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1985 DEC 11 PM 3:46

NOTICE OF AGENCY ~~ADOPTION~~ Approval

RULE TITLE: Hazardous Waste Management

RULE TYPE: Legislative

The attached rule constitutes the official rule ~~adopted~~ approved by the Director, West Virginia Department of Natural Resources on December 11, 1985 and filed with the Secretary of State.

Ronald R. Potesta

Ronald R. Potesta
Director

STATE OF WEST VIRGINIA
DEPARTMENT OF NATURAL RESOURCES
CHARLESTON 25305

ARCH A. MOORE, JR.
Governor

RONALD R. POTESTA
Director

MICHAEL A. FOTOS
Deputy Director

December 11, 1985

The Honorable Ken Hechler
Secretary of State
State Capitol, Suite 157-K
Charleston, West Virginia 25305

Re: Approved Rules: Chapter 20, Article 5E, Series XIV, Hazardous Waste Management

Dear Mr. Hechler:

Enclosed please find two copies of amendments to legislative rules which were approved by the Director on December 11, 1985.

We are filing the same with the Legislative Rulemaking Review Committee. If you have any questions, please contact Mr. Ron Shipley at 348-2761.

Sincerely,

Ronald R. Potesta

Ronald R. Potesta
Director

RRP/rsb

Enclosure

cc: Legislative Rulemaking Review Committee

APPENDIX B

FISCAL NOTE FOR PROPOSED RULES

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Rule Title: Hazardous Waste Management

Type of Rule: XX Legislative _____Interpretive _____Procedural

Agency Dept. of Nat. Resources Address 1800 Washington Street, East, Charleston, W. Va. 25305

1. Effect of Proposed Rule	Increase	ANNUAL Decrease	Current	FISCAL YEAR Next	Thereafter
Estimated Total Cost	$	$	$	$	
Personal Services					
Current Expense		N O E S T I M A T E			
Repairs and Alterations					
Equipment					
Other					

2. Explanation of above estimates:

3. Objectives of these rules: To conform to EPA program.

4. Explanation of Overall Economic Impact of Proposed Rule.

A. Economic Impact on State Government.

B. Economic Impact on Political Subdivisions; Specific

Industries; Specific groups of citizens.

C. Economic Impact on Citizens/Public at Large.

Date: 12-11-85

Signature of Agency Head of Authorized Representative

Ronald R. Potesta

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DATE: December 10, 1985

TO: LEGISLATIVE RULEMAKING REVIEW COMMITTEE

FROM: Ronald A. Shipley, Special Assistant to the Director
Division of Regulatory Affairs
Department of Natural Resources

LEGISLATIVE RULE TITLE:

1. Authorizing statute(s) citation W. Va. Code Section 20-5E-6

2. a. Date filed in State Register with Notice of Hearing:

October 3, 1985

b. What other notice, including advertising, did you give of the hearing?

Informal notice through Hazardous Waste Advisory Committee; Chamber of Commerce; Director's Hazardous Waste Task Group

c. Date of hearing(s): November 18, 1985

d. Attach list of persons who appeared at hearing, comments received, amendments, reasons for amendments.

Attached XX No comments received _____

e. Date you filed in State Register the agency approved proposed Legislative Rule following public hearing: (be exact)

December 11, 1985

f. Name and phone number of agency person to contact for additional information:

Ron Shipley, 348-2761

3. If the statute under which you promulgated the submitted rules requires certain findings and determinations to be made as a

condition precedent to their promulgation: NA

a. Give the date upon which you filed in the State Register a notice of the time and place of a hearing for the taking of evidence and a general description of the issues to be decided.

_____

_____

b. Date of hearing: _____

c. On what date did you file in the State Register the findings and determinations required together with the reasons therefor?

_____

d. Attach findings and determinations and reasons:

Attached _____

Dept. of Nat. Res.
Leg. Rule, 20-5E
Series XV, Sec. 8 (Emergency Rule--10/3/85)

Section 6 Standards Applicable to Generators of Hazardous Waste

6.1 Purpose, Scope and Applicability

6.1a This Section establishes standards and regulations for generators of hazardous wastes.

6.1b A generator who treats, stores, or disposes of hazardous waste on-site must only comply with the following subsections of this Section with respect to that waste: 6.1.1 for determining whether his waste is hazardous; 6.1.2 for obtaining an EPA identification number; 6.4.1(c) and (d) for recordkeeping; 6.4.4 for additional reporting; and, if applicable, 6.5.2 for Farmers; and 6.3.5 for accumulation of hazardous waste.

* * * * *

6.4.3 Exception Reporting

6.4.3a A generator, who does not receive a copy of the manifest with the handwritten signature of the ~~authorized representative~~ owner or operator of the facility within 35 days of the date the waste was accepted by the initial transporter, shall contact the transporter and/or the owner or operator of the designated facility to determine the status of the hazardous waste.

6.4.3b A generator shall submit an Exception Report to the Chief if he has not received a copy of the manifest with the handwritten signature of the owner or operator of the designated facility within forty-five (45) days of the date the waste was accepted by the initial transporter. The Exception Report must include:

6.4.3.b.1 A legible copy of the manifest for which the generator does not have confirmation of delivery.

6.4.3.b.2 A cover letter signed by the generator or his authorized representative explaining the efforts taken to locate the hazardous waste and the results of those efforts.

6.4.3.b.3 In case of interstate shipments which originated in the State for delivery to a designated facility in another State, an additional copy of the Exception Report will be provided to the Chief for transmittal to that State or EPA as provided for in 40 C.F.R. Section 271.128(b)(8).

* * * * *

Section 8 Standards for Owners and Operators of Hazardous Waste Treatment, Storage and Disposal Facilities

8.1 General, Purpose, Scope and Applicability

8.1.1 The purpose of these regulations is to establish minimum standards which define the acceptable management of hazardous waste.

8.1.2 The standards in this section apply to owners and operators of all facilities which treat, store, or dispose of hazardous waste except as Section 8.1.5 provides otherwise.

8.1.3 The requirements of this section apply to a person disposing of hazardous waste by means of underground injection only to the extent that they are required to comply with certain portions of this section under the Underground Injection Control Program establish pursuant to the Water Pollution Control Act, 20-5A, et seq..

8.1.4 The requirements of this section apply to the owner or operator of a POTW which treats, stores, or disposes of hazardous waste only to the extent they are included in a Hazardous Waste Management Permit by Rule granted to such a person under Section 11.6.

8.1.5 The requirements of this section do not apply to:

8.1.5a The owner or operator of a facility which treats or stores hazardous waste, which treatment or storage meets the criteria in Section 3.1.5(a), except to the extent that Section 3.1.5(b) provides otherwise.

8.1.5b A generator accumulating waste on-site in compliance with Section 6.3.5 provided the requirements of Sections 3.1.4 and 3.1.5 are complied with.

8.1.5c A farmer disposing of wate pesticides from his own use in compliance with Section 6.5.2.

8.1.5d The owner or operator of a totally enclosed treatment facility, as defined in Section 2.

8.1.5e The owner or operator of an elementary neutralization

unit or a wastewater treatment unit as defined in Section 2.

8.1.5f A transporter storing manifested shipments of hazardous waste in containers meeting the requirements of Section 6.3.1, at a transfer facility for a period of ten (10) days or less.

8.1.5g Persons with respect to those activities which are carried out to immediately contain or treat a spill of hazardous waste, except that, with respect to such activities, the appropriate requirements of Sections 8.3 and 8.4 are applicable to owners and operators of treatment, storage and disposal facilities otherwise subject to this section. (Comment: After the immediate response activities are completed, the applicable regulations apply fully to the management of any spill residue or debris which is a hazardous waste under Section 3.)

8.1.5h The addition of absorbent material to hazardous waste in a container or the addition of hazardous waste to absorbent material in a container, provided that these actions occur at the time hazardous waste is first placed in the container and Section 8.2.8 (b), 8.7.2 and 8.7.3 are complied with. ~~(Comment:---After the--immediate--response-activities-are-completed,-the-applicable regulations-apply-fully-to-the-management-of-any-spill-residue-or debris-which-is-a-hazardous-waste-under-Section-3.)~~

* * * * *

8.2.4 General Waste Analysis

8.2.4a.1 Before an owner or operator treats, stores, or disposes of any hazardous waste, a detailed chemical and physical analysis of a representative sample of the waste must be obtained. At a minimum, this analysis must contain all the information which must be known to treat, store, or dispose of the waste in accordance with the requirements of this section or with the conditions of a permit issued under Section 11.00 of these regulations. (Comment: Section 11.5 of these regulations requires that the waste analysis plan be submitted with Part B of the permit application.)

8.2.4a.2 The analysis may include data developed under Section 3 of these regulations, and existing published or documented data on the hazardous waste or on hazardous waste generated from similar processes.

8.2.4.a.3 The facility's records of analysis performed on the waste before the effective date of these regulations, or studies conducted on hazardous waste generated from processes similar to that which generated the waste to be managed at the facility, may be included in the data base required to comply with (a)(1) of this section. The owner or operator of an off-site facility may arrange for the generator of the hazardous waste to supply part or all of the information required by (a)(1) of this section. If the generator does not supply the information, and the owner or operator chooses to accept a hazardous waste, the owner or operator is responsible for obtaining the information required to comply with this section.

8.2.4.a.4 The analysis must be repeated as necessary to ensure that it is accurate and up-to-date. At a minimum, the analysis must be repeated:

8.2.4.a.4.i When the owner or operator is notified, or has reason to believe, that the process or operation generating the hazardous waste has changed; and

8.2.4.a.4.ii For off-site facilities, when the results of the inspection required in (a)(5) of this section indicate that the hazardous waste received at the facility does not match the waste designated on the accompanying manifest or shipping paper.

8.2.4.a.5 The owner or operator of an off-site facility must inspect and, if necessary, analyze each hazardous waste movement received at the facility to determine whether it matches the identity of the waste specified on the accompanying manifest or shipping paper.

8.2.4b The owner or operator must develop and follow a written waste analysis plan which describes the procedures which will comply with (a) of this section. This plan must be kept at the facility. At a minimum, the plan must specify:

8.2.4.b.1 The parameters for which each hazardous waste will be analyzed and the rationale for the selection of the parameters (i.e., how analysis for these parameters will provide sufficient information on the waste's properties to comply with (a) of this section).

8.2.4.b.2 The test methods which will be used to test for these parameters.

8.2.4.b.3 The sampling method which will be used to obtain a representative sample of the waste to be analyzed. A representative sample may be obtained using either:

8.2.4.b.3.i One of the sampling methods described in Appendix I of Section 3 of these regulations.

8.2.4.b.3.ii An equivalent sampling method.

8.2.4.b.4 The frequency which the initial analysis of the waste will be reviewed or repeated to ensure that the analysis is accurate and up-to-date; and

8.2.4.b.5 For off-site facilities, the waste analyses that hazardous waste generators have agreed to supply.

8.2.4.b.6 Where applicable, the methods which will be used to meet the additional waste analysis requirements for specific waste management methods as specified in Sections 8.02.08 and the Air Pollution Control Commission's Regulation XXV.

8.2.4.~~b~~c For off-site facilities, the waste analysis plan required in (b) of this section must also specify the procedures which will be used to inspect and, if necessary, analyze each movement of hazardous waste received at the facility to ensure that it matches the identity of the waste designated on the accompanying manifest or shipping paper. At a minimum, the plan must describe:

8.2.4.c.1 The procedures which will be used to determine the identity of each movement of waste managed at the facility.

8.2.4.c.2 The sampling method which will be used to obtain a representative sample of the waste to be identified, if the identification method includes sampling.

8.2.5 Security

8.2.5a The owner or operator must prevent the unknowing entry, and minimize the possibility for the unauthorized entry, of persons or livestock onto the active portion of the facility, unless it can be demonstrated to the Chief that:

8.2.5.a.1 Physical contact with the waste, structures, or equipment within the active portion of the facility will not injure unknowing or unauthorized persons or livestock which may

enter the active portion of a facility.

8.2.5.a.2 Disturbance of the waste or equipment, by the unknowing or unauthorized entry ~~of~~ of persons or livestock onto the active portion of a facility, will not cause a violation of the requirements of this section.

8.2.5.a.3 The owner or operator who wishes to make the demonstration referred to above must do so with Part B of the permit application.

8.2.5b Unless the owner or operator has made a successful demonstration under paragraphs (a)(1) and (a)(2) of this section, a facility must have:

8.2.5.b.1 A twenty-four hour surveillance system (e.g., television monitoring or surveillance by guards or facility personnel) which continuously monitors and controls entry onto the active portion of the facility or;

8.2.5.b.2.i An artificial or nature physical barrier (e.g., a fence in good repair or a fence combined with a cliff), which completely surrounds the active portions of the facility; and

8.2.5.b.2.ii A means to control entry, at all times, through the gates or other entrances to the active portion of the facility (e.g., an attendant, television monitors, locked entrance, or controlled roadway access to the facility).

8.2.5.b.3 The requirements of (b) of this section are satisfied if the facility or plant within which the active portion is located itself has a surveillance system, or a barrier and a means to control entry, which complies with the requirements of (b)(1) or (b)(2) of this section.

8.2.5.c Unless the owner or operator has made a successful demonstration under (a)(1) and (a)(2) of this section, a sign with the Legend, "DANGER - UNAUTHORIZED PERSONNEL KEEP OUT," must be posted at each entrance to the active portion of a facility, and at other locations, in sufficient numbers to be seen from any approach to this active portion. The legend must be written in English and in any other language predominant in the area surrounding the facility, and must be legible from a distance of at least twenty-five (25) feet. Existing signs with a legend other than "DANGER - UNAUTHORIZED PERSONNEL KEEP OUT" may be used if the legend on the sign indicates that only authorized

personnel are allowed to enter the active portion, and that entry onto the active portion can be dangerous.

8.2.6 General Inspection Requirements

8.2.6a The owner or operator must inspect the facility for malfunctions and deterioration, operator errors, and discharges which may be causing - or may lead to:

8.2.6.a.1 Release of hazardous waste constituents to the environment; or

8.2.6.a.2 A threat to human health. The owner or operator must conduct these inspections often enough to identify problems in time to correct them before they harm human health or the environment.

8.2.6.b.1 The owner or operator must develop and follow a written schedule for inspecting monitoring equipment, safety and emergency equipment, security devices, and operating and structural equipment (such as dikes and sump pumps) that are important to preventing, detecting, or responding to environmental or human health hazards.

8.2.6.b.2 This schedule must be kept at the facility.

8.2.6.b.3 The schedule must identify the types of problems (e.g., malfunctions or deterioration) which are to be looked for during the inspection (e.g., inoperative sump pump, leaking fitting, eroding dike, etc.).

8.2.6.b.4 The frequency of inspection may vary for the items on the schedule. However, it should be based on the rate of possible deterioration of the equipment and the probability of an environmental or human health incident if the deterioration or malfunction or any operator error goes undetected between inspections. Areas subject to spills, such as loading and unloading areas, must be inspected daily when in use. At a minimum, the inspection schedule must include the terms and frequencies called for in Sections 8.7.6, 8.8.4, 8.9.5, 8.10.5, and 8.11.3 where applicable.

8.2.6.b.5 A copy of the inspection schedule as required by Section 8.02.06(b) must be submitted to the Chief with Part B of the permit application to ensure that it adequately protects human health and the environment. As part of this review, the

Chief may modify or amend the schedule as may be necessary.

8.2.6c The owner or operator must remedy any deterioration or malfunction of equipment or structures which the inspection reveals to ensure that the problem does not lead to an environmental or human health hazard. A schedule for remedial action may be allowed by the Chief. Where a hazard is imminent or has already occurred, remedial action must be taken immediately.

8~~.3~~.2.6d The owner or operator must record inspections in an inspection log or summary. These records must be kept for the life of the facility. At a minimum, these records must include the date and time of the inspection, the name of the inspector, a notation of the observations made, and the date and nature of any repairs or other remedial actions.

* * * * *

8.5 Manifest System, Recordkeeping, and Reporting

* * * * *

8.5.3 Manifest Discrepancies

8.5.3a Manifest discrepancies are differences between the quantity or type of hazardous waste designated on the manifest or shipping paper, and the quantity or type of hazardous waste a facility actually receives. Significant discrepancies in quantity are:

8.5.3.a.1 For bulk waste, variations greater than 10 percent in weight, and

8.5.3.a.2 For batch waste, an any variation in piece count, such as a discrepancy of one drum in a truckload.

Significant discrepancies in type are obvious differences which can be discovered by inspection or waste analysis, such as waste solvent substituted for waste acid, or toxic constituents not reported on the manifest or shipping paper.

8.5.3b Upon discovery a significant discrepancy, the owner or operator must attempt to reconcile the discrepancy with the waste generator or transporter (e.g., with telephone conversations). If the discrepancy is not resolved within 15 days after receiving the waste, the owner or operator must immediately submit to the Chief a letter describing the discrepancy and attempts to reconcile it, and a copy of the manifest or shipping paper at issue.

* * * * *

8.6.1 Applicability

Except as Section 8.01 provides otherwise:

8.6.1a Sections 8.6.2 - 8.6.8 and 15.1 (which concern closure) apply to the owners and operators of all hazardous waste management facilities; and

8.6.1b Sections 8.6.2 - 8.6.8, ~~and~~ 15.1 and 15.3 (which concern post-closure care) apply to the owners and operators of all hazardous waste disposal facilities.

8.6.8 Post-Closure Plan;Amendment of Plan

8.6.8a The owner or operator of a disposal facility must have a written post-closure plan. The plan must be submitted with Part B of the permit application and approved by the Chief as a part of the permit issuance proceeding. The approved post-closure plan will become a condition of any permit issued. A copy of the approved plan and all revisions must be kept at the facility until the post-closure care period begins. This plan must identify the activities which will be carried on after closure and the frequency of these activities, and include at least:

8.6.8.a.1 A description of the planned groundwater monitoring activities and frequencies at which they will be performed.

8.6.8.a.2 A description of the planned maintenance activities, and frequencies at which they will be performed, to ensure:

8.6.8.a.2.i The integrity of the cap and final cover or other containment structures where applicable; and

8.6.8.a.2.ii The function of the facility monitoring equipment.

8.6.8.a.3 The name, address, and phone number of the person or office to contact about the disposal facility during the post-closure period. This person or office must keep an updated post-closure plan during the post-closure period.

8.6.8b The owner or operator may amend the post-closure plan at any time during the active life of the disposal facility or

during the post-closure care period. The owner or operator must amend the plan whenever changes in operating plans or facility design, or events which occur during the active life of the facility or during the post-closure period, affect the post-closure plan. This plan must be amended whenever there is a change in the expected year of closure.

8.6.8c When a permit modification is requested during the active life of the facility to authorize a change in operating plans or facility design, modification of the post-closure plan must be requested at the same time. In all other cases, the request for modification of the post-closure plan must be made within sixty (60) days after the change in operating plans or facility design or the events which affect the post-closure plans occur.

8.7 Use and Management of Containers

8.7.1 Applicability

The regulations in this section apply to owners and operators of all hazardous waste management facilities that store containers of hazardous waste, except as Section 8.1 provides otherwise. (Comment: Under Sections 3.1.6 and 3.4.4(c) if a hazardous waste is emptied from a container the residue remaining in the container is not considered a hazardous waste if the "container" is "empty" as defined in Section 3.1.6. In that event, management of the container is exempt from the requirements of this section.)

* * * * *

8.8 Tanks

* * * * *

8.8.4 Inspections

8.8.4a The owner or operator must inspect:

8.8.4.a.1 Overfilling control equipment (e.g., waste feed cut-off systems and by-pass systems) at least once each operating day to ensure that it is in good working order.

8.8.4.a.2 Data gathered from monitoring equipment (e.g., pressure and temperature gauges) where present, at least once each operating day to ensure that the tank is being operated according to design.

8.8.4.a.3 For uncovered tanks, the level of waste in the tank, at least once each operating day to ensure compliance with Section 8.8.3(b).

8.8.4.a.4 The construction materials of above-ground portions of the tank, at least weekly to detect corrosion or erosion and leaking of fixtures and seams.

8.8.4.a.5 The area immediately surrounding the tank, at least weekly, to detect obvious signs of leakage (e.g., wet spots, or dead vegetation).

8.8.4b As part of the inspection schedule required in Section 8.2.6(b) and in addition to the specific requirements of (a) of this section, the owner or operator must develop a schedule and procedure for assessing the condition of the tank. The schedule and procedure must be adequate to detect cracks, leaks, corrosion and erosion which may lead to cracks or leaks, or wall thinning to less than the thickness required under Section 8.8.2. Procedures for emptying a tank to allow entry and inspection of the interior must be established when necessary to detect corrosion or erosion of the tank sides and bottom. The frequency of these assessments must be based on the material of construction of the tank, type of corrosion or erosion protection used, rate of corrosion or erosion observed during previous inspections, and the chracteristics of the waste being treated or stored.

8.8.4c As part of the contingency plan required under

Section 8.4 the owner or operator must specify the procedures to be used to respond to tank spills or leakage, including procedures and timing for expeditious removal of leaked or spilled waste and repair of the tank.

* * * * *

8.9 Surface Impoundments

* * * * *

8.9.2 General Design Requirements

8.9.2a A surface impoundment must be designed and constructed to provide maintenance of sufficient freeboard, and to prevent overtopping resulting from wave or wind action, normal and abnormal operation, malfunctions or level controllers, alarms and other equipment, precipitation and human error or any combination thereof. The freeboard shall not be less than 60 centimeters (2 feet); or an amount of freeboard other than 60 centimeters based on documentation acceptable to the Chief that the specified amount of freeboard will prevent overtopping.

8.9.2b A surface impoundment must be designed and constructed so that any flow of waste into the impoundment can be immediately shut off in the event of overtopping or liner failure.

8.9.2c A surface impoundment must be designed and constructed to prevent discharge into or on the land, and to waters of the State (except discharges authorized by an NPDES permit during the life of the impoundment) by use of a liner system and leachate detection, collection and removal system which complies with Section 8.9.4, except as provided in (f) of this section.

8.9.2d Dikes must be designed and constructed with sufficient structural integrity to prevent massive failure without dependence on any liner system included in the surface impoundment design.

8.9.2e A leachate detection, collection, and removal system must be designed and constructed so that liquid will flow freely from the collection system to prevent the creation of pressure head within the collection system in excess of that necessary to cause the liquid to flow freely.

8.9.2.f.1 Existing facilities are exempt from the ~~liner~~ requirements outlined in Sections 8.9.2(c), (e), 8.9.4(a)(1), (c), (d), 8.9.6, 8.9.10, ~~(2)~~ (c)(2) and (d)~~(2), (e)(1) and (e)(3)~~, provided that paragraph (2) of this section is complied with.

8.9.2.f.2 The owner or operator, in order to qualify for the

exemption in (1) above, must demonstrate that statistically significant increases of hazardous constituents do not occur in the groundwater or surface water during its active life and the post closure period, except as provided in (f)(4) of this Section.

8.9.2.f.3 If statistically significant increases of hazardous constituents are detected as outlined in Section 8.13.8(d) in the groundwater beneath the facility (including the regulated unit) the owner or operator must comply with the corrective action outlined in Section 8.13.9 (if ground water contamination has been determined).

8.9.2.f.4 If the owner or operator determines that the corrective action program being implemented under Section 8.13.09 is insufficient for causing cessation of hazardous waste constituents migration, then the unit must be closed. However, if it is determined that the corrective action will adequately arrest and remove the contamination, the owner may choose one of the four options which will become part of the conditions of the permit:

8.9.2.f.4.i Retrofit the unit with liners; in accordance with Section 8.9.4(a)(1);

8.9.2.f.4.ii Stop the leak;

8.9.2.f.4.iii Continue the operation of the unit, (while concurrently develop/implementing an alternate treatment, storage or disposal method), for a period of five years at which time the unit must be closed; or

8.9.2.f.4.iv Continue the operation of the unit provided a demonstration can be made and approved by the Chief that no adverse impact to human health or to the environment will result from the continued operation of the unit during the active life and closure and post-closure period, provided that the facility continues to comply with an approved corrective action program. Such demonstration must include and discuss the following:

8.9.2.f.4.iv.A Potential adverse effects on groundwater quality, considering:

8.9.2.f.iv.A.1 The physical and chemical characteristics of the waste in the regulated unit, including its potential for migration;

8.9.2.f.4.iv.A.2 The hydrogeological characteristics of the facility and surrounding land;

8.9.2.f.4.iv.A.3 The quantity of ground water and the direction of ground water flow;

8.9.2.f.4.iv.A.4 The proximity and withdrawal rates of ground water users;

8.9.2.f.4.iv.A.5 The current and future uses of ground water in the area;

8.9.2.f.4.iv.A.6 The existing quality of ground water, including other sources of contamination and their cumulative impact on the ground water quality;

8.9.2.f.4.iv.A.7 The potential for health risks caused by human exposure to waste constituents;

8.9.2.f.iv.A.8 The potential damage to wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents;

8.9.2.f.4.iv.A.9 The persistence and permanence of the potential adverse effects; and

8.9.2.f.4.iv.B Potential adverse effects on hydraulically connected surface water quality, considering:

8.9.2.f.4.iv.B.1 The volume and physical and chemical characteristics of the waste in the regulated unit;

8.9.2.f.4.iv.B.2 The hydrogeological characteristics of the facility and surrounding land;

8.9.2.f.iv.B.3 The quantity and quality of ground water, and the direction of ground water flow:

8.9.2.f.4.iv.B.4 The patterns of rainfall in the region;

8.9.2.f.4.iv.B.5 The proximity of the regulated unit to surface waters;

8.9.2.f.4.iv.B.6 The current and future uses of surface waters in the area and any water quality standards established for those surface waters;

8.9.2.f.4.iv.B.7 The existing quality of surface water, including other sources of contamination and the cumulative impact on surface water quality;

8.9.2.f.4.iv.B.8 The potential for health risks caused by human exposure to waste constituents;

8.9.2.f.4.iv.B.9 The potential damage to wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents; and

8.9.2.f.iv.B.10 The persistence and permanence of the potential adverse effects.

8.9.2.f.4.iv.C In making any determination under paragraph (4) of this section concerning the use of ground water in the area around the facility, the Chief will consider any identification of underground sources of drinking water and exempted aquifers made under the West Virginia Administrative Regulations of the State Water Resources Board Chapter 20, Article 5E, Series IX (1983).

* * * * *

8.9.4 Specific Design Requirements

8.9.4a A surface impoundment must be designed to prevent discharge into the land, and State waters during its life and must have:

8.9.4.a.1 A double liner system that is designed, constructed, and installed to prevent any migration of wastes and/or leachate out of the impoundment to the adjacent subsurface, soil or groundwater or surface water at any time during the operating life, closure (and the post closure period where applicable) of the impoundment. The primary liner (i.e. -- the liner in contact with the waste) must be constructed of materials that prevent wastes and/or leachate from passing into the liner during the operating life, closure (and the post closure period where applicable of the facility. All liners must be:

8.9.4.a.1.i Constructed of materials that are chemically resistant to the waste and leachate expected to be generated and of sufficient strength and thickness to prevent failure due to pressure gradients (including static head and external

hydrogeologic forces), physical contact with the waste and leachate to which they are exposed, climatic conditions, the stress of installation, and the stress of daily operation. The liner will be tested for compatibility with the waste and leachate expected to be generated to determine possible effects on the liner materials prior to installation.

8.9.4.a.1.ii Placed upon a foundation or base capable of providing support to the liners and resistance to pressure gradients above and below the liners to prevent failure of the liners due to settlement, compression, or uplift; and

8.9.4.a.1.iii Installed to cover all surrounding earth likely to be in contact with the waste and leachate; and

8.9.4.a.1.iv Constructed to be free of lenses, cracks, channels, holes, or other structural nonuniformities; and

8.9.4.a.1.v If a soil-based or admixed liner is to be used as the secondary liner (i.e. -- the liner underneath the primary liner), then such liner must be at least 90 centimeters (3 feet) thick with a maximum saturated hydraulic conductivity of nomore than 1 x 10-7 cm/sec throughout the total thickness and area of the liner;

8.9.4.a.2 The impoundment (including the base of the lower most liner components) must be located at a minimum of 3 feet above the highest know seasonal water table elevation. This 3 foot distance may be achieved by elevating the surface impoundment artificially or by the non-mechanical lowering of the water table at the location. However, no mechanical means (i.e. - pumps) may be used to lower the water table. All plans for alteration of the water level must be approved by the Chief and will become a part of the hazardous waste management permit.

8.9.4.a.3 A leachate detection, collection and removal system beneath the liner(s) in contact with the waste (i.e. - must be situated between the liners in the double liner system) to detect, contain, collect and remove any discharge from the liner(s) in contact with the waste.

8.9.4b Earthen dikes must have a protective cover, such as grass, or rock to minimize wind and water erosion and to preserve the structural integrity of the dike.

~~8.9.4c A liner system and leachate detection, collection and~~

~~removal--system--must-have-a-containment-life-equal-to-or-greater than-the-life-of-the-surface-impoundment.~~

8.9.4c A leachate detection, collection and removal system beneath the liner in contact with the waste (i.e. must be situated between the liners in the double liner system) to detect, contain, collect and remove any discharge from the liner in contact with the waste at any time during the operating life, closure (and the post closure period where applicable) of the impoundment.

8.9.4d The owner or operator and a registered professional engineer must submit to the Chief a certification that the facility has been designed and constructed in compliance with Section 8.9.4 prior to placement of wastes into the impoundment.

8.9.5 Inspections and Testing

8.9.5a During construction or installation, liner systems must be inspected for uniformity, damage, and imperfections (e.g., holes, cracks, thin spots, and foreign materials).

8.9.5.a.1 Soil based and admixed liner systems must be tested for compaction density, moisture content, permeability, and inspected for imperfections including lenses, cracks, channels, root holes or other structural non-conformities that may cause an increase in the permeability of the liner; and

8.9.5.a.2 Manufactured liner materials (e.g., membranes, sheets, and coatings) must be inspected to ensure tight seams and joints and the absence of tears or blisters.

8.9.5.a.3 Upon discovery of such imperfections, the repair of the liner must be completed prior to placement of the wastes into the impoundment.

8.9.5.a.4 The leachate detection, collection and removal system must be inspected for cracks, breaks, loose seams and joints, clogging, areas of structural stress, and any other faults or conditions which may result in collapse or failure of the system.

