

Premise No. / / /  
Source No. / / /  
Application: / / /

APPENDIX P: LANDFILLS

General Information

1. Name Of Landfill: \_\_\_\_\_

2. Date Landfill plans to commenced (or commenced operation: \_\_\_\_\_  
Expected useful life of Landfill: \_\_\_\_\_ years.

3. Prior land use: \_\_\_\_\_

4. Landfill method. If more than one type, indicate relative proportions (percent):

\_\_\_\_\_ Area ; \_\_\_\_\_ Slope/Ramp; \_\_\_\_\_ Trench; or \_\_\_\_\_ Pit/Quarry

5. Final Landfill capacity: \_\_\_\_\_ tons of compacted waste. If Landfill is in operation, indicated remaining landfill capacity: \_\_\_\_\_ tons of compacted waste. Assume waste density of 1000 lb/cu.yd. (589 kg/m3) or indicate alternate density used to calculate capacity: \_\_\_\_\_ lb/cu.yd.

6. Waste material proportions -	<u>Percent of Final Capacity</u>
A. Unprocessed domestic solid waste:	_____
B. Shredded domestic solid waste:	_____
C. Unprocessed commercial solid waste:	_____
D. Shredded commercial solid waste:	_____
E. Construction or demolition refuse:	_____
F. Industrial solid waste (non-hazardous):	_____
G. Hazardous solid waste:	_____
H. Mining waste:	_____
I. Agricultural waste:	_____
J. Asbestos-containing waste:	_____
K. Incinerator residue:	_____
L. Fly ash:	_____
M. Sludge (type: _____);	_____
N. Other (specify: _____);	_____

## Appendix P: Landfills

## 7. Landfill operation:

- A. Normal operating schedule: \_\_\_\_\_ hours/day; \_\_\_\_\_ days/week; \_\_\_\_\_ weeks/year.
- B. Daily waste received: Average \_\_\_\_\_ tons/day; Maximum \_\_\_\_\_ tons/day,
- C. Percent annual receipts by season:  
 Winter \_\_\_\_\_; Spring \_\_\_\_\_; Summer \_\_\_\_\_; Fall \_\_\_\_\_

## 8. Type of hauler:

	<u>Average Loads/Day</u>	<u>Percent of Final Capacity</u>
A. Landfill-owned haulers:	_____	_____
B. Municipal haulers:	_____	_____
C. Commercial haulers:	_____	_____
D. Industrial users:	_____	_____
E. Members of the public:	_____	_____

FUGITIVE DUST

## 9. Soil composition (percent by weight):

	<u>Surface Soil</u>	<u>Cover Soil</u>
A. Clay:	_____	_____
B. Sand :	_____	_____
C. Silt:	_____	_____

## 10. Daily cover soil application:

Intermediate cover depth: \_\_\_\_\_ inches; Amount of cover soil: \_\_\_\_\_ cu.yd./day;

Final cover depth: \_\_\_\_\_ inches, Amount of cover soil: \_\_\_\_\_ cu.yd./day.

11. Attach a detailed description of techniques used to control fugitive dust emissions during the operation of the Landfill, including the dumping, transfer, compaction and covering of waste material. Page No. \_\_\_\_\_

## Appendix P: Landfills

12. Fugitive dust emission data: JDmissions from Landfill operations have been determined and data is included with this Appendix: \_\_\_\_\_ Yes; \_\_\_\_\_ No  
 If yes, check method: \_\_\_\_\_ **Source sampling**; \_\_\_\_\_ Emission factor;  
 \_\_\_\_\_ Other (Describe) \_\_\_\_\_

Page No. \_\_\_\_\_

ASBESTOS WASTE DISPOSAL

13. Will Landfill accept asbestos-containing waste material?  
 \_\_\_\_\_ Yes (Complete Items 14 through 19 of this Section) ;  
 \_\_\_\_\_ No (Omit Items 14 through 19 of this Section).
14. Minimum amount of cover applied within 24-hours of deposition of asbestos waste: \_\_\_\_\_ inches.
15. Describe cover material to be used for asbestos waste:  
 \_\_\_\_\_
16. On an attached sheet, describe control techniques used to comply with 40 CFR 61, Subpart M: National Emission Standard for Asbestos. Page No. \_\_\_\_\_
17. Attach a copy of your emergency action plan to protect workers and control asbestos emissions in the event of an asbestos spill, Page No. \_\_\_\_\_
18. On an attached sheet, describe record-keeping procedures used to document the delivery of asbestos wastes and the location of **asbestos** wastes in the Landfill. Page No. \_\_\_\_\_
19. On an attached sheet, describe the final closure techniques to be used on areas where asbestos wastes is deposited. Page No. \_\_\_\_\_
20. Attach a detailed drawing of the Landfill site. Page No. \_\_\_\_\_
21. Attach a site location map showing surrounding general land use within at least a 2 mile radius of the Landfill. Page No. \_\_\_\_\_
22. Completed by: \_\_\_\_\_ Date: \_\_\_\_\_

