waste disposal unit or facility during the post-closure care period.

3. If closure or post-closure plans have been approved by the Department as part of a TOP, construction, or operation permit application, attach a copy of a closure and post-closure plan as required by §264.112 and §264.118. Also, either:

a. Attach a certification stating that no changes have been made to the plans which have been provided to the Department; or

b. Provide an amended plan showing all the changes which have been made, or are proposed to be made, to the plans which have been provided to the Department.

4. For facilities applying for a closure permit, the applicant must submit a Quality Assurance Plan that meets the requirements of Chapter 62-760, F.A.C.

## **L. Compliance Schedule**

The applicant may, at his option, propose a compliance schedule for achieving compliance with any standards that have not been met in accordance with Rule 62-730.280(4), F.A.C. and 40 CFR 270.14(c)(8)(v) and 270.33. The Department will take this proposal into consideration when developing a compliance schedule.

## **M. Ground Water Protection**

The applicant must provide the following information in accordance with 40 CFR Part 264, Subpart F. [§270.14(c)]

Owners or operators of hazardous waste surface impoundments, piles, land treatment units, miscellaneous units, and landfills must provide the following additional information regarding protection of ground water except as otherwise provided in §264.90(b):

1. A summary of the ground water monitoring data obtained during the interim status period under §§265.90 through 265.94, where applicable;
2. Identification of the uppermost aquifer and aquifers hydraulically interconnected beneath the facility property, including ground water flow direction and rate, and the basis for such identification (i.e., the information obtained from hydrogeologic investigations of the facility area including ground water contour maps);
3. On the topographic map required under Part II, A.1., a delineation of the waste management area, the property boundary, the proposed "point of compliance" as defined under §264.95, the proposed location of ground water monitoring wells as required under §264.97, and, to the extent possible, the information required in 2. above;
4. A description of any plume of contamination that has entered the ground water from a regulated unit at the time that the application is submitted that:
  - a. Delineates the vertical and horizontal extent of the plume on the topographic map required under Part II, A.1.; and
  - b. Identifies the concentration of each hazardous constituent in Appendix IX of 40 CFR Part 264 throughout the plume or identifies the maximum concentrations of each hazardous constituent in Appendix IX of 40 CFR Part 264 in the plume.
5. Detailed plans and an engineering report describing the proposed ground water monitoring program the applicant will implement to meet the requirements of §264.97;
6. If the presence of hazardous constituents has not been detected in the ground water at the time the applicant applies for a permit, the owner or operator must submit sufficient information, supporting data, and analyses to establish a detection monitoring program which meets the requirements of §264.98. Address the following items as specified under §264.98:
  - a. A proposed list of indicator parameters, waste constituents, or reaction products that can provide a reliable indication of the presence of hazardous constituents in the ground water;
  - b. A proposed ground water monitoring system;

- c. Background values for each proposed monitoring parameter or constituent, or procedures to calculate such values; and
- d. A description of proposed sampling, analysis and statistical comparison procedures to be used in evaluating ground water monitoring data.

7. If the applicant detects the presence of hazardous constituents in the ground water at the point of compliance at the time the applicant applies for a permit, the owner or operator must submit sufficient information, supporting data, and analyses to establish a compliance monitoring program which meets the requirements of §264.99. The owner or operator must also submit an engineering feasibility plan for a corrective action program necessary to meet the requirements of §264.100 and Rule 62-730.180(4), FAC except as provided in §264.98(h)(5). The owner or operator must address the following items to demonstrate compliance with §264.99:

- a. A description of the wastes previously handled at the facility;
- b. A characterization of the contaminated ground water, including concentrations of hazardous constituents;
- c. A list of hazardous constituents for which the applicant will conduct compliance monitoring in accordance with §§264.97 and 264.99;
- d. Proposed concentration limits for each hazardous constituent, based on the criteria set forth in §264.94(a), including a justification for establishing any alternate concentration limits;
- e. Detailed plans and an engineering report describing the proposed ground water monitoring system, in accordance with the requirements of §264.97; and
- f. A description of proposed sampling, analysis and statistical comparison procedures to be utilized in evaluating ground water monitoring data.