8.9.5.a.5 Results of such tests and repairs must be certified in writing by a registered professional engineer.

8.9.5b The owner or operator must inspect:

8.9.5.b.1 A surface impoundment (including the leachate detection, collection and removal system) at least once each day to ensure compliance with Section 8.09.03(a), (b) and (c) and to detect any leaks or other failures of the impoundment.

8.9.5.b.2 Each surface impoundment, including dikes, berms, and vegetation surrounding the dike, at least once a week and after storms to detect any evidence of or potential for leaks from the impoundment, erosion of dikes, and to ensure compliance with Section 8.9.3(d).

8.9.5c The structural integrity of any dike, including that portion of any dike which provides freeboard, must be certified against massive failure by a registered professional engineer prior to the issuance or reissuance of a permit; or if the impoundment is not in service and has not been inspected and maintained as required under Section 8.09.05(b), prior to being placed in service and after construction or prior to being returned to service.

8.9.5.c.1 In certifying the structural integrity of the dike it must be established that the dike will withstand:

8.9.5.c.1.i The stress of the pressure head of liquids placed into the impoundment;

8.9.5.c.1.ii The weakening effect of earth materials being scoured due to leakage from the impoundment through and under the dike without relying on any liner system;

8.9.5.c.1.iii The weakening effect of earth materials being scoured due to leakage from the impoundment through and under the dike assuming leaks develop in the liner system; and

8.9.6~~.5~~.c.1.iv The weakening effect of any piping included in the impoundment's construction.

8.9.6 Liner System Repairs, Contingency Plans

8.9.6a Whenever there is any indication of a possible failure of the liner system, that system must be inspected in accordance with the provisions of the liner system evaluation and repair plan required by (d) of this section. Indications of possible failure of the liner system include at least an unplanned and non-sudden drop in liquid level in the impoundment, liquid detection in the leachate detection system, evidence of

leakage or the potential for leakage in the dike, erosion of the dike, apparent or potential deterioration of the liner(s) based on observation or test samples of the liner materials, any mishandling of wastes placed in the impoundment and foreign objects in the impoundment.

8.9.6b Whenever there is a positive indication of an unplanned sudden drop in liquid level in the impoundment, or active leakage through the dike, the impoundment must be removed from service.

8.9.6c If the surface impoundment must be removed from service as required by (b) of this section, the owner or operator must:

8.9.6.c.1 Immediately shut off the flow or stop the addition of wastes into the impoundment.

8.9.6.c.2 Immediately contain any surface leakage which has occurred or is occurring and cause such leak(s) to be stopped.

8.9.6.c.3 Immediately notify the Chief through the Division of Water Resources' Emergency Notification Number 1-800-642-3074.

8.9.6.c.4 If all leaks specified in (b) of this section (including leaks not evident at the surface) cannot be stopped by any other means, empty the impoundment.

8.9.6.c.5 Within 15 days after detecting the leak, submit to the Chief a written report of the problem and corrective measures taken.

8.9.6.c.6 Take any other steps necessary to stop or prevent catastrophic failure.

8.9.6d As part of the contingency plan required in Section 8.04, the owner or operator must specify:

8.9.6.d.1 A procedure for complying with the requirements of (c) of this section; and

8.9.6.d.2 A liner system repair plan describing testing and monitoring techniques; procedures to be followed to evaluate the integrity of the liner system in the event of a possible failure; a schedule of actions to be taken in the event of a possible failure; and a description of the repair techniques to be used in

the event of leakage due to liner system failure or deterioration which does not require the impoundment to be removed from service.

8.9.6e No surface impoundment that has been removed from service in accordance with (b) of this section may be restored to service unless:

8.9.6.e.1 The liner system and leachate detection, collection and removal system has been repaired; and

8.9.6.e.2 The liner system and the leachate detection, collection and removal system has been re-certified by a registered professional engineer as meeting the design specifications approved in the permit.

8.9.6f A surface impoundment that has been removed from service in accordance with (b) of this section and that is not being repaired must be closed in accordance with Section 8.09.07.

8.9.6g All wastes removed from the impoundment must be managed as a hazardous waste in compliance with all applicable requirements. Any point source discharge to waters of the State is subject to the requirements of the Water Pollution Control Act and all regulations promulgated thereunder.

8.9.7 Closure

8.9.7a At closure, all hazardous waste and hazardous waste residues must be removed from the impoundment (except as provided in Section 8.09.10). Any component of the surface impoundment or any appurtenant structures or equipment (e.g., discharge platforms and pipes, baffles, skimmers, aerators, or other equipment) containing or contaminated with hazardous waste or hazardous waste residues must be decontaminated or removed.

8.9.7b At closure, as throughout the operating period, unless the owner or operator can demonstrate in accordance with these regulations that the waste removed from the surface impoundment is not a hazardous waste, the owner or operator becomes a generator of hazardous waste and must manage it in accordance with all applicable requirements.

8.9.7c An owner or operator who plans to close a surface impoundment exempted from the liner requirements pursuant to Section 8.9.2f of these regulations must:

1. Prepare a contingent plan for complying with Sections 8.9.10(a)(1), (a)(2) and (b) of these regulations in case not all contaminated subsoils can be practicably removed at closure; and

2. Prepare a contingent post-closure plan for complying with Section 8.9.10c, except paragraph c.2 of these regulations in case not all contaminated subsoils can be practicably removed at closure.

* * * * *

8.9.10 Additional Requirements for Impoundments Used for Disposal of Hazardous Wastes

In addition to all the other requirements of this section:

~~8.9.10a The owner or operator desiring to leave wastes in place in an impoundment upon closure, must comply with the following as part of the closure procedures:~~ when an owner or operator leaves wastes, or waste residues or contaminated materials in place in an impoundment upon closure he must comply with the following as part of the closure procedures:

8.9.10.a.1 Eliminate the free liquids contained in the impoundment by removing the liquid wastes and by solidifying the remaining wastes and waste residues left in place;

8.9.10.a.2 Stabilize the remaining wastes to a bearing capacity sufficient to support the final cover;

8.9.10b Prior to beginning the post closure period, the owner or operator must cover the impoundment with a final cover designed and constructed to:

8.9.10.b.1 Provide long-term minimization of migration of liquids through the closed impoundment;

8.9.10.b.2 Function with minimum maintenance;

8.9.10.b.3 Promote drainage and minimize erosion or abrasion of the cover;

8.9.10.b.4 Accommodate settling and subsidence so that the cover's integrity is maintained; and

8.9.10.b.5 Have a permeability less than or equal to the

least permeable component of the liner system or 1 x 10-7 cm/sec whichever value is less.

8.9.10.c After final closure, the owner or operator must comply with all post closure requirements contained in Section 8.6.7, 8.6.8, ~~and~~ 13.00, 15.1 and 15.3 including maintenance and monitoring throughout the post closure period (specified in the permit under Section 8.6.7). The owner or operator must:

8.9.10.c.1 Maintain the integrity and effectiveness of the cover including making repairs to the cover as necessary to correct the effects of settling, subsidence, erosion, or other events;

8.9.10.c.2 Continue to operate the leachate collection and removal system for the entire post closure period;

8.9.10.c.3 Maintain and monitor the groundwater monitoring system and comply with all other applicable requirements of Section 8.13 of these regulations;

8.9.10.c.4 Prevent run-on and run-off from eroding or otherwise damaging the cover; and

8.9.10d During the post closure period, the owner or operator must:

8.9.10.d.1 Inspect daily and maintain the leachate detection, collection and removal system. If leachate is detected in the detection system between the liners, the owner or operator must:

8.9.10.d.1.i Immediately notify the Chief through the Division of Water Resources' Emergency Notification Number 1-800-642-3074.

8.9.10.d.1.ii Within 15 days after detecting the leak, submit to the Chief a written report of the problem and corrective measures taken.

8.9.10.d.2 Unless the owner or operator can demonstrate otherwise, the leachate must be managed as a hazardous waste in accordance with all regulations governing the generation of such wastes.

8.9.10.d.3 If it is determined that the liner(s) is leaking,

the owner or operator must begin the remedial actions set forth in the contingency plan specified in the permit which shall at least include plans for repairing the breach in the liner and preventing the continued migration of the leachate.

Section 8.10 Waste Piles

8.10.1 Applicability

8.10.1a The regulations in this section apply to owners and operators of facilities that store or treat hazardous waste in piles, except as Section 8.1 provides otherwise.

8.10.1b (Reserved)

8.10.1c Owners and operators of waste piles used to store or treat only hazardous wastes that do not contain free liquids are not subject to regulation under Sections 8.10.2, 8.10.3, 8.10.4, ~~8.10.5,~~ and 8.10.6 with respect to these piles, provided that:

8.10.1.c.1 Liquids or materials containing free liquids are not placed in the pile;

8.10.1.c.2 The pile is inside or under a structure that provides protection from precipitation so that neither run-off nor leachate is generated;

8.10.1.c.3 The pile is protected from surface water run-on by the structure or in some other manner;

8.10.1.c.4 The pile is designed and operated to control dispersal of the waste by wind, where necessary, by means other than wetting;

8.10.1.c.5 The pile will not generate leachate through decomposition or other reactions; and

8.10.1.c.6 The pile does not discharge hazardous wastes into State waters.

8.11 Landfills

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8.11.2 Design and Operating Requirements

8.11.2a A landfill must have:

8.11.2.a.1 A double liner system that is designed, constructed, and installed to prevent any migration of wastes and/or leachate out of the landfill to the adjacent subsurface, soil or groundwater or surface water at any time during the operating life, closure and the post closure period of the landfill. The primary liner (i.e. -- the liner in contact with the waste), must be constructed of materials that prevent wastes and/or leachate from passing into the liner during the operating life, closure and the post closure period of the facility. All liners must be:

8.11.2.a.1.i Constructed of materials that are chemically resistant to the waste and leachate expected to be generated and of sufficient strength and thickness to prevent failure due to pressure gradients (including static head and external hydrogeologic forces), physical contact with the waste and leachate installation, and the stress of daily operation. The liner will be tested for compatibility with the waste and leachate expected to be generated to determine possible effects on the liner materials prior to installation.

8.11.2.a.1.ii Placed upon a foundation or base capable of providing support to the liners and resistance to pressure gradients above and below the liners to prevent failure of the liners due to settlement, compression, or uplift;

8.11.2.a.1.iii Installed to cover all surrounding earth likely to be in contact with the waste and leachate;

8.11.2.a.1.iv Constructed to be free of lenses, cracks, channels, holes, or other structural nonuniformities; and

8.11.2.a.1.v If a soil-based or admixed liner is to be used as the secondary liner (i.e. -- the liner underneath the primary liner), then such liner must be at least 90 cm (3 feet) thick with a maximum saturated hydraulic conductivity of no more than 1 x 10-7 cm/sec throughout the total thickness and area of the liner;

8.11.2.a.2 A leachate collection and removal system immediately above the primary liner that is designed, constructed, maintained, and operated to collect and remove leachate from the landfill. The Chief will specify conditions for design and operation in the permit to ensure that the leachate depth over the liner does not exceed 30 cm (one foot). The leachate collection and removal system must be:

8.11.2.a.2.i Constructed of materials that are:

8.11.2.a.2.i.A Chemically resistant to the waste managed in the landfill and the leachate expected to be generated; and

8.11.2.a.2.i.B Of sufficient strength and thickness to prevent collapse under the pressures exerted by overlying wastes, waste cover materials, and by any equipment used at the landfill; and

8.11.2.a.2.ii Must be overlain by a graded granular material assuring a hydraulic conductivity of 1 x 10-3 cm/sec placed with a minimum slope of 2%.

8.11.2.a.2.iii Designed and operated to function without clogging through the operating life and scheduled closure and post closure period of the landfill.

8.11.2.a.3 A leachate detection system must be designed, constructed, maintained and operated between the liners to detect any migration of liquid into the space between the liners.

8.11.2b The owner or operator must design, construct, operate, and maintain a run-on control system capable of preventing flow onto the active portion of the landfill during peak discharge from at least a 25-year 24-hour storm.

8.11.2c The owner or operator must design, construct, operate, and maintain a run-off management system to collect and control at least the water volume resulting from a 25-year 24-hour storm.

8.11.2d Collection and holding facilities (e.g., tanks or basins) associated with run-on and run-off control systems must be emptied or otherwise managed expeditiously after storms to maintain design capacity of the system.

8.11.2e If the landfill contains any particulate matter

which may be subject to wind dispersal, the owner or operator must cover or otherwise manage the landfill to control wind dispersal.

8.11.2f The landfill (including the base of the lower most liner components) must be located at a minimum of 3 feet above the highest known seasonal water table elevation. This 3 foot distance may be achieved by elevating the waste disposal facility artificially or by non-mechanical lowering of the water table. ~~However, no mechanical means (i.e. pumps) may be used, to lower the water table.~~ All plans for alteration of the water level must be approved by the Chief and will become a part of the hazardous waste management permit.

8.11.2g The chief will specify in the permit all design and operating practices that are necessary to ensure that the requirements of this section are satisfied.

8.11.2h The design specifications, construction and installation practices and operating conditions will be certified by an owner or operator and a registered professional engineer.

8.11.2i Existing portions of landfills are exempt from the requirements of Section 8.11.2(a), 8.11.3(a), 8.11.4, 8.11.11(c)(2), (c)(3), and (d) provided that paragraph (i)(1), is complied with.

8.11.2.i.1 The owner or operator, in order to qualify for the exemption in (i) above, must demonstrate that statistically significant increases of hazardous constituents do not occur in the groundwater or surface water during its active life and the post closure period, except as provided in paragraph (j) of this Section.

8.11.2.i.2 If statistically significant increases of hazardous constituents are detected as outlined in Section 8.13.08(d) in the groundwater beneath the facility (including the regulated unit) the owner or operator must comply with the corrective action outlined in Section 8.13.9 (if groundwater contamination has been determined).

8.11.2j If the owner or operator determines that the corrective action program being implemented under Section 8.13.09 is <u>insufficient</u> for causing cessation of hazardous waste constituents migration, then the unit must be closed. However, if it is determined that the corrective action will adequately

arrest and remove the contamination, the owner may choose one of the four options which will become part of the conditions of the permit:

8.11.2.j.1 Retrofit the unit with liners; in accordance with Section 8.11.01(a)(1);

8.11.2.j.2 Stop the leak;

8.11.2.j.3 Continue the operation of the unit, (while concurrently developing/implementing an alternate treatment, storage, or disposal method), for a period of five years at which time the unit must be closed; or

8.11.2.j.4 Continue the operation of the unit provided a demonstration can be made and approved by the Chief that no adverse impact to human health or to the environment will result from the continued operation of the unit during the active life and closure and post closure period, provided that the facility continue to comply with an approved corrective action program. Such demonstration must include and discuss the following:

8.11.2.j.4.i Potential adverse effects on ground water quality, considering:

8.11.2.j.4.i.A The physical and chemical characteristics of the waste in the regulated unit, including its potential for migration;

8.11.2.j.4.i.B The hydrogeological characteristics of the facility and surrounding land;

8.11.2.j.4.i.C The quantity of ground water and the direction of ground water flow;

8.11.2.j.4.i.D The proximity and withdrawal rates of ground users;

8.11.2.j.4.i.E The current and future uses of ground water in the area;

8.11.2.j.4.i.F The existing quality of ground water, including other sources of contamination and their cumulative impact on ground water quality;

8.11.2.j.4.i.G The potential for health risks caused by

human exposure to waste constituents;

8.11.2.j.4.i.H The potential damage to wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents;

8.11.2.j.4.i.I The persistence and permanence of the potential adverse effects; and

8.11.2.j.4.ii Potential adverse effects on hydraulically connected surface water quality, considering:

8.11.2.j.4.ii.A The volume and physical and chemical characteristics of the waste in the regulated unit;

8.11.2.j.4.ii.B The hydrogeological characteristics of the facility and surrounding land;

8.11.2.j.4.ii.C The quantity and quality of ground water, and the direction of ground water flow;

8.11.2.j.4.ii.D The patterns of rainfall in the region;

8.11.2.j.4.ii.E The proximity of the regulated unit to surface waters;

8.11.2.j.4.ii.F The current and future uses of surface waters in the area and any water quality standards established for those surface waters;

8.11.2.j.4.ii.G The existing quality of surface water, including other sources of contamination and the cumulative impact on surface water quality;

8.11.2.j.4.ii.H The potential for health risks caused by human exposure to waste constituents;

8.11.2.j.4.ii.I The potential damage to wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents; and

8.11.2.j.4.ii.J The persistence and permanence of the potential adverse effects.

8.11.2.j.4.iii In making any determination under paragraph (4) of this section concerning the use of ground water in the

area around the facility, the Chief will consider any identification of underground sources of drinking water and exempted aquifers made under the West Virginia Administrative Regulations of the State Water Resources Board, Chapter 20, Article 5A, Series IX (1983).

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8.11.15 Restrictions on Liquid Waste

8.11.15a Bulk or non-containerized liquid waste or waste containing free liquids must not be placed in a landfill unless:

8.11.15.a.1 The landfill has a liner and leachate collection and removal system that meet the requirements of 8.11.2; or

8.11.15.a.2 Before disposal the liquid waste or waste containing free liquids is treated, solidified and stabilized, chemically or physically, so that free liquids are ~~not~~ no longer present.

8.11.15b Containers holding free liquids must not be placed in a landfill unless:

8.11.15.b.1 The container is very small, such as an ampule; and

8.11.15.b.2 The container is placed in an overpack drum (lab pack) as defined in Section 8.11.17 and is disposed of in accordance with Section 8.11.17.

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8.12 Land Treatment

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8.12.7 Food Chain Crops

The Chief may allow the growth of food chain crops in or on the treatment zone only if the owner or operator satisfies the conditions of this section. The Chief will specify in the facility permit the specific food chain crops which may be grown.

8.12.7.a.1 The owner or operator must demonstrate that there is no substantial risk to human health caused by the growth of such crops in or on the treatment zone by demonstrating, prior to the planting of such crops, that hazardous constituents other than cadmium:

8.12.7.a.1.i Will not be transferred to the food or feed portions of the crop by plant uptake or ~~indirect~~ direct contact, and will not otherwise be ingested by food chain animals (e.g., by grazing); or

8.12.7.a.1.ii Will not occur in greater concentrations in or on the food or feed portions of crops grown on the treatment zone than in or identical portions of the same crops grown on untreated soils under similar conditions in the same region.

8.12.7.a.2 The owner or operator must make the demonstration required under this paragraph prior to the planting of crops at the facility for all constituents identified in Appendix VIII of Section 3 of these regulations that are reasonably expected to be in, or derived from, waste placed in or on the treatment zone.

8.12.7.a.3 In making a demonstration under this paragraph, the owner, or operator may use field tests, greenhouse studies, available data, or, in the case of existing units, operating data, and must;

8.12.7.a.3.i Base the demonstration on conditions similar to those present in the treatment zone, including soil characteristics (e.g., pH, cation exchange capacity), specific wastes, application rates, application methods, and crops to be grown; and

8.12.7.a.3.ii Describe the procedures used in conducting any tests, including the sample selection criteria, sample size,

analytical methods, and statistical procedures.

8.12.7.a.4 If the owner or operator intends to conduct field tests or greenhouse studies in order to make the demonstration required under this paragraph, he must obtain a permit for conducting such activities.

8.12.7b The owner or operator must comply with the following conditions if cadmium is contained in wastes applied to the treatment zone:

8.12.7.b.1.i The pH of the waste and soil mixture must be 6.5 or greater at the time of each waste application, except for waste containing cadmium at concentrations of 2 mg/kg (dry weight) or less;

8.12.7.b.1.ii The annual application from cadmium from waste must not exceed .44 lbs/acre on land used for production of tobacco, leafy vegetables, or root crops grown for human consumption. For other food chain crops, the annual cadmium application rate must not exceed:

Time Period	Annual Cd application rate lbs/acre
Present to June 30, 1984	1.78
July 1, 1984 to December 31, 1986	1.11
Beginning January 1, 1987	.44

8.12.7.b.1.iii The cumulative application of cadmium from waste must not exceed 4.46 lbs/acre if the waste and soil mixture has a pH of less than 6.5; and

8.12.7.b.1.iv If the waste and soil mixture has a pH of 6.5 or greater or is maintained at a pH of 6.5 or greater during crop growth, the cumulative application of cadmium from waste must not exceed: 4.46 lbs/acre if soil cation exchange capacity (CEC) is less than 5 meq/100g; 8.92 lbs/acre if soil CEC is 5-15 meq/100g; and 17.4884 lbs/acre if soil CEC is greater than 15 meq/100g; or

8.12.7.b.2.i Animal feed must be the only food chain crop produced;

8.12.7.b.2.ii The pH of the waste and soil mixture must be 6.5 or greater at the time of waste application or at the time the crop is planted, whichever occurs later, and this pH level must be maintained whenever food chain crops are grown;

8.12.7.b.2.iii There must be an operating plan which demonstrates how the animal feed will be distributed to preclude ingestion by humans. The operating plan must describe the measures to be taken to safeguard against possible health hazards from cadmium entering the food chain, which may result from alternative land uses; and

8.12.7.b.2.iv Future property owners must be notified by a stipulation in the land record or property deed which states that the property has received waste at high cadmium application rates and that food chain crops must not be grown except in compliance with paragraph (b)(2) of this section.

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8.12.11 Closure and Post Closure Care

8.12.11a During the closure period the owner or operator must:

8.12.11.a.1 Continue all operations (including pH control) necessary to maximize degradation, transformation, or immobilization of hazardous constituents within the treatment zone as required under Section 8.12.4(a), except to the extent such measure are inconsistent with paragraph (a)(8 of this section;

8.12.11.a.2 Continue all operations in the treatment zone to minimize run-off of hazardous constituents as required under Section 8.12.4(b);

8.12.11.a.3 Maintain the run-on control system required under Section 8.12.4(c);

8.12.11.a.4 Maintain the run-off management system required under Section 8.12.4(d);

8.12.11.a.5 Control wind dispersal of hazardous waste if required under Section 8.12.4(f);

8.12.11.a.6 Continue to comply with any prohibitions or

conditions concerning growth of food chain crops under Section 8.12.7;

8.12.11.a.7 Continue unsaturated zone monitoring in compliance with Section 8.12.09, except that soil-pore liquid monitoring may be terminated 90 days after the last application of waste to the treatment zone; and

8.12.11.a.8 Establish a vegetative cover on the portion of the facility being closed at such time that the cover will not substantially impede degradation, transformation, or immobilization of hazardous constituents in the treatment zone. The vegetative cover must be capable of maintaining growth without extensive maintenance.

8.12.11b For the purpose of complying with Section 8.06.06, when closure is completed the owner or operator may submit to the Chief certification by an independent qualified soil scientist, in lieu of an independent registered professional engineer, that the facility has been closed in accordance with the specifications in the approved closure plan.

8.12.11c During the post-closure care period the owner or operator must:

8.12.11.c.1 Continue all operations (including pH control) necessary to ~~enhaee~~ enhance degradation and transformation and sustain immobilization of hazardous constituents in the treatment zone to the extent that such measures are consistent with other post-closure care activities;

8.12.11.c.2 Maintain a vegetative cover over closed portions of the facility;

8.12.11.c.3 Maintain the run-on control system required under Section 8.12.4(c);

8.12.11.c.4 Maintain the run-off management system required under Section 8.12.4(d);

8.12.11.c.5 Control wind dispersal of hazardous waste if required under Section 8.12.04(f);

8.12.11.c.6 Continue to comply with any prohibitions or conditions concerning growth of food chain crops under Section 8.12.7; and

8.12.11.c.7 Continue unsaturated zone monitoring in compliance with Section 8.12.9 except that soil-pore liquid monitoring may be terminated 90 days after the last application of waste to the treatment zone.

8.12.11d The owner or operator is not subject to regulation under paragraphs (a)(8) and (c) of this section if the Chief finds that the level of hazardous constituents in the treatment zone soil does not exceed the background value of those constituents by an amount that is statistically significant when using the test specified in paragraph (d)(3) f this section. The owner or operator may submit such a demonstration to the Chief or at any time during the closure or post closure care periods. For the purposes of this paragraph:

8.12.11.d.1 The owner or operator must establish background soil values and determine whether there is a statistically significant increase over those values for all hazardous constituents specified in the facility permit under Section 8.12.2(b).

8.12.11.d.1.i Background soil values may be based on a one-time sampling of a background plot having characteristics similar to those of the treatment zone.

8.12.11.d.1.ii The owner or operator must express background values and values for hazardous constituents in the treatment zone in a form necessary for the determination of statistically significant increases under paragraph (d)(3) of this section.

8.12.11.d.2 In taking samples used in the determination of background and treatment zone values, the owner or operator must take samples at a sufficient number of sampling points and at appropriate locations and depths to yield samples that represent the chemical make-up of soil that has not been affected by leakage from the treatment zone and the soil within the treatment zone, respectively.

8.12.11.d.3 In determining whether a statistically significant increase has occurred, the owner or operator must compare the value of each constituent in the treatment zone to the background value for that constituent using a statistical procedure that provides reasonable confidence that constituent presence in the treatment zone will be identified. The owner or operator must use a statistical procedure that:

8.12.11.d.3.i Is appropriate for the distribution of the data used to establish background values; and

8.12.11.d.3.ii Provides a reasonable balance between the probability of falsely identifying hazardous constituent presence in the treatment zone and the probability of failing to identify real presence in the treatment zone.

8.12.11e The owner or operator is not subject to regulation under Section 8.13 of these regulations if the Chief finds that the owner or operator satisfies paragraph (d) of this section and if unsaturated zone monitoring under Section 8.12.9 indicates that hazardous constituents have not migrated beyond the treatment zone during the active life of the land treatment unit.

* * * * *

Section 8.13 Groundwater Protection

8.13.1 Applicability

8.13.1a Except as provided in paragraph (b) of this section, the regulations in Section 8.13 apply to owners and operators of facilities that treat, store, or dispose of hazardous waste in surface impoundments, waste piles, land treatment units, or landfills. The owner or operator must satisfy the requirements of Section 8.13 for all wastes (or constituents thereof) contained in any such waste management unit at the facility that receives hazardous waste after the effective ~~day~~ date of Section 8.13 (hereinafter referred to as a "regulated unit"). Any waste or waste constituent migrating beyond the waste management area under Section 8.13.05(b) is assumed to originate from a regulated unit unless the Chief finds that such waste or waste constituent originated from another source.

8.13.1b The owner or operator is not subject to regulation under Section 8.13 if:

8.13.1.b.1 He is exempted under Section 8.01;

8.13.1.b.2 He designs and operates a pile in compliance with Section 8.10.01(c);

8.13.1.b.3 The Chief finds, pursuant to Section 8.12.11(d), that the treatment zone of land treatment unit does not contain concentrations of hazardous constituents that are above background levels of those constituents by an amount that is statistically significant, and if an unsaturated zone monitoring program meeting the requirements of Section 8.12.09 has not shown a statistically significant increase in hazardous constituents below the treatment zone during the operating life of the unit. An exemption under this paragraph can only relieve an owner or operator of responsibility to meet the requirements of Section 8.13 during the post closure care period.

8.13.1c The regulations under Section 8.13 apply during the active life of the regulated unit (including the closure period). After closure of the regulated unit, the regulations in Section 8.13:

8.13.1.c.1 Do not apply if all waste, waste residues, contaminated containment system components, and contaminated subsoils are removed or decontaminated at closure;

8.13.1.c.2 Apply during the post closure period under Section 8.06.07 in all other cases.

* * * * *

8.13.7 Groundwater Monitoring System Requirements

The owner or operator must comply with the following requirements for any groundwater monitoring program:

8.13.7a The groundwater monitoring system must consist of a sufficient number of wells, installed at appropriate locations and depth to yield groundwater samples from the uppermost aquifer that:

8.13.7.a.1 Represent the quality of background groundwater that has not been afected by leakage from the regulated unit; and

8.13.7.a.2 Represent the quality of groundwater passing the point of compliance.

8.13.7b Well construction must meet the following standards:

8.13.7.b.1 Wells must be cased in a manner that maintains the integrity of the monitoring well bore hole:

8.13.7.b.2 Wells must be screened and packed with sand or gravel throughout the total vertical distance of the uppermost aquifer except as provided under Section 8.13.07(c). The screened interval of an individual well should not exceed 20 feet (screened intervals greater than 20 feet may be permitted if the owner or operator can successfully demonstrate that the proposed interval will provide representative samples; such demonstration must be based on specific hydrogeologic conditions at the facility). In order to meet these requirements for screened intervals, nested wells or well clusters may be needed.

8.13.7.b.3 Screening shall be designed to prevent the introduction of sediment, yet allow optimum entrance velocity for water;

8.13.7.b.4 Screens and casing must be constructed of materials that are strong enough to prevent collapse and must be non-reactive, non-synergistic and non-catalytic to the hazardous constituents being monitored;

8.13.7.b.5 The annular space (the space between the bore

hole wall and the well casing) above the sampling depth must be sealed to prevent contamination of samples and groundwater by entrance of materials from the surface; and

8.13.7.b.6 The wells must be installed, constructed and maintained using the best available techniques which will provide compliance with this section.

8.13.7c In locations where multiple formations comprise the uppermost aquifer the owner or operator must establish a groundwater monitoring system that isolates each ~~strata~~ stratum containing water and allows for separate sampling of each ~~strata~~ stratum containing water.

8.13.7d If a facility contains more than one regulated unit, separate groundwater monitoring systems may not be required for each regulated unit provided that provisions for sampling the groundwater in the uppermost aquifer will enable detection and measurement at the point of compliance of hazardous constituents from the regulated units that have entered the groundwater in the uppermost aquifer. Requests to use such a monitoring system must be submitted in the permit application as required under Section 8.13.05(b)(2).

8.13.8 Groundwater Monitoring Program

An owner or operator required to establish a groundwater monitoring program must, at a minimum, discharge the following responsibilities:

8.13.8a General requirements:

8.13.8.a.1 The owner or operator must monitor for indicator parameters (e.g., pH, specific conductance, total organic carbon, or total organic halogen), hazardous constituents under Section 8.13.04 and/or reaction products that provide a reliable indication of the presence of hazardous constituents in groundwater. The Chief will specify the monitoring parameters (indicator parameters and/or reaction products) and constituents to be monitored in the permit, after considering the following factors:

8.13.8.a.1.i The types, quantities, and concentrations of hazardous constituents in wastes managed at the regulated unit;

8.13.8.a.1.ii The mobility, stability, and persistence of

hazardous constituents or their reaction products in the unsaturated zone beneath the waste management area;

8.13.8.a.1.iii The detectability of indicator parameters, hazardous constituents, and reaction products in groundwater; and

8.13.8.a.1.iv The concentrations and coefficients of variation of proposed monitoring parameters of hazardous constituents in the background groundwater.