Appendix P is a technical information appendix which addresses air contaminant emissions from landfills. Appendix F: Solid Waste Disposal Facility Data Sheet and Appendix M1-1: General Fugitive Dust Emission Sources: Plant Roadways and Parking Areas should accompany this Appendix if they have not been submitted previously.

For the purpose of this Appendix, a "landfill" is defined as a land disposal site where solid or semi-solid waste materials are accepted for disposal.

"Asbestos-containing waste materials means any waste that contains **commercial asbestos** and is generated **by a source subject to 40 CFR 61, Subpart M: National Emission standard for Asbestos.** This term includes asbestos mill **tailings**, asbestos waste from control devices, friable waste material, and bags or containers that previously contained commercial asbestos. However, as applied to demolition and renovation operations, this term includes only friable **asbestos waste** and asbestos waste from control devices.

General Instructions: Answer or complete all items. If the item does not apply to the landfill, write in "not applicable" or "NA". If the answer is not known, write in "not known" or "NK". The Appendix form may be returned if all items are not completed or answered.

Specific Instructions:

Item      General Information:      Items (1) through (8) refer to general design and identification information for the landfill.

- (1) Give the complete name for the landfill.
- (2) Provide the month and year that the landfill will begin to accept waste material, or commenced accepting waste material. Give the expected full life of the landfill in years.
- (3) Describe the prior land use (for example: farmland, industrial, forest).
- (4) Identify the method of landfill operation. If the landfill will utilize more than one method of operation, give the **relative** proportions of each method as a percent of total capacity. The proportions for all methods; shall total 100%.
  - Area: The deposition of waste material on the surface involving **no** excavation of waste cells.
  - Slope or Ramp: The deposition of waste material at the top or **base** of a natural or artificial incline.
  - Trench: The excavation of long narrow cells which are filled **by** alternating waste material and cover material layers.
  - Pit or Quarry: The filling in of an existing hole or depression **by successive layers** of waste material and cover material

**Item**

- (5) Indicate the planned final capacity of the landfill in tons of compacted waste. For landfills already in operation, also indicate the remaining capacity to be filled in tons of compacted waste. The cover material should not be included in these calculations. Use an average waste density of 1,000 pounds per cubic yard (589 kg/m<sup>3</sup>). or indicate the actual density used in pounds per cubic yard, and document the method of determination on a separate sheet.
- (6) Indicate the expected proportions of waste material received as a percent of the final capacity given in item No. 5. If any types of waste material will not be accepted, indicate this by entering "not accepted" opposite the waste type. The waste material proportions should total 100%.

## Types of material:

- Unprocessed domestic solid waste; Directly from residential sources.
- Shredded domestic solid waste: Refuse from residential sources that has been processed through a shredder.
- Unprocessed commercial solid waste: General refuse from stores, restaurants, offices, light industries.
- Shredded commercial solid waste: Above waste that has been processed through a shredder.
- Construction or Demolition refuse: Waste material from the construction or demolition of houses, buildings or other facilities.
- Industrial solid waste (non-hazardous): Waste material from industrial sources not classified as "hazardous" (see below).
- Hazardous solid waste: Waste material defined by the Resource Conservation and Recovery Act (RCRA) to be "hazardous".
- Mining waste: Waste material generated by a mining operation.
- Agricultural waste: Waste material generated from farming or other agricultural activity.
- Asbestos-containing waste: Waste containing asbestos fibers from operations governed by the National Emission Standard for Asbestos, 40 CFR 61.140 through 61.156.
- Incinerator residue: Residue and ashes from incinerators that are not hazardous under RCRA.

Item

- Fly ash: Air pollution collector wastes from fuel-burning equipment.
- Sludge: Any liquid/solid suspension. Specify the origin of the sludge (for example: POTW, industrial pre-treatment, water softening, air pollution scrubber).
- Other: Specify type of waste material if none of the above apply.