8. If the applicant measured hazardous constituents in the ground water which exceed the concentration limits established under §264.94 Table 1, or if ground water monitoring conducted at the time of permit application under §§265.90 through 265.94 at the waste boundary indicates the presence of hazardous constituents from the facility in ground water over background concentrations, the owner or operator must submit sufficient information, supporting data, and analyses to establish a corrective action program. The corrective action must meet the requirements of §§264.100 and 264.101 and Rule 62-730.180(4), F.A.C. However, an owner or operator is not required to submit information to establish a corrective action program if the owner or operator demonstrates to the Department that alternate concentration limits will protect human health and the environment after considering the criteria listed in §264.94(b). An owner or operator who is not required to establish a corrective action program for this reason must instead submit sufficient information to establish a compliance monitoring program which meets the requirements of §264.99 and 7. above. To demonstrate compliance with §§264.100 and 264.101 and Rule 62-730.180(4), F.A.C., the owner or operator must address, at a minimum, the following items:

- a. A characterization of the contaminated ground water, including concentrations of hazardous constituents;
- b. The concentration limit for each hazardous constituent found in the ground water as set forth in §264.94;
- c. Detailed plans and an engineering report describing the corrective action to be taken;
- d. A description of how the ground water monitoring program will assess the adequacy of the corrective action; and

e. A description of the wastes previously handled at the facility.

9. The requirements of Chapters 62-3 and 62-4, F.A.C.;

Hazardous waste facilities which may impact the ground water must also comply with the ground water provisions of Chapters 62-3 and 62-4, F.A.C. [Rule 62-730.180(4)(c), F.A.C.].

10. Additional ground water monitoring requirements:

a. Do not use filters when taking ground water samples. Use filtered samples for comparison purposes only.

b. The applicant must complete and submit a Well Construction Summary Report [DEP Form 62-730.900(2)(b)] for each piezometer, ground water monitoring and recovery well installed as part of initial site assessment and any ground water monitoring program(s) under 40 CFR Parts 264 and 265.

11. A Quality Assurance Plan that meets the requirements of Chapter 62-160, F.A.C.; and

12. The applicant must have all documents submitted pursuant to this section that entail the practice of professional geology signed and sealed in accordance with Rules 62-4.050(3) and 62-730.220(7), F.A.C.



## Instructions For Well Construction Summary Report

- A. **Elevation:** The land surface elevation at the well location and the elevation of the top of casing (TOC) must be reported relative to mean sea level (MSL).
- B. **Turbidity:** Measurements must be made immediately after completing well development.
- C. **Casing:** List the material of each casing used (PVC, stainless steel, etc.) in order of emplacement in each well, the inside and outside diameter of each casing, and the top and bottom depth of each casing (or series of casings where identical casings are used) relative to ground surface.
- D. **Screen:** List the material of the monitoring screen, inside and outside diameter of the screen, the top and bottom depth of the screen (relative to ground surface) and the manufactured slot (or perforation) size of the screen.
- E. **Annulus:** List the material(s) used to seal the annular space of the well along with any additives, the size of the material (filter pack), the depth interval (relative to ground surface), and the method used to install the material (tremie pipe, pouring, etc.).
- F. **Drilling method:** List drilling method(s) used to install the well (mud-rotary, etc.), the diameters of the bit or auger used, the drilling interval (relative to ground surface) for each method or bit/auger diameter used, and the type of drilling fluids used.
- G. **Well construction diagram:** The diagram should show the final construction details of the well including surface elevation, hole diameter, casing length, casing material, screen length, screen material, annulus sealant, and total depth of the well. Indicate height (relative to ground surface) of stickup and the type of security used for the well.
- H. **Latitude, Longitude:** These must be reported to the nearest one-hundredth (.01) of a second.
- I. The **field geologist** is the person responsible for lithologic descriptions.

## **N. Research, Development and Demonstration**

The applicant must provide the following information in accordance with 40 CFR Part 270, Subpart F. [§270.65]

1. The applicant should submit a letter to the Department summarizing the proposed research prior to submitting the formal application so that the Department may, in accordance with Rule 62-730.330(2), F.A.C., determine if it can waive any of the requirements of the application. This letter should contain:

- a. The purpose of the research;
- b. An explanation of why the research is innovative and experimental; and
- c. A summary of the research objectives.

2. The applicant should submit the following information as part of the formal application:

- a. The purpose of this project;
- b. An explanation as to why the proposed activity is experimental and innovative;
- c. A general description of the proposed activity;
- d. The estimated time of operation for the experimental activities;
- e. All information on the expected performance of the unit; and
- f. A description of performance data that may have been previously generated from the operation of the unit.

3. The applicant should establish monitoring and inspection requirements at a level consistent with the proposed activity in order to assure protection of human health and the environment.

4. The applicant should propose to report and keep records in a manner which will provide the Department with sufficient data about the operating efficiency of the RD&D activity. The applicant should propose to submit data at a frequency adequate to allow proper Department oversight of the experimental activity.

5. The applicant should describe the qualifications of personnel. The personnel responsible for conducting and managing the experimental testing should be technically competent to assure that all situations which arise as a result of the experimental activity will be handled properly.