8.13.8.a.2 The owner or operator must install a groundwater monitoring system at the point of compliance under Section 8.13.05. The groundwater monitoring system must comply with Section 8.13.07.

8.13.8.a.3 The groundwater monitoring program must include consistent sampling and analysis procedures that are designed to ensure monitoring results that provide a reliable indication of groundwater quality below the waste management area. At a minimum the program must include procedures and techniques for:

8.13.8.a.3.i Sample collection;

8.13.8.a.3.ii Sample preservation and shipment;

8.13.8.a.3.iii Analytical procedures; and

8.13.8.a.3.iv Chain of custody control.

8.13.8.a.4 The groundwater monitoring program must include sampling and analytical methods that are appropriate for groundwater sampling and that accurately measure hazardous constituents in groundwater samples. Recommended methods include those outlined in 40 CFR Part 136. The proposed sampling and analytical methods must be approved by the Chief and upon approval, become a condition of the hazardous waste management permit.

8.13.8.a.5 The owner or operator must determine the groundwater flow rate and direction in the uppermost aquifer at least annually and determine transmissibility during initial sampling or initial well development.

8.13.8.a.6 The groundwater monitoring program must include a determination of the static water level and groundwater surface elevation each time groundwater is sampled.

8.13.8.a.7 If the owner or operator determines that the groundwater monitoring program no longer satisfies the requirements of this section, he must, within 90 days, submit an application for a permit modification to make any appropriate changes to the program.

8.13.8.a.8 The owner or operator must assure that monitoring and corrective action measures necessary to achieve compliance with the Water Resources Board's Groundwater Protection Standard Regulation, Series VII, Section 1 are taken during the term of the permit.

8.13.8.a.9 The groundwater monitoring wells must be sampled to allow detection of density separated hazardous constituents or monitoring parameters which may escape from the regulated unit.

8.13.8b Establishing water quality concentrations:

8.13.8.b.1 The groundwater monitoring program must establish background groundwater quality concentrations for each of the hazardous constituents or monitoring parameters specified in the permit.

8.13.8.b.1.i The background concentration for a hazardous constituent must be based on data from upgradient wells.

8.13.8.b.1.ii Samples shall be obtained from upgradient well(s) each time downgradient wells are sampled. Downgradient concentrations of hazardous constituents or monitoring parameters shall be compared with upgradient concentrations to determine whether the upgradient background concentrations have been exceeded.

8.13.8.b.1.iii In comparing concentrations of hazardous constituents or monitoring parameters at the point of compliance with background concentrations, the owner or operator shall use the background concentration values for the current quarter. At least four (4) background concentration values collected as required under (b)(1)(v) of this section must be used when utilizing the statistical test outlined in Section 8.13.08(c).

8.13.8.b.1.iv The owner or operator may propose to the Chief to use background concentrations of hazardous constituents or monitoring parameters based on sampling of wells that are not upgradient from the waste management area where sampling at other wells will provide values that are representative than those

provided by the upgradient wells or in situations where the owner or operator cannot define or locate an upgradient well due to adverse hydrogeologic conditions. The owner or operator must submit the details of such a proposal to the Chief for his approval. The reasons for the proposal to utilize wells that are not upgradient must be included with the proposal.

8.13.8.b.1.v In developing the data base used to determine a background concentration for each monitoring parameter or hazardous constituent, the owner or operator must take a minimum of four (4) samples from each well and a minimum of four (4) samples from the entire system used to determine background groundwater quality, each time the system is sampled.

8.13.8.b.2 The owner or operator must determine the concentration of each hazardous constituent and monitoring parameter at each monitoring well at the point of compliance and each upgradient well at least quarterly during the compliance period. Intervals between sampling and the frequency of sampling will be specified in the permit. The owner or operator must express the concentrations of each hazardous constituent and monitoring parameter at each monitoring well in a form necessary for the determination of statistically significant increases under (c) of this section.

8.13.8c Statistical method:

The owner or operator must use the following statistical procedure in determining whether the Water Resources Board's Groundwater Protection Standard Regulation, Series VII, Section 1 has been exceeded:

8.13.8.c.1 If, in a groundwater monitoring program, the concentration of a hazardous constituent or monitoring parameter at the point of compliance is to be compared to it's respective background concentration, and both the background concentration data set and the point of compliance monitoring well concentration data set have been determined to be normally distributed by an appropriate method approved by the Chief:

8.13.8.c.1.i The owner or operator must take at least four (4) samples at each well at the point of compliance and determine whether any increase between the mean concentration of each constituent at each well (using all samples taken) and the background concentration value for the constituent is significant at the 0.05 level using the Cochran's Approximation to the

Behren-Fisher Student's t-test as described in Appendix II. If the test indicates that the increase is significant, the owner or operator must repeat the same procedure (with at least the same number of samples as used in the first test) using fresh samples from the monitoring well. If this second round of analyses indicates that the increase is significant, the owner or operator must conclude that a statistically significant increase has occurred; or

8.13.8.c.1.ii The owner or operator may request in writing for authorization to use an equivalent statistical procedure for determining whether a statistically significant increase has occurred. The Chief will specify such a procedure in the permit if he finds that the alternative procedure reasonably balances the probability of falsely identifying a non-contaminating regulated unit and the probability of failing to identify a contaminating regulated unit in a manner that is comparable to that of the statistical procedure described in paragraph (c)(1)(i) of this section. This alternative procedure must be appropriate for the distribution of the data.

8.13.8.c.2 In all other situations in a groundwater monitoring program the owner or operator must use a statistical procedure which provides a reasonable balance of the probability of falsely identifying a non-contaminating regulated unit and the probability of failing to identify a contaminating regulated unit. The Mann-Whitney Test (Appendix III) is recommended. The owner or operator must supply to the Chief a written request to use such a statistical procedure, completely describing the details of the procedure and the reasons for using it.

8.13.8.c.3 The Chief will approve statistical procedures in specific cases where he finds the procedure:

8.13.8.c.3.i Is appropriate for the distribution of the data used to establish concentration values; and

8.13.8.c.3.ii Provides a reasonable balance between the probability of falsely identifying a non-contaminating regulated unit and the probability of failing to identify a contaminating regulated unit.

8.13.8.c.4 In taking samples used in the determination of concentration values, the owner or operator must use a groundwater monitoring system that complies with Section 8.13.07 and which fulfills the requirements of Section 8.13.08.

8.13.8d Determination of significant increases:

8.13.8.d.1 The owner or operator must determine whether there is a statistically significant increase over background concentration values for any monitoring parameter or hazardous constituent specified in the permit pursuant to paragraph (a)(1) of this section each time he determines the concentration of hazardous constituents or monitoring parameters in the groundwater at the point of compliance under paragraph (b)(2) of this section.

8.13.8.d.1.i In determining whether a statistically significant increase has occurred, the owner or operator must compare the concentration of each hazardous constituent and monitoring parameter at each individual monitoring well at the point of compliance to the background concentration value for that parameter or constituent, according to the statistical procedure specified under Section 8.13.08(c).

8.13.8.d.1.ii The owner or operator must determine whether there has been a statistically significant increase at each monitoring well at the point of compliance. This will be done within the time period after completion of sampling specified in the permit. The Chief will specify that time period, after considering the complexity of the statistical test and the availability of laboratory facilities to perform the analysis of groundwater samples.

8.13.8.d.2 If the owner or operator determines, pursuant to paragraph (d)(1) of this section, that there is a statistically significant increase in the concentrations of any monitoring parameter or hazardous constituents specified pursuant to paragraph (a)(1) of this section at any monitoring well at the point of compliance, he must:

8.13.8.d.2.i Notify the Chief of this finding in writing within seven (7) days. The notification must indicate what monitoring parameter(s) or hazardous constituent(s) have shown statistically significant increases;

8.13.8.d.2.ii Immediately sample the groundwater in all monitoring wells and determine the concentration of all constituents identified in Appendix VIII of Section 3 of these regulations that are present in ground water;

8.13.8.d.2.iii Establish a background value for each

Appendix VIII constituent that has been found at the compliance point under paragraph (d)(2)(ii) of this section as follows:

8.13.8.d.2.iii.A The owner or operator must comply with Section 8.13.08(b) in developing the data base used to determine background values;

8.13.8.d.2.iii.B The owner or operator must express background values in a form necessary for the determination of statistically significant increases under Section 8.13.08(c); and

8.13.8.d.2.iii.C In taking samples used in the determination of background values, the owner or operator must use a groundwater monitoring system that complies with Section 8.13.07(a), (b), (c), and (d);

8.13.8.d.2.iv Within 60 days submit to the Chief a written report including the following information:

8.13.8.d.2.iv.A Any proposed changes to the groundwater monitoring system at the facility necessary to meet the requirements of Section 8.13.09;

8.13.8.d.2.iv.B Any proposed changes to the monitoring frequency, sampling and analysis procedures or methods, or statistical procedures used at the facility necessary to meet the requirements of Section 8.13.09;

8.13.8.d.2.iv.C An identification of the concentration of any Appendix VIII constituents found in the groundwater at each monitoring well at the compliance point; and

8.13.8.d.2.iv.D If such changes are proposed under (A) and (B) of this subsection, then an application for permit modification must be submitted, with the report, pursuant to Section 11.17; and,

8.13.8.d.2.v If the owner or operator determines, pursuant to paragraph (d)(1) of this section, that there is a statistically significant increase in the concentrations of hazardous constituents specified pursuant to paragraph (a)(1) of this section at any monitoring well at the point of compliance (thereby violating the Water Resources Board's Groundwater Protection Standard Regulation, Series VII, Section 1), he must comply with the provisions of the corrective action program specified in the permit, unless the Chief determines that a

demonstration made under paragraph (d)(3) of this section successfully shows that a source other than the regulated unit caused the increase or that the increase resulted from an error in sampling, analysis or evaluation.

8.13.8.d.3 If the owner or operator determines, pursuant to paragraph (d)(1) of this section, that the Water Resources Board's Groundwater Protection Standard Regulation, Series VII, Section 1 if being exceeded at any monitoring well at the point of compliance, he may demonstrate that a source other than a regulated unit caused the increase or that the increase resulted from error in sampling, analysis or evaluation. In making a demonstration under this paragraph, the owner or operator must;

8.13.8.d.3.i Notify the Chief in writing within seven (7) days that he intends to make a demonstration under this paragraph;

8.13.8.d.3.ii Within 60 days, submit a written report to the Chief which demonstrates that a source other than a regulated unit caused the standard to be exceeded or that the apparent noncompliance with the standards resulted from error in sampling, analysis, or evaluation;

8.13.8.d.3.iii Within 90 days, submit to the Chief an application for a permit modification to make any appropriate changes to the groundwater monitoring program at the facility; and

8.13.8.d.3.iv Continue to monitor in accord with the groundwater monitoring program established under this section.

8.13.9 Corrective Action Program

An owner or operator, required to establish a corrective action program under Section 8.13 must, at a minimum, discharge the following responsibilities:

8.13.9a The owner or operator must take corrective action to ensure that regulated units are in compliance with the Water Resources Board's Groundwater Protection Standard Regulation, Series VII, Section 1.

8.13.9b The owner or operator must implement a corrective action program that prevents hazardous constituents from exceeding their respective background concentrations in

groundwater by removing the hazardous constituents from the groundwater. The contingency plan in the permit will specify the specific measure that will be taken.

8.13.9c The owner or operator must begin corrective action within the time period specified in the permit contingency plan after the Water Resources Board's Groundwater Protection Standard Regulation, Series VII, Section 1, is exceeded.

8.13.9.d.1 In conjunction with a corrective action program, the owner or operator must establish and implement a groundwater monitoring program to demonstrate the effectiveness of the corrective action program. Such a monitoring program may be based on the requirements for a groundwater monitoring program under Section 8.13.08 and must be as effective as that program in determining compliance with the Water Resources Board's Groundwater Protection Standard Regulation, Series VII, Section 1.

8.13.9.d.2 The owner or operator must analyze samples from all monitoring wells for all constituents contained in Appendix VIII of Section 3 of these regulations at least once prior to terminating the corrective action program to determine if there is a need for further corrective action. The owner or operator shall report the results of full Appendix VIII sample analyses to the Chief within seven (7) days after completion of the analyses.

8.13.9e In addition to the other requirements of this section, the owner or operator must conduct a corrective action program to remove any hazardous constituents under Section 8.13.4 that exceed their respective background concentrations in groundwater at the point of compliance under Section 8.13.6 or between the point of compliance and the downgradient facility property boundary. The contingency plans submitted in the permit application will specify the measures to be taken.

8.13.9.e.1 Corrective action measures under this paragraph must be initiated and completed within a reasonable time considering the extent of contamination.

8.13.9.e.2 Corrective action measures under this paragraph may be terminated once the concentration of hazardous constituents under Section 8.13.4 is reduced to levels below their respective background concentrations.

8.13.9f The owner or operator must continue corrective

action measures during the compliance period to the extent necessary to ensure that the Water Resources Board's Groundwater Protection Standard Regulation, Series VII, Section 1 is not exceeded. If the owner or operator is conducting corrective action for as long as necessary to achieve compliance with the above standard. The owner or operator may terminate corrective action measures taken beyond the compliance period if he can demonstrate, based on data from the groundwater monitoring program under paragraph (d) of this section, that the Water Resources Board's Groundwater Protection Standard Regulation, Series VII, Section 1, has not been exceeded for a period of three (3) consecutive years.

8.13.9g The owner or operator must report in writing to the Chief on the effectiveness of the corrective action program. The owner or operator must submit these reports semi-annually.

8.13.9h If the owner or operator determines that the corrective action program no longer satisfies the requirements of this section, he must, within 60 days submit an application for a permit modification to make any appropriate changes to the program.

8.13.9i If the owner or operator elects to pursue a corrective action program other than that outlined in the permit contingency plan, he must notify the Chief of his decision, in writing, within 15 days of the determination made under Section 8.13.08(d). The owner or operator must obtain approval to implement any alternate corrective action plan from the Chief and begin implementation of such plan, within 90 days of the determination made under Section 8.13.08(d). If the alternate plan is not approved or in effect within 90 days, the owner or operator must immediately begin implementation of the original corrective action program outlined in the permit contingency plan.

8.13.9j If the Chief determines that groundwater quality has been affected by a regulated unit prior to or upon receipt of a Part B application, the owner or operator shall be required to implement a corrective action program immediately upon issuance of the permit.

8.13.10 - 8.13.20 (Reserved)

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11.5 Contents of Part B

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11.5.2 Specific Information Requirements

The following additional information is required from owners or operators of specific types of hazardous waste management facilities that are used or to be used for storage or treatment:

11.5.2a For facilities that store containers of hazardous waste except as otherwise provided in Section 8.07.01:

11.5.2.a.1 A description of the containment system to demonstrate compliance with Section 8.07.07. Show at least the following:

11.5.1.a.1.i Basic design parameters, dimensions, and materials of construction.

11.5.2.a.1.ii How the design promotes drainage or how containers are kept from contact with standing liquids in the containment system.

11.5.2.a.1.iii Capacity of the containment system relative to the number and volume of containers to be stored.

11.5.2.a.1.iv Provisions for preventing or managing run-on.

11.5.2.a.1.v How accumulated liquids can be analyzed and removed to prevent overflow.

11.5.2.a.2 For storage areas that store containers holding hazardous wastes that do not contain free liquids, a demonstration of compliance with Section 8.07.07(c), including:

11.5.2.a.2.i Test procedures and results or other documentation or information to show that the wastes do not contain free liquids provided such test procedures, results and other documentation or information simulate in-situ waste management conditions and demonstrate the irreversibility of the liquid to solid phase of the waste during the time the waste is managed in the containers, based at least on in-situ temperature and pressure conditions, possible chemical and biological reactions, and the partition coefficients of the specific sorbant matrix with that of the particular waste; and

11.5.2.a.2.ii A description of how the storage area is designed or operated to drain and remove liquids and how containers are kept from contact with standing liquids.

11.5.2.a.3 Sketches, drawings, or data demonstrating compliance with Section 8.07.08 (location or buffer zone and containers holding ignitable or reactive wastes) and Section 8.07.09(c) (location of incompatible wastes), where applicable.

11.5.2.a.4 Where incompatible wastes are stored or otherwise managed in containers, a description of the procedures used to ensure compliance with Sections 8.07.09(a) and (b) and 8.02.08(b) and (c).

11.5.2b For facilities that use tanks to store or treat hazardous waste, except as otherwise provided in Section 8.08.01, description of design and operation procedures which demonstrate compliance with all applicable requirements of Section 8.00, including:

11.5.2.b.1 References to design standards or other available information used (or to be used) in design and construction of the tank.

11.5.2.b.2 A description of design specifications including identification of construction materials and lining materials (include pertinent characteristics such as corrosion or erosion resistence).

11.5.2.b.3 Tank dimensions, capacity, and shell thickness.

11.5.2.b.4 A diagram of piping, instrumentation, and process flow.

11.5.2.b.5 Description of feed systems, safety cutoff, bypass systems, and pressure controls (e.g., vents).

11.5.2.b.6 Description of procedures for handling incompatible, ignitable, or reactive wastes, including the use of buffer zone.

11.5.2c For facilities that store, treat, or dispose of hazardous waste in surface impoundments, except as otherwise provided in Section 8.09.01:

11.5.2.c.1 A list of the hazardous wastes placed or to be

placed in each surface impoundment;

11.5.2.c.2 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 Sections 8.09.02 and 8.09.04. This submission must address the following items:

11.5.2.c.2.i The liner system,

11.5.2.c.2.ii Prevention of overtopping; and

11.5.2.c.2.iii Structural integrity of dikes.

11.5.2.c.3 A description of how each surface impoundment, including the liner and cover systems and appurtenances for control of overtopping, will be inspected in order to meet the requirements of Section 8.09.05. This information should be included in the inspection plan and submitted under paragraph ~~(a)(5)~~ 11.5.1.e of this section;

11.5.2.c.4 A certification by a registered professional engineer which attests to the structural integrity of each dike, as required under Section 8.09.05. For new units, the owner or operator must submit a statement by a registered professional engineer that he will provide such a certification upon completion of construction in accordance with the plans and specifications;

11.5.2.c.5 A description of the procedure to be used for removing a surface impoundment from service, as required under Section 8.09.06 and (c). This information should be included in the contingency plan submitted under paragraph ~~(a)(7)~~ 11.5.1.g of this section;

11.5.2.c.6 A description of how hazardous waste residues and contaminated materials will be removed from the unit at closure, as required under Section 8.09.07. 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 Section 8.09.07 will be complied with. This information should be included in the closure plan and, where applicable, the post-closure plan submitted under Section 11.05.01(n);

11.5.2.c.7 If ignitable or reactive wastes are to be placed in a surface impoundment, an explanation of how Section 8.09.08

will be complied with;

11.5.2.c.8 If incompatible wastes, or incompatible wastes and materials will be placed in a surface impoundment, an explanation of how Section 8.09.09 will be complied with.

11.5.2d For facilities that store or treat hazardous waste in waste piles, except as otherwise provided in Section 8.01:

11.5.2.d.1 A list of hazardous wastes placed or to be placed in each waste pile;

11.5.2.d.2 If an exemption is sought to Section 8.10.2, 8.10.3, 8.10.4 and 8.10.6 pursuant to 8.10.1c a demonstration must be made sufficient to show compliance with Section 8.10.1(c) (1)-(6). ~~Such demonstration must include:~~

11.5.2.d.~~2.~~3 Detailed plans and an engineering report describing how the pile is or will be designed, constructed, operated and maintained to meet the requirements of Section 8.10.2. This submission must address the following items as specified in Section 8.10.2:

11.5.2.d.2~~3~~.i.A The liner system;

11.5.2.d.2~~3~~.ii.B Control of run-on;

11.5.2.d.2.3iii.C Control of run-off;

11.5.2.d.2.3iv.D Management of collection and holding units associated with run-on and run-off control systems; and

11.5.2.d.2.3v.E control of wind dispersal of particulate matter, where applicable;

11.5.2.d.~~4~~2.~~i.~~F A description of how each waste pile, including the liner and appurtenances for control of run-on and run-off, will be inspected in order to meet the requirements of Section 8.10.05. This information should be included in the inspection plan submitted under paragraph of this section;

11.5.2.d.5~~i.~~G If treatment is carried out on or in the pile, details of the process and equipment used, and the nature and quality of the residuals;

11.5.2.d.6~~2.i.~~H If ignitable or reactive wastes are to be

placed in a waste pile, an explanation of how the requirements of Section 8.10.07 will be complied with;

11.5.2.d.7~~2.i.I~~ If incompatible wastes, or incompatible wastes and materials will be placed in a waste pile, an explanation of how Section 8.10.08 will be complied with;

11.5.2.d.8~~2.i.J~~ A description of how hazardous waste residues and contaminated materials will be removed from the waste pile at closure, as required under Section 8.06.

11.5.2e For facilities that use land treatment to dispose of hazardous waste, except as otherwise provided in Section 8.01:

11.5.2.e.1 A description of plans to conduct a treatment demonstration as required under Section 8.12.03. The description must include the following information:

11.5.2.e.1.i The wastes for which the demonstration will be made and the potential hazardous constituents in the wastes;

11.5.2.e.1.ii The data sources to be used to make the demonstration (e.g., literature, laboratory data, field data, or operating data);

11.5.2.1.iii Any specific laboratory or field test that will be conducted, including:

11.5.2.e.1.iii.A The type of test (e.g., column leaching, degradation);

11.5.2.e.1.iii.B Materials and methods, including analytical procedures;

11.5.2.e.1.iii.C Expected time for completion;

11.5.2.e.1.iii.D Characteristics of the unit that will be simulated in the demonstration, including treatment zone characteristics, climatic conditions, and operating practices;

11.5.2.e.2 A description of a land treatment program, as required under Section 8.12.03. This information must be submitted with the plans for the treatment demonstration, and updated following the treatment demonstration. The land treatment program must address the following items;

11.5.2.e.2.i The wastes to be land treated;

11.5.2.e.2.ii Design measures and operating practices necessary to maximize treatment in accordance with Section 8.12.04 including;

11.5.2.e.2.ii.A Waste application method and rate;

11.5.2.e.2.ii.B Measures to control soil pH;

11.5.2.e.2.ii.C Enhancement of microbial or chemical reactions;

11.5.2.e.2.ii.D Control of moisture content;

11.5.2.e.2.iii Provisions for unsaturated zone monitoring, including:

11.5.2.e.2.iii.A Sampling equipment, procedures, and frequency;

11.5.2.e.2.iii.B Procedures for selecting sampling locations;

11.5.2.e.2.iii.C Analytical procedures;

11.5.2.e.2.iii.D Chain of custody control;

11.5.2.e.2.iii.E Procedures for establishing background values;

11.5.2.e.2.iii.F Statistical methods for interpreting results;

11.5.2.e.2.iii.G The justification for any hazardous constituents, in accordance with the criteria for such selection in Section 8.12.9;

11.5.2.e.2.iv 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 Section 8.2.4;

11.5.2.e.2.v The proposed dimensions of the treatment zone;

11.5.2.e.3 A description of how the unit is or will be designed, constructed, operated, and maintained in order to meet

the requirements of Section 8.12.04. This submission must address the following items;

11.5.2.e.3.i Control of run-on;

11.5.2.e.3.ii Collection and control of run-off;

11.5.2.e.3.iii Minimization of run-off of hazardous constituents from the treatment zone;

11.5.2.e.3.iv Management of collection and holding facilities associated with run-on and run-off control systems;

11.5.2.e.3.v Periodic inspection of the unit. This information should be included in the inspection plan submitted under paragraph ~~(a)(5)~~ 11.5.1.e of this section;

11.5.2.e.3.vi Control of wind dispersal of particulate matter, if applicable;

11.5.2.e.4 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 Section 8.12.07(a) will be conducted including;

11.5.2.e.4.i Characteristics of the food-chain crop for which the demonstration will be made;

11.5.2.e.4.ii Characteristics of the waste, treatment zone, and waste application method and rate to be used in the demonstration;

11.5.2.e.4.iii Procedures for crop growth, sample collection, sample analysis, and data evaluation;

11.5.2.e.4.iv Characteristics of the comparison crop including the location and conditions under which it was or will be grown.

11.5.2.e.5 If food-chain crops are to be grown, and cadmium is present in the land-treated waste, a description of how the requirements of Section 8.12.07 will be complied with;

11.5.2.e.6 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 Section 8.12.11. This information should be included in the closure plan and, where applicable, the post-closure care plan submitted under Section 11.05.01(n).

11.5.2.e.7 If ignitable or reactive wastes will be placed in or on the treatment zone, an explanation of how the requirements of Section 8.12.12 will be complied with;

11.5.2.e.8 If incompatible wastes, or incompatible wastes and materials, will be placed in or on the same treatment zone, an explanation of how Section 8.12.13 will be complied with.

11.5.2f For facilities that dispose of hazardous waste in landfills, except s otherwise provided in Section 8.01:

11.5.2.f.1 A list of the hazardous wastes placed in each landfill or landfill cell;

11.5.2.f.2 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 Section ~~8.11.04~~ 8.11.2. This submission must address the following items as specified in Section ~~8.11.04~~ 8.11.2:

11.5.2.f.2.i The liner system and leachate collection and removal system;

11.5.2.f.2.ii Control of run-on;

11.5.2.f.2.iii Control of run-off;

11.5.2.f.2.iv Management of collection and holding facilities associated with run-on and run-off control systems; and

11.5.2.f.2.v Control of wind dispersal of particulate matter, where applicable.

11.5.2.f.3 A description of how each landfill, including the liner and cover systems will be inspected in order to meet the requirements of Section 8.11.03. This information should be included in the inspection plan submitted under paragraph ~~(a)(5)~~ 11.5.1.e of this section;

11.5.2.f.4 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 Section 8.11.11, and a description of how each landfill will be maintained and monitored after closure in accordance with Section 8.11.11. This information should be included in the closure and post-closure plans submitted under paragraph ~~(a)(3)~~ 11.5.1.n of this section.

11.5.2.f.5 If ignitable or reactive wastes will be landfilled, an explanation of how the requirements of Section 8.11.13 will be complied with;

11.5.2.f.6 If incompatible wastes, or incompatible wastes and materials will be landfilled, an explanation of how Section 8.11.14 will be complied with;

11.5.2.f.7 If bulk or non-containerized liquid waste or waste containing free liquids is to be landfilled, an explanation of how the requirements of Section 8.11.15 will be complied with;

11.5.2.f.8 If containers of hazardous waste are to be landfilled, an explanation of how the requirements of Sections 8.11.16 or 8.11.17, as applicable, will be complied with.

11.5.2g The following additional information regarding protection of ground water is required from owners or operators of hazardous waste surface impoundments, piles, land treatment units, and landfills, except as otherwise provided in Section 8.13.01(G):

11.5.2.g.1 A summary of the ground-water monitoring data obtained during the interim status period under 40 C.F.R. 265.90-265.94, were applicable.

11.5.2.g.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). This information should include the following:

11.5.2.g.2.i Characterization of the site hydrogeology:

11.5.2.g.2.i.A Copies of any available geophysical logs of the site (Spontaneous potential, resistivity, gamma ray, etc.);

11.5.2.g.2.i.B Depth to the top of each water-bearing formation:

11.5.2.g.2.i.C Depth to the bottom of each water-bearing formation;

11.5.2.g.2.i.D Areas of recharge and discharge for the uppermost aquifer;

11.5.2.g.2.i.E Water level depth information (i.e., a water-table map);

11.5.2.g.2.i.F Depth to and type of bedrock present;

11.5.2.g.2.i.G Information available on the three dimensional flow of the site (including horizontal and vertical flow rates and directions); and

11.5.2.g.2.i.H Any additional information deemed necessary by the Chief.

11.5.2.g.2.ii Characterization of each soil horizon underlying the hazardous waste management area:

11.5.2.g.2.ii.A pH;

11.5.2.g.2.ii.B Cation exchange capacity;

11.5.2.g.2.ii.C Particle size ratio and textural classification;

11.5.2.g.2.ii.D Bulk density;

11.5.2.g.2.ii.E Percent voids present;

11.5.2.g.2.ii.F Permeability;

11.5.2.g.2.ii.G Infiltration rate; and

11.5.2.g.2.ii.H Any other information deemed necessary by the Chief.

11.5.2.g.3 On the topographic map required under Section 11.05.01 (t), a delineation of the waste management area, the property boundary, the propsoed "point of compliance" as defined under Section 8.13.05, the proposed location of ground-water monitoring wells as required under Section 8.13.07 and, to the extent possible, the information required in paragraph g ~~(e)(2)~~ (2) of this section;

11.5.2.g.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:

11.5.2.g.4.i Delineates the extent of the plume on the topographic map required under Section 11.05.01(t);

11.5.2.g.4.ii Identifies the concentration of each Appendix VIII constituent in the plume.

11.5.2.g.5 Detailed plans and an engineering report describing the proposed ground-water monitoring program to be implemented to meet the requirements of Section 8.13.07 (including such information as proposed purging methods, proposed development of wells, etc.);

11.5.2.g.6 The owner or operator must also submit an engineering feasibility plan for a corrective action program necessary to meet the requirements of Section 8.13.09.

11.5.2.g.7 The owner or operator must submit sufficient information, supporting data, and analyses to establish a ground-water monitoring program which meets the requirements of Section 8.13.08. This submission must address the following items as specified under Section 8.13.08:

11.5.2.g.7.i 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;

11.5.2.g.7.ii A proposed ground-water monitoring system;

11.5.2.g.7.iii Background concentrations of each proposed monitoring parameter or hazardous constituent, or procedures to calculate such concentrations; and

11.5.2.g.7.iv A description of proposed sampling, analysis and statistical comparison procedures to be utilized in evaluating ground-water monitoring data.

