

§ 270.20

(ii) 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),

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

(i) Expected carbon monoxide (CO) level in the stack exhaust gas.

(ii) Waste feed rate.

(iii) Combustion zone temperature.

(iv) Indication of combustion gas velocity.

(v) Expected stack gas volume, flow rate, and temperature.

(vi) Computed residence time for waste in the combustion zone.

(vii) Expected hydrochloric acid removal efficiency.

(viii) Expected fugitive emissions and their control procedures.

(ix) Proposed waste feed cut-off limits based on the identified significant operating parameters.

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

(8) Waste analysis data, including that submitted in paragraph (c)(1) of this section, sufficient to allow the Director to specify as permit Principal Organic Hazardous Constituents (permit POHC's) those constituents for which destruction and removal efficiencies will be required.

(d) The Director shall approve a permit application without a trial burn if he finds that:

(1) The wastes are sufficiently similar; and

(2) The incinerator units are sufficiently similar, and the data from other trial burns are adequate to specify (under §264.345 of this chapter) operating conditions that will ensure that the performance standards in §264.343 of this chapter will be met by the incinerator.

(e) When an owner or operator demonstrates compliance with the air emission standards and limitations in part 63, subpart EEE, of this chapter (i.e., by conducting a comprehensive performance test and submitting a Notification of Compliance under

40 CFR Ch. I (7-1-03 Edition)

§§ 63.1207(j) and 63.1210(b) of this chapter documenting compliance with all applicable requirements of part 63, subpart EEE, of this chapter), the requirements of this section do not apply, except those provisions the Director determines are necessary to ensure compliance with §§264.345(a) and 264.345(c) of this chapter if you elect to comply with §270.235(a)(1)(i) to minimize emissions of toxic compounds from startup, shutdown, and malfunction events. Nevertheless, the Director may apply the provisions of this section, on a case-by-case basis, for purposes of information collection in accordance with §§270.10(k) and 270.32(b)(2).

[48 FR 14228, Apr. 1, 1983, as amended at 58 FR 46051, Aug. 31, 1993; 64 FR 53076, Sept. 30, 1999; 67 FR 6816, Feb. 13, 2002; 67 FR 77692, Dec. 19, 2002]

§ 270.20 Specific part B information requirements for land treatment facilities.

Except as otherwise provided in §264.1, owners and operators of facilities that use land treatment to dispose of hazardous waste must provide the following additional information:

(a) A description of plans to conduct a treatment demonstration as required under §264.272. The description must include the following information:

(1) The wastes for which the demonstration will be made and the potential hazardous constituents in the waste;

(2) The data sources to be used to make the demonstration (e.g., literature, laboratory data, field data, or operating data);

(3) Any specific laboratory or field test that will be conducted, including:

(i) The type of test (e.g., column leaching, degradation);

(ii) Materials and methods, including analytical procedures;

(iii) Expected time for completion;

(iv) Characteristics of the unit that will be simulated in the demonstration, including treatment zone characteristics, climatic conditions, and operating practices.

(b) A description of a land treatment program, as required under §264.271. This information must be submitted with the plans for the treatment demonstration, and updated following the

Environmental Protection Agency

§ 270.20

treatment demonstration. The land treatment program must address the following items:

- (1) The wastes to be land treated;
- (2) Design measures and operating practices necessary to maximize treatment in accordance with §264.273(a) including:
 - (i) Waste application method and rate;
 - (ii) Measures to control soil pH;
 - (iii) Enhancement of microbial or chemical reactions;
 - (iv) Control of moisture content;
- (3) Provisions for unsaturated zone monitoring, including:
 - (i) Sampling equipment, procedures, and frequency;
 - (ii) Procedures for selecting sampling locations;
 - (iii) Analytical procedures;
 - (iv) Chain of custody control;
 - (v) Procedures for establishing background values;
 - (vi) Statistical methods for interpreting results;
 - (vii) 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);
- (4) 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;
- (5) The proposed dimensions of the treatment zone;
- (c) A description of how the unit is or will be designed, constructed, operated, and maintained in order to meet the requirements of §264.273. This submission must address the following items:
 - (1) Control of run-on;
 - (2) Collection and control of run-off;
 - (3) Minimization of run-off of hazardous constituents from the treatment zone;
 - (4) Management of collection and holding facilities associated with run-on and run-off control systems;
 - (5) Periodic inspection of the unit. This information should be included in the inspection plan submitted under §270.14(b)(5);
 - (6) Control of wind dispersal of particulate matter, if applicable;
- (d) If food-chain crops are to be grown in or on the treatment zone of

the land treatment unit, a description of how the demonstration required under §264.276(a) will be conducted including:

- (1) Characteristics of the food-chain crop for which the demonstration will be made.
- (2) Characteristics of the waste, treatment zone, and waste application method and rate to be used in the demonstration;
- (3) Procedures for crop growth, sample collection, sample analysis, and data evaluation;
- (4) Characteristics of the comparison crop including the location and conditions under which it was or will be grown;
- (e) If food-chain crops are to be grown, and cadmium is present in the land-treated waste, a description of how the requirements of §264.276(b) will be complied with;
- (f) A description of the vegetative cover to be applied to 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). This information should be included in the closure plan and, where applicable, the post-closure care plan submitted under §270.14(b)(13);
- (g) If ignitable or reactive wastes will be placed in or on the treatment zone, an explanation of how the requirements of §264.281 will be complied with;
- (h) If incompatible wastes, or incompatible wastes and materials, will be placed in or on the same treatment zone, an explanation of how §264.282 will be complied with.
- (i) A waste management plan for EPA Hazardous Waste Nos. FO20, FO21, FO22, FO23, FO26, and FO27 describing how a land treatment facility is or will be designed, constructed, operated, and maintained to meet the requirements of §264.283. This submission must address the following items as specified in §264.283:
 - (1) The volume, physical, and chemical characteristics of the wastes, including their potential to migrate through soil or to volatilize or escape into the atmosphere;
 - (2) The attenuative properties of underlying and surrounding soils or other materials;

§ 270.21

40 CFR Ch. I (7-1-03 Edition)

(3) The mobilizing properties of other materials co-disposed with these wastes; and

(4) The effectiveness of additional treatment, design, or monitoring techniques.

[48 FR 14228, Apr. 1, 1983; 48 FR 30114, June 30, 1983, as amended at 50 FR 2006, Jan. 14, 1985]

§ 270.21 Specific part B information requirements for landfills.

Except as otherwise provided in § 264.1, owners and operators of facilities that dispose of hazardous waste in landfills must provide the following additional information:

(a) A list of the hazardous wastes placed or to be placed in each landfill or landfill cell;

(b) Detailed plans and an engineering report describing how the landfill is designed and is or will be constructed, operated, and maintained to meet the requirements of §§ 264.19, 264.301, 264.302, and 264.303 of this chapter, addressing the following items:

(1)(i) The liner system (except for an existing portion of a landfill), if the landfill must meet the requirements of § 264.301(a) of this chapter. If an exemption from the requirement for a liner is sought as provided by § 264.301(b) of this chapter, submit detailed plans, and engineering and hydrogeological reports, as appropriate, describing alternate designs 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;

(ii) The double liner and leak (leachate) detection, collection, and removal system, if the landfill must meet the requirements of § 264.301(c) of this chapter. If an exemption from the requirements for double liners and a leak detection, collection, and removal system or alternative design is sought as provided by § 264.301(d), (e), or (f) of this chapter, submit appropriate information;

(iii) If the leak detection system is located in a saturated zone, submit detailed plans and an engineering report explaining the leak detection system design and operation, and the location of the saturated zone in relation to the leak detection system;

(iv) The construction quality assurance (CQA) plan if required under § 264.19 of this chapter;

(v) Proposed action leakage rate, with rationale, if required under § 264.302 of this chapter, and response action plan, if required under § 264.303 of this chapter;

(2) Control of run-on;

(3) Control of run-off;

(4) Management of collection and holding facilities associated with run-on and run-off control systems; and

(5) Control of wind dispersal of particulate matter, where applicable;

(c) A description of how each landfill, 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 § 264.303(a), (b), and (c) of this chapter. This information must be included in the inspection plan submitted under § 270.14(b)(5);

(d) A description of how each landfill, including the liner and cover systems, will be inspected in order to meet the requirements of § 264.303 (a) and (b). This information should be included in the inspection plan submitted under § 270.14(b)(5).

(e) 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), and a description of how each landfill will be maintained and monitored after closure in accordance with § 264.310(b). This information should be included in the closure and post-closure plans submitted under § 270.14(b)(13).

(f) If ignitable or reactive wastes will be landfilled, an explanation of how the standards of § 264.312 will be complied with;

(g) If incompatible wastes, or incompatible wastes and materials will be landfilled, an explanation of how § 264.313 will be complied with;

(h) If bulk or non-containerized liquid waste or wastes containing free liquids is to be landfilled prior to May 8, 1985, an explanation of how the requirements of § 264.314(a) will be complied with;