6. The applicant should prepare a closure plan in accordance with the appropriate sections of Part II.

## **O. Exposure Information**

The applicant must provide the following information if the facility has a surface impoundment [§264.601(a)(8)] or a landfill [§270.10(j)]:

1. Reasonably foreseeable potential releases from both normal operations and accidents at the unit, including releases associated with transportation to or from the unit.

2. The potential pathways of human exposure to hazardous wastes or constituents resulting from the release described under 1. of this section.

3. The potential magnitude and nature of the human exposure resulting from such releases.

## **P. Information Regarding Potential Releases From Solid Waste Management Units**

A Solid Waste Management Unit (SWMU) is a discernible unit at which solid wastes have been placed at any time, irrespective of whether the unit was intended for the management of solid or hazardous waste. Such units include all areas at a facility where solid wastes have been routinely and systematically released, as described in the July 27, 1990 Federal Register (55 FR 30798). The SWMU list in DEP Form 62-730.900(2)(c) does not include all types of SWMUs: these are a sampling of the more common types of units. If you have a different type of Solid Waste Management Unit, mark yes under "other".

## **Q. Information Requirements For Solid Waste Management Units**

1. The applicant must provide the following information for each solid waste management unit [§270.14]:
  - a. The location of the unit on the topographic map;
  - b. Designation of type of unit;
  - c. General dimensions and structural description (supply all available drawings);
  - d. When the unit was operated; and
  - e. Specification of all wastes managed at the unit.
2. The applicant must submit all available information pertaining to all releases of hazardous waste or hazardous constituents from each unit.
3. The applicant must attach the results of sampling and analysis of ground water, landsurface, and subsurface strata, surface water, or air. The sampling and analysis may include the installation of wells. The Department will determine what sampling and analysis is necessary to complete the RCRA Facility Assessment.

## **R. Process Vents**

The applicant must provide the following information in accordance with 40 CFR Part 264, Subpart AA or Part 265, Subpart AA. [§270.24]

1. Facilities that cannot install a closed-vent system and control device to comply with the provisions of 40 CFR Part 264, Subpart AA or Part 265, Subpart AA on the effective date that the facility becomes subject to the provisions of these subparts, must attach an implementation schedule as specified in §264.1033(a)(2).
2. Attach documentation of compliance with the process vent standards in §264.1032, including:
  - a. Information and data identifying all affected process vents, annual throughput and operating hours of each affected unit, estimated emission rates for each affected vent and for the overall facility (i.e., the total emissions for all affected vents at the facility), and the approximate location within the facility of each affected unit (e.g., identify the hazardous waste management units on a facility plot plan);
  - b. Information and data supporting estimates of vent emissions and emission reduction achieved by add-on control devices based on engineering calculations or source tests. For the purpose of determining compliance, make estimates of vent emissions and emission reductions using operating parameter values (e.g., temperatures, flow rates, or concentrations) that represent the conditions that exist when the waste management unit is operating at the highest load or capacity level reasonably expected to occur; and
  - c. Information and data used to determine whether or not a process vent is subject to the requirements of §264.1032.
3. If the applicant proposes to use a control device other than a thermal vapor incinerator, catalytic vapor incinerator, flare, boiler, process heater, condenser, or carbon adsorption system to comply with the requirements of §264.1032, and chooses to use test data to determine the organic removal efficiency or the total organic compound concentration achieved by the control device, submit a performance test plan as specified in §264.1035(b)(3).

4. Attach documentation of compliance with §264.1033, including:
  - a. A list of all information references and sources used in preparing the documentation;
  - b. Records, including the dates, of each compliance test required by §264.1033(k);
  - c. A design analysis, specifications, drawings, schematics, and piping and instrumentation diagrams based on the appropriate sections of "APTI Course 415: Control of Gaseous Emissions" or other engineering texts acceptable to the Department that present basic control device design information. The design analysis shall address the vent stream characteristics and control device operation parameters as specified in §264.1035(b)(4)(iii);
  - d. A statement signed and dated by the owner or operator certifying that the operating parameters used in the design analysis reasonably represent the conditions that exist when the hazardous waste management unit is or would be operating at the highest load or capacity level reasonably expected to occur; and
  - e. A statement signed and dated by the owner or operator certifying that the control device is designed to operate at an efficiency of 95 weight percent or greater unless the total organic emission limits of §264.1032(a) for affected process vents at the facility can be attained by a control device involving vapor recovery at an efficiency less than 95 weight percent.
5. Attach a schedule and procedure for meeting the inspection requirement of §264.15.