11.5.2.g.8 If hazardous constituents have been measured in the groundwater at the point of compliance at concentrations which are determined to be significantly increased over background concentrations under Section 8.13.08(d), the owner or operator must submit sufficient information, supporting data, and

analyses to establish a corrective action program which meets the requirements of Section 8.13.09. To demonstrate compliance with Section 8.13.09, the owner or operator must address the following items (in addition to other Section 8.13.09 requirements):

11.5.2.g.8.i A characterization of the contaminated groundwater, including concentrations of hazardous constituents;

11.5.2.g.8.ii The background concentration for each hazardous constituent found in the groundwater as set forth in Section 8.13.08(b);

11.5.2.g.8.iii Detailed plans and an engineering report describing the corrective action to be taken;

11.5.2.g.8.iv A description of how the ground-water monitoring program will assess the adequacy of the corrective action under Section 8.13.09(d);

11.5.2.g.8.v A proposed compliance schedule for beginning the corrective action; and

11.5.2.g.8.vi A description of the wastes previously handled at the facility.

* * * * *

11.10.12 Reporting Requirements

11.10.12a Planned changes.

The permittee shall give written notice to the Chief as soon as possible of any planned ~~major~~ physical alterations or additions to the permitted facility. For a new hazardous waste management facility, the permittee may not commence treatment, storage, or disposal of hazardous waste; and for a facility being modified the permittee may not treat, store, or dispose of hazardous waste in the modified portion of the facility, until:

11.10.12.a.1 The permittee has submitted to the Chief by certified mail or hand delivery, a letter signed by the permittee and a registered professional engineer, stating that the facility has been constructed or modified in compliance with the permit; and

11.10.12.a.1.i The Chief has inspected the modified or newly

constructed facility and finds it is in compliance with the conditions of the permit; or

11.10.12.a.1.ii Within fifteen (15) days of the date of submission of the letter in paragraph (a)(1) of this section, if the permittee has not received notice from the Chief of the intent to inspect, prior inspection is waived and the permittee may commence treatment, storage or disposal of hazardous waste.

* * * * *

COMMENTS OF WEST VIRGINIA MANUFACTURERS ASSOCIATION
ON PROPOSED LEGISLATIVE RULES OF
THE WEST VIRGINIA DEPARTMENT OF NATURAL RESOURCES
HAZARDOUS WASTE MANAGEMENT, CHAPTER 20, ARTICLE 5E (1985)

November 18, 1985

My name is Robert G. Worden. I am the President of the West Virginia Manufacturers Association. Our association has played an active role in support of the DNR's receipt of full authorization from EPA to manage the regulation of hazardous waste in West Virginia.

On October 3, 1985, the Director of the Department of Natural Resources filed in the Office of the Secretary of State certain emergency rules and proposed rules amending the DNR's hazardous waste management regulations. The regulations contain a preamble which stated that the regulations were being promulgated "to conform to federal requirements or to clarify the regulations on issues" that have been raised by U.S. EPA in its review of the DNR's final authorization application.

The current proposed amendments represent only one in a series of amendments that have been proposed by State agencies in an effort to play "catch-up" with an ever changing federal regulatory program. We recognize that a major effort is necessary for State agencies to maintain a State program which remains equivalent to a federal program which is constantly being revised. However, we believe that far too many man-hours have been expended by the DNR in attempting to "re-invent the wheel" in terms of drafting a regulatory program which could receive final authorization from EPA under RCRA. The many hours consumed in

this administrative effort could have been more profitably spent from the standpoint of the citizenry of West Virginia and our environment-in efforts to implement and enforce the State program.

Despite our concerns about the inappropriate manner in which some State agencies have approached the process of developing a State program, we have nevertheless reviewed the proposed changes on a substantive basis and offer the following comments.

1. Sec. 8.11.2(f) - A change has been made to this section by changing the term "non-mechanical" to read "no mechanical." This section, as revised, provides that no mechanical needs may be used to lower the water table. We would note that this is a condition which is more stringent than its federal counterpart.

The second and third sentences of this section now read as follows:

> This 3 foot distance may be achieved by elevating the waste disposal facility artificially or by non-mechanical lowering of the water table. However, no mechanical means (i.e, pumps) may be used to lower the water table.

We believe these two sentences are redundant and result in unnecessary confusion. We recommend that the third sentence of this section be deleted altogether.

2. 11.10.12(a) - This section has been revised to now specify that "the permittee shall give written notice to the Chief as soon as possible of any planned physical alterations or additions to the permitted facility." The regulations would

propose to delete the term "major" as qualifying the kinds of physical alterations or additions for which notification must be given. We recognize that the word "major" does not appear in EPA regulations. However, by requiring notice of "any physical alterations or additions", without limitation, permittee will be forced to consider any physical changes possibly triggering this notification requirement, without regard to whether the change would have an effect on public health or safety or the environment or whether such alteration or addition would affect the safe and adequate management of the waste. Indeed, the vast majority of physical changes which would be made at a facility would be irrelevant to any of these goals. Without some qualification of this notification requirement, it is overly broad, and not consistent with the purposes of the state Hazardous Waste Management Act. See, W. Va. Code §20-5E-2. We recommend that the notification requirement be modified to read as follows:

> The permittee shall give notice to the Chief as soon as practicable of any planned physical alterations or additions to the permitted facility which could reasonably be anticipated to endanger public health or safety or the environment or to affect the safe and adequate management of hazardous waste at the permitted facility.

We appreciate the opportunity to provide these comments for your consideration.

STATE OF WEST VIRGINIA
DEPARTMENT OF NATURAL RESOURCES
CHARLESTON 25305

ARCH A. MOORE, JR.
Governor

March 5, 1986

RONALD R. POTESTA
Director

MICHAEL A. FOTOS
Deputy Director

NOTICE OF AGENCY APPROVAL

LEGISLATIVE RULE: Hazardous Waste Management, W. Va. Administrative Regulations, Chapter 20, Article 5E, Series 15
(3rd Amendment)

The attached legislative rule constitutes the official rule approved by the West Virginia Department of Natural Resources on the 5th day of March, 1986 and filed pursuant to law with the West Virginia Secretary of State and the Legislative Rulemaking Review Committee.

Ronald R. Potesta
Director

FILED
1986 MAR -5 P 3:18

STATE OF WEST VIRGINIA
DEPARTMENT OF NATURAL RESOURCES
CHARLESTON 25305

ARCH A. MOORE, JR.
Governor

March 5, 1986

RONALD R. POTESTA
Director

MICHAEL A. FOTOS
Deputy Director

The Honorable Ken Hechler
Secretary of State
State Capitol, Suite 157-K
Charleston, West Virginia 25305

Re: Filing of Approved Rules (Hazardous Waste Management, Series 15) and Response to Comments

FILED
86 MAR -5 PM 12:13
SECRETARY OF STATE

Dear Mr. Hechler:

Enclosed please find for your filing a copy of approved amendments to the legislative rules of the Department of Natural Resources and a Response to Comments.

If you have any questions, please contact Mr. Ron Shipley, Director's Office of Regulatory Affairs, State Hazardous Waste Coordinator at 304-348-2761.

Sincerely,

Ronald R. Potesta

Ronald R. Potesta
Director

RRP/rsb

Enclosures

cc: David W. Robinson
Timothy T. Laraway
All State Hazardous Waste Management Agencies
Legislative Rulemaking Review Committee

PREAMBLE TO HAZARDOUS WASTE MANAGEMENT REGULATIONS

PROGRAM: Hazardous Waste Management

REGULATIONS: Hazardous Waste Management Regulations, West Virginia Department of Natural Resources, Chapter 20, Article 5E, Series 15

AUTHORITY: West Virginia Code Section 20-5E-6

ACTION: Approval of Rule and Response to Comments

TOPIC: Amendments to the Hazardous Waste Regulations based on EPA amendments between October 29, 1984 and May 8, 1985 and rulemaking petitions from the West Virginia Manufacturers' Association.

SUMMARY: This approved rulemaking reflects changes to the State's hazardous waste management program prompted by EPA regulatory changes primarily made between October 29, 1984 and May 8, 1985 as well as rulemaking petitions of the West Virginia Manufacturers' Association (WVMA). Some of these approved changes are necessary for the State to retain primacy of the federal program and for the State to receive final authorization of the RCRA program in effect prior to the Hazardous and Solid Waste Amendments of 1984 (HSWA). In addition, the West Virginia Manufacturers' Association has petitioned the Department four times for rulemaking to amend the State's regulations based on EPA regulatory amendments. This approved rulemaking completes the Department's response to most of the requested changes in the four petitions.

DATES: Agency approval of these regulations occurred on March 5, 1986.

CONTACT: Ron Shipley, Special Assistant to the Director, Director's Office of Regulatory Affairs, West Virginia Department of Natural Resources, 1800 Washington Street, East, Building 3, Room 842, Charleston, West Virginia 25305, (304) 348-2761.

SUPPLEMENTARY INFORMATION:

Response to Comments

The Department received comments from three organizations concerning sixty-six different sections or paragraphs of the proposed regulations. Twenty-one comments were deemed clerical or typographical changes and were adopted. In addition, one commenter provided a copy of the proposed regulations identifying

typographical and clerical errors. These were also utilized. We appreciate the assistance.

The remaining changes are based either on clarification suggestions or on suggestions that the Department should parallel federal regulations more closely. A synopsis of these changes follows:

§2 - Definitions.

We have adopted a definition of the term RCRA. This term appears throughout the regulations but was heretofore undefined.

§3 - Identification and Listing of Hazardous Wastes

§3.1.b - One commenter pointed out that the proposed regulation omitted the word "wastes" from this subsection. This was inadvertant and we have included this word in our adopted version.

3.1.1.c.4 - Table - One commenter suggested that we include a note at the end of the Table which is identical to the note in EPA's analogous Table. We have done so.

3.1.1.e.1.iii - One commenter suggested that we make the second sentence of this subsection conform to the EPA analogous provision. We have done so.

3.1.5.a.2.ii - Two comments were received about this section which conflicted with each other. We have adopted the recommendations of the West Virginia Air Pollution Control Commission and deleted the reference to their regulations in this section. The reason is that hazardous wastes which are burned for energy recovery are presently exempt from APCC Regulation 25. The reference to their regulations, therefore, is unnecessary and may be confusing.

3.1.5.c.1 - One commenter pointed out that EPA made a correction to this regulation on August 20, 1985 and urged that we make the same adjustment. We did so.

3.4.4 - One commenter pointed out that the reference to Section 3.1.1.a.2.i was incorrect since "discarded materials" were covered by subsections ii and iii also. We have changed the reference accordingly.

§5. Transportation of Hazardous Waste by Air or Water

One commenter suggested that the Department's incorporation by reference of EPA regulations was not specific enough. The Department proposed to incorporate by reference all appropriate EPA regulations except those that are adopted pursuant to the

Hazardous and Solid Waste Amendments of 1984 (HSWA). We proposed this exception because the State is currently seeking final authorization to implement the EPA program in existence prior to the passage of HSWA. We are fearful that adopting by reference regulations pursuant to HSWA may confuse EPA and delay authorization. Upon reflection we agree with the commenter that such an exception is unclear. The exception not only requires knowledge of the regulations but also the date and authority under which they were promulgated. The regulation, therefore, would be difficult for the regulated community to understand and therefore ineffective.

One suggested alternative was to list those EPA regulations which are not adopted pursuant to HSWA. Although possible to do, this regulatory scheme would require the State to amend its regulations whenever EPA adjusts its regulations pursuant to RCRA and not HSWA authority. This is also confusing and would result in ineffective regulations. We have, therefore, deleted the exception referencing HSWA. We have made the same change in Section 13.

§6. Standards Applicable to Generators of Hazardous Waste

6.3.5.b - One commenter requested that the Department adopt the thirty-day extension for storage which EPA may grant but that the State did not previously recognize. We have adopted an extension analogous to the EPA program.

§8. Standards for Owners and Operators of Hazardous Waste Treatment, Storage and Disposal Facilities

8.1.2 - The Air Pollution Control Commission commented that our reference to the coverage of their regulations was inaccurate since we limited it only to incinerators. We have corrected our explanation of their coverage.

§9. Standards for Management of Specific Hazardous Wastes and Specific Types of Hazardous Waste Management Facilities

9.3.1.a.2 - One commenter suggested that we clarify that this section make it clear that the mixture was one of recyclable materials and other substances which are not hazardous wastes. We have done so by adding the phrase "that are not hazardous wastes" after the phrase "other substances".

9.4.1.a - Two commenters (including the APCC) urge that we delete any reference to the Air Pollution Control Commission regulations. We have done so.

§11. Hazardous Waste Permitting Program

11.1.2.g - One commenter pointed out that this section did not

contain language delineating the action to which this applied and suggested that we add "taken during immediate response to any of the following situations:" Such omission was inadvertant. We have added this language.

11.7.1.a.2 - One commenter suggested that we add a "Note" to this section which parallels the EPA regulations. We have done so because it provides more guidance to the regulated community.

16.3.2.a - One commenter suggested that we add the word "accumulation" in the last sentence for clarification. We have done so.

In addition to the above suggestions which we accepted, the Department rejected several suggestions.

Variance for Boilers. One commenter argued that our failure to adopt the variance for boilers was inconsistent with our adoption of the boiler definition and therefore we should include the boiler variance provision. In our proposed rulemaking we declined to adopt the variance provision because we believe that such a provision is more appropriately left to the APCC. We still believe so and have not adopted the boiler variance.

The commenter argued that if we had the ability and expertise to define and establish regulations for boilers then we also have the ability and expertise to decide on whether a variance should be allowable under the regulations. Although we may have the ability and expertise we decline to do so and offer the following explanation.

As the lead agency for the hazardous waste program we have a responsibility for coordinating and implementing Chapter 20, Article 5E. One purpose of Article 5E is to assume regulatory primacy of the federal RCRA program. See W. Va. Code §20-5E-2(b0(4). See also: W. Va. Code §§20-5E-4 and 20-5E-5a. Secondly, W. Va. Code §20-5E-6(c) states that "...the director shall not promulgate rules and regulations which are more properly within the jurisdiction and expertise of any of the agencies empowered with rulemaking authority pursuant to section seven of this article." The APCC is one of those agencies.

The issue for the Department, however, was how do we meet the primary purpose of the article, i.e. assuming primacy while also retaining the proper roles of the various agencies?

The EPA regulations governing boilers are split into two categories by EPA when examining a State's program for delegation purposes. First are those provisions which must be in a State's program to make it "consistent and equivalent" with the federal program. Secondly are those provisions which a state may adopt or omit which would make the state program more stringent than

the federal program.

In order to meet the goal of Article 5E concerning primacy assumption, the Department decided that it had to adopt those boiler provisions which EPA considers necessary for delegation. We have done so in this rulemaking.

The variance rules, however, are not mandatory for delegation. Omission of them leaves the State's program more stringent. The APCC has advised the Department, however, that the "APCC director will propose a Regulation XXV boiler variance classification procedure when the Commission amends Regulation XXV.

Incinerator Definition

One commenter pointed out that the definition of incinerator in our regulation is different than the APCC's definition. Again, we are adopting this definition to satisfy EPA in the State's attempt to gain regulatory primacy. We have discussed this problem with the APCC and both agencies will work together to resolve the conflict.

Spent Materials and By-Products

All three commenters pointed out that EPA has amended its regulations concerning spent materials and by-products and urged the Department to do so also. Although that action will be necessary the Department declined to do so in this rulemaking since these provisions are significant additions to the regulations not subject to notice and rulemaking procedures. We plan to put such rules out for notice and comment shortly and promulgate such regulations under emergency rulemaking procedures if justifiable.

The Department did, however, add one section from the November 29, 1985 EPA rulemaking which was a clarification. We added subsection (B) to §3.1.2.c.2.ii which clarifies that wastes resulting from burning any of the exempt recyclable materials are not hazardous wastes.

Conclusion

Accordingly, the Department is filing the following rules as approved regulations.

Section 2. Definitions

For the purposes of these regulations, the following words and phrases shall have the meanings ascribed to them in this section unless the context of the regulations indicate otherwise.

~~(1)~~ "Active portion" means that portion of a facility where treatment, storage or disposal operations are being conducted. It includes the treated area of a landfarm and the active face of a landfill, but does not include those portions of a facility which have been closed in accordance with all applicable closure requirements;

~~(2)~~ "Administrator" means the administrator of the United States Environmental Protection Agency or his designee;

~~(3)~~ "Approved form" means any environmental Protection Agency standard national form for administering the hazardous waste provisions of RCRA, or a form approved by the Chief of the Division of Water Resources or the Director of the Department of Natural Resources;

~~(4)~~ "Aquifer" means a geologic formation, group of formations, or part of a formation that is capable of yielding a significant amount of groundwater to wells or springs;

~~(5)~~ "Application, part A" means that part of the application which a permit applicant must complete to qualify for interim status under Section 3005(e) of RCRA or these regulations and for consideration for a permit;

~~(6)~~ "Application, Part B" means that part of the application which a permit applicant must complete to be considered for a permit;

~~(120)~~ "Authorized representative" means the person responsible for the overall operation of a facility or an operational unit (i.e. - part of a facility), e.g. - the plant manager, superintendent or person of equivalent responsibility

~~(8)~~ "Boiler" means an enclosed device using controlled flame combustion and having the following characteristics:

(a) The unit must have physical provisions for recovering and exporting thermal energy in the form of steam, heated fluids, or heated gases; and

(b) the unit's combustion chamber and primary energy recovery section(s) must be of integral design. To be of integral design, the combustion chamber and primary energy recovery section(s) (such as waterwalls and superheaters) must be physically formed into one manufactured or assembled unit. A unit in which the combustion chamber and the primary energy recovery section(s) are joined only by ducts or connections carrying flue gas is not

integrally designed; however, secondary energy recovery equipment (such as economizers or air preheaters) need not be physically formed into the same unit as the combustion chamber and primary energy recovery section(s). The following units are not precluded from being boilers solely because they are not of integral design: process heaters (units that transfer energy directly to a process stream), and fluidized bed combustion units; and

(c) While in operation, the unit must maintain a thermal energy recovery efficiency of at least sixty percent (60%), calculated in terms of the recovered energy compared with the thermal value of the fuel; and

(d) The unit must export and utilize at least seventy-five percent (75%) of the recovered energy, calculated on an annual basis. In this calculation, no credit shall be given for recovered heat used in the same unit. (Examples of internal use are the preheating of fuel or combustion air, and the driving of induced or forced draft fans or feedwater pumps.);

~~(7)~~ "Calendar Year" means January 1 through December 31;

~~(8)~~ "Cell" means a discrete volume of a hazardous waste landfill which uses a liner to provide isolation of wastes from adjacent cells or wastes;

~~(9)~~ "Certification" means a statement of professional opinion based upon knowledge and belief;

~~(10)~~ "Chief" means the chief of the division of water resources of the Department of Natural Resources;

~~(11)~~ "Closed facility" means a facility which has been properly closed in accordance with the facility closure plan and all applicable regulations and requirements;

~~(12)~~ "Closed portion" means that portion of a facility which an owner or operator has closed in accordance with the facility closure plan and all applicable closure requirements;

~~(13)~~ "Closure" means the act of securing a hazardous waste management facility pursuant to the requirements of these regulations;

~~(14)~~ "Confined aquifer" means an aquifer, overlain by a confining layer of significantly lower hydraulic conductivity, containing ground water that is under sufficient pressure to rise above the level at which it is encountered by a well;

~~(14)~~ "Container" means any portable device in which a material is stored, transported, treated, disposed of or otherwise handled;

~~(15)~~ "Contingency plan" means a document setting out an organized,

planned and coordinated course of actions to be followed in the event of a fire, explosion or release of hazardous waste or hazardous constituents which could threaten human health or environment;

~~(16)~~ "Common code" means the unique code assigned by the Chemical Abstract Services (also known as the CAS Registry Number) to each EPA hazardous waste and to each Department of Transportation hazardous waste material;

~~(17)~~ "CWA" means the Clean Water Act (formerly referred to as the Federal Water Pollution Control Act), Public Law 92-500, as amended by Public Law 95-217 and Public Law 95-576;33 U.S.C. 1251 et seq.;

~~(18)~~ Designated facility (designated hazardous waste management facility)" means a hazardous waste treatment, storage or disposal facility which has received a permit from the Environmental Protection Agency in accordance with 40 CFR Parts 271 and 124, a permit from this State, or another authorized state hazardous waste program or which has been granted interim status or that is regulated under Section 3.1.5 or Section 9.6 of these regulations, and that has been designated on the manifest to receive a specific hazardous waste shipment;

~~(19)~~ "Dike" means an embankment or ridge of either natural or man-made materials used to contain liquids, sludges, solids, or other materials;

~~(20)~~ "Director" means the director of the department of Natural Resources;

~~(21)~~ "Discharge or hazardous waste discharge" means the accidental or intentional spilling, leaking, pumping, pouring, emitting, emptying or dumping of hazardous waste into or on any land or State waters;

~~(22)~~ "Disposal" means the discharge, deposit, injection, dumping, spilling, leaking or placing of any hazardous waste into or on any land or water so that such hazardous waste or any constituent thereof may enter the environment or be emitted into the air or discharged into any State waters;

~~(23)~~ "Disposal facility" means a facility or part of a facility at which hazardous waste is intentionally placed into or on any land or water, and at which the waste will remain after closure;

~~(24)~~ "Division" means the Division of Water Resources of the Department of Natural Resources;

~~(25)~~ "Domestic sewage" means untreated sanitary wastes that pass through a sewer system;

~~(26)~~ "DOT" means the United States Department of Transportation;

~~(124)~~ "Draft permit" means a document prepared under Section 11.21 indicating the Chief's tentative decision to issue, deny, modify, revoke and reissue, revoke, or reissue a permit;

~~(27)~~ "Elementary neutralization unit" means a device which (i) is used for neutralizing wastes which are hazardous only because they exhibit the corrosivity characteristic defined in Section 3.3.3 of these regulations, or are listed in Section 3.4 only for this reason; and, (ii) meets the definition of a tank, container, or transport vehicle in this section;

~~(28)~~ "Emergency permit" means a permit issued where an imminent and substantial endangerment to human health or the environment is determined to exist by the Director, or the Chief;

~~(29)~~ "EPA" means the United States Environmental Protection Agency;

~~(30)~~ "EPA hazardous waste number" means the number assigned by EPA to each hazardous waste listed in Section 3.4 of these regulations and to each characteristic identified in Section 3.3 of these regulations;

~~(31)~~ "EPA identification number" means the number assigned by EPA to each hazardous waste generator, hazardous waste transporter or hazardous waste facility;

~~(32)~~ "Equivalent method" means any testing or analytical method approved by the EPA Administrator under 40 CFR Section 260.20, and 260.21;

~~(33)~~ "Existing hazardous waste management facility or existing facility" means a facility which was in operation or for which construction commenced on or before July 10, 1981. Under this authority a facility has commenced construction if: (a) the owner or oeprator has obtained all necessary Federal, State and local approvals or permits to begin physical construction; and either (i) a continuous physical, on-site construction program has begun, or (ii) the owner or operator has entered into contractual obligations (which cannot be cancelled or modified without substantial loss) for construction of the facility to be completed within a reasonable time;

~~(34)~~ "Existing portion" means that land surface area of an existing waste management unit, included in the original Part A permit application, on which wastes have been placed prior to the issuance of a permit;

~~(35)~~ "Facility". See "hazardous waste management facility."

~~(36)~~ "Federal agency" means any department, agency, or other

instrumentality of the Federal government, any independent agency or establishment of the Federal government including any government corporation and the Government Printing Office;

~~(37)~~ "Federal, state, and local approvals or permits necessary to begin physical construction" means permits and approvals required under federal, state, or local hazardous waste control statutes, regulations, or ordinances;

~~(38)~~ "Final cover" means cover material that is applied upon closure of a landfill and is permanently exposed at the surface;

~~(39)~~ "Flash point" means the minimum temperature at which a liquid or solid gives off sufficient vapor to form an ignitable vapor-air mixture near the surface of the liquid or solid. An ignitable mixture is one that, when ignited, is capable of the initiation and propagation of flame away from the source of ignition. Propagation of flame means the spread of the flame from layer to layer independent of the source of ignition;

~~(40)~~ "Food chain crops" means tobacco, crops grown for human consumption, or crops grown for pasture, forage or feed for animals whose products are consumed by humans;

~~(41)~~ "Foreign source" means a source outside the geographical boundaries of the continental United States;

~~(42)~~ "Freeboard" means the vertical distance between the top of a surface impoundment, open tank, or other containment device and the surface of the waste contained therein;

~~(43)~~ "Free liquids" means liquids which readily separate from the solid portion of a waste under ambient temperature and pressure;

~~(44)~~ "Generator" means any person, by site location, whose actor process produces hazardous waste identified or listed in Section 3 of these regulations or whose act first causes a hazardous waste to become subject to these regulations;

~~(45)~~ "Groundwater" means water below the land surface in a zone of saturation;

~~(46)~~ "Hazardous constituent" or "constituent" are constituents identified in Appendix VIII of Section 3 of these regulations or constituents that caused the Director to list the hazardous waste in Section 3.4 of these regulations or constituents listed in Table 1 of Section 3.3.5 of these regulations, that are reasonably expected to be in or derived from waste contained in a regulated unit or that have been detected in groundwater in the uppermost aquifer underlying a regulated unit;

~~(47)~~ "Hazardous Waste" means a hazardous waste as defined in Section 3.1.2 except as 3.1b provides otherwise;

~~(48)~~ "Hazardous waste activity" means the handling of hazardous waste as in the generation, transportation, treatment, storage, or disposal of any hazardous waste;

~~(49)~~ "Hazardous waste generation" means the act or process of producing hazardous waste materials;

~~(50)~~ "Hazardous waste management" means the systematic control of the collection, source separation, storage, transportation, processing, treatment, recovery and disposal of hazardous wastes;

~~(51~~ "Hazardous waste management facility (facility)" means all contiguous land and structures, other appurtenances, and improvements on the land used for treating, storing, or disposing of hazardous waste. A facility may consist of several treatment, storage or disposal operational units;

~~(118)~~ "Inactive Portion" means that portion of a facility which has not been in operation since the effective date of Section 3 of these regulations;

"Incinerator" means any enclosed device using controlled flame combustion that neither meets the criteria for classification as a boiler nor is listed as an industrial furnace.

~~(52)~~ "Incompatible waste" means a hazardous waste which is unsuitable for: (a) placement in a particular device or facility because it may cause corrosion or decay of containment materials; or (b) commingling with another waste or material under uncontrolled conditions because the commingling might produce heat or pressure, fire or explosion, violent reaction, toxic dusts, mists, fumes or gases, or flammable fumes or gases;

~~(53)~~ "Individual generation site" means the contiguous site at or on which one or more hazardous wastes are generated. An individual generation site, such as a large manufacturing plant may have one or more sources of hazardous waste, but is considered a single or individual generation site if the site or property is contiguous;

~~(54)~~ "In operation" means facilities that are treating, storing or disposing of hazardous waste;

"Industrial furnace" means any of the following enclosed devices that are integral components of manufacturing processes and that use controlled flame devices to accomplish recovery of materials or energy:

(1) Cement kilns

(2) Lime Kilns

(3) Aggregate kilns

(4) Phosphate kilns

(5) Coke ovens

(6) Blast furnaces)

(7) Smelting, melting and refining furnaces (including pyrometallurgical devices such as cupolas, reverberator furnaces,sintering machine. roasters, and foundry furnaces)

(8) Titanium dioxide chloride process oxidation reactors.

(9) Methane reforming furnaces.

(10) Pulping liquor recovery furnaces.

(11) Combustion devices used in the recovery of sulfur values from spent sulfuric acid.

(12) Such other devices as the Administrator may, after notice and comment, add to this list on the basis of one or more of the following factors:

(i) The design and use of the device primarily to accomplish recovery of material products;

(ii) The use of the device to burn or reduce raw materials to make a material product;

(iii) The use of the device to burn or reduce secondary materials as effective substitutes for raw materials, in processes using raw materials as principal feedstocks;

(iv) The use of the device to burn or reduce secondary materials as ingredients in an industrial process tomake a material product;

(v) The use of the device in common industrial practice to produce a material product; and

(vi) Other factors, as appropriate.

~~(44)~~ "Injection well" means a well or bore hole into which fluids are injected;

~~(56)~~ "Inner liner" means a continuous layer of material placed inside a tank or container which protects the construction materials of the tank or container from the contained waste or reagents used to treat the waste;

~~(57)~~ "Interim status" means the status obtained by any person who owns or operates a facility in existence, or existing on July 10, 1981, and required to have a permit under these regulations. Such

facilities will be treated as having been issued a permit until such time as final administrative disposition is made with respect to an applicant for such permit provided that such facility is operating and continues to operate in compliance with interim status requirements of Section 3005 of the Federal Solid Waste Disposal Act, and in such a manner as will not cause or create a substantial risk of a health hazard or public nuisance or a significant adverse effect upon the environment;

~~(58)~~ "International shipment" means the transportation of hazardous waste, into or out of the jurisdiction of the United States;

~~(59)~~ "Landfill" means a disposal facility or part of a facility where hazardous waste is placed in or on land and which is not a land treatment facility, a surface impoundment, or an injection well;

~~(60)~~ "Landfill cell" See "cell".

~~(61)~~ "Land treatment facility" means a facility or part of a facility at which hazardous waste is applied onto or incorporated into the soil surface; such facilities are disposal facilities if the waste will remain after closure;

~~(62)~~ "Leachate" means liquid, including any suspended components in the liquid, that has percolated through or drained from hazardous waste;

~~(63)~~ "Liner" means a continuous layer of natural or man-made materials beneath or on the sides of a surface impoundment, landfill, or landfill cell which restricts the downward or lateral escape of hazardous waste, hazardous waste constituents or leachate;

~~(64)~~ "Major facility" means a disposal or treatment facility which disposes or treats an amount of hazarodus waste exceeding or equal to 1,000 tons during a calendar year, and any storage facility having a storage capacity for 1,000 tons of hazardous waste or more;

~~(65)~~ "Manifest" means the shipping document originated and signed by the generator, which contains the information required by Section 6.2.

