STATE OF WEST VIRGINIA
DEPARTMENT OF NATURAL RESOURCES
CHARLESTON 25305

ARCH A. MOORE, JR.
Governor

RONALD R. POTESTA
Director

ROBERT K. PARSONS
Deputy Director

January 9, 1987

NOTICE OF AGENCY APPROVAL

LEGISLATIVE RULE: Hazardous Waste Management Regulations

The attached legislative rule constitutes the official rule approved by the West Virginia Department of Natural Resources on 9th day of January, 1987 and filed pursuant to law with the West Virginia Secretary of State and the Legislative Rule-Making Review Committee.

Ronald R. Potesta
Director

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DEPARTMENT OF NATURAL RESOURCES
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January 9, 1987

FILED
1987 JAN 13 PM 3:
SECRETARY OF STATE

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

Re: Filing of Approved Rules
(Hazardous Waste Management
Regulations, Series 35) by the
Department of Natural Resources

Dear Mr. Hechler:

Enclosed please find for your filing a copy of approved amendments to the legislative rules of the Department of Natural Resources. Please note that these rules were originally proposed as Series 15. Title 47, the compilation of Department regulations, has since been renumbered; Series 15 became 35 and has been so renumbered in this filing.

If you have any questions, please contact Mr. Ron Shipley, Special Assistant to the Director, at 348-2761.

Sincerely,

Ronald R. Potesta
Director

RRP/jhb

Enclosures

cc: Legislative Rule-Making Review Committee
State Hazardous Waste Management Agencies

FILED

1988 SEP 10 AM 11: 30

OFFICE OF WEST VIRGINIA SECRETARY OF STATE

FISCAL NOTE FOR PROPOSED RULES

Rule Title: Hazardous Waste Management Regulations

Type of Rule: X Legislative Interpretive Procedural

Agency: Department of Natural Resources

Address: 1800 Washington Street East, Charleston, West Virginia 25305

1. Effect of Proposed Rule (Estimated Total Cost)	ANNUAL Increase $	ANNUAL Decrease $	FISCAL YEAR Current $	FISCAL YEAR Next $	FISCAL YEAR Thereafter $
Personal Services					
Current Expense					
Repairs and Alterations			Little or No Impact		
Equipment					
Other					

2. Explanation of Above Estimates:

The proposed rule will result in a minor increase in Department paperwork.

3. Objectives of These Rules:

The proposed rules will substantially lower the costs incurred by the chemical industry in the handling of waste mixtures while ensuring the protection of human health and the environment.

4. Explanation of Overall Economic Impact of Proposed Rule.

A. Economic Impact on State Government:

The proposed rules should have little or no economic impact upon state government.

B. Economic Impact on Political Subdivisions; Specific Industries; Specific Groups of Citizens:

Under current legislative rules, the chemical industry in West Virginia expects to incur costs of $56 million in new capital expenditures and in excess of $2.5 million per year in operating costs in order to comply with federal regulations set to become effective on November 8, 1986. The proposed rule will provide

substantial cost savings to the industry in two regards. Under the proposed rule, the industry would incur new capital expenditures of approximately $15,000 for each hazardous waste treatment facility impacted by the rules (less than 10 facilities at present). The annual operating cost of each of these facilities would be approximately $16,000. Thus, the proposed rule is anticipated to provide a savings of $55.75 million in initial capital expenditures and at least $2.3 million annually thereafter.

C. Economic Impact on Citizens/Public at Large:

The proposed rule will result in a substantial costs savings to the chemical industry in West Virginia, which could ultimately result in a reduction in the costs of consumer goods.

Date: September 19, 1986

Director

DATE: January 9, 1987

TO: LEGISLATIVE RULEMAKING REVIEW COMMITTEE

FROM: West Virginia Department of Natural Resources

LEGISLATIVE RULE TITLE: Hazardous Waste Management Regulations

1. Authorizing statute(s) citation:

   West Virginia Code Chapter 20, Article 5E, Section 6

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

      September 19, 1986

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

      An official Department News Release was sent to all West Virginia newspapers and radio and television stations.

   c. Date(s) of hearing(s): October 27, 1986

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

      Attached __X__ No comments received _____

      Comments received, amendments, and reasons for amendments appear in the Response to Comments filed with the agency approved proposed Legislative Rule.

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

      January 9, 1987

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

      Mr. Ron Shipley
      Special Assistant to the Director
      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:

NOT APPLICABLE

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 _____

West Virginia Administrative Regulations
Department of Natural Resources
Series 35
Hazardous Waste Management Regulations

* * * * *

3.1.2 Definition of Hazardous Waste

3.1.2.a 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.~~ It is a mixture of a waste and a hazardous waste that is listed in Section 3.4 solely because it exhibits one or more of the characteristics of hazardous waste identified in Section 3.3, unless the resultant mixture no longer exhibits any characteristic of hazardous waste identified in Section 3.3.