## **S. Requirements For Equipment**

The applicant must provide the following information in accordance with 40 CFR Part 264, Subpart BB. [§270.25]

1. Attach the following information for each piece of equipment to which Subpart BB of Part 264 applies:
  - a. Equipment identification number and hazardous waste management unit identification;
  - b. Approximate locations within the facility (e.g., identify the hazardous waste management unit on a facility plot plan);
  - c. Type of equipment (e.g., a pump or pipeline valve);
  - d. Percent by weight total organics in the hazardous waste stream at the equipment;
  - e. Hazardous waste state at the equipment (e.g., gas/vapor or liquid); and
  - f. Method of compliance with the standard (e.g., "monthly leak detection and repair" or "equipped with dual mechanical seals").
2. Facilities that cannot install a closed-vent system and control device to comply with the provisions of 40 CFR 264, Subpart BB on the effective date that the facility becomes subject to the provisions of 40 CFR 264 or 265, Subparts BB, attach an implementation schedule as specified in §264.1033(a)(2).
3. Attach a schedule and procedure for meeting the inspection requirement of §264.15.

4. If the applicant proposes to use a control device other than a thermal vapor incinerator, catalytic vapor incinerator, flare, boiler, process heater, condenser, or carbon adsorption system and chooses to use test data to determine the organic removal efficiency or the total organic compound concentration achieved by the control device, submit a performance test plan as specified in §264.1035(b)(3).
5. Attach documentation that demonstrates compliance with the equipment standards in §§264.1052 to 264.1059. This documentation shall contain the records required under §264.1064. The Department may request further documentation before deciding if the applicant demonstrated compliance.
6. Attach documentation to demonstrate compliance with §264.1060. Include the following information:
  - a. A list of all information references and sources used in preparing the documentation;
  - b. Records including the dates of each compliance test required by §264.1033(j);
  - c. A design analysis, specifications, drawings, schematics, and piping and instrumentation diagrams based on the appropriate sections of "APTI Course 415: Control of Gaseous Emissions" or other engineering texts acceptable to the Department that present basic control device design information. The design analysis shall address the vent stream characteristics and control device operation parameters as specified in §264.1035(b)(iii);
  - d. A statement signed and dated by the owner or operator certifying that the operating parameters used in the design analysis reasonably represent the conditions that exist when the hazardous waste management unit is operating at the highest load or capacity level reasonably expected to occur; and
  - e. A statement signed and dated by the owner or operator certifying that the control device is designed to operated at an efficiency of 95 weight percent or greater.

## **T. Boilers and Industrial Furnaces**

The applicant must provide the following information in accordance with 40 CFR Part 266, Subpart H. [§270.22]

1. The applicant must conduct a trial burn and must submit a trial burn plan or the results of a trial burn, including all required determinations [§270.66], if the applicant is subject to certain standards in 40 CFR Part 266. The standards are to control organic emissions [§266.104]; particulate matter [§266.105]; metals emissions [§266.106]; or hydrogen chloride or chloride gas emissions [§266.107].
  - a. Applicants for new boilers and industrial furnaces (those not operating under a TOP under Rule 62-730.231, F.A.C. and §266.103) are subject to paragraphs 1.b. through 1.f. of this section. Boilers and industrial furnaces operating under a TOP are subject to paragraph 1.g. of this section. [§270.66(a)]
  - b. A permit for a new boiler or industrial furnace must specify appropriate conditions for the Pretrial Burn Period, the Trial Burn Period, and the Post-Trial Burn Period. [§270.66(b)] The applicant must:
    - (1) Submit a statement describing the conditions necessary to operate in compliance with the standards of §§266.104 through 266.107 during the Pretrial Burn Period. This statement should

include, at a minimum, restrictions on the applicable operating requirements identified in §266.102(e). [§270.66(b)(1)(i)]

(2) Propose a trial burn plan, prepared under paragraph 1.c. of this section, to be submitted with Part II of the permit application. [§270.66(b)(2)]

(3) Submit a statement that identifies the conditions necessary to operate during the Post-Trial Burn Period in compliance with the performance standards of §§266.104 through 266.107. This statement should include, at a minimum, restrictions on the operating requirements provided by §266.102(e). [§270.66(b)(3)(ii)]

c. Submit a trial burn plan that includes the following information [§270.66(c)]:

(1) An analysis of each feed stream as fired, including hazardous waste, other fuels, and industrial furnace feed stocks. Include in the analysis:

(a) Heating value, levels of antimony, arsenic, barium, beryllium, cadmium, chromium, lead, mercury, silver, thallium, total chlorine/chloride, and ash;

(b) Viscosity or a description of the physical form of the feed stream;

(2) An analysis of each hazardous waste, as fired, including:

(a) An identification of any hazardous organic constituents listed in 40 CFR Part 261, Appendix VIII that are present in the feed stream, except that the applicant need not analyze for constituents listed in Appendix VIII that would reasonably not be expected to be found in the hazardous waste. Identify the constituents excluded from analysis and explain the basis for this exclusion. Use the analytical techniques specified in Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (adopted by reference in Rule 62-730.021, F.A.C.), or their equivalent.