~~(66)~~ "Manifest document number" means the serial number assigned to the manifest by the generator for recordkeeping and reporting purposes;

~~(67)~~ "Mining overburder returned to the mine site" means any material overlying an economic mineral deposit which is removed to gain access to that deposit and is then used for reclamation of a surface mine;

~~(68)~~ "Monitoring" means all procedures used to inspect and quantify the chemical or physical characteristics of the air, State waters or soils;

~~(69)~~ "Movement" means transportation of hazardous waste to a facility in an individual transportation vehicle;

~~(70)~~ "New hazardous waste management facility" or "New facility" means a facility which began operation, or for which construction commenced after July 10, 1981. (See also, "existing hazardous waste management facility");

~~(74)~~ "Not in service" means a regulated unit that has ceased receiving hazardous waste and has been emptied to the point that portions of the liner(s) are exposed below the normal operating level;

~~(72)~~ "NPDES (National Pollutant Discharge Elimination System)" means the national program for issuing, modifying, revoking, reissuing, terminating, monitoring and enforcing permits and imposing and enforcing pre-treatment requirements pursuant to Sections 307, 402, 318 and 405 of the CWA. The term includes any approved State program;

~~(73)~~ "On site" means on the same or geographically contiguous property which may be divided by public or private rights-of-way, provided the entrance and exit between the properties is at a cross-roads intersection, and access is by crossing as opposed to going along the rights-of-way. Non-contiguous properties owned by the same person but connected by a right-of-way which the person controls and to which the public does not have access, is also considered on-site property;

~~(74)~~ "Operator means the person responsible for the overall operation of a hazardous waste management facility;

~~(75)~~ "Owner" means the person who owns a hazardous waste management facility or part of a hazardous waste management facility;

~~(76)~~ "Packaging" means the assembly of one or more containers and any other components necessary to assure compliance with the minimum packaging requirements under 49 CFR 173, 178, and 179 and includes containers (other than freight containers or overpacks), portable tanks, cargo tanks, tank cars and multi-unit tank car units;

~~(77)~~ "Partial closure" means the closure of a discrete port of a facility in accordance with the applicable closure requirements of these regulations;

~~(78)~~ "Permit by rule" means the provision of these regulations stating that a "facility or activity" is deemed to have a permit

if it meets the requirements of such provision;

~~(79)~~ "Permit" means a control document issued by this state pursuant to the State Act and these regulations, or by other states having an authorized program pursuant to Section 3006 of RCRA or by the EPA Administrator pursuant to applicable Federal regulations, or a facility having "interim status";

~~(80)~~ "Permitted hazardous waste management facility (or permitted facility)" means a hazardous waste treatment, storage, or disposal facility that has received an EPA RCRA permit, a RCRA permit from an authorized state pursuant to Section 3006 of RCRA, or a State permit in accordance with the requirements of these regulations, or a facility having "interim status";

~~(81)~~ "Person" means an individual, trust, firm, joint stock company, public, private or government corporation, partnership, association, State or Federal agency, the United States government, this State or any other State, municipality, county commission or any other political subdivision of a State or any interstate body;

~~(82)~~ "Personnel or facility personnel" means all persons who work at, or oversee the operations of a hzardous waste management facility, and whose actions or failure to act may result in noncompliance with the requirements of these regulations;

~~(83)~~ "Physical construction" or "construct" means excavation, movement of earth, erection of forms or structures, or similar activity involving the actual preparation of a hazardous waste management facility;

~~(84)~~ "Pile" means any non-containerized accumulation of solid, non-flowing hazardous waste that is used for treatment or storage;

~~(85)~~ "Point source" means any discernible, confined and discrete conveyance, including, but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation or vessel or other floating craft, from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture;

~~(86)~~ "Publicly owned treatment works (POTW)" means any device or system used in the treatment (including recycling and reclamation) of municipal sewage or industrial wastes of a liquid nature which is owned by a State or municipality (as defined by Section 502(4) of the CWA). This definition includes sewers, pipes, or other conveyances only if they convey wastewater to a POTW providing treatment;

<u>"RCRA" means the Subtitle C, the Resource Conservation and Recovery Act, as amended of the Federal Solid Waste Disposal Act,</u>

as amended.

~~(87)~~ "Representative sample" means a sample of a universe or whole which can be expected to exhibit the average properties of the universe or whole;

~~(88)~~ "Retrofitting" means the act of installing or upgrading a regulated unit with liners, leachate collection, detection, and removal systems not installed at the time of original construction;

~~(423)~~ "Revocation," when the term is used in Section 11 in the context of a permit action, means an action which renders a permit permanently null and void;

~~(89)~~ "Run-off" means any rainwater, leachate, or other liquid that drains over land from any part of a facility;

~~(90)~~ "Run-on" means any rainwater, leachate, or other liquid that drains over land onto any part of a facility;

~~(91)~~ "Saturated zone (zone of saturation)" means that part of the earth's crust in which all voids are filled with water;

~~(92)~~ "SDWA" means the safe drinking water act (public law 95-523, as amended by Public Law 95-1900);

~~(93)~~ "SIC" means standard industrial classification,

~~(94)~~ "Sludge" means any solid, semi-solid or liquid waste generated from a municipal, commercial, or industrial wastewater treatment plant, water supply treatment plant, or air pollution control facility, exclusive of the treated effluent from a wastewater treatment plant;

~~(95) "Spill" means the accidental spilling, leaking, pumping, pouring, emitting, emptying, or dumping of hazardous wastes or materials which, when spilled, become hazardous wastes into or on any land or water;~~

~~(96)~~ "State act" means the hazardous waste management act, 20-5E-1, et seq.

~~(97)~~ "State waters" or "waters" means any and all water on or beneath the surface of the ground, whether percolating, standing, diffused or flowing, wholly or partially within this State, or bordering this State and within its jurisdiction, and shall include, without limiting the generality of the foregoing, natural or artificial lakes, rivers, streams, creeks, branches, brooks, ponds (except farm ponds, industrial settling basins and ponds and water treatment facilities), impounding reservoirs, springs, wells, water-courses and wetlands;

~~(98)~~ "Storage" means the holding of hazardous waste for a temporary period, at the end of which the hazardous waste is treated, disposed of, or stored elsewhere;

~~(99)~~ "Storm" means the 5-year, 24-hour rainfall event for a particular location as it relates to the inspection requirements specified in Sections 8.9.5, 8.10.5 and 8.11.3; "storm" for the purposes specified in the design requirements of Sections 8.9.2, 8.10.2, and 8.11.2 shall mean a 25-year, 24-hour rainfall event for a particular location. Both definitions are as defined by the National Weather Service in Technical Paper #40, "Rainfall Frequency Atlas of the United States," May 1961, and subsequent amendments thereto or equivalent region or State rainfall probability information developed therefrom;

~~(100)~~ "Surface impoundment or impoundment" means a facility or part of a facility which is a natural topographic depression, man-made excavation, or diked area formed primarily of earthen materials (although it may be lined with man-made materials), which is designed to hold an accumulation of liquid wastes or wastes containing free liquids, and which is not an injection well. Examples of surface impoundments are holding, storage, settling, and aeration pits, ponds and lagoons;

~~(125)~~ "Suspension," when used in Section 11 in the context of a permit action, means an action which renders a permit temporarily null and void until such time as the Chief reinstates, modifies, revokes, or revokes and reissues the permit in accordance with the applicable provisions of Section 11 of these regulations.

~~(101)~~ "Tank" means a stationary device, designed to contain an accumulation of hazardous waste which is constructed primarily of non-earthen materials which provide structural support;

~~(124)~~ "Termination," when the term is used in Section 11 in the context of a permit action, means the same as the term "revocation;"

~~(102)~~ "Totally enclosed treatment facility" means a facility for the treatment of hazardous waste which is directly connected to an industrial production process and which is constructed and operated in a manner which prevents release of any hazardous waste or any constituent thereof into the environment during treatment;

~~(103)~~ "Transfer facility" means any transportation related facility including loading docks, parking areas, storage areas, and other similar areas where shipments of hazardous waste are held during the normal course of transportation;

~~(104)~~ "Transportation" means the movement of hazardous waste by air, rail, highway or water;

~~(105)~~ "Transporter" means a person engaged in the off-site

transportation of hazardous waste by air, rail, highway or water;

~~(106)~~ "Transport vehicle" means a motor vehicle or rail car used for the transportation of cargo by any mode. Each cargo-carrying body (trailer, railroad freight car, etc.) is a separate transport vehicle;

~~(107)~~ "Treatment" means any method, technique, or process including neutralization, designed to change the physical, chemical, or biological character or composition of any hazardous waste so as to neutralize such waste or so as to render such waste non-hazardous, safer to transport, store or dispose of, or amenable to recovery, amenable for storage or reduced in volume. Such term includes any activity or processing designed to change the physical form or chemical composition of hazardous waste as to render it non-hazardous;

~~(108)~~ "Treatment zone" means a soil area of the unsaturated zone of a land treatment unit within which hazardous constituents are degraded, transformed or immobilized;

~~(109)~~ "Triple rinsed" means containers which have been flushed three (3) times, each time using a volume of ~~dilutant~~ diluent at least equal to ten percent (10%) of the container's capacity;

~~(122)~~ "Underground injection" means the sub-surface emplacement of fluids through a bored, drilled or driven well; or through a dug well, where the depth of the dug well is greater than the largest surface dimension (see also "injection well");

~~(110)~~ "Unsaturated zone" or "zone of aeration" means the zone between topographic surface and the water table;

~~(111)~~ "Uppermost aquifer" means the geologic formation nearest the natural ground surface that is an aquifer, as well as lower aquifers that are hydraulically interconnected with this aquifer within the facility's property boundary;

~~(119)~~ "Vessel" means every description of water craft used or capable of being used as a means of transportation on the water;

~~(112)~~ "Waste" means waste as defined in section 3.1.1.

~~(113)~~ "Wastewater treatment unit" means a device which: (i) is part of a wastewater treatment facility which is subject to regulation under the CWA; (ii) receives and treats or stores an influent wastewater which is a hazardous waste as defined in this section, or generates and accumulates, or treats or stores a wastewater treatment sludge that is defined as a hazardous waste; and (iii) meets the definition of a tank as defined in this section;

~~(114)~~ "Water (bulk shipment)" means the bulk transportation of

hazardous waste which is loaded or carried on board a vessel without containers or labels;

~~(115)~~ "Water table" means the upper surface of the zone of saturation in groundwaters in which the hydrostatic pressure is equal to atmospheric pressure;

~~(116)~~ "Well" means any shaft or pit dug, drilled, jetted, driven or bored into the earth, generally of a cylindrical form, and often cased with bricks or tubing to prevent the earth from caving in, whose depth is greater than the largest surface dimension;

Section 3. Identification and Listing of Hazardous Waste

3.1 Purpose and Scope

3.1a This section identifies those wastes which are subject to regulation as hazardous wastes.

~~3.1b This section identifies only some of the materials which are hazardous wastes for purposes of Sections 5, 12, 13, and 17 of the West Virginia Code, Chapter 20, Article 5E. A material which is not a hazardous waste identified or listed in this section may still be a hazardous waste for purposes of those sections if the Director has reason to believe that the material may be a hazardous waste within the meaning of 20-5E-3(6) of the State Act.~~

3.1.b The definition of waste contained in this section applies only to wastes that are also hazardous for purposes of the State Act and the regulations implementing the State Act. For example, it does not apply to materials (such as non-hazardous scrap,paper, textiles or rubber) that are not otherwise hazardous wastesandthat are recycled.

3.1.b.1 This section identifies only some of the materials which are wastes and hazardous wastes under Sections 5, 12, 13, and 17 of the State Act. A material which is not defined as a waste in this section, or is not a hazardous waste identified or listed in this section, is still a waste and a hazardous waste for purposes of these sections if:

3.1.b.2 In the case of Sections 20-5E-12 and 20-5E-13 of the State Act, the Director has reason to believe the material may be a waste within the meaning of Section 20-5E-3(12) of the State Act and a hazardous waste within the meaning of Section 20-5E-3(6) of the State Act; or

3.1.b.3 In the case of Section 20-5E-17, the statutory elements are established.

3.1c For the purposes of Sections 3.1.1 and 3.1.5:

3.1.c.1 A "spent material" is any material that has been used and as a result of contamination can no longer serve the purpose for which it was produced without processing;

3.1.c.2 "Sludge" has the same meaning used in Section 2 of these regulations;

3.1.c.3 A "by-product" is a material that is not one of the primary products of a production process and is not solely or separately produced by the production process. Examples are process residues such as slag or distillation column bottoms. The term does not include a co-product that is produced for the general public's use and is ordinarily used in the form it is

produced by the process;

3.1.c.4 A material is "reclaimed" if it is processed to recover a usable product or if it is regenerated. Examples are recovery of lead values from spent batteries and regeneration of spent solvents;

3.1.c.5 A material is "used or reused" if it is either;

3.1.c.5A Employed as an ingredient (including use as an intermediate) in an industrial process to make a product, (for example, distillation bottoms from one process used as feedstock for another process.) However, a material will not satisfy this condition if distinct components of the material are recovered as separate end products (as when metals are recovered from metal-containing secondary materials); or

3.1.c.5B Employed in a particular function or application as an effective substitute for a commercial product (for example, spent pickle liquor used as phosphorus precipitant and sludge conditioner in wastewater treatment);

3.1.c.6 "Scrap metal" is bits and pieces of metal parts (e.g.,) bars, turnings, rods, sheets, wire) or metal pieces that may be combined together with bolts or soldering (e.g., radiators, scrap automobiles, railroad box cars), which when worn or superfluous can be recycled;

3.1.c.7 A material is "recycled" if it is used, reused or reclaimed;

3.1.c.8 A material is "accumulated speculatively" if it is accumulated before being recycled. A material is not accumulated speculatively, however, if the person accumulating it can show that the material is potentially recyclable and has a feasible means of being recycled; and that - during the calendar year (commencing on January 1) - the amount of material that is recycled, or transferred to a different site for recycling, equals at least 75 percent by weight or volume of the amount of that material accumulated at the beginning of the period. In calculating the percentage of turnover, the 75 percent requirement is to be applied to each material of the same type (e.g., slags from single smelting process) that is recycled in the same way (i.e., from which the same material is recovered or that is used in the same way). Materials accumulating in units that would be exempt from regulation under Section 3.1.3(c) are not to be included in making the calculation. (Materials that are already defined as wastes also are not to be included in making the calculation.) Materials are no longer in this category once they are removed from accumulation for recycling, however.

3.1.1 Definitions of Waste

~~3.1.1a A waste is any garbage, refuse, sludge or any other waste material which is not excluded under 3.1.3(a).~~

3.1.1.a.1 A waste is any discarded material that is not excluded by Section 3.1.3.a or that is not excluded by variance granted under Section 16.3.

3.1.1.a.2 A discarded material is any material which is:

3.1.1.a.2.i Abandoned, as explained in paragraph b of this subsection; or

3.1.1.a.2.ii Recycled, as explained in paragraph c of this subsection; or

3.1.1.a.2.iii Considered inherently waste-like, as explained in paragraph d of this section.

~~3.1.1b An "other waste material" is any solid, liquid, semi-solid or contained gaseous material, resulting from industrial, commercial, mining or agricultural operations, or from community activities which:~~

~~3.1.1.b.1 Is discarded or is being accumulated, stored or physically, chemically or biologically treated prior to being discarded; or~~

~~3.1.1.b.2 Has served its original intended use and sometimes is discarded; or~~

~~3.1.1.b.3 Is a manufacturing or mining by product and sometimes is discarded.~~

3.1.1.b Materials are waste if they are abandoned by being:

3.1.1.b.1 Disposed of; or

3.1.1.b.2 Burned or incinerated; or

3.1.1.b.3 Accumulated, stored, or treated (but not recycled) before or in lieu of being abandoned by being disposed of, burned or incinerated.

~~3.1.1c A material is "discarded" if it is abandoned (and not used, re-used, reclaimed or recycled) by being:~~

~~3.1.1.c.1 Disposed of; or~~

~~3.1.1.c.2 Burned or incinerated, except where the material is being burned as a fuel for the purpose of recovering usable energy; or~~

~~3.1.1.c.3 Physically, chemically or biologically treated (other

~~than--burned-or-incinerated)-in-lieu-of-or-prior-to-being-disposed of.~~

3.1.1.c Materials are waste if they are recycled - or accumulated, stored or treated before recycling - as specified in paragraphs c.1 through c.4 of this section.

3.1.1.c.1 Used in a manner constituting disposal.

3.1.1.c.1.i Materials noted with a "*" in column 1 of Table 1 are wastes when they are:

3.1.1.c.1.i.A Applied to or placed on the land in a manner that constitutes disposal; or

3.1.1.c.1.i.B Contained in products that are applied to the land (in which case the product itself remains a waste).

3.1.1.c.1.i.C However, commercial chemical products listed in Section 3.4.4 are not wastes if they are applied to the land and that is their ordinary manner of use.

3.1.1.c.2 Burning for energy recovery.

3.1.1.c.2.i Materials noted with a "*" in column 2 of Table 1 are wastes when they are:

3.1.1.c.2.i.A Burned to recovery energy;

3.1.1.c.2.i.B Used to produce a fuel or are otherwise contained in fuels (in which case the fuel itself remains a waste).

3.1.1.c.2.ii However, commercial chemical products listed in Section 3.4.4 are not wastes if they are themselves fuels.

3.1.1.c.3 Reclaimed. Materials noted with a "*" in column 3 of Table 1 are wastes when reclaimed.

3.1.1.c.4 Accumulated speculatively. Materials noted with a "*" in column 4 of Table 1 are wastes when accumulated speculatively.

Table 1
(All new language.)

	Use constituting disposal (1)	Energy recovery/ fuel (2)	Reclamation (3)	Speculative accumulation (4)
Spent materials	*	*	*	*
Sludges (listed in Sections (3.4.2 and 3.4.3)	*	*	*	*
Sludges exhibiting a characteristic of hazardous waste	*	*		*
By-products (listed in Section (3.4.2 and 3.4.3)	*	*	*	*
By-products exhibiting a characteristic of hazardous waste	*	*		*
Commercial chemical products listed in Section (3.4.4)	*	*		
Scrap metal	*	*	*	*

NOTE: The terms "spent materials", "sludges", "by-products" and "scrap metal" are defined in Section 3.1.6.

~~3.1.1.d--A--material--is--"disposed--of"--if--it--is---discharged, deposited,--injected,-dumped,-spilled,-leaked-or-placed-into-or-on any-land-or-water-so-that-such-material-or-any-constituent-thereof may-enter-the-environment-or-be-emitted-into-the-air-or-discharged into-ground-or-surface-waters.~~

3.1.1.d Inherently waste-like materials. The following materials are wastes when they are recycled in any manner:

3.1.1.d.1 (Reserved)

3.1.1.d.2 The Director will use the following criteria to add wastes to that list:

3.1.1.d.2.i.A The materials are ordinarily disposed, burned or

incinerated; or

3.1.1.d.2.i.B The materials contain toxic constituents listed in Appendix VIII of this Section and these constituents are not ordinarily found in raw materials or products for which the materials substitute (or are found in raw materials or products in smaller concentrations) and are not used or reused during the recycling process; and

3.1.1.d.2.ii The material may pose a substantial hazard to human health and the environment when recycled.

~~3.1.1.e A "manufacturing or mining by product" is a material that is not one of the primary products of a particular manufacturing or mining operation, is a secondary and incidental product of the particular operation and would not be solely and separately manufactured or mined by the particular manufacturing or mining operation. The term does not include an intermediate manufacturing or mining product which results from one of the steps in a manufacturing or mining process and is typically processed through the next step of the process within a short time. (Note: This definition of waste currently excludes from regulations materials which are burned as fuel for the purpose of recovering usable energy. The Director believes that elimination of this exclusion may, at some future time, be necessary in order to protect the public health and safety and the environment, as required by statute.)~~

3.1.1.e Materials that are not waste when recycled.

3.1.1.e.1 Materials are not wastes when they can be shown to be recycled by being:

3.1.1.e.1.i Used or reused as ingredients in an industrial process to make a product, provided the materials are not being reclaimed; or

3.1.1.e.1.ii Used or reused as effective substitutes for commercial products;

3.1.1.e.1.iii Returned to the original process from which they are generated, without first being reclaimed. The material must be returned as a substitute for raw material feedstock, and the process must use raw materials as principal feedstocks.

3.1.1.e.2 The following materials are wastes, even if the recycling involves use, reuse or return to the original process (described in paragraphs e.1.i through iii of this subsection):

3.1.1.e.2.i Materials used in a manner constituting disposal, or used to produce products that are applied to the land; or

3.1.1.e.2.ii Materials burned for energy recovery, used to produce

a fuel, or contained in fuels; or

3.1.1.e.2.iii Materials accumulated speculatively; or

3.1.1.e.2.iv (Reserved)

3.1.1.f Documentation of claims that materials are not wastes or are conditionally exempt from regulation. Respondents in actions to enforce regulations implementing the State Act who raise a claim that a certain material is not a waste, or is conditionally exempt from regulation, must demonstrate that there is a known market or disposition for the material, and that they meet the terms of the exclusion or exemption. In doing so, they must provide appropriate documentation (such as contracts showing that a second person uses the material as an ingredient in a production process) to demonstrate that the material is not a waste, or is exempt from regulation. In addition, owners or operators of facilities claiming that they actually are recycling materials must show that they have the necessary equipment to do so.

3.1.2 Definition of Hazardous Waste

3.1.2a A waste as defined in Section 3.1.1 is a hazardous waste if:

3.1.2.a.1 It is not excluded from regulation as a hazardous waste under Section 3.1.3(b); and

3.1.2.a.2 It meets any of the following criteria:

3.1.2.a.2.i It is listed in Section 3.4 and has not been excluded from the list in Section 3.4 pursuant to Section 16.

3.1.2.a.2.ii It is a mixture of waste and one or more hazardous wastes listed in Section 3.4 and has not been excluded under Section 16; or

3.1.2.a.2.iii It exhibits any of the characteristics of hazardous waste identified in Section 3.3.

3.1.2.b A waste which is not excluded from regulation under paragraph (a)(1) of this section becomes a hazardous waste when any of the following events occur:

3.1.2.b.1 In the case of a waste listed in Section 3.4 when the waste first meets the listing description set forth in Section 3.4;

3.1.2.b.2 In the case of a mixture of a waste and one or more listed hazardous wastes, when a hazardous waste listed in Section 3.4 is first added to the waste;

3.1.2.b.3 In the case of any other waste (including a waste

mixture), when the waste exhibits any of the characteristics identified in Section 3.3.

3.1.2.c Unless and until it meets the criteria of paragraph (d):

3.1.2.c.1 A hazardous waste will remain a hazardous waste.

~~3.1.2.c.2 Any waste generated from the treatment, storage or disposal of a hazardous waste, including any sludge, spill residue, ash, emission control dust or leachate (but not including precipitation run-off), is a hazardous waste.~~

3.1.2.c.2.i Except as otherwise provided in paragraph 3.1.2.c.2.ii of this section, any waste generated from the treatment, storage, or disposal of a hazardous waste, including any sludge, spill residue, ash, emmissions control dust, or leachate (but not including precipitation run-off) is a hazardous waste. (However, materials that are reclaimed from waste and that are used beneficially are not wastes and hence are not hazardous wastes under this provision unless the reclaimed material is burned for energy recovery or used in a manner constituting disposal.)

3.1.2.c.2.ii The following wastes are not hazardous wastes even though they are generated from the treatment, storage, or disposal of a hazardous waste, unless they exhibit one or more of the characteristics of hazardous waste: (A) Waste pickle liquor sludge generated by lime stabilization of spent pickle liquor from the iron and steel industry (SIC Codes 331 and 332); (B) wastes from burning any of the materials exempted from regulation by Section 3.1.5.a.3.

3.1.2.d Any waste described in paragraph (c) is not a hazardous waste if it meets the following criteria:

3.1.2.d.1 In the case of any waste, it does not exhibit any of the characteristics identified in Section 3.3.

3.1.2.d.2 In the case of a waste which is a listed waste under Section 3.4, contains a waste listed under Section 3.4 or is derived from a waste listed in section 3.4, it also has been excluded from paragraph (c) under Section 16.

3.1.3 Exclusions

3.1.3a Materials which are not wastes.

The following materials are not wastes for the purposes of this section:

3.1.3.a.1.i Domestic sewage; and

3.1.3.a.1.ii Any mixture of domestic sewage and other wastes that passes through a sewer system to a publicly-owned treatment works

for treatment. "Domestic sewage" means untreated sanitary wastes that pass through a sewer system.

3.1.3.a.2 Industrial wastewater discharges that are point source discharges subject to regulation under Section 402 of the Clean Water Act, as amended. (Comment: This exclusion applies only to the actual point source discharge. It does not exclude industrial wastewaters while they are being collected, stored or treated before discharge, nor does it exclude sludges that are generated by industrial wastewater treatment.)

3.1.3.a.3 Irrigation return flows.

3.1.3.a.4 Source, special nuclear, or by-product material as defined by the Atomic Energy Act of 1954, as amended, 42 U.S.C. 2011, et seq.

3.1.3.a.5 Materials subjected to in-situ mining techniques which are not removed from the ground as part of the extraction process.

3.1.3.a.6 Pulping liquors (i.e., black liquor) that are reclaimed in a pulping liquor recovery furnace and then reused in the pulping process, unless it is accumulated speculatively as defined in Section 3.1.c.8 of these regulations.

3.1.3.a.7 Spent sulfuric acid used to produce virgin sulfuric acid, unless it is accumulated speculatively as defined in Section 3.1.c.8 of these regulations.

3.1.3.b Wastes which are not hazardous wastes. The following wastes are not hazardous wastes:

3.1.3.b.1 Household waste, including household waste that has been collected, transported, stored, treated, disposed, recovered (e.g., refuse-derived fuel) or reused. "Household waste" means any waste material (including garbage, trash and sanitary wastes in septic tanks) derived from households (including single and multiple residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds, and day-use recreation areas).

3.1.3.b.2 Wastes generated by any of the following, and which are returned to the soil as fertilizers:

3.1.3.b.2.i The growing and harvesting of agricultural crops.

3.1.3.b.2.ii The raising of animals, including animal manures.

3.1.3.b.3 Mining overburden returned to the mine site.

3.1.3.b.4 Fly ash waste, bottom ash waste, slag waste, and flue gas emission control waste generated primarily from the combustion of coal or other fossil fuels.

3.1.3.b.5 Drilling fluids, produced waters, and other wastes associated with the exploration, development, or production of crude oil, natural gas or geothermal energy.

3.1.3.b.6.i Wastes which fail the test for the characteristic of EP toxicity because chromium is present or are listed in 3.4 due to the presence of chromium which do not fail the test for the characteristic of EP toxocity for any other constituent or are not listed due to the presence of any other constituent, and which do not fail the test for any other characteristic, if it is shown by a waste generator or by waste generators that:

3.1.3.b.6.i.A The chromium in the waste is exclusively (or nearly exclusively) trivalent chromium; and

3.1.3.b.6.i.B The waste is generated from an industrial process which uses trivalent chromium exclusively (or nearly exclusively) and the process does not generate hexavalent chromium; and

3.1.3.b.6.i.C The waste is typically and frequently managed in non-oxidizing environments.

3.1.3.b.6.ii Specific wastes which meet the standard in paragraphs (b) (6) (i), (A), (B), and (C), (so long as they do not fail the test for the characteristic of EP toxicity, and do not fail the test for any other characteristic) are:

3.1.3.b.6.ii.A Chrome (blue) trimmings generated by the following sub-categories of the leather tanning and finishing industry; hair pulp/chrome tan/retan/wet finish/ hair save/chrome tan/retan/wet finish; retan/wet finish; no beamhouse; through-the-blue; and shearling.

3.1.3.b.6.ii.B Chrome (blue shavings generated by the following sub-categories of the leather tanning and finishing industry; hair pulp/chrome tan/retan/wet finish/ hair save/chrome tan/retan/wet finish/ retan/wet finish/ no beamhouse; through-the-blue; and shearling.

3.1.3.b.6.ii.C Buffing dust generated by the following subcategories of the leather tanning and finishing industry; hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish/ retan/wet finish/ no beamhouse; through-the-blue.

3.1.3.b.6.ii.D Sewer screenings generated by the following sub-categories of the leather tanning and finishing industry; hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; retan/wet finish; no beamhouse; through-the-blue; and shearling.

3.1.3.b.6.ii.E Wastewater treatment sludges generated by the following sub-categories of the leather tanning and finishing industry; hair pulp/chrome tan/retan/wet finish; hair save/chrome

tan/retan/wet finish; retan/wet finish; no beamhouse; through-the-blue; and shearling.

3.1.3.b.6.ii.F Wastewater treatment sludges generated by the following sub-categories of the leather tanning and finishing industry; hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; and through-the-blue.

3.1.3.b.6.ii.G Waste scrap leather from the leather tanning industry, the shoe manufacturing industry, and other leather product manufacturing industries.

3.1.3.b.6.ii.H Wastewater treatment sludges from the production of TiO2 pigment using chromium-bearing ores by the chloride process.

3.1.3.b.7 Waste from the extraction, benefication and processing of ores and minerals (including coal), including phosphate rock and overburden from the mining of uranium ore.

3.1.3.b.8 Cement kiln dust waste.

3.1.3.b.9 Waste which consists of discarded wood or wood products which fails the test for the characteristic of EP toxicity and which is not a hazardous waste for any other reason if the waste is generated by persons who utilize the arsenical-treated wood and wood products for these materials intended end use.

* * * * *

3.1.4 Special Requirements for Hazardous Waste Generated by Small Quantity Generators.

3.1.4a A generator is a small quantity generator in a calendar month if he generates less than 1000 kilograms of hazardous waste in that month.

3.1.4b Except for those wastes identified in paragraphs (e) and (f) of this section, a small quantity generator's hazardous wastes are not subject to regulation under Sections 6, 8, and 11 of these regulations and 40 CFR Part 265, provided the generator complies with the requirements of paragraph (g) ~~or~~ and (j) of this section, whichever applies.

~~3.1.4c Hazardous waste that is beneficially used or re-used or legitimately recycled or reclaimed and that is excluded from regulation by Section 3.1.5(a) is not included in the quantity determinations of this section, and is not subject to any requirements of this section if the notification requirements of Section 4 are complied with. Hazardous waste that is subject to the special requirements of Section 3.1.5(b) is included in the quantity determinations of this section and is subject to the requirements of this section.~~

3.1.4.c Hazardous waste that is recycled and that is excluded from regulation under Sections 3.1.5(a)(2)(iii) and (v), (a)(3), or 9.4 is not included in the quantity determinations of this section and is not subject to any requirements of this section. Hazardous waste that is subject to the requirements of Sections 3.1.5(b) and (c) and 9.3, 9.4, and 9.6 is included in the quantity determination of this section and is subject to the requirements of this section.