3.1.2.a.2.iii It is a mixture of a waste and one or more hazardous wastes listed in Section 3.4 and has not been excluded from this paragraph under Section 16 of these regulations; however, the following mixtures of solid wastes and hazardous wastes listed in Section 3.4 are not hazardous wastes (except by application of Sections 3.1.2.a.2.iv or 3.1.2.a.2.i) if the generator complies with the requirements contained in Section 3.1.2.a.3:

3.1.2.a.2.iii.A It is one or more of the following spent solvents listed in Section 3.4.2 - carbon tetrachloride, tetrachloroethylene, and trichoroethylene - provided that the maximum total weekly usage of these solvents (other than the amounts that can be demonstrated not to be discharged to wastewater) divided by the average weekly flow of wastewater into the headworks of the facility's wastewater treatment or pretreatment system does not exceed 1 part per million; or

3.1.2.a.2.iii.B It is one or more of the following spent solvents listed in Section 3.4.2 - methylene chloride, 1, 1, 1-trichloroethane, chlorobenzene, o-dichlorobenzene, cresols, cresylic acid, nitrobenzene, toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, and spent chlorofluorocarbon solvents -

provided that the maximum total weekly usage of these solvents (other than the amounts that can be demonstrated not to be discharged to wastewater) divided by the average weekly flow of wastewater into the headworks of the facility's wastewater treatment or pretreatment system does not exceed 25 parts per million; or

3.1.2.a.2.iii.C It is the following waste listed in Section 3.4.3 - heat exchanger bundle cleaning sludge from the petroleum refining industry (EPA Hazardous Waste No. K050); or

3.1.2.a.2.iii.D It is a discarded commercial chemical product, or chemical intermediate listed in Section 3.4.4, arising from "de minimis" losses of these materials from manufacturing operations produced in the manufacturing process. For purposes of this subsection, "de minimis" losses include those from normal material handling operations (e.g. spills from the unloading or transfer of materials from bins or other containers, or leaks from pipes, valves, or other devices used to transfer materials); minor leaks from process equipment, storage tanks, or containers; leaks from well-maintained pump packings and seals; sample purgings; relief device discharges; discharges from safety showers or the rinsing and cleaning of personal safety equipment; and rinsate from empty containers or from containers that are rendered empty by that rinsing; or

3.1.2.a.2.iii.E It is a wastewater resulting from laboratory operations containing toxic (T) wastes listed in Section 3.4, provided the annualized average flow of laboratory wastewater does not exceed one percent of total wastewater flow into the headworks of the facility's wastewater treatment or pretreatment system, or provided the wastes' combined annualized average concentration does not exceed one part per million in the headworks of the facility's wastewater treatment or pretreatment facility. Toxic (T) wastes used in laboratories that are demonstrated not to be discharged to wastewater are not to be included in this calculation.

3.1.2.a.2.~~iii~~.iv It exhibits any of the characteristics of hazardous waste identified in Section 3.3.

3.1.2.a.3 In order for a mixture of a waste and one or more hazardous wastes identified in Section 3.1.2.a.2.iii to be exempt from the definition of hazardous waste, the owner or operator must comply with the following:

3.1.2.a.3.i Before claiming an exemption, demonstrate in writing to the Chief that the weekly ratio of the usage of solvents to the flow of wastewater in the headworks of wastewater treatment does not exceed the values listed in 3.1.2.a.2.iii A or B; or the annualized ratio of average flow of laboratory wastes of the total

flow of wastewater in the headworks of wastewater treatment or the combined annualized concentration in the headworks of wastewater treatment does not exceed the values listed in Section 3.1.2.a.2.iii.E. He must also report annually to the Chief the ratios or values described in this paragraph for the previousyear.

3.1.2.a.3.ii Annually submit to the Chief a list of hazardous wastes that are expected to be present in the mixture to be exempted.

3.1.2.a.3.iii Before claiming an exemption, demonstrate in writing to the Chief that the mixture consists of wastewater which is treated in a wastewater treatment facility, the discharge of which is subject to regulation under W. Va. Code [20-5A-1 (including wastewater at facilities which have eliminated the discharge of wastewater).

3.1.2.a.3.iv Provide a certification in writing to the Chief that groundwater monitoring complying with either 40 C.F.R. Part 265, Subpart F, or which is approved by the Chief, is or will be in place at the wastewater treatment facility identified in Section 3.1.2.a.3.iii. A time schedule for the installation of such groundwater monitoring must be included. (Note: This requirement does not apply to wastewater treatment units or containers.)