(b) An approximate quantification of the hazardous constituents identified in the hazardous waste, within the precision produced by the analytical methods specified in Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (adopted by reference in Rule 62-730.021, F.A.C.), or other equivalent.

(c) A description of blending procedures prior to firing the hazardous waste, if applicable, including a detailed analysis of the hazardous waste prior to blending, an analysis of the material with which the hazardous waste is blended, and blending ratios.

(3) A detailed engineering description of the boiler or industrial furnace, including:

(a) Manufacturer's name and model number of the boiler or industrial furnace;

(b) Type of boiler or industrial furnace;

(c) Maximum design capacity in appropriate units;

(d) Description of the feed system for the hazardous waste, and, as appropriate, other fuels and industrial furnace feedstocks;

- (e) Capacity of hazardous waste feed system;
- (f) Description of automatic hazardous waste feed cutoff system(s);
- (g) Description of any pollution control system; and
- (h) Description of stack gas monitoring and any pollution control monitoring systems.

(4) A detailed description of sampling and monitoring procedures including sampling and monitoring locations in the system, the equipment to be used, sampling and monitoring frequency, and planned analytical procedures for sample analysis.

(5) A detailed test schedule for each hazardous waste for which the trial burn is planned, including date(s), duration, quantity of hazardous waste to be burned, and other factors relevant to the Department's decision under paragraph 1.b.(2) of this section.

(6) A detailed test protocol, including, for each hazardous waste identified, the ranges of hazardous waste feed rate, and, as appropriate, the feed rates of other fuels and industrial furnace feedstocks, and any other relevant parameters that may affect the ability of the boiler or industrial furnace to meet the performance standards in §§266.104 through 266.107.

(7) A description of, and planned operating conditions for, any emission control equipment that will be used.

(8) Procedures for rapidly stopping the hazardous waste feed and controlling emissions in the event of an equipment malfunction.

d. Conduct a Trial Burn to demonstrate conformance with the standards of §§266.104 through 266.107 under an approved trial burn plan.

(1) Submit a certification that the trial burn has been carried out in accordance with the approved trial burn plan.

(2) Submit within 90 days of completion of the trial burn, or later if approved by the Department, the results of all the determinations required in paragraph 1.c. of this section.

(a) Submit all data collected during a trial burn following completion of the trial burn.

(b) Certify all submissions required by this paragraph on behalf of the applicant by the signature of a person authorized to sign a permit application or a report under §270.11.

e. The applicant must make the following determinations based on the approved trial burn [§270.66(f)]:

(1) A quantitative analysis of the levels of antimony, arsenic, barium, beryllium, cadmium, chromium, lead, mercury, thallium, silver, and chlorine/chloride, in the feed streams (hazardous waste, other fuels, and industrial furnace feedstocks);

(2) When a DRE trial burn is required under §266.104(a):

(a) A quantitative analysis of the trial POHCs in the hazardous waste feed;



(b) A quantitative analysis of the stack gas for the concentration and mass emissions of the trial POHCs; and

(c) A computation of destruction and removal efficiency (DRE), in accordance with the DRE formula specified in §266.104(a);

(3) When a trial burn for chlorinated dioxins and furans is required under §266.104(e) a quantitative analysis of the stack gas for the concentration and mass emission rate of the 2,3,7,8-chlorinated tetra-octa congeners of chlorinated dibenzo-p-dioxins and furans, and a computation showing conformance with the emission standard.

(4) When a trial burn for particulate matter, metals, or HCl/Cl<sub>2</sub> is required under §§266.105, 266.106 (c) or (d), or 266.107 (b)(2) or (c) a quantitative analysis of the stack gas for the concentrations and mass emissions of particulate matter, metals, or hydrogen chloride (HCl) and chlorine (Cl<sub>2</sub>), and computations showing conformance with the applicable emission performance standards;

(5) When a trial burn for DRE, metals, or HCl/Cl<sub>2</sub> is required under §§266.104(a), 266.106 (c) or (d), or 266.107 (b)(2) or (c) a quantitative analysis of the scrubber water (if any), ash residues, other residues, and products for the purpose of estimating the fate of the trial POHCs, metals, and chlorine/chloride;