* * * * *

~~3.1.5 Special Requirements for Hazardous Waste Which is Used, Reused, Recycled or Reclaimed~~

~~3.1.5a Except as otherwise provided in paragraph (b) of this section, a hazardous waste which meets any of the following criteria is not subject to the full requirements of these regulations until such time as the Director promulgates regulations to the contrary:~~

~~3.5.1.a.1 It is beneficially used or reused or legitimately recycled or reclaimed;~~

~~3.5.1.a.2 It is being accumulated, stored or physically, chemically or biologically treated prior to beneficial use or reuse or legitimate recycling or reclamation;~~

~~3.5.1.a.3 It is one of the following materials being used, reused, recycled or reclaimed in the specified manner;~~

~~3.5.1.a.3.i Spent pickle liquor which is reused in wastewater treatment at a facility holding a National Pollutant Discharge Elimination System (NPDES) permit, or which is being accumulated, stored, or physically, chemically, or biologically treated before such reuse.~~

~~3.5.1b Except for those wastes listed in paragraph (a)(3), a hazardous waste which is a sludge, or which is listed in 3.4, or which contains one or more hazardous wastes listed in 3.4 and which is transported or stored prior to being used, reused, recycled, or reclaimed is subject to the following requirements with respect to such transportation or storage:~~

~~3.5.1.b.1 Notification requirements under Section 4;~~

~~3.5.1.b.2 Requirements for generators under Section 6;~~

~~3.5.1.b.3 Sections 8.1, 8.2, 8.3, 8.4, 8.5, 8.6, 8.7, 8.8, 8.9, 8.10, 8.13 and 13;~~

~~3.5.1.b.4 Storage facility requirements Section 11;~~

~~3.5.1.b.5 40 CFR 265 Subpart A, B, C, D, E, F, G, H, I, J, K and~~

~~b.~~

~~3.5.1.b.6 Location standards in Section 12 where applicable; and~~

~~3.5.1.b.7 Transportation regulations promulgated by the Public Service Commission and the Department of Highways and the Director.~~

3.1.5 Requirements for Recyclable Materials

3.1.5.a.1 Hazardous wastes that are recycled are subject to the requirements for generators, transporters, and storage facilities of paragraphs (b) and (c) of this section, except for the materials listed in paragraphs (a)(2) and (a)(3) of this section. Hazardous wastes that are recycled will be known as "recyclable materials."

3.1.5.a.2 The following recyclable materials are not subject to the requirements of this section but are regulated under Sections 9.3 through 9.7 and all applicable provisions of Section 11 of these regulations:

3.1.5.a.2.i Recyclable materials used in a manner constituting disposal (Section 9.3):

3.1.5.a.2.ii Hazardous wastes burned for energy recovery in boilers and industrial furnaces.

3.1.5.a.2.iii (Reserved);

3.1.5.a.2.iv Recycled materials from which precious metals are reclaimed (Section 9.6);

3.1.5.a.2.v Spent lead-acid batteries that are reclaimed (Section 9.7).

3.1.5.a.3 The following recyclable materials are not subject to regulation under §§4 through 8 and are not subject to the notification requirements of W.Va. Code §20-5E-10.

3.1.5.a.3.i Reclaimed industrial ethyl alcohol;

3.1.5.a.3.ii Used batteries (or used battery cells) returned to a battery manufacturer for regeneration;

3.1.5.a.3.iii Used oil that exhibits one or more of the characteristics of hazardous waste but is recycled in some other manner than being burned for energy recovery; or

3.1.5.a.3.iv Scrap metal.

3.1.5.b Generators and transporters of recyclable materials shall comply with all applicable provisions of Sections 4, 5 and 6 of

these regulations, except as provided in paragraph 3.1.5.a of this section.

3.1.5.c.1 Owners or operators of facilities that store recyclable materials are regulated under all applicable provisions of Sections 4, 8.1 through 8.10, 8.13, and 11 of these regulations, except as provided in paragraph 3.1.5.a of this section (the recycling process itself is exempt from regulations).

3.1.5.c.2 Owners or operators of facilities that recyclerecyclable materials without storing them before they are recycled are subject to the following requirements, except as provided in paragraph 3.1.5.a of this section:

3.1.5.c.2.i Notification requirements of Section 4;

3.1.5.c.2.ii Sections 8.5.2 and 8.5.3 (concerning use of the manifest and manifest discrepancies).

3.1.5d Additional Regulation of Certain Hazardous Waste Recycling Activities on a case-by-case basis.

3.1.5.d.1 The director may decide on a case-by-case basis that persons accumulating or storing the recyclable materials described in 3.1.5.a.2.iv should be regulated under 3.1.5.b and 3.1.5.c. The basis for this decision is that the materials are being accumulated or stored in a manner that does not protect human health and the environment because the materials or their toxic constituents have not been adequately contained, or because the materials being accumulated or stored together are incompatible. In making this decision, the director will consider the following factors:

3.1.5.d.1.a The types of materials accumulated or stored and the amounts accumulated or stored;

3.1.5.d.1b The method of accumulation or storage;

3.1.5.d.1.c The length of time the materials have been accumulated or stored before being reclaimed;

3.1.5.d.1.d Whether any contaminants are being released into the environment, or are likely to be so released; and

3.1.5.d.1.e Other relevant factors.

The procedures for this decision are set forth in 3.1.5.d.2.

3.1.5.d.2 Procedures for case-by-case regulation of hazardous waste recycling activities.

3.1.5.d.2.i The director will use the following procedures when determining whether to regulate hazardous waste recycling

activities described in Section 3.1.5.a.2.iv under the provisions of 3.1.5.b and 3.1.5.c, rather than under the provisions of 9.6.

3.1.5.d.2.i.A If a generator is accumulating the waste, the director will issue a notice setting forth the factual basis for the decision and stating that the person must comply with the applicable requirements of Sections 6.1, 6.3, 6.4, and 6.5 of these regulations. The notice will become final within 30 days, unless the person served requests a public hearing to challenge the decision. Upon receiving such a request, the director will hold a public hearing. The director will provide notice of the hearing to the public and allow public participation at the hearing. The director will issue a final order after the hearing stating whether or not compliance with Section 6 is required. The order becomes effective 30 days after service of the decision unless the director specifies a later date or unless review by the director is requested. The order may be appealed to the director by any person who participated in the public hearing. Thedirector may choose to grant or to deny the appeal. Final agency action occurs when a final order is issued and agency review procedures are exhausted.

3.1.5.d.2.i.B If the person is accumulating the recyclable material at a storage facility, the notice will state that the person must obtain a permit in accordance with all applicable revisions of Section 11 of these regulations. The owner or operator of the facility must apply for a permit within no less than 60 days and no more than six months of notice, as specified in the notice. If the owner or operator of the facility wishes to challenge the director's decision, he may do so in his permit application, in a public hearing held on the draft permit, or in comments filed on the draft permit or on the notice of intent to deny the permit. The fact sheet accompanying the permit will specify the reasons for the agency's determination. The question of whether the director's decision was proper will remain open for consideration during the public comment period discussed under 11.25 of the regulations and in any subsequent hearing.

* * * * *

3.3 Characteristics of Hazardous Waste

* * * * *

3.3.2 Characteristic of Ignitability

3.3.2a A waste exhibits the characteristic of ignitability if a representative sample of the waste has any of the following properties:

3.3.2.a.1 It is a liquid, other than an aqueous solution containing less than 24 percent alcohol by volume, and has a flashpoint less than 60 C (140 F), as determined by a

Pensky-Martens Closed Cup Tester, using the test method specified in ASTM Standard D-93-79, or D-93-80, or a Setaflash Closed Cup Tester, using the test method specified in ASTM standard D-3278-78, or as determined by an equivalent method. (See Section 2.00 ~~(32)~~ and 40 CFR Section 260.11 for test method information)

3.3.2.a.2 It is not a liquid and is capable, under standard temperature and pressure, of causing fire through friction, absorption of moisture or spontaneous chemical changes and, when ignited, burns so vigorously and persistently that it creates a hazard.

3.3.2.a.3 It is an ignitable compressed gas as defined in 49 CFR Section 173.3 and as determined by the test method described in that regulation or an equivalent test methods (see Section 2.0 ~~(32)~~).

3.3.2.a.4 It is an oxidizer as defined in 40 CFR Section 173.51.

3.3.2b A waste that exhibits the characteristic of ignitability, but is not listed as a hazardous waste by the Administrator, or the Director has the Hazardous Waste Number of D001.

3.3.3 Characteristic of Corrositivity

3.3.3a A waste exhibits the characteristic of corrositivity if a representative sample of the waste has either of the following properties:

3.3.3.a.1 It is an aqueous and has a pH less than or equal to 2 or greater than or equal to 12.5, as determined by a pH meter using either the test method specified in the "Test Methods for the Evaluation of Solid Waste, Physical/chemical Methods," or an equivalent test method approved by the Administrator under the procedures set forth in 40 CFR Sections 260.20 and 260.21.

3.3.3.a.2 It is a liquid and corrodes steel (SAE 1020) at a rate greater than 6.35 mm (0.250 inch) per year at a test temperature of 55 C (130 F) as determined by the test method specified in NACE (National Association of Corrision Engineers) Standard TM-01-69 as standardized in "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods," or an equivalent test method (see Section 2.00 ~~(32)~~).

3.3.3.b A waste that exhibits the characteristics of corrositivity, but is not listed as a hazardous waste by the Administrator, or Director has the Hazardous Waste Number of D002.

3.3.4 Characteristic of Reactivity.

3.3.4a A waste exhibits the characteristic of reactivity if a represeentative sample of the waste has any of the following properties:

3.3.4.a.1 It is normally unstable and readily undergoes violent changes without detonating;

3.3.4.a.2 It reacts violently with water;

3.3.4.a.3 It forms potentially explosive mixtures with water;

3.3.4.a.4 When mixed with water, it generates toxic gases, vapors or fumes in a quantity sufficient to present a danger to human health or the environment;

3.3.4.a.5 It is a cyanide or sulfide bearing waste which, when exposed to pH conditions betwen 2 and 12.5, can generate toxic gases, vapors or fumes in a quantity sufficient to present a danger to human health or the environment;

3.3.4.a.6 It is capable of detonation or explosive reaction if it is subjected to a strong initiating source or if heated under confinement;

3.3.4.a.7 It is readily capable of detonation or explosive decomposition or reaction at standard temperature and pressure;

3.3.4.a.8 It is a forbidden explosive as defined in 49 CFR Section 173.51, or a Class A explosive as defined in 49 CFR Section 173.53 or a Class B explosive as defined in 49 CFR Section 173.88.

3.3.4.b A waste that exhibits the characteristic of reactivity, but is not listed as a hazardous waste by the Administrator or Director has the Hazardous Waste Number of D003.

* * * * *

3.4 Lists of Hazardous Wastes

3.4.1 General

3.4.1a A waste is a hazardous waste if it is listed in this section unless it has been excluded from this list under Section 16.

3.4.1b The Director will indicate his basis for listing the classes or types of wastes listed in this section by employing one or more of the following hazard codes:

Ignitable Waste . . . . . (I)
Corrosive Waste . . . . . (C)
Reactive Waste . . . . . (R)
EP Toxic Waste . . . . . (E)
Acute Hazardous Waste . . . . . (H)
Toxic Waste . . . . . (T)

Appendix VII identifies the constituent which caused the Director to list the waste as an EP Toxic Waste (E) or Toxic Waste (T) in Sections 3.4.2 and 3.4.3.

3.4.1c Each hazardous waste listed in this section is assigned a Hazardous Waste Number which precedes the name of the waste. This number must be used in complying with the notification requirements of Section 4 of these regulations and certain recordkeeping and reporting requirements under Section 6, Section 8 and Section 11 of these regulations.

3.4.1d The following hazardous wastes listed in Section 3.4.2 or 3.4.3 are subject to the exclusion limits for acutely hazardous wastes established in Section 3.1.4: (Reserved)

3.4.2 Hazardous Waste from Non-specific sources.

Hazardous Waste No.	Hazardous Waste	Hazard Code
F001	The following spent halogenated solvents used in degreasing: tetrachloroethylene, trichloroethylene, methylene chloride, 1,1,1-trichloroethane, carbon tetrachloride, and chlorinated fluorocarbons; and sludges from the recovery of these solvents in degreasing operations.	(T)
F002	The following spent halogenated solvents: tetra-chloroethylene, methylene chloride, trichloroethylene, 1,1,1-trichloroethane, chlorobenzene, 1,1,2-trichloro-1,2,2-trifluoroethane, orthodichlorobenzene, and trichlorofluoromethane; and the still bottoms from the recovery of these solvents.	(T)
F003	The following spent non-halogenated solvents: xylene, acetone, ethyl acetate, ethyl benzene, ethyl ether, methyl isobutyl ketone, n-butyl alcohol, cyclohexanone, and methanol; and the still bottoms from the recovery of these solvents.	(I)
F004	The following spent non-halogenated solvents: cresols and cresylic acid, and nitrobenzene; and the still bottoms from the recovery of these solvents.	(T)
F004	The following spent non-halogenated solvents: toluene, methyl ethyl ketone, carbon disulfide, isobutanol, and pyridine; and the still bottoms from the recovery of these solvents.	(I,T)
F005	The following spent non-halogenated solvents: toluene, methyl ethyl ketone, carbon disulfide,	

isobutanol, and pyridine; and the still bottoms from the recovery of these solvents. (I,T)

F006 . . . . . .Wastewater treatment sludges from elextroplating operations except from acid anodizing of aluminum; (2) tin plating on carbon steel; (3) zinc plating (segregated basis) on carbon steel; (4) aluminum or zinc-aluminum plating on carbon steel; (5) cleaning/ stripping associated with tin, zinc and aluminum plating on carbon steel; and (6) chemical etching and milling of aluminum. (T)

F019 . . . . . .Wastewater treatment sludges from the chemical conversion coating of aluminum (T)

F007 . . . . . .Spent cyanide plating bath solutions from electroplating operations ~~(except for precious metals electroplating spent cyanide plating bath solutions)~~. (R,T)

F008 . . . . . .Plating bath ~~sludges~~ residues from the bottom of plating baths from electroplating operations where cyanides are used in the process ~~(except for precious metals electroplating plating bath sludges)~~. (R,T)

F009 . . . . . .Spent stripping and cleaning bath solutions from electroplating operations where cyanides are used in the process ~~(except for precious metals electroplating spent stripping and cleaning bath solutions)~~. (R,T)

F010 . . . . . .Quenching bath ~~sludge~~ residues from oil baths from metal heat treating operations where cyanides are used in the process ~~(except for precious metals heat treating quenching bath sludges)~~. (R,T)

F011 . . . . . .Spent cyanide solutions from salt bath pot cleaning from metal heat treating operations ~~(except for precious metals heat treating spent cyanide solutions from salt bath pot cleaning)~~. (R,T)

F012 . . . . . .Quenching wastewater treatment sludges from metal heat treating operations where cyanides are used in the process ~~(except for precious metals heat treating quenching wastewater treatment sludges)~~. (T)

F019 . . . . . Wastewater treatment sludges from the chemical conversion coating of aluminum. (T)

F020 . . . . . (Reserved)

F021 . . . . . (Reserved)

F022 . . . . . (Reserved)

F023 . . . . . (Reserved)

F024 . . . . . Wastes, including but not limited to, distillation residues, heavy ends, tars, and reactor cleanout wastes from the production of chlorinated aliphatic hydrocarbons, having a carbon content from one to five, utilizing free radical catalyzed processes. (This listing does not include light ends, spent filters and filter aids, spent dessicants, wastewater, wastewater treatment sludges, spent catalysts and waste listed in 3.4.3.) (T)

F026 . . . . . (Reserved)

F027 . . . . . (Reserved)

F028 . . . . . (Reserved)

* * * * *

3.4.4 Discarded Commercial Chemical Products, Off-Specification Species, Container Residues, and Spill Residues Thereof

The following materials or items are hazardous wastes if and when they are discarded or intended to be discarded: as described in Section 3.1.1.a.2 of these regulations, when they are burned for purposes of energy recovery in lieu of their original intended use, when they are used to produce fuels in lieu of their original intended use, when they are applied to land in lieu of their intended use, or when they are contained in products that are applied to land in lieu of their intended use.

3.4.4a Any commercial chemical product, or manufacturing chemical intermediate having the generic name listed in paragraphs (e) or (f) of this section.

3.4.4b Any off-specification commercial chemical product or manufacturing chemical intermediate which, if it met specifications, would have the generic name listed in paragraphs (e) or (f) of this section.

3.4.4c Any residue remaining in a container or an inner liner removed from a container that has held any commercial chemical product or manufacturing chemical intermediate having the generic name listed in paragraph (e) of this section, unless the container is empty as defined in 3.01.06(b)(3) of this chapter. Comment: Unless the residue is being beneficially used or reused, or legitimately recycled or reclaimed; or being accumulated, stored, transported or treated prior to such use, re-use, recycling or reclamation, the Director considers the residue to be intended for discard, and thus a hazardous waste. An example of a + legitimate re-use of the residue would be where the residue remains in the container and the container is used to hold the same commercial chemical product or manufacturing chemical product or manufacturing chemical intermediate it previously held. An example of the discard of the residue would be where the drum is sent to a drum reconditioner who reconditions the drum but discards the residue.

3.4.4d Any residue or contaminated soil, water or other debris resulting from the cleanup of a spill into or on any land or water of any commercial chemical product or manufacturing chemical intermediate having the generic name listed in paragraph (e) or (f) of this section, or any residue or contaminated soil, water or other debris resulting from the cleanup of a spill, into or on any land or water, of any off-specification chemical product and manufacturing chemical intermediate which, if it met specifications, would have the generic name listed in paragraph (e) or (f) of this section.

Comment: The phrase "commercial chemical product or manufacturing chemical intermediate having the generic name listed in . . ." refers to a chemical substance which is manufactured or formulated for commercial or manufacturing use which consists of the commercially pure grade of the chemical, any technical grades of the chemical that are produced or marketed, and all formulations

in which the chemical is the sole active ingredient. It does not refer to a material, such as a manufacturing process waste, that contains any of the substances listed in paragraphs (e) or (f). Where a manufacturing process waste is deemed to be a hazardous waste because it contains a substance listed in paragraphs (e) or (f), such waste will be listed in either 3.04.02 or 3.04.03 or will be identified as a hazardous waste by the characteristics set forth in 3.03 of these regulations.

3.4.4e The commercial chemical products, manufacturing chemical intermediates or off-specification commercial chemical products or manufacturing chemical intermediates referred to in paragraphs (a) through (d) of this section, are identified as acute hazardous wastes

(H) and are subject to be the small quantity exclusion defined in 3.01.04(a).

Comment: For the convenience of the regulated community the primary hazardous properties of these materials have been indicated by the letters T (Toxicity), and R (Reactivity). Absence of a letter indicates that the compound only is listed for acute toxicity.

These wastes and their corresponding Hazardous Waste Numbers are:

Hazardous Waste No.	Substance
P023	Acetaldehyde, chloro-
P002	Acetamide, N-(aminothioxomethyl)-
P057	Acetamide, 2-fluoro-
P058	Acetic acid, fluro-, sodium salt
P066	Acetimidic acid, N-((methylcarbamoyl)oxy) thio-, methyl ester
P001	3-(alpha-acetonylbenzyl)-4-hydroxycoumarin and salts, when present at concentrations greater than 0.3%

* * * * *

P001	Warfarin (when present at concentrations greater than 0.3%)
P121	Zinc cyanide
P122	Zinc phosphide (R,T)
P122	Zinc phosphide when present at concentrations greater than 10%

3.4.4f The commercial chemical products, manufacturing chemical intermediates, or off-specification commercial chemical products referred to in paragraphs (a) through (d) of this section, are identified as toxic wastes (T) unless otherwise designated and are subject to the small quantity exclusion defined in Section 3.1.4

of these regulations.

(Comment: For the convenience of the regulated community, the primary hazardous properties of these materials have been indicated by the letters T (Toxicity), R (Reactivity), I(Ignitability) and C (Corrosivity). Absence of a letter indicates that the compound is only listed for toxicity.)

These wastes and their corresponding EPA Hazardous Waste Numbers are:

Hazardous Waste No.	Substance
U001	Acetaldehyde (i)
U034	Acetaldehyde, trichloro-
U187	Acetamide, N-(4-ethoxyphenyl)-
U005	Acetamide, N-9-H-fluoren-2-yl-
U112	Acetic acid, ethyl ester (i)
U144	Acetic acid, lead salt
U214	Acetic acid, thallium(i) salt
U002	Acetone (i)
U003	Acetonitrile (I,T)
U248	3-(alpha-acetonylbenzyl)-4 hydroxycoumarin and salts, when present at concentrations of 0.3% or less

* * * * *

U248	Warfarin, when present at concentrations of 0.3% or less
U200	Yohimban-16-carboxylic acid, 11,17-dimethoxy-18-((3,4,5-trimethoxybenzoyl)oxy)-, methyl ester,
U249	Zinc phosphide, when present at concentrations of 10%

Section 5. Standards Applicable to Transporters of Hazardous Waste by Air and/or Water

The Director hereby adopts and incorporates by reference 40 CFR Part 263, as published in the Code of Federal Regulations on ~~July 1, 1982~~ the effective date of these regulations insofar as such regulations relate to the transportation of hazardous waste by air and water.

Whenever the term Administrator or Regional Administrator is used, the term shall have the meaning of the Director of the Department of Natural Resources.

Section 6. Standards Applicable to Generators of Hazardous Waste

* * * * *

6.3.5 Accumulation Time

6.3.5a A generator may accumulate hazardous waste on site for ninety (90) days or less without a permit or without having interim status, provided that:

~~6.3.5.a.1 All such waste is within ninety (90) days, either shipped off-site to a designated facility or placed in an on-site facility that is permitted under Section 11 of these regulations, or permitted under 40 C.F.R. Part 270 of the federal regulations, or has interim status under Section 11 of these regulations, or is authorized to manage hazardous waste by a state with a hazardous waste program approved by EPA; and~~

6.3.5.a.21 The waste is placed either in containers which meet the standards of Section 6.3.1 and are managed in accordance with 40 CFR Part 265 Subpart I , or in tanks, and ~~provided~~ the generator complies with Subpart J of 40 C.F.R. Part 265 except 265.193;

6.3.5.a.32 The date upon which each period of accumulation begins is clearly marked and visible for inspection on each container.

6.3.5.a.43 Each container is properly labeled and marked according to Sections 6.3.2 and 6.3.3;

6.3.5.a.54 While being accumulated, on site, each container and tank is labeled or marked clearly with the words, "Hazardous Waste -"; and

6.3.5.a.65 The generator complies with the requirements for owners or operators in Subparts C and D in 40 C.F.R. Part 265 and with 265.16~~; and~~.

6.3.5.b A generator who accumulates hazardous waste for more than ninety (90) days is an operator of a storage facility and is subject to the applicable requirements of Sections 4, 8, and 12 of these regulations, ~~40 C.F.R. Part 265 and~~ the permit requirements of Section 11 and 40 C.F.R. Part 265 unless he has been granted an extension to the ninety (90) day period. Such an extension may be granted by the Director if hazardous wastes must remain on-site for longer than 90 days due to unforeseen, temporary, and uncontrollable circumstances. An extension of up to 30 days may be granted at the discretion of the Director on a case-by-case basis. Before the end of ninety (90) days, or any extension period granted by the Director (not to exceed thirty days), the generator must either transport all such hazardous waste off-site to a designated facility, or, if held on-site for more than ninety (90) days, place such hazardous waste in an on-site facility that is either permitted under section 11.00 ofthese regulations or

under 40 C.F.R. Part 270 or whichhasinterim status or which is authorized to manage hazardous wastebya state with a hazardous waste program approved by EPA.

6.3.5.c Satellite Area Accumulation

6.3.5.c.1 A generator may accumulate as much as 55 gallons of hazardous waste or one quart of acutely hazardous waste listed in Section 3.4.4(e) in containers at or near any point of generation where wastes initially accumulate, which is under the control of the operator of the process generating the waste, without a permit or interim status and without complying with paragraph (a) of this section, provided he:

6.3.5.c.1.i Complies with 40 CFR Sections 265.171, 265.172, and 265.173(a) of the federal regulations; and

6.3.5.c.1.ii Marks the containers either with the words "Hazardous Waste" or with other words that identify the contents of the containers.

6.3.5.c.2 A generator who accumulates either hazardous waste or acutely hazardous waste listed in 3.4.4(e) of these regulations in excess of the amounts listed in paragraph (c)(1) of this section at or near any point of generation must, with respect to that amount of excess waste, comply within three (3) days with paragraph (a) of this section or other applicable provisions of these regulations. During the three day period the generator must continue to comply with paragraphs (c)(1)(i)-(ii) of this section. The generator must mark each container holding the excess accumulation of hazardous waste with the date the excess amount of hazardous waste began accumulating.

* * * * *

6.5 Special Conditions

6.5.1 International Shipments

6.5.1a Any person who exports hazardous waste to a foreign country or imports hazardous waste from a foreign country into West Virginia shall comply with 40 CFR Part 262 and this section.

6.5.1 When shipping hazardous waste outside the United States the generator shall:

6.5.1.b.1 Notify the chief and the EPA administrator in writing four weeks before the initial shipment of hazardous waste to each country in each calendar year. The waste shall be identified by its EPA hazardous waste identification number and its Department of Transportation shipping description. The name and address of the foreign consignee shall be included in the notice.

6.5.1.b.2 Send the original of the notice to ~~hazardous--waste Expert, Division--of-Oceans-and-Regulatory-Affairs-(A-107)~~ Office of International Activities (A-106), U.S. Environmental Protection Agency, Washington, D.C. 20460, and one copy to the Chief, Division of Water Resources.

6.5.1.b.3 Require that the foreign consignee conform the delivery of the waste in the foreign country. A copy of the manifest, signed by the foreign consignee, may be used for this purpose.

6.5.1.b.4 Meet the requirements under Section 6.2.2 for the manifest, except that:

6.5.1.b.4.ii In place of the name, address and EPA identification number of the designated facility, the name and address of the foreign consignee shall be used;

6.5.1.b.4.ii The generator shall identify the point of departure from the United States through which the waste shall travel before entering a foreign country.

6.5.1c A generator shall file an exception report, if:

6.5.1.c.1 He has not received a copy of the manifest signed by the transporter stating the date and place of departure from the United States within 45 days from the date it was accepted by the initial transporter; or

6.5.1.c.2 Within 90 days from the date the waste was accepted by the initial transporter, the generator has not received written 6.5.1.c.2 confirmation from the foreign consignee that the hazardous waste was received.

6.5.1d When importing hazardous waste, a person shall meet all requirements of Section 6.2.2 for the manifest except that:

6.5.1.d.1 In place of the generator's name, address and EPA identification number, the name and address of the foreign generator and the importer's name, address and EPA identification number shall be used.

6.5.1.d.2 In place of the generator's signature on the certification statement, the U.S. importer or his agent shall sign and date the certification and obtain the signature of the initial transporter.

* * * * *

Section 8. Standards for owners and operators of Hazardous Waste Treatment, Storage and Disposal Facilities

8.1 General, Purpose, Scope and Applicability

8.1.1 The purpose of these regulations is to establish minimum standards which define the acceptable management of hazardous waste.

8.1.2 The standards in this section apply to owners and operators of all facilities which treat, store, or dispose of hazardous waste except as Section 8.1.5 provides otherwise. In addition to the standards in this section, the regulations of the Air Pollution Control Commission, Series 25 - "To Prevent and Control Air Pollution from Hazardous Waste Treatment, Storage or Disposal Facilities apply to management facilities which may emit hazardous waste or the constituents thereof to the atmosphere including incineration facilities except as 8.1.5 provides otherwise. For purposes of this section the following persons are to be incinerating hazardous waste:

8.1.2.a Owners or operators of hazardous waste incinerators (as defined in Section 2.00 of these regulations; and

8.1.2.b Owners or operators of in boilers or industrial furnaces used to destroy the wastes.

8.1.3 The requirements of this section apply to a person disposing of hazardous waste by means of underground injection only to the extent that they are required to comply with certain portions of this section under the Underground Injection Control Program establish pursuant to the Water Pollution Control Act, W. Va. Code §20-5A, et seq.

8.1.4 The requirements of this section apply to the owner or operator of a POTW which treats, stores, or disposes of hazardous waste only to the extent they are included in a Hazardous Waste Management Permit by Rule granted to such a person under Section 11.8.

8.1.5 The requirements of this section do not apply to:

8.1.5a The owner or operator of a facility ~~which treats or stores hazardous waste, which treatment or storage meets the criteria in Section 3.01.05(a), except to the extent that Section 3.1.5(b) provides otherwise.~~ managing recyclable materials described in Section 3.1.5a.2 and 3.1.5a.3 of these regulations (except in cases or situations in which the requirements of Section 3 of these regulations are referred to in Section 9 of these regulations).

8.1.5b Generator accumulating waste on site in compliance with Section 6.03.05 provided the requirements of Sections 3.1.4 and 3.1.5 are complied with.

8.1.5c A farmer disposing of waste pesticides from his own use in compliance with Section 6.5.2.

8.1.5d The owner or operator of a totally enclosed treatment facility, as defined in Section 2.

8.1.5e The owner or operator of an elementary neutralization unit or a wastewater treatment unit as defined in Section 2.

8.1.5f A transporter storing manifested shipments of hazardous waste in containers meeting the requirements of Section 6.3.1, at a transfer facility for a period of ten (10) days or less.

~~8.1.5g Persons with respect to those activities which are carried out to immediately contain or treat a spill of hazardous waste, except that, with respect to such activities, the appropriate requirements of Sections 8.3 and 8.4 are applicable to owners and operators of treatment, storage and disposal facilities otherwise subject to this section. (Comment: After the immediate response activities are completed, the applicable regulations apply fully to the management of any spill residue or debris which is a hazardous waste under Section 3.)~~

8.1.5g Except as provided in paragraph (g)(2) of this Section, a person engaged in treatment or containment activities during immediate response to any of the following situations:

8.1.5.g.1.i A discharge of a hazardous waste;

8.1.5.g.1.ii An imminent and substantial threat of a discharge of hazardous waste;

8.1.5.g.iii A discharge of a material which, when discharged, becomes a hazardous waste.