3.1.2.a.4 Before claiming an exemption, the owner or operator of each wastewater treatment facility receiving mixtures of wastes under Section 3.1.2.a.2 shall notify the Chief of the receipt of such wastes on a form prescribed by the Chief.

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.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, emissions control dust, or leachate (but not including precipitation run-off) is a hazardous waste. (However, materials that are reclaimed from waste 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.

* * * * *

PREAMBLE TO HAZARDOUS WASTE MANAGEMENT REGULATIONS
APPROVED RULES

PROGRAM: Hazardous Waste Management

REGULATIONS: Hazardous Waste Management Regulations, Series 35

AUTHORITY: West Virginia Code, Chapter 20, Article 5E

ACTION: Approval of rules and response to comments

SUMMARY: Today's rulemaking adopts rules, as modified based upon public comment, that were proposed on September 19, 1986 to exempt certain mixtures of wastes and hazardous wastes from the "presumption of hazardous" concept contained in the State's Hazardous Waste Management Regulations (HWMR). The adopted rules are similar to the United States Environmental Protection Agency (EPA) "mixture rule" contained in 40 C.F.R. 261.3(a)(2)(iii-iv), with certain modifications which are more stringent than the existing federal rule. The proposed rules were also promulgated on an emergency basis, effective September 22, 1986.

CONTACT: Ron Shipley, Special Assistant to the Director, Director's Office of Regulatory Affairs, Room 842, 1800 Washington Street, East, Charleston, WV 25305, phone (304) 348-2761.

SUPPLEMENTAL INFORMATION: The Department's decision to adopt a "mixture rule" similar to EPA's current rule was made in order to reduce the potential economic burden that could be imposed upon the West Virginia chemical industry. In the absence of an adoption of a mixture rule, a federal ban on land disposal of wastes would have seriously affected the disposal of certain waste mixtures. Furthermore, impoundments handling the waste mixture being exempted would have had to undergo expensive retrofitting.

The Department proposed modifications to the EPA mixture rule to alleviate environmental concerns of the Department and the public. By requiring groundwater monitoring and formalized demonstration, the Department's mixture rule would better protect human health and environment and exempt from regulation only those wastes which really qualified.

RESPONSE TO COMMENTS A public hearing on the proposed rules, held on October 27, 1986 in Charleston, was attended by four interested parties and representatives of the Department. The Department received comments from five parties; these comments and the Department's responses are as follows:

Section 3.1.2.a.2.iii

Comment:

One entity objected to our adopting the proposed "mixture rule" because it contended that these rules effectively destroyed any authority that could be exercised by the Air Pollution Control Commission to control volatile organics, some of which are carcinogens, discharged into air from waste water treatment plants via air stripping.

Response:

The DNR believes that the commentor has both overstated the alleged harm from this rule as well as understating the authority of the Air Pollution Control Commission. Today's rule will have only limited environmental impact. The rule does not allow additional types of pollutants to be treated at wastewater treatment plants. Rather, today's rule will allow small additional quantities of hazardous waste and dilute mixtures of hazardous wastes to also be treated at such facilities. A facility which already is treating unmixed hazardous waste, for example, is still subject to the full panoply of environmental regulation, including Air Polution Control Commission regulations. Therefore any facility which is recieving both hazardous waste and mixture rule waste will still be regulated by the Air Pollution Control Commission under its current regulation Series 25. We estimate that less than five units, which are currently covered by DNR regulation, will be exempted from hazardous waste regulation under this rule.

In addition, we note that the APCC has broad authority under both the Hazardous Waste Management Act and the Air Pollution Control statute. Thus, DNR rule promulgation does not affect generic APCC authority over the few units affected by this rule.

Section 3.1.2.a.2.iii.a

Comment:

The word after "average weekly" should be "flow" rather than "low" (i.e. the average weekly flow of wastewater).

Response: Corrected.

Section 3.1.2.a.3

Comment:

Most commentors objected to the provisions contained in this subsection which required those owners or operators claiming exemption for waste mixtures from the definition of hazardous waste to meet certain requirements. The commentors in general objected to the requirements which were more stringent than the federal regulations. One commentor pointed out that there are no peculiar circumstances in the State requiring provisions different from the federal regulations. Another commentor stated that by adopting these special requirements, West Virginia's program is no longer consistent with and equivalent to the federal program.