(6) An identification of sources of fugitive emissions and their means of control;

(7) A continuous measurement of carbon monoxide (CO), oxygen, and where required, hydrocarbons (HC), in the stack gas; and

(8) Such other information as the Department may specify as necessary to ensure that the trial burn will determine compliance with the performance standards in §§266.104 through 266.107 and to establish the operating conditions required by §266.102(e) as necessary to meet those performance standards.

f. **TOPs for boilers and industrial furnaces.** For the purpose of determining feasibility of compliance with the performance standards of §§266.104 through 266.107 and of determining adequate operating conditions under §266.103, applicants owning or operating existing boilers or industrial furnaces operated under the interim status standards of §266.103 must either prepare and submit a trial burn plan and perform a trial burn in accordance with the requirements of this section or submit other information as specified in §270.22(a)(6). Applicants who submit a trial burn plan and receive approval before submission of Part II of the Hazardous Waste Facility Permit Application must complete the trial burn and submit the results specified in paragraph 1.f. of this section with Part II of the permit application. If completion of this process conflicts with Rule 62-730.231(8), F.A.C., for submission of Part II of the Hazardous Waste Facility Permit Application, the applicant must contact the Department to establish a later date for submission the trial burn results. If the applicant submits a trial burn plan with Part II of the permit application, the trial burn must be conducted and the results submitted within a time period prior to permit issuance to be specified by the Department. [§270.66(g) and Rule 62-730.231(8), F.A.C.]

2. Submit documentation that the boiler operates under the special operating requirements provided by §§266.104(a)(4) and 266.110 when seeking a Waiver of a Trial Burn for DRE. [§270.22(a)(2)(i)]

3. Submit the following when seeking provision for low risk wastes for boilers and industrial furnaces in §§266.104(a)(5) and 266.109(a) [§270.22(a)(2)(ii)]:

- a. Documentation that the device is operated in conformance with the requirements of §266.109(a)(1).
- b. Results of analyses of each waste to be burned, documenting the concentrations of nonmetal compounds listed in 40 CFR Part 261, Appendix VIII, except for those constituents that would reasonably not be expected to be in the waste. Identify the constituents excluded from analysis and explain the basis for their exclusion. Rely on analytical techniques specified in Test Methods for Evaluating Solid Waste, Physical/Chemical Methods for the analysis (adopted by reference, see Rule 62-730.021, F.A.C.).
- c. Documentation of hazardous waste firing rates and calculations of reasonable, worst-case emission rates of each constituent identified in 3.b. of this section using procedures provided by § 266.109(a)(2)(ii).
- d. Results of emissions dispersion modeling for emissions identified in 3.c. of this section using modeling procedures prescribed by §266.106(h).
- e. Documentation that the maximum annual average ground level concentration of each constituent identified in 3.b. of this section quantified in conformance with 3.d. of this section does not exceed the allowable ambient level established in 40 CFR Part 266, Appendix IV or Appendix V. The acceptable ambient concentration for emitted constituents for which a specific Reference Air Concentration has not been established in Appendix IV or Risk-Specific Dose has not been established in Appendix V is 0.1 micrograms per cubic meter, as noted in the footnote to Appendix IV.

4. Submit the following when seeking a Waiver of Trial Burn for Metals under the Tier I (or adjusted Tier I) metals feed rate screening limits in §266.106 (b) and (e): [§270.22(a)(3)]

- a. Documentation of the feed rate of hazardous waste, other fuels, and industrial furnace feed stocks;
- b. Documentation of the concentration of each metal controlled by §266.106 (b) or (e) in the hazardous waste, other fuels, and industrial furnace feedstocks, and calculations of the total feed rate of each metal;
- c. Documentation of how the applicant will ensure that the Tier I feed rate screening limits provided by §266.106 (b) or (e) will not be exceeded during the averaging period;
- d. Documentation to support the determination of the terrain-adjusted effective stack height, good engineering practice stack height, terrain type, and land use as provided by §266.106 (b)(3) through (b)(5);
- e. Documentation of compliance with the provisions of §266.106(b)(6), if applicable, for facilities with multiple stacks;
- f. Documentation that the facility does not fail the criteria provided by §266.106(b)(7) for eligibility to comply with the screening limits; and