8.1.5.g.2 An owner or operator of a facility otherwise regulated by this Section must comply with all applicable requirements of Section 8.3 and 8.4.

8.1.5.g.3 Any person who is covered by paragraph g.1 of this subsection and who continues or initiates hazardous waste treatment or containment activities after the immediate response is over is subject to all applicable requirements of Chapter 20, Article 5E of these activities.

8.1.5h The addition of absorbent material to hazardous waste in a container or the addition of hazardous waste to absorbent material in a container, provided that these actions occur at the time hazardous waste is first placed in the container and Section 8.2.8

(b), 8.7.2 and 8.7.3 are complied with.

* * * * *

8.2.6 General Inspection Requirements

8.2.6a The owner or operator must inspect the facility formal functions and deterioration, operator errors, and discharges which may be causing - or may lead to:

8.2.6.a.1 Release of hazardous waste constituents to theenvironment; or

8.2.6.a.2 A threat to human healty. The owner or operator must conduct these inspections often enought to identify problems in time to correct them before they harm human health or the environment.

8.2.6.b.1 The owner or operator must develop and follow a written schedule for inspecting monitoring equipment, safety and emergency equipment, security devices, and operating and structural equipment (such as dikes and sump pumps) that are important to preventing, detecting, or responding to environmental or human health hazards.

8.2.6.b.2 This schedule must be kept at the facility.

8.2.6.b.3 The schedule must identify the types of problems (e.g., malfunctions or deterioration) which are to be looked for during the inspection (e.g., inoperative sump pump, leaking fitting, eroding dike, etc.).

8.2.6.b.4 The frequency of inspection may vary for the items on the schedule. However, it should be based on the rate of possible deterioration of the equipment and the probability of an environmental or human health incident if the deterioration or malfunction ~~or~~ of any operator error goes undetected between inspections. Areas subject to spills, such as loading and unloading areas, must be inspected daily when in use. At a minimum, the inspection schedule must include the terms and frequencies called for in Sections 8.7.6, 8.8.4, 8.9.5, 8.10.5, and 8.11.3 where applicable.

8.2.6.b.5 A copy of the inspection schedule as required by Section 8.02.06(b) must be submitted to the Chief with Part B of the permit application to ensure that it adequately protects human health and the environment. As part of this review, the Chief may modify or amend the schedule as may be necessary.

8.2.6c The owner or operator must remedy any deterioration or malfunction of equipment or structures which the inspection reveals to ensure that the problem does not lead to an environmental or human health hazard. A schedule for remedial

action may be allowed by the Chief. Where a hazard is imminent or has already occurred, remedial action must be taken immediately.

8.2.6.d The owner or operator must record inspections in an inspection log or summary. These records must be kept for the life of the facility. At a minimum, these records must include the date and time of the inspection, the name of the inspector, a notation of the observations made, and the date and nature of any repairs or other remedial actions.

* * * * *

Section 9 Standards for Management of Specific Hazardous Wastes and Specific Types of Hazardous Waste Management Facilities

9.1 (Reserved)

9.2 (Reserved)

9.3 Recyclable Materials Used in a Manner Constituting Disposal

9.3.1 Applicability

9.3.1.a This Section applies to recyclable materials that are applied to or placed on the land;

9.3.1.a.1 without mixing with any other substances; or

9.3.1.a.2 after mixing with any other substances that are not hazardous wastes, unless the recyclable material undergoes a chemical reaction so as to become inseparable from the other substances by physical means; or

9.3.1.a.3 after combination with any other substances if the resulting combined material is not produced for the general public's use.

9.3.1.a.4 The materials identified in paragraphs 9.3.1.a.1 through 9.3.1.a.3 will be referred to throughout this Section as "materials used in a manner that constitutes disposal."

9.3.1b Products produced for the general public's use that are used in a manner that constitutes disposal and that contain recyclable materials are not presently subject to these regulations if the recyclable materials have undergone chemical reaction in the course of producing the product so as to become inseparable by physical means. Commercial fertilizers that are produced for the general public's use that contain recyclable material also are not presently subject to these regulations.

9.3.2 Standards Applicable to Generators and Transporters of Materials Used in a Manner That Constitutes Disposal

Generators and transporters of materials that are used in a manner that constitutes disposal are subject to applicable requirements of Sections 4, 5, and 6 of these regulations.

9.3.3 Standards Applicable to Storers of Materials that are to be Used in a Manner that Constitutes Disposal Who are not the Ultimate Users.

Owners or operators of facilities that store recyclable materials that are to be used in a manner that constitutes disposal, but who are not the ultimate users of the materials are regulated

under all applicable provisions of Sections 4, 8 and 11 of these regulations, and 40 CFR Part 265, subparts A through L.

9.3.4 Standards Applicable to Users of Materials that are Used in a Manner that Constitutes Disposal

Owners or operators of facilities that use recyclable materials in a manner that constitutes disposal are subject to all applicable provisions of Sections 4, 8 and 11 of these regulations, and 40 CFR Part 265, Subparts A through N. (These requirements do not apply to products which contain these recyclable materials under the provisions of paragraph 9.3.1b of these regulations.)

9.4 Hazardous Waste Burned for Energy Recovery

9.4.1 Applicability.

9.4.1.a The regulations of this Subpart apply to hazardous wastes that are burned for energy recovery in any boiler or industrial furnace except as provided by paragraph 9.4.1.b of this section. Such hazardous wastes burned for energy recovery are termed "hazardous waste fuel". However, hazardous waste fuels produced from hazardous waste by blending or other treatment by a person who neither generated the waste nor burns the fuel are not subject to regulation at the present time.

9.4.1.b The following hazardous wastes are not regulated under this section:

9.4.1.b.1 Used oil burned for energy recovery that is also a hazardous waste solely because it exhibits a characteristic of hazardous waste identified in 3.3.2 of these regulations. Such used oil is subject to regulation under Section 9.5 of these regulations rather than this section and

9.4.1.b.2 Wastes that are exempt from regulation under the provisions of Section 3.1.3.b of these regulations and hazardous wastes that are subject to the special requirements for small quantity generators under the provisions of Section 3.1.4 of these regulations.

9.4.1.b.3 Hazardous waste fuels that are exempt from the labeling requirements of RCRA Section 3004(r).

9.4.1.b.4 Coke from the iron and steel industry that contains hazardous waste from the iron and steel production process.

9.4.2 Prohibitions. (Reserved)

9.4.3 Standards applicable to generators of hazardous waste fuel.

9.4.3.a Generators of hazardous waste fuel are subject to the

requirements of Section 6 of these regulations except that 9.4.7 exempts certain spent materials and by-products from these provisions;

9.4.3.b Generators who are marketers also must comply with Section 9.4.5.

9.4.3.c Generators who are burners also must comply with Section 9.4.6.

9.4.4 Standards applicable to transporters of hazardous waste fuel.

9.4.4.a Transporters of hazardous waste fuel from generator to marketer, or from a generator to a burner are subject to the requirements of either Section 5 of these regulations or the applicable regulations of the West Virginia Department of Highways or Public Service Commission of West Virginia regarding hazardous waste transporters, except that 9.4.7 exempts certain spent materials and by-products from these provisions.

9.4.4.b Transporters of hazardous waste fuel are not presently subject to regulation when they transport hazardous wastes fuel from marketers, who are not also the generators of the waste, to burners or other marketers.

9.4.5 Standards applicable to marketers of hazardous waste fuel.

Persons who market hazardous waste fuel are called "marketers". Marketers include generators who market hazardous waste fuel directly to a burner, and persons who receive hazardous waste from generators and produce, process, or blend hazardous waste fuel from these hazardous wastes. Persons who distribute but do not process or blend hazardous waste fuel are also marketers, but are not presently subject to regulation. Marketers (other than distributors) are subject to the following requirements:

9.4.5a Prohibitions (Reserved).

9.4.5.b Prohibitions (Reserved).

9.4.5.c.1 Storage. Marketers who are generators are subject to the requirements of Section 6.3.5 of these regulations or to Sections 8.1 through 8.10, 8.13 and Section 11 of these regulations or 40 CFR Subparts A through L of Part 265 and Parts 270 and 124, except as provided by Section 9.4.7 of this Section for certain spent materials and by-products;

9.4.5.c.2 Marketers who receive hazardous wastes from generators, and produce, process, or blend hazardous waste fuel from these hazardous wastes, are subject to regulation under all applicable provisions of Sections 8.1 through 8.10, 8.13 and Section 13 of these regulations or 40 CFR Subparts A through L of Part 265 and

Parts 270 and 124, except as provided by Section 9.4.7 of this section for certain spent materials and by-products.

9.4.6 Standards applicable to burners of hazardous waste fuel.

9.4.6a (Reserved)

9.4.6.b Notification. (Reserved)

9.4.6.b.c Burners that store hazardous waste fuel prior to burning are subject to the requirements of Section 6.3.5 of this chapter, or to all applicable requirements in Sections 8.1 through 8.10, 8.13 and Section 13 of these regulations or 40 C.F.R. Subparts A through L of Part 265 or 40 CFR Part 265 of this chapter with respect to such storage, except as provided by Section 9.4.7 of this subpart for certain spent materials and by-products.

9.4.7 Conditional exemption for spent materials and by-products exhibiting a characteristic of hazardous waste.

9.4.7a Except as provided in paragraph (b), hazardous waste fuels that are spent materials and by-products and that are hazardous only because they exhibit a characteristic of hazardous waste are not subject to the notification requirements of Chapter 20, Article 5E, Section 10, the generator, transporter, or storage requirements of Chapter 20, Article 5E.

9.4.7b This exemption does not apply when the spent material or by-product is stored in a surface impoundment prior to burning.

9.5 (Reserved)

9.6 Recyclable Materials Utilized for Precious Metal Recovery

9.6a The regulations of this section apply to recyclable materials that are reclaimed to recover economically significant amounts of gold, silver, platinum, paladium, irridium, osmium, rhodium, ruthenium, or any combination of these.

9.6b Persons who generate, transport, or store recyclable materials that are subject to this section are subject to the following requirements:

9.6b.1 notification requirements of Section 4;

9.6b.2 (analog to 262, Subpart B) (for generators), (analogs to 263.20 and 263.21) (for transporters), and 40 CFR Sections 265.71 and 265.72 (for persons who store).

9.6c Persons who store recyclable materials that are subject to this section must keep the following records to document that they are not accumulating these materials speculatively (as defined in Section 3.1b of these regulation):

9.6c.1 records showing the volume of these materials stored at the beginning of the calendar year;

9.6c.2 the amount of these materials generated or received during the calendar year; and

9.6c.3 the amount of these materials remaining at the end of the calendar year.

9.6d Recyclable materials that are regulated under this section that accumulated speculatively (as defined in Section 3.1b of these regulations) are subject to all applicable provisions of Sections 5 through 8 and 11 of these regulations and 40 CFR Part 265.

9.7 Reclaimed Spent Lead-Acid Batteries

9.7a This section applies to persons who reclaim spent lead-acid batteries that are recyclable materials ("spent batteries"). Persons who generate, transport, or collect spent batteries, or who store spent batteries but do not reclaim them are not subject to the requirements of Sections 4 through 9 or 11 of these regulations, nor 40 CFR Part 265.

9.7b Owners or operators of facilities that store spent batteries before reclaiming them are subject to the following requirements:

9.7b.1 the notification requirements of Section 4 of these regulations;

9.7b.2 all applicable provisions of Sections 8.1 through 8.10 of these regulations, except Section 8.2.3 concerning waste analysis and 8.5.2 and 8.5.3 concerning use of the manifest and manifest discrepancies.

9.7b.3 all applicable provisions of Subparts A, B (but not Section 265.13 (waste analysis)), C, D, E (but not Sections 265.71 and 265.72 (dealing with use of the manifest and manifest

discrepancies)), and F through L of 40 CFR Part 265; and

9.7b.4 all applicable provisions of Section 11 of these regulations.

Section 11.Hazardous Waste Permitting Program

* * * * *

11.1.2 Specific Exclusions

The following are not required to obtain a hazardous waste management permit:

11.1.42a Generators who accumulate hazardous waste on site for less than ninety (90) days as provided in Section 6.03.05.

11.1.42b Farmers who dispose of hazardous waste pesticidesfrom their own use as provided in Section 6.05.02.

11.1.42c Persons who own or operate facilities operated solely for the treatment, storage or disposal of hazardous waste excluded from regulations under this section by Sections 3.01.03 or 3.01.04.

11.1.42d Owners or operators of totally enclosed treatment facilities, as defined in Section 2.00.

11.1.42e Owners and operators of elementary neutralization units or wastewater treatment units as defined in Section 2.00.

11.1.42f Transporters storing manifested shipments of hazardous waste in containers meeting the requirements of Section 6.03.01 at a transfer facility for a period of ten (10) days or less.

11.1.42g A person is not required to obtain a hazardous waste management permit for ~~those~~ treatment or containment activities ~~he carries out to immediately contain or treat a spill of hazardous waste or material, which, when spilled, becomes a hazardous waste. After the immediate response activities are completed, any treatment, storage or disposal of spilled material or spill residue or debris that is undertaken must be covered by a Hazardous Waste Management Permit, an emergency Hazardous Waste Management Permit or interim status~~ taken during immediate response to any of the following situations:

11.1.2.g.1.i A discharge of a hazardous waste;

11.1.2.g.1.ii An imminent and substantial threat of a discharge of hazardous waste;

11.1.2.g.1.iii A discharge of a material which, when discharged, becomes a hazardous waste.

11.1.2.g.2 Any person who continues or initiates hazardous waste treatment or containment activities after the immediate response is over is subject to all applicable requirements of this Part for those activities.

11.1.1h Persons adding absorbent material to hazardous wastein a container and persons adding hazardous waste to absorbent material in a container, provided that these actions occur at the time hazardous waste is first placed in the container and sections 8.02.08(b), 8.07.02, and 8.07.03 are complied with.

* * * * *

11.3 Interim Status

11.3.1 Qualifying for Interim Status

11.3.1a Any person who owns or operates an existing facility or a facility in existence as of July 10, 1981, shall have interim status and shall be treated as having been issued a permit to the extent they:

11.3.1.a.1 Comply with the interim status requirements ofthe Federal EPA established pursuant to Section 3005 of the Federal Solid Waste Disposal Act;

11.3.1.a.2 Operate the facility in such a manner as will not cause or create a substantial risk of a health hazard or public nuisance or a significant adverse effect upon the environment; and

11.3.1.a.3 Make a timely and complete application for suchpermit in accordance with these rules and regulations;

11.3.1.b.1 If the chief determines that a facility is notcomplying with the requirements of Section 11.03.01 he may terminate interim status of any owner or operator. Such termination will be in the form of an ORDER stating the reasons for the termination and shall inform the operator that he is subject to an enforcement action for operation without a permit;

11.3.1.b.2 Failure to qualify for interim status. If the Chief has reason to believe upon examination of a Part A application that it fails to meet the requirements of Section 11.4 he shall notify the owner or operator in writing of the apparent deficiency. Such notice shall specify the grounds for the Chief's belief that the application is deficient. The owner or operator shall have 30 days from receipt to respond to such a notification and to explain or cure the alleged deficiency in his Part A application. If, after such notification and opportunity for response, the Chief determines that the application is deficient he may take appropriate enforcement action.

11.3.1c Any person who owns or operates an existing facility which was not previously required to have a permit under the Act because it managed no hazardous wastes identified or listed under Section 3.00 of these regulations, but which due to a revision of Section 3.00 is later required to have a permit, shall also have interim status and shall be treated as having been issued a permit to the

extent such person:

11.3.1.c.1 Has notified the Chief within ninety (90) days from the effective date of any revision of Section 3.00 of these regulations of such hazardous waste activity by the use of EPA Form 8700-12 or the provision of the same information in any other manner selected by the notifier; and

11.3.1.c.2 Complies with and continues to operate in compliance with the interim status requirements of the federal Environmental Protection Agency established pursuant to Section 3005 of the Federal Solid Waste Disposal Act, as amended, if applicable within ninety (90) days from the effective date of such revision to Section 3.00, and operates in such a manner as will not cause or create a substantial risk of a health hazard or public nuisance or a significant adverse effect upon the environment; and

11.3.1.c.3 Makes a timely and complete application for apermit as required by Section 11.00 of these regulations.

* * * * *

11.7 Signatories to Permit Applications and Reports

11.7.1 Applications

All permit applications shall be signed as follows:

~~(2) For a corporation: by a principal executive officer of at least the level of vice president.~~

11.7.1a For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:

11.7.1.a.1 A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or

11.7.1.a.2 The manager of one or more manufacturing, production or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding $25 million if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures. NOTE: The Director does not require specific assignments or delegations of authority to responsible corporate officers identified in §11.7.1.a.1 The Director will presume that these responsible corporate officers have the requisite authority to sign permit applications unless the corporation has notified procedures governing authority to assign permit applications may provide for assignment or delegation to applicable corporate positions under §11.7.1.a.2 rather than to specific individuals.

11.7.1.b For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or

11.7.1.c For a municipality, State, Federal, or other public agency: by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes:

11.7.1.c.1 The chief executive officer of the agency or

11.7.1.c.2 A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).

11.7.2 All reports required by permits and other information requested by the Chief shall be signed by a person described in Section 11.07.01 above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

11.7.2a The authorization is made in writing by a person described in Section 11.07.01;

11.7.2b The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or an individual or a position having responsibility for the facility's compliance with environmental laws permits; and

11.7.2c The written authorization is submitted to the chief.

11.7.3 Changes to Authorization

If an authorization is no longer accurate because a different individual or position has responsibility for the overall operation of the facility or because a new individual or position has responsibility for the facility's compliance with environmental laws and permits, a new authorization satisfying the requirements shall be submitted to the Chief prior to or together with any reports, information or applications to be signed by an authorized representative.

11.7.4 Certification

Any person signing a document under Section 11.7.1 or Section 11.7.2 shall make the following certification:

~~"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false~~

~~information,-including-the-possibility-of-fine-and-imprisonment."~~

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

* * * * *

11.10.3 ~~Duty~~ Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

11.10.4 Duty to Mitigate

~~The-permittee-shall-take--all--reasonable--steps--to--mitigate--or correct--any--adverse--impact--on--the-environment-or-human-health resulting-from-non-compliance-with-this-permit.~~

In the event of non-compliance with the permit, the permittee shall take all reasonable steps to minimize releases to the environment, and shall carry out such measures as are reasonable to prevent adverse impacts on human health or the environment.

* * * * *

11.10.8 Duty to Provide Information

The permittee shall furnish to the chief within a specified time, any relevant information which the Chief or an authorized representative may request to determine whether cause exists for modifying, revoking and reissuing, suspension, revoking, or terminating this permit or to determine compliance with this permit. The permittee shall also furnish to the Chief or an authorized representative, upon request, copies of records to be kept as part of the permit.

* * * * *

Section 13. Financial Requirements

The Director hereby adopts and incorporates by reference 40 CFR Parts 264 and 265, Subparts H, as published in the Code of Federal Regulations on ~~July 1, 1982~~ the effective date of these regulations with the following modifications: Sections 264.143(f), 265.143(e), 264.145(f), 265.145(e), and 264.147(f), 265.147(f) shall be amended by the addition of the following paragraph:

"Notwithstanding the above, the Director may disallow the use of this test on the basis of information that the owner or operator has violated or is in violation of any state or federal law or regulation pertaining to environmental protection. The owner or operator must provide alternate financial assurance as specified in this section within 30 days after notification of the disallowance."

Sections 264.149, 265.149, 264.150 and 265.150 shall be deletec.

Wherever the term Administrator or Regional Administrator is used, the term shall have the meaning of the Director of the Department of Natural Resources.

Wherever the term Environmental Protection Agency or EPA is used, the term shall have the meaning of the West Virginia Department of Natural Resources.

40 CFR Sections 264.147(b)(4)(iii) and 265.147(b)(4)(iii) shall be amended to read: "All other owners or operators, 30 days after the effective date of these regulations."

Section 16. Notices of Changes to the ~~Board or the~~ Director

16.1 Notices of Amendments to Federal Law or Regulations

Persons desiring to call to the attention of the ~~Board or~~ Director amendments to the federal Solid Waste Disposal Act, as amended, or regulations promulgated pursuant thereto, may do so by filing a notice with the ~~Board or~~ Director~~, as appropriate,~~ identifying the amendment which has been made to the federal Solid Waste Disposal Act, as amended, or regulations promulgated pursuant thereto and identifying the provision of these regulations which such person believes should be amended.

16.2 Petitions for Waste Exclusions

16.2.a Persons desiring to exclude a waste at a particular generating facility from the lists in Section 3.04, must petition the Director for such an exclusion. The petition shall include

16.2.a.1 A copy of the petition submitted to the Administrator pursuant to 40 CFR 260.22, including all demonstration information; ~~and~~

16.2.a.2 A copy of the administrator's approval granting the exclusion pursuant to 40 CFR 260.20(d); and

16.2.a.3 Any other additional information which may be required for the Director to evaluate the petition.

16.2.b Within 120 days of the filing of the petition the Director shall decide whether to approve or to deny the petition and so advise the petitioner. Where a decision to deny a petition is made, the Director shall notify the petitioner of such action in writing, setting forth the reasons therefor.

16.2.c The Director shall not deny a petition to exclude a waste at a particular facility that has been approved by the EPA Administrator unless scientifically supportable reasons for such denial are advanced which had not been presented to the EPA Administrator.

16.3 Variances from Classification as a Waste

16.3.1 General

In accordance with the standards and criteria in Sections 16.3.2 and the procedures in Section 16.3.3, the Director may determine on a case-by-case basis that the following recycled materials are not wastes:

(a) materials that are accumulated speculatively without

sufficient amounts being recycled (as defined in Section 3.1.c.8 of these regulations):

(b) Materials that are reclaimed and then reused within the original primary production process in which they were generated; or

(c) Materials that have been reclaimed but must be reclaimed further before the materials are completely recovered.

16.3.2 Standards and Criteria

(a) The Director may grant requests for a variance from classification as a waste those materials that are accumulated speculatively without sufficient amounts being recycled if the applicant demonstrates that sufficient amounts of the material will be recycled or transferred for recycling in the following calendar year. A variance granted under this section is valid only from the date of approval through the following calendar year; but may be renewed on an annual basis by filing a new application for such variance. The Director will base the decision to grant or deny a variance under this subsection on the following standards and criteria:

(1) The manner in which the material is expected to be recycled, when the material is expected to be recycled, and whether this expected disposition is likely to occur (e.g., because of past practice, market factors, the nature of the material, or contractual arrangements for recycling);

(2) The reason that the applicant has accumulated the material for one or more years without recycling 75 percent of the volume accumulated at the beginning of the calendar year;

(3) The quantity of material already accumulated and the quantity expected to be generated and accumulated before the material is recycled;

(4) The extent to which the material is handled to minimize loss; and

(5) Other relevant factors.

(b) The Director may grant requests for a variance from classifying as a waste those materials that are reclaimed and then reused as feedstock within the original primary production process in which the material was generated if the reclamation operation is an essential part of the production process. This determination will be based on the following criteria:

(1) How economically viable the production process would be if it were to use virgin materials, rather than reclaimed materials;

(2) The prevalence of the practice on an industry-wide basis;

(3) The extent to which the material is handled before reclamation to minimize loss;

(4) The time periods between generating the material and its reclamation, and between reclamation and return to the original primary production process;

(5) The location of the reclamation operation in relation to the production process;

(6) Whether the reclaimed material is used for the purpose for which it was originally produced when it is returned to the original process, and whether it is returned to the process in substantially its original form;

(7) Whether the person who generates the material also reclaimes it; and

(8) Other relevant factors.

(c) The Director may grant requests for a variance from classifying as a waste those materials that have been reclaimed but must be reclaimed further before recovery is completed if, after initial reclamation, the resulting material is commodity-like (even though it is not yet a commercial product, and must be reclaimed further). This determination will be based on the following factors:

(1) The degree of processing the material has undergone and the degree of further processing that is required to complete recovery of the material;

(2) The value of the material after it is reclaimed;

(3) The degree to which the reclaimed material has been like an analogous raw material;

(4) The extent to which an end market for the reclaimed material is guaranteed;

(5) The extent to which the reclaimed material is handled to minimize loss, and

(6) Other relevant factors.

16.3.3 Variance Procedures

(a) An applicant for a variance from classification as a waste under this section must apply to the Director. The application must address the applicable criteria or standards contained in section 16.3.2 of these regulations.

(b) The Director will evaluate the application and issue a public notice of the tentative determination to grant or deny a variance from classification as a waste. Notification of this tentative determination will be provided in the manner prescribed in paragraph 11.24.3(b) of these regulations. The Director will accept public comment on the tentative variance determination for thirty (30) days, and may also hold a public hearing upon request or at his discretion. The Director will issue a final decision after receipt of public comments and the hearing (if any). Such final decision may not be appealed to the Water Resources Board.

ANALYSIS OF PROPOSED LEGISLATIVE RULES

Agency: Department of Natural Resources

Subject: Proposed rules and regulations relating to Hazardous Waste Management.

PERTINENT DATES

Filed for public comment: October 3, 1985
Public comment period ended: November 18, 1985
Filed following public comment period: December 11, 1985
Filed LRMRC: December 12, 1985
Filed as emergency: October 3, 1985
FN: No estimate

ABSTRACT

The proposed rule makes numerous amendments to the current legislative rule in order to bring it into conformity with changes in the federal law and in order for the state to receive primacy in this area. Rather than abstract the entire contents of each section, only the amendments are abstracted below.

Section 6.16 lists those subsections with which a generator who treats, stores or disposes of hazardous waste must comply. Subsection 6.3.5 relating to accumulation of hazardous waste was added to the list.

Section 6.4.3a is amended to refer to the signature of the owner or operator of a hazardous waste treatment, storage or disposal facility on the manifest rather than the signature of an authorized representative.

Section 8.1.5g which excepts persons who are involved in the immediate containment or treatment of a hazardous spill from the standards under Section 8 for owners and operators of hazardous waste, treatment, storage and disposal facilities has been amended to require those persons to comply with the standards once the immediate response activities are completed.

Section 8.6.1b which lists those sections which apply to the owners and operators of all hazardous waste disposal actives was amended to also include Section 15.3 concerning post-closure care.

Section 8.9.4c has been amended to require that there be a leachate detection, collection and removal system beneath the liner in contact with the waste to detect, contain, collect and remove any discharge from the liner in contact with the waste at any time during the operating life, closure and the post-closure period where applicable, of the impoundment. Prior language required that the system have a containment life equal to or greater than the life of the surface impoundment.

Section 8.9.7, which related to closure has been amended by the addition of a new subsection (c) which requires an owner or operator, who plans to close a surface impoundment who is exempted from the liner requirements, to (1) prepare a contingent plan for compliance with certain specified requirements in case not all contaminated subsoils can be practicably removed at closure and (2) prepare a contingent post-closure plan for complying with Section 8.9.10c in case all contaminated subsoils cannot be practicably removed at closure.

Section 8.9.10.c which specifies those post-closure requirements with which an owner or operator must comply has been amended to also require compliance with Sections 15.1 and 15.3, which relate to requiring that, after closure, a notation be placed on the deed that the land was used for the management of hazardous waste and that notice be given to the local land authority of the parameters of the land fill.

Section 8.10.1c has been amended to require owners and operators of waste piles used to store or treat only hazardous wastes that do not contain free liquids to comply with Section 8.10.5, which provides monitoring and inspection requirements. They are currently exempt from compliance with this section.

Section 8.11.2f relating to landfills has been amended to remove the restriction on use of mechanical means to lower the water table.

Section 8.11.15a has been amended to allow bulk or non-containerized waste or waste containing free liquids to be placed in a landfill if the landfill has a liner and leachate collection and removal system. Under the current rule any liquid waste or waste containing free liquids had to be treated so that free liquids were no longer present. Under the proposed rule either alternative is allowable.

Section 8.12.7.a.1.i requires an owner or operator to demonstrate that hazardous constituents will not be transferred to food or feed portions of a crop by "direct" contact. The present rule refers to "indirect" contact.

Section 8.13.9.d.2 is new. It requires that prior to terminating a corrective action program (for groundwater monitoring) that the owner or operator must analyze samples from all monitoring wells for all constituents contained in Appendix VIII of Section 3 of the regulation at least once prior to termination. The results from the samples must be reported to the Chief within seven days after completion of the analysis.

Section 11.10.12a requires a permittee to give written notice to the Chief as soon as possible of any planned physical alterations to a permitted facility. The current rule only requires notice for major physical alterations.

AUTHORITY

Statutory authority: W. Va. Code, §20-5E-6(e)(3) and 6(b)

> (a) The director has overall responsibility for the promulgation of rules and regulations under this article ...
>
> (3) Rules and regulations establishing such standards applicable to generators of hazardous waste identified or listed under this article as may be necessary to protect public health and safety and the environment, which standards shall establish requirements respecting (A) record keeping practices that accurately identify the quantities of such hazardous waste generated, the constituents thereof which are significant in quantity or in potential harm to human health of the environment and the disposition of such wastes, (B) labeling practices for any containers used for the storage, transport or disposal of such hazardous waste such as will identify accurately such waste, (C) use of appropriate containers for such hazardous waste, (D) furnishing of information on the general chemical composition of such hazardous wastes to persons transporting, treating, storing or disposing of such wastes, (E) use of a manifest system and any other reasonable means necessary to assure that all such hazardous waste generated is designed for treatment storage or disposal in, and arrives at treatment, storage or disposal facilities (other than facilities on the premises where the waste is generated) with respect to which permits have been issued which are required (1) by this article or any rule and regulation required by this article to be promulgated,

(2) by Subtitle C of the federal Solid Waste Disposal Act, as amended, (3) by the laws of any other state which has an authorized hazardous waste program pursuant to section 3006 of the federal Solid Waste Disposal Act, as amended, or (4) by title I of the federal Marine Protection, Research and Sanctuaries Act and (F) the submission of reports to the director at such times as the director deems necessary setting out the quantities of hazardous wastes identified or listed under this article that the generator has generated during a particular time period, and the disposition of all such hazardous waste; ...

(b) The rules and regulations required by this article to be promulgated shall be reviewed and where necessary, revised not less frequently than every three years. Additionally, the rules and regulations required to be promulgated by this article shall be revised, as necessary, within six months of the effective date of any amendment of the federal Solid Waste Disposal Act and within six months of the effective date of any adoption or revision of rules and regulations required to be promulgated by the federal Solid Waste Disposal Act, as amended.