(7) Landfill operation. Indicate landfill's normal operating schedule in hours per day, days per week and, months per year. Indicate quantity of waste received (both average and maximum) on a daily basis in tons per day. Complete the seasonal percentage of annual receipts. The four seasons should total 100% and include: Winter (December, January and February); Spring (March, April and May); Summer (June, July and August); and Fall (September, October and November).

(8) Type of hauler. Indicate the average number of loads per day from each type of hauler. Also indicate the proportion in percent of final capacity. The total for all types of haulers should be 100%.

- Landfill-owner hauler: Trucks owned or operated by the landfill owner or operator.
- Municipal hauler: Trucks owned by a local government, or privately-owned trucks operated under contract to a government.
- Commercial hauler: Refuse operators operating independently or under contract to individuals or industry.
- Industrial users: Factory-owned or operated trucks hauling wastes generated by the same firm.
- Members of the public: private individuals hauling their own refuse.

Fugitive Dust: Items (9) through (12) refer to fugitive dust emissions from the operation of the landfill.

- (9) Soil composition: Indicate the relative proportions of sand, clay and silt for both the existing surface soil and the cover soil.
- (10) Daily cover soil application; Indicate cover depth in inches and total amount of cover in cubic yards per day for both intermediate cover application and final cover application.

Item

- (11) Describe in detail on a separate sheet all control measures to be used to control fugitive dust emission during **landfilling** operations. The description should cover waste dumping, transfer, compaction, excavation of cover material, and covering of waste. Roadway dust emissions are addressed in Appendix M1-1 which is required to be completed for all landfills. Fugitive emission control techniques include spraying or wetting the area, the erection of wind barriers, more frequent covering or other special handling. Indicate the frequency of application and application rate along with an estimated control efficiency, if known. Number **all** pages of the completed application and provide the page number of the response to this item.
- (12) If fugitive dust emissions from this source have been determined or estimated, attach a report to this Appendix and specify the method of determination (i.e., source sampling, emission factor, etc.) The source sampling may be from either this source or a similar one located elsewhere. The emission factor calculation should indicate the efficiency of, any control methods. Indicate the page number of the report.

Asbestos Waste Disposal: Items (13) through (19) refer to the waste disposal of asbestos-containing materials.

- (13) Indicate whether asbestos-containing waste material will be accepted. If "yes" is checked, submit the information requested by item No.'s 14 through 19 of this Appendix. If "no" is checked, omit item- No.'s 14 through 19.
- (14) Indicate minimum thickness of cover in inches to be applied to deposited asbestos waste within 24 hours.
- (15) Describe the type of cover material to be used for asbestos waste.
- (16) Describe control techniques used to comply with 40 CFR 61, Subpart M: National Emission Standard for Asbestos. On a separate sheet, state the procedures to be followed for accepting asbestos wastes, preparation of deposition site, unloading, covering and compaction. Indicate page number of this attachment.
- (17) Attach a copy of the emergency action plan to protect workers and control asbestos emissions in the event of an asbestos spill. The plan must address broken or open bags in delivery trucks, bag spillage during unloading, and bag breakage during covering. Recognition of hazards and proper response to spills must be stressed. The plan must include initial training of all employees that contact asbestos, training of new employees and periodic review of procedures. The OSHA standards for worker exposure, 29 CFR 1910.1001, must be followed. Indicate page number of this attachment.

**Item**

- (18) On a separate sheet describe record-keeping procedures used to document the delivery of asbestos wastes, the origination, hauler, and amount and condition of the load. Describe procedures to record the location of deposited asbestos wastes. Indicate page number of this attachment.
- (19) On a separate sheet describe final closure techniques to be used on areas where asbestos has been deposited to prevent future dispersion of fibers. Indicate page number of this attachment.
- (20) Attach a detailed plan of the landfill site. Include site boundaries, fences, asbestos warning signs, access roadways, existing and future on-site roadways, location, type (slope, trench, etc.) and condition (future, active, closed) of all planned cells, borrow areas, asbestos waste areas, and direction of prevailing wind. Indicate page number of this attachment.
- (21) Attach a 7-1/2" USGS topographic map with precise location and boundaries of landfill showing general land use within at least a two (2) mile radius of the landfill. Indicate page number of this attachment.
- (22) Completed by and Date: Write in the name of the person completing this form and the date.