- g. Proposed sampling and metals analysis plan for the hazardous waste, other fuels, and industrial furnace feed stocks.
5. Submit documentation supporting the low risk waste provisions of §266.109(b) for a Waiver of Trial Burn for Particulate Matter and 3. and 4. of this section. [§270.22(a)(4)]
6. Submit the following when seeking a Waiver of Trial Burn for HCl and Cl<sub>2</sub> under the Tier I (or adjusted Tier I) feed rate screening limits for total chloride and chlorine in §266.107 (b)(1) and (e): [§270.22(a)(5)]
- a. Documentation of the feed rate of hazardous waste, other fuels, and industrial furnace feed stocks;
  - b. Documentation of the levels of total chloride and chlorine in the hazardous waste, other fuels, and industrial furnace feedstocks, and calculations of the total feed rate of total chloride and chlorine;
  - c. Documentation of how the applicant will ensure that the Tier I (or adjusted Tier I) feed rate screening limits provided by §266.107 (b)(1) or (e) will not be exceeded during the averaging period provided by that paragraph;
  - d. Documentation to support the determination of the terrain-adjusted effective stack height, good engineering practice stack height, terrain type, and land use as provided by §266.107(b)(3);
  - e. Documentation of compliance with the provisions of §266.107(b)(4), if applicable, for facilities with multiple stacks;
  - f. Documentation that the facility does not fail the criteria provided by §266.107(b)(3) for eligibility to comply with the screening limits; and
  - g. Proposed sampling and analysis plan for total chloride and chlorine for the hazardous waste, other fuels, and industrial furnace feedstocks.
7. The applicant may submit Data in Lieu of a Trial Burn. The owner or operator may seek an exemption from the trial burn requirements to demonstrate conformance with §§266.104 through 266.107 and §270.66 by providing the information required by §270.66 from previous compliance testing of the device in conformance with §266.103 or from compliance testing or trial or operational burns of similar boilers or industrial furnaces burning similar hazardous wastes under similar conditions. If data from a similar device is used to support a trial burn waiver, provide the design and operating information required by §270.66 for both the similar device and the device to which the data is to be applied, and provide a comparison of the design and operating information. In addition, submit the following information: [§270.22(a)(6)]
- a. For a waiver from any trial burn:
    - (1) A description and analysis of the hazardous waste to be burned compared with the hazardous waste for which data from compliance testing, or operational or trial burns are provided to support the contention that a trial burn is not needed;
    - (2) The design and operating conditions of the boiler or industrial furnace to be used, compared with that for which comparative burn data are available; and
    - (3) Such supplemental information as the Department finds necessary to achieve the purposes of this paragraph.

- b. For a waiver of the DRE trial burn, the basis for selection of POHCs used in the other trial or operational burns which demonstrate compliance with the DRE performance standard in §266.104(a). This analysis should specify the constituents in 40 CFR Part 261, Appendix VIII, that the applicant has identified in the hazardous waste for which the applicant is seeking a permit, and all differences from the POHCs in the hazardous waste for which the applicant provided burn data.
8. Submit the following information for an alternative HC limit for industrial furnaces with organic matter in raw materials under §266.104(f): [§270.22(b)]
- a. Documentation that the furnace is designed and operated to minimize HC emissions from fuels and raw materials;
  - b. Documentation of the proposed baseline flue gas HC (and CO) concentration, including data on HC (and CO) levels during tests when the facility produced normal products under normal operating conditions from normal raw materials while burning normal fuels and when not burning hazardous waste;
  - c. Test burn protocol to confirm the baseline HC (and CO) level including information on the type and flow rate of all feedstreams, point of introduction of all feedstreams, total organic carbon content (or other appropriate measure of organic content) of all nonfuel feedstreams, and operating conditions that affect combustion of fuel(s) and destruction of hydrocarbon emissions from nonfuel sources;
  - d. Trial burn plan to:
    - (1) Demonstrate that flue gas HC (and CO) concentrations when burning hazardous waste do not exceed the baseline HC (and CO) level; and
    - (2) Identify the types and concentrations of organic compounds listed in 40 CFR Part 261, Appendix VIII, that are emitted when burning hazardous waste in conformance with procedures prescribed by the Department;
  - e. Implementation plan to monitor over time changes in the operation of the facility that could reduce the baseline HC level and procedures to periodically confirm the baseline HC level; and
  - f. Such other information as the Department finds necessary to achieve the purposes of this paragraph.
9. Submit documentation specifying how the Alternative metals implementation approach under §266.106(f) ensures compliance with the metals emissions standards of §266.106(c) or (d) and how the approach can be effectively implemented and monitored. [§270.22(c)]
10. Submit information describing the automatic waste feed cutoff system, including any pre-alarm systems that may be used. [§270.22(d)]
11. Submit information supporting conformance with the standards for direct transfer operations to feed hazardous waste from transport vehicles directly to the boiler or industrial furnace provided by §266.111. [§270.22(e)]
12. Submit information adequate to demonstrate conformance with the provisions of §266.112 regarding residues excluded from regulation. [§270.22(f)]

13. Attach a copy of the closure cost estimate [§270.14(b)(14)] and the post-closure care cost estimate [§270.14(b)(15)].
14. Attach a schedule and procedure for meeting the inspection requirement of §264.15.