ANALYSIS

I. HAS THE AGENCY EXCEEDED THE SCOPE OF ITS STATUTORY AUTHORITY IN APPROVING THE PROPOSED LEGISLATIVE RULE?

No. Under the above-cited code provision, the Director has the authority to promulgate rules and regulations of the type proposed. In fact the Director is required to revise its rules and regulations within six months of the effective date of any amendment to the federal law or rules and regulations.

II. IS THE PROPOSED LEGISLATIVE RULE IN CONFORMITY WITH THE INTENT OF THE STATUTE WHICH THE RULE IS INTENDED TO IMPLEMENT, EXTEND, APPLY, INTERPRET OR MAKE SPECIFIC?

Yes. The Legislature in W. Va. Code, §20-5E-2, stated the purposes of the article are:

(1) To protect the public health and safety, and the environment from the effects of the improper, inadequate or unsound management of hazardous wastes;

(2) To establish a program of regulation over the storage, transportation, treatment and disposal of hazardous wastes;

(3) To assure the safe and adequate management of hazardous wastes within this State; and

(4) To assume regulatory primacy through Subtitle C of the federal Solid Waste Disposal Act, as amended.

In order to fulfill these stated purposes, the Commissioner has promulgated rules to carry-out the intent of the statute and with the present rule is bringing West Virginia into conformity with federal law as is required by the statute and as required by the federal government in order for the State to obtain regulatory primacy.

III. DOES THE PROPOSED LEGISLATIVE RULE CONFLICT WITH OTHER CODE PROVISIONS OR WITH ANY OTHER RULE ADOPTED BY THE SAME OR A DIFFERENT AGENCY?

No. This, however, is a qualified "no". Counsel has reviewed the Hazardous Waste Management Act. Due to serious time constraints counsel did not examine all interrelated statutes and rules, based on the assumption that the Director has performed his duty mandated in W. Va. Code, §20-5E-5(b), which reads as follows:

(b) The director shall integrate all provisions of this article for purposes of administration and enforcement and shall avoid duplication to the maximum extent practicable, with the appropriate provisions of the Water Pollution Control Act, article five-A of this chapter; the Surface Mining and Reclamation Act, article six of this chapter; the Coal Refuse Disposal Control Act, Article six-C of this chapter; the Air Pollution Control Act, article twenty, chapter sixteen of this Code; the Oil and Gas Laws of article four, chapter twenty-two of this Code; the Public Health Laws, chapter sixteen of this Code; the Dam Control Act, Article five-D of this chapter; the Pesticide Use and Application Act of 1975, article sixteen-B, chapter nineteen of this Code; and the Pesticide Act of 1961, article sixteen-A, chapter nineteen of this Code.

An extensive comparison of all of these statutes and related rules would effectively preclude consideration of other agency rules currently on file with the Committee and awaiting action during the 1986 Session.

IV. IS THE PROPOSED LEGISLATIVE RULE NECESSARY TO FULLY ACCOMPLISH THE OBJECTIVES OF THE STATUTE UNDER WHICH THE PROPOSED RULE WAS PROMULGATED?

Yes.

V. IS THE PROPOSED LEGISLATIVE RULE REASONABLE, ESPECIALLY AS IT AFFECTS THE CONVENIENCE OF THE GENERAL PUBLIC OR OF PERSONS AFFECTED BY IT?

Yes. It should be noted, however, that a comment was received regarding the amendment to Section 11.10.12a which requires notice of any planned physical alterations rather than any major physical alterations. The comment was to the effect that this standard is too vague and gives the owner operator no guidance as to what physical alterations need to be reported.

VI. CAN THE PROPOSED LEGISLATIVE RULE BE MADE LESS COMPLEX OR MORE READILY UNDERSTANDABLE BY THE GENERAL PUBLIC?

No. Counsel did find a few minor language problems to be resolved with an agency representation.

VII. WAS THE PROPOSED LEGISLATIVE RULE PROMULGATED IN COMPLIANCE WITH THE REQUIREMENTS OF CHAPTER 29A, ARTICLE 3 AND WITH ANY REQUIREMENTS IMPOSED BY ANY OTHER PROVISION OF THE CODE?

The proposed legislative rule, as submitted, did not contain, as required by W. Va. Code, §29A-3-11(a), "(a) a brief summary of the content of the legislative rule and description of any rule which the agency proposes to amend or repeal."

Bill 23

H. B. 1768

(By Delegate Casey)

(Introduced February 5, 1986; referred to the Committee on the Judiciary)

A BILL to amend and reenact section twenty(five-e)(six), article two, chapter sixty-four of the code of West Virginia, one thousand nine hundred thirty-one, as amended, relating to authorizing the director of the department of natural resources to promulgate legislative rules relating to hazardous waste management.

Be it enacted by the Legislative of West Virginia:

That section twenty(five-e)(six), article two, chapter sixty-four of the code of West Virginia, one thousand nine hundred thirty-one, as amended, be amended and reenacted to read as follows:

ARTICLE 2. EXECUTIVE AGENCY AUTHORIZATION TO PROMULGATE LEGISLATIVE RULES.

§64-2-20(5e)(6). Department of natural resources.

1768

(a) The legislative rules filed in the state register on the sixth day of January, one thousand nine hundred eighty-four, relating to the department of natural resources (hazardous waste management) are authorized.

(b) The legislative rules filed in the state register on the sixth day of January, one thousand nine hundred eighty-four, relating to the air pollution control commission (to prevent and control air pollution from hazardous waste treatment, storage or disposal facilities)(series XXV) are authorized with the amendments set forth below:

Page 3, § 1.06, change the § title from "Enforcement" to "Procedure"; place an "(a)" in front of the existing paragraph and add the following:

"(b) Permit applications filed pursuant to this regulation shall be processed in accordance with the permitting procedures as set forth in code § 20-5E of this regulation. Permit procedures set forth in code § 16-20 and any other regulation of this commission are not applicable to any permit application filed pursuant to this regulation."

Such rules shall also include a section which shall read as follows:

"The commission shall report to the legislative rule-making review committee as required by that committee, but in no event later than the first day of the regular session of the Legislature in the year one thousand nine hundred eighty-five. Such report shall include information regarding the commission's

data gathering efforts, the development of compliance programs, the progress in implementation, and such other matters as the committee may require, pertaining to the regulations hereby authorized."

(c) The legislative rules filed in the state register on the third day of December, one thousand nine hundred eighty-four, modified by the department of natural resources to meet the objections of the legislative rule-making review committee and refiled in the state register on the thirteenth day of February, one thousand nine hundred eighty-five, relating to the department of natural resources (hazardous waste management), are authorized.

(d) The legislative rules filed in the state register on the eleventh day of December, one thousand nine hundred eighty-five, modified by the department of natural resources to meet the objections of the legislative rule-making review committee and refiled in the state register on the , one thousand nine hundred eighty- , relating to the department of natural resources (hazardous waste management) are authorized.

NOTE: The purpose of this bill is to authorize the department of natural resources to promulgate legislative rules relating to hazardous waste management.

Strike-throughs indicate language that would be stricken from the present law, and underscoring indicates new language that would be added.

Bill 23

SENATE BILL NO. 451

(By Senator R. Williams)

[Introduced February 3, 1986; referred to the Committee on Natural Resources; then to the Committee on the Judiciary.]

A BILL to amend and reenact section twenty(five-e)(six), article two, chapter sixty-four of the code of West Virginia, one thousand nine hundred thirty-one, as amended, relating to authorizing the director of the department of natural resources to promulgate legislative rules relating to hazardous waste management.

Be it enacted by the Legislative of West Virginia:

That section twenty(five-e)(six), article two, chapter sixty-four of the code of West Virginia, one thousand nine hundred thirty-one, as amended, be amended and reenacted to read as follows:

ARTICLE 2. EXECUTIVE AGENCY AUTHORIZATION TO PROMULGATE LEGISLATIVE RULES.

§64-2-20(5e)(6). Department of natural resources.

NR/JUD

(a) The legislative rules filed in the state register on the sixth day of January, one thousand nine hundred eighty-four, relating to the department of natural resources (hazardous waste management) are authorized.

(b) The legislative rules filed in the state register on the sixth day of January, one thousand nine hundred eighty-four, relating to the air pollution control commission (to prevent and control air pollution from hazardous waste treatment, storage or disposal facilities)(series XXV) are authorized with the amendments set forth below:

Page 3, § 1.06, change the § title from "Enforcement" to "Procedure"; place an "(a)" in front of the existing paragraph and add the following:

"(b) Permit applications filed pursuant to this regulation shall be processed in accordance with the permitting procedures as set forth in code § 20-5E of this regulation. Permit procedures set forth in code § 16-20 and any other regulation of this commission are not applicable to any permit application filed pursuant to this regulation."

Such rules shall also include a section which shall read as follows:

"The commission shall report to the legislative rule-making review committee as required by that committee, but in no event later than the first day of the regular session of the Legislature in the year one thousand nine hundred eighty-five. Such report shall include information regarding the commission's

data gathering efforts, the development of compliance programs, the progress in implementation, and such other matters as the committee may require, pertaining to the regulations hereby authorized."

(c) The legislative rules filed in the state register on the third day of December, one thousand nine hundred eighty-four, modified by the department of natural resources to meet the objections of the legislative rule-making review committee and refiled in the state register on the thirteenth day of February, one thousand nine hundred eighty-five, relating to the department of natural resources (hazardous waste management), are authorized.

(d) The legislative rules filed in the state register on the eleventh day of December, one thousand nine hundred eighty-five, modified by the department of natural resources to meet the objections of the legislative rule-making review committee and refiled in the state register on the , one thousand nine hundred eighty- , relating to the department of natural resources (hazardous waste management) are authorized.

NOTE: The purpose of this bill is to authorize the department of natural resources to promulgate legislative rules relating to hazardous waste management.

Strike-throughs indicate language that would be stricken from the present law, and underscoring indicates new language that would be added.

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SECRETARY OF STATE

NOTICE OF AGENCY APPROVAL

LEGISLATIVE RULE: Hazardous Waste Management; Chapter 20, Article 5E, Series XIV: Small Quantity Generators and Waste Minimization Certification

The attached legislative rule constitutes the official rule approved by the Director of the West Virginia Department of Natural Resources on 10th day of October, 1985 and filed pursuant to law with the West Virginia Secretary of State and the Legislative Rulemaking Review Committee.

Ronald R. Potesta
Director

FILED

3.1.4 Special Requirements for Hazardous Waste Generated by Small Quantity Generators

3.1.4a A generator is a small quantity generator in a calendar month if he generates less than 1000 kilograms of hazardous waste in that month.

3.1.4b Except for those wastes identified in paragraphs (e) and (f) of this section, a small quantity generator's hazardous wastes are not subject to regulation under Sections 6, 8, and 11 of these regulations and 40 C.F.R. Part 265, provided the generator complies with the requirements of paragraphs (g) or (j) of this section.

3.1.4c Hazardous waste that is beneficially used or re-used or legitimately recycled or reclaimed and that is excluded from regulation by Section 3.1.5(a) is not included in the quantity determinations of this section, and is not subject to any requirements of this section if the notification requirements of Section 4 are complied with. Hazardous waste that is subject to the special requirements of Section 3.1.5(b) is included in the quantity determinations of this section and is subject to the requirements of this section.

3.1.4d In determining the quantity of hazardous waste he generates, a generator need not include:

3.1.4.d.1 His hazardous waste when it is removed from on-site storage; or

3.1.4.d.2 Hazardous waste produced by on-site treatment of his hazardous waste.

3.1.4e If a small quantity generator generates acutely hazardous waste in a calendar month in quantities greater than set forth below, all quantities of that acutely hazardous waste are fully subject to these regulations:

3.1.4.e.1 A total of one kilogram of commercial chemical products and manufacturing chemical intermediates having the generic names listed in 3.4.4(e), and off-specification commercial chemical products and manufacturing chemical intermediates which, if they met specifications, would have the generic names listed in 3.4.4(e);

3.1.4.e.2 A total of 100 kilograms of any residue or contaminated soil, water or other debris resulting from the clean-up of a spill, into or on any land or water, of any commercial chemical products or

manufacturing chemical intermediates having the generic names listed in 3.4.4(e), or any residue or contaminated soil, water or other debris resulting from the cleanup of a spill, into or on any land or water, of any off-specification commercial chemical products or manufacturing chemical intermediates which, if they met specifications, would have the generic names listed in 3.4.4(e).

3.1.4f A small quantity generator may accumulate hazardous waste on-site. If he accumulates at any time more than a total of 1000 kilograms of his hazardous waste, or his acutely hazardous wastes in quantities greater than those set forth in paragraphs (e)(1) or (e)(2) of this section all of those accumulated wastes for which the accumulation limit was exceeded are fully subject to these regulations. The time period of Section 6.3.5 for accumulation of wastes on-site begins for a small quantity generator when the accumulated wastes exceed the applicable exclusion level.

3.1.4g In order for hazardous waste generated by a small quantity generator to be excluded from full regulation under this section ~~f~~, the generator must:

3.1.4.g.1 Comply with Sections 4 and 6.1.1 of these regulations;

3.1.4.g.2 If he stores his hazardous waste on-site, store it in compliance with the requirements of paragraph (f) of this section;

3.1.4.g.3 Establish and maintain on-site a written record specifying the quantity and types of hazardous wastes disposed of, the dates the wastes were transported off-site, and the final disposition of the wastes; and (Comment: This recordkeeping requirement is only applicable to manufacturing facilities. Non-manufacturing facilities such as schools, service stations, etc. are not required to comply with this subsection.)

3.1.4.g.4 Either treat or dispose of his hazardous waste in an on-site facility, or ensure delivery to an off-site storage, treatment or disposal facility, either of which is:

3.1.4.g.4.i Permitted under 40 CFR Part 270 of the federal code;

3.1.4.g.4.ii In interim status under ~~either~~ 40 CFR Parts 270 and ~~or~~ 265 and 20-5E-10 of the West Virginia Code;

3.1.4.g.4.iii Permitted by this State under Section 11.00 of these regulations;

3.1.4.g.4.iv Permitted by this State to manage industrial wastes under the Water Pollution Control Act; (Comment: After March 31, 1986 a small quantity generator will not be allowed to send its hazardous waste to this type of facility.)

3.1.4.g.4.v Authorized to manage hazardous waste by a state with a hazardous waste program approved under 40 CFR Part 271;

3.1.4.g.4.vi A facility which:

3.1.4.g.4.vi.A Beneficially uses or re-uses, or legitimately recycles or reclaims his waste; or

3.1.4.g.4.vi.B Treats his waste prior to beneficial use or re-use, or legitimate recycling or reclamation.

3.1.4.h Hazardous waste subject to the reduced requirements of this section may be mixed with non-hazardous waste and remain subject to these reduced requirements even though the resultant mixture exceeds the quantity limitations identified in this section, unless the mixture meets any of the characteristics of hazardous wastes identified in Sections 3.3.

3.1.4.i If a small quantity generator mixes a waste with a hazardous waste that exceeds a quantity exclusion level of this section, the mixture is subject to full regulation.

3.1.4.j A small quantity generator that generates more than 100, but less than 1000 kilograms of hazardous waste or who generates acutely hazardous waste in an amount greater than specified in Section 3.1.4e in any calendar month shall be subject to the following requirements, in addition to those requirements enumerated in paragraphs (a) through (i) of this section:

3.1.4.j.1 The manifest requirements of Section 6.2, except that such small quantity generators are only required to complete the following items on the generator segment of the Uniform Hazardous Waste Manifest prior to shipping hazardous waste off-site for treatment, storage, disposal or recycling:

3.1.4.j.1.i Generator name, address, and signature (items 3 and 16 on the Uniform Hazardous Waste Manifest form.)

3.1.4.j.1.ii The name and address of the facility designated to receive the hazardous waste (item 9 on the Uniform Hazardous Waste Manifest form).

3.1.4.j.1.iii The DOT description of the waste, including the proper shipping name, hazard classification, and the "UN" or "NA" identification number (item 11 on the Uniform Hazardous Waste Manifest form).

3.1.4.j.1.iv The number and type of containers of hazardous wastes (item 12 on the Uniform Hazardous Waste Manifest form). (COMMENT: Each container must be properly marked, labeled, and meet all DOT specifications), and

3.1.4.j.1.v The total quantity of hazardous waste to be transported off-site (items 13 and 14 on the Uniform Hazardous Waste Manifest form);

3.1.4.j.2 The pre-transport DOT packaging, labeling, marking and placarding requirements described in Section 6.3 of these regulations:

3.1.4.j.3 The recordkeeping requirements of Section 6.4.1(a), (c), and (d) and 6.4.4; and

3.1.4.j.4 The special conditions of Section 6.5.

Section 6. Standards Applicable to Generators of Hazardous Waste

6.1 Purpose, Scope and Applicability

6.1a This Section establishes standards and regulations for generators of hazardous wastes.

6.1a.1 Generators that generate more than 1000 kilograms of hazardous waste, identified or listed in Section 3 of these regulations, in any calendar month or who generate acutely hazardous waste in quantities greater than the amounts listed in 3.1.4.e are subject to all sections of these regulations, except as otherwise provided in Section 6 of these regulations.

6.1a.2 Small quantity generators that generate between 100 and 1000 kilograms of hazardous waste, identified or listed in Section 3 of these regulations, in any calendar month are subject to the requirements of Section 6 listed in Section 3.1.4(j) of these regulations.

6.1b A generator who treats, stores, or disposes of hazardous waste on-site must only comply with the following subsections of this Section with respect to that waste: 6.1.1 for determining whether his waste is hazardous; 6.1.2 for obtaining an EPA identification number; 6.4.1(c) and (d) for recordkeeping; 6.4.4 for additional reporting; and, if applicable, 6.5.2 for farmers; and 6.3.5 for accumulation of hazardous waste.

6.1c Any person who imports hazardous waste into West Virginia shall comply with the standards applicable to generators established in this section.

6.1d A farmer who generates waste pesticides which are hazardous wastes and who complies with all the requirements of Section 6.5.~~1~~2 is not required to comply with the remainder of these regulations with respect to such pesticides.

6.1e A person who generates a hazardous waste, as defined in Section 3 is subject to the compliance requirements and penalties prescribed in Sections 14, 15 and 16 of the Hazardous Waste Management Act if he does not comply with the requirements of this section.

6.1f An owner or operator who initiates a shipment of hazardous waste from a treatment, storage, or disposal facility must comply with the generator standards established in this section.

6.2 The Manifest

6.2.1 General Requirements

6.2.1.a A generator who transports, or offers for transportation, hazardous waste for off-site treatment, storage, or disposal must prepare a manifest, OMB control number 2000-0404 on EPa form 8700-22, and, if necessary, EPA form 8700-22A, according to the requirements adopted in Appendix I of this section.

6.2.1.b A generator must designate on the manifest one facility which is permitted to handle the waste described on the manifest.

6.2.1.c Beginning on September 1, 1985, and thereafter, generators shall insert on the manifest, at item 16 "Generator Certification", in addition to the certification which already exists at item 16, the following waste minimization certification:

"Unless I am a small quantity generator who has been exempted by statute or regulation from the duty to make a waste minimization certification under Section 3002(b) of RCRA, I also certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and I have selected the method of treatment, storage or disposal currently available to me which minimizes the present and future threat to human health and the environment."

6.2.1.d A generator may also designate on the manifest one alternate facility which is permitted to handle his waste in the event an emergency prevents delivery of the waste to the primary designated facility.

6.2.1.e If the transporter is unable to deliver the hazardous waste to the designated facility or the alternate facility, the generator must either designate another facility or instruct the transporter to return the waste.

6.4 Recordkeeping and Reporting

* * * * *

6.4.2 Annual Reporting

6.4.2a A generator who ships hazardous waste off-site shall submit an Annual Report to the Chief on a form prescribed by him, no later than March 1 for the preceding calendar year. Such report must include, at least, the following information:

(1) The EPA identification number, name, and address of the generator;

(2) The calendar year covered by the report;

(3) The EPA identification number, name, and address for each off-site treatment, storage, or disposal facility to which waste was shipped during the year; for exported shipments, the report must give the name and address of the foreign facility.

(4) The name and EPA identification number of each transporter used during the reporting year.

(5) A description, EPA hazardous waste number (from 40 CFR Part 261, Subpart C or D), DOT hazard class, and quantity of each hazardous waste shipped off-site. This information must be listed by EPA identification number of each off-site facility to which waste was shipped.

(6) A description of the efforts undertaken during the year to reduce the volume and toxicity of waste generated.

(7) A description of the changes in volume and toxicity of waste actually achieved during the year in comparison to previous years to the extent such information is available for years prior to 1984.

(8) The certification signed by the generator or authorized representative.

6.4.2b Any generator who treats, stores, or disposes of hazardous waste on-site shall submit an Annual Report covering those wastes in accordance with the provisions of Sections 8.00 and 11.00 of these regulations, and 40 C.F.R. Part 265.

* * * * *

APPENDIX I

The Director hereby adopts and incorporates by reference 40 CFR Part 262, Appendix - Uniform Hazardous Waste Manifest and Instructions, as published in the Federal Register on ~~March 20,~~ July 15, 1985 (attached).

Wherever the term Administrator or Regional Administrator is used, the term shall have the meaning of the Director of the Department of Natural Resources.

Wherever the term Environmental Protection Agency or EPA is used, the term shall have the meaning of the West Virginia Department of Natural Resources.

APPENDIX

Please print or type. *(Form designed for use on elite (12-pitch) typewriter.)*

Form Approved. OMB No. 2050-0404. Expires 7-31-86

UNIFORM HAZARDOUS WASTE MANIFEST

1 Generator's US EPA ID No. | Manifest Document No. | 2 Page 1 of | Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address

4. Generator's Phone ( )

5. Transporter 1 Company Name | 6. US EPA ID Number

7. Transporter 2 Company Name | 8. US EPA ID Number

9. Designated Facility Name and Site Address | 10. US EPA ID Number

A. State Manifest Document Number

B. State Generator's ID

C. State Transporter's ID

D. Transporter's Phone

E. State Transporter's ID

F. Transporter's Phone

G. State Facility's ID

H. Facility's Phone

GENERATOR

11. US DOT Description *(Including Proper Shipping Name, Hazard Class, and ID Number)*	12. Containers No.	Type	13. Total Quantity	14. Unit Wt./Vol.	Waste No.
a.					
b.					
c.					
d.					

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

Unless I am a small quantity generator who has been exempted by statute or regulation from the duty to make a waste minimization certification under Section 3002(b) of RCRA, I also certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and I have selected the method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment.

Printed/Typed Name | Signature | Month Day Year

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month Day Year

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month Day Year

FACILITY

19 Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name | Signature | Month Day Year

EPA Form 8700-22 (Rev. 4-85) Previous edition is obsolete.

BILLING CODE 6560-50-C

8.5.4 Operating Record

8.5.4a The owner or operator shall keep a written operating record at the facility.

8.5.4b The following information shall be recorded, as it becomes available, and maintained in the operating record until ~~closure~~ closure of the facility:

8.5.4.b.1 A description and the quantity of each hazardous waste received and the method(s) and date(s) of its treatment, storage or disposal at the facility, as required by Appendix I;

8.5.4.b.2 The location of each hazardous waste within the facility and the quantity of each location. For disposal facilities, the location and quantity of each hazardous waste must be recorded on a map or diagram of each cell or disposal area. For all facilities, this information must include cross-references to specific manifest document numbers, if the waste was accompanied by manifest.

8.5.4.b.3 Records and results of waste analyses performed as specified in Sections 8.2.4 and 8.2.8.

8.5.4.b.4 Summary reports and details of all incidents that require implementing the contingency plan, as required by Section 8.4.7(j).

8.5.4.b.5 Records and results of inspections as required by Section 8.2.6.

8.5.4.b.6 For off-site facilities, notices to generators as specified in Section 8.2.3(b).

8.5.4.b.7 All closure cost estimates, and for disposal facilities all post-closure cost estimates.

8.5.4.b.8 Monitoring, testing, or analytical data where required by Sections 8.13, 8.9.5, 8.10.4, 8.10.5, 8.12.7, 8.12.9, 8.12.11, 8.11.3(a), 8.11.3(b), 8.11.10(a), and 8.11.10(b).

8.5.4.b.9 A certification by the permittee no less often than annually, that the permittee has a program in place to reduce the volume and toxicity of hazardous waste that he generates to the degree determined by the permittee to be economically practicable; and the proposed method of treatment, storage or disposal is that practicable method currently available to the permittee which minimizes the

present and future threat to human health and the environment.

11.10.10 Monitoring Records

11.10.10a Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

11.10.10b The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original chart recordings for continuous monitoring instrumentation, copies of all reports required by the permit, the certification required by 8.5.4.b.9, and records of all data used to complete the application for the permit, for a period of three (3) years from the date of the sample, measurement, report, or application. This period may be extended by the Chief, at any time.

11.10.10c The permittee shall maintain records from all groundwater monitoring wells and associated groundwater surface elevations, for the active life of the facility, and for disposal facilities for the post-closure care period as well.

11.10.10d records of monitoring information shall include:

11.10.10.d.1 The date, exact place, and time of sampling or measurements.

11.10.10.d.2 The individual(s) who performed the sampling or measurements.

11.10.10.d.3 The date(s) analyses were performed.

11.10.10.d.4 The individual(s) who performed the analyses.

11.10.10.d.5 The analytical techniques or methods used.

11.10.10.d.6 The results of such analyses.

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RESPONSE TO COMMENTS
DEPARTMENT OF NATURAL RESOURCES
AND DEPARTMENT OF HIGHWAYS
RULEMAKING CONCERNING SMALL QUANTITY GENERATORS
AND WASTE MINIMIZATION CERTIFICATIONS

The Departments of Natural Resources and Highways received several comments from two sources. Below is a synopsis of those comments and the Departments' responses.

1. Comment: State regulations are not needed at this time since EPA regulations apply on the federal level. In addition, EPA issued proposed rules on August 1 for further regulation of small quantity generators. West Virginia should not impose unnecessary regulations now, but rather wait for completion of EPA's rulemaking.

   Answer: Although federal regulations do apply to West Virginia's small quantity generators, there are several reasons why state regulations should be enacted now on an emergency basis. First, the West Virginia Department of Highways and the Department of Natural Resources are the principal implementing agencies for these regulations. Although EPA has promulgated regulations, they will not play an important role in implementing the SQG or WMC regulations in West Virginia. For example, EPA does not plan to conduct any training seminars to explain these new requirements or conduct any inspections to ensure compliance. Consequently the State needs to adopt these regulations into their program to both heighten their visibility for West Virginia's generators and, secondly, to allow the State to enforce these provisions if necessary.

   Most importantly, however, there are statutory reasons for promulgating these regulations. Under the State's Hazardous Waste Management Act (Chapter 20, Article 5E) the State Hazardous Waste Management Agencies must promulgate changes to their regulations within six months of federal changes. EPA promulgated the SQG and WMC regulations on July 15, 1985. Thus, the State has until December 15, 1985, to meet its State statutory obligations. Consequently, emergency regulations will be needed. Because of the cited program reasons, the State has decided to proceed with emergency regulations now instead of in December.

2. Comment: The State should begin a concentrated effort to educate small quantity generators regarding their new obligations. As part of this effort a toll-free hazardous waste Hot-Line should be established to answer questions.

   Answer: Both the Department of Natural Resources and the Department of Highways have agreed to conduct training seminars targeted for small quantity generators. In addition, we agree that a toll-free hot-line is a good idea and we are looking into how to establish one, its costs, and how to make it effective.

3. Comment: Historically, DNR regulations have been more stringent than the federal rules because the HWMA regulations prohibited disposal of hazardous waste in "municipal landfills". DNR regulations did allow for disposal of SQG hazardous wastes in "industrial landfills" permitted under Article 5A. This alternative was illusory since none of these landfills were operated on a commercial basis. Limited availability of TSD facilities because of these restrictions means that compliance with DNR regulations will be more difficult for SQG's in West Virginia than in other states. Therefore, a commercial site must be established in West Virginia as soon as possible.

Answer: The departments agree that a commercial site in West Virginia would be a positive step. We are discussing with the Governor the possibility that he establish a committee to begin working on this issue. We must, however, address other portions of this comment.

It is correct that DNR has prohibited disposal of hazardous waste in municipal landfills for some time. The department's judgment in this matter has been vindicated by the recent Hazardous and Solid Waste Act Amendments of 1984 which also prohibited hazardous waste disposal in municipal landfills. As we noted in our comment to DNR regulation 3.1.4.g.4.iv, after March 31, 1986, a SQG will not be able to send its hazardous waste to even an industrial waste landfill (according to federal law). Consequently, the federal program will not only "catch-up" to the State's program, but will be even more stringent.

4. Comment: Generators should be informed of what information they should provide in its annual report concerning waste minimization.

Answer: The State agrees and has therefore amended Section 6.4.2 of DNR's regulations. In addition to including reference to the three items relating to waste minimization, the State is including reference to other items needed in this report consistent with 40 CFR Section 262.41.

5. Comment: The State should require its annual report biennially consistent with EPA's requirement.

Answer: The State visited this issue previously when EPA changed its reporting requirements from annually to biennially. Several reasons exist for maintaining annual reporting including a statutory requirement under the Hazardous Waste Emergency Response Fund (Chapter 20, Article 5G) that generators file annual reports. As we noted in the preamble to the SQG regulations, the State HWMA imposes responsibilities on the State agencies concerning waste minimization which are greater than the federal responsibilities. DNR believes that requiring annual reports will aid in meeting these statutory responsibilities.

6. Comment: Section 3.1.4g should refer to the exclusion under Section 3.1.4 rather than the exclusion of Section 6 for conformity with EPA program requirements.

Answer: Concur. Change incorporated.

7. Comment: Section 3.1.4.g.4.ii should include references to 40 CFR Parts 270, 265 and 20-5E-10 of the West Virginia Code.

   Answer: Concur. Change incorporated.

8. Comment: The reference to 6.5.1 in 6.1.3 is incorrect. It should be 6.5.2.

   Answer: Concur. Change incorporated.

9. Comment: The reference in Section 6, Appendix 1 to the Uniform Hazardous Waste Manifest should be July 15, 1985, not July 15, 1984.

   Answer: Concur. Change incorporated.

10. Comment: In Section 8.5.4 the word "measure" should be "closure".

    Answer: Concur. Change incorporated.