## **U. Requirements For Drip Pads**

The applicant must provide the following information in accordance with 40 CFR Part 264, Subpart W. [§270.26]

1. Attach the following additional information, except as otherwise provided by §264.1, for management of hazardous waste on drip pads:

- a. A list of hazardous wastes placed or to be placed on each drip pad.
- b. If the applicant is seeking an exemption to 40 CFR Part 264, Subpart F, as provided by §264.90, attach detailed plans and an engineering report describing how the applicant will satisfy the requirements of §264.90(b)(2).
- c. Attach detailed plans and an engineering report describing how the drip pad is or will be designed, constructed, operated and maintained to meet the requirements of §264.573, including the as-built drawings and specifications. Address the following items as specified in §264.571:
  - (1) The design characteristics of the drip pad;
  - (2) The liner system;
  - (3) The leakage detection system, including the leak detection system and how it is designed to detect the failure of the drip pad or the presence of any releases of hazardous waste or accumulated liquid at the earliest practicable time;
  - (4) Practices designed to maintain the drip pads;
  - (5) The associated collection system;
  - (6) Control of run-on to the drip pad;
  - (7) Control of run-off from the drip pad;
  - (8) The interval at which the applicant will remove drippage and other materials from the associated collection system and a statement demonstrating that the interval is sufficient to prevent overflow onto the drip pad;
  - (9) Procedures for cleaning the drip pad at least once every seven days to ensure the removal of any accumulated residues of waste or other materials. Procedures should include but not be limited to rinsing, washing with detergents or other appropriate solvents, or steam cleaning. Describe the provisions for documenting the date, time, and cleaning procedure used each time the pad is cleaned.
  - (10) Operating practices and procedures that personnel will follow to ensure that they minimize the tracking of hazardous waste or waste constituents off the drip pad due to their or equipment activities;

- (11) Procedures (including recordkeeping practices) for ensuring that, after removal from the treatment vessel, personnel hold treated wood from pressure and non-pressure processes on the drip pad until drippage has ceased;
- (12) Provisions for ensuring that personnel empty or otherwise manage collection and holding units associated with the run-on and run-off control systems as soon as possible after storms to maintain design capacity of the system;
- (13) If the applicant is treating hazardous waste on the drip pad, details of the process equipment used and the nature and quality of the residuals.
- (14) A description of how personnel will inspect each drip pad, including appurtenances for control of run-on and run-off, in order to meet the requirements of §264.573. Include this information in the inspection plan submitted under §270.14(b)(5).
- (15) A certification signed by an independent qualified, registered professional engineer, stating that the drip pad design meets the requirements of paragraphs (a) through (f) of §264.573.
- (16) A description of how personnel will remove hazardous waste residues and contaminated materials from the drip pad at closure, as required under §264.575(a). For any waste not to be removed from the drip pad upon closure, the applicant must submit detailed plans and an engineering report describing how he will comply with §264.310 (a) and (b). Include this information in the closure plan and, where applicable, the post-closure plan submitted under §270.14(b)(13).
- (17) Attach a copy of the closure cost estimate [§270.14(b)(14)] and the post-closure care cost estimate [§270.14(b)(15)].
- (18) Attach a schedule and procedure for meeting the inspection requirement of §264.15.

## **X. Equivalency Demonstrations**

The applicant must submit the following information in accordance with 40 CFR Part 271.1(c)(5) & (6).

1. If the owner/operator has submitted a Part B application for a post-closure permit, the owner/operator may request a determination, based on information contained in the application, that section 264 closure by removal standards were met.
2. If the owner/operator has not submitted a Part B application for a post-closure permit, the owner/operator may petition the Department for a determination that a post-closure permit is not required because the closure met the applicable part 264 closure standards. The closure equivalency determination must include all information required by this Hazardous Waste Facility Permit Application that are needed to ensure that 40 CFR Part 264 closure by removal standards are met, including, but not limited to:
  - a. Site characterization;
    - (1) Facility description; and
    - (2) Description of the unit(s) requiring an equivalency demonstration.
  - b. Demonstration of compliance with clean closure equivalency requirements;

- (1) Description of closure activities conducted; and
  - (2) Sampling and analytical requirements;
  - (3) Information required by Parts II.K and M of this application.
- c. Quality assurance/quality control requirements.
- d. Applicable Certifications (owner/operator, PE, PG, and landowner).