Response:

The DNR believes that by adopting the "mixture rule" provisions of EPA, the industry's economic burden has been greatly reduced. The Agency, however, had some concerns regarding potential harm to the environment and public health if the EPA "mixture rule" was adopted without any modification. Our modifications to the federal rule in this subsection are designed to protect human health and the environment.

We note that the State's hazardous waste management program remains consistent and equivalent with the federal program. Today's rule does not contradict the federal program or adopt provisions which are less stringent than the federal program. Federal law expressly allows a State to adopt provisions which are more stringent than the federal provisions. Consistency under the federal program is judged based on whether we comply with 40 C.F.R. §270.4. This rule does not interfere with compliance of that federal rule.

Section 3.1.2.a.3.i

Comment:

The commentor believes that the written demonstration required under this subsection is unnecessary. The Department can request the information whenever necessary. Even if a written demonstration is required, it should be to require the tested concentration of the solvents in the wastewater and not the calculated ratios.

Response:

Testing for concentration, if meaningful analysis of the data needs to be made, would require monitoring the spent solvent

concentration at reasonable frequency throughout the year which can be expensive and time consuming. Hence, the Agency, like EPA, is requiring only the ratios of maximum amount of solvents used during a week to the average waste water flow. The Agency has recently published a guidance document for applicants seeking exemption which allows an applicant to use monitoring results for demonstration, if he so desires.

Comment:

"Due to the relatively constant quantities of laboratory wastes, laboratory wastewaters, and total wastewater flow to a facility's wastewater treatment plant from year to year, there is no need to calculate" the ratios for laboratory wastes. This ratio should be required only when significant changes occur at the facility.

Response:

The DNR does not have any data to prove the commentor's contention.

Comment:

Is the annual reporting required where ratios were used to obtain exemption? Is continuous monitoring of the concentrations required for annual reporting?

Response:

No monitoring needs to be done for annual reporting. The ratios for annual reports must be calculated in the same manner as for obtaining the exemption.

Section 3.1.2.a.3.ii

Comment:

The annual reporting of the list of wastes could be lengthy and presence of certain wastes is difficult to predict. Failure to list a specific waste should not preclude a claim for the exemption.

Response:

Any person seeking to claim exemption will be required to identify the listed wastes likely to be present in the mixture based on the knowledge of the operations. The annual report would identify these wastes together with any deletions or additions expected based on previous year's knowledge of the operations. Failure to list a specific waste will not preclude a claim for exemption.

However, if the operator becomes aware of the presence of waste in the mixture based on the knowledge of operations, it must be listed in the annual report.

Section 3.1.2.a.3.iii

Comment:

The Department should indicate that issuance of an existing NPDES permit covering the waste streams being exempted satisfies the demonstration required under this section.

Response:

The information required for satisfying the demonstration requirement has been clarified in the guidance manual issued by the Division of Waste Management.

Comment:

The proposed subsection requires a demonstration that the mixture consists of wastewater which is treated in a wastewater treatment facility, permitted under the State Water Pollution Control Act. The federal regulation does not contain the terms "which is treated in a wastewater treatment facility." These should be deleted from the final regulation.

Response:

EPA, in its preamble to the "mixture rule" (46 F.R. 56583, November 17, 1981), had stated that the amendment "applied to wastewater mixtures managed in wastewater treatment systems whose discharge is subject to regulation under either Section 402 or 307(b) of the Clean Water Act." EPA further stated that "those facilities (known as "zero discharges") that have eliminated the discharge of wastewater as a result of or by exceeding NPDES or pre-treatment program" would also be considered to have met this requirement. The DNR adopted the language it did in light of the explanation given above.

Comment:

The State adopted a reference to W. Va. Code §20-5a-1 in place of "Section 402 or Section 307(b) of Clean Water Act" as contained in 40 C.F.R. 261.3(a)(2)(iv). Section 20-5A-1 of the West Virginia Code is the "Declaration of Policy" of the Water Pollution Conrol Act, which does not appear to regulate anything. It is suggested that the State use more appropriate citations which are not broader than the federal citations.

Response: The citation has been corrected to state "West Virginia Code §20-5a-1 et seq." so that all the relevant sections of the statute equivalent to federal citations are included.

Section 3.1.2.a.3.iv

Comment:

The requirement of groundwater monitoring certification is inconsistent with EPA's interim status groundwater monitoring (GWM) requirement. EPA's interim status GWM requirement is likely to change. The tests for GWM under interim status are inaccurate and unpredictable. There is no definitive corrective action guidance under HSWA. Therefore, GWM based on federal corrective action is misplaced.

Response:

The Agency believes that GWM is required to ensure protection to human health and environment. This section allows a facility, with the approval of the Chief, to have a GWM plan which is an alternative to the interim status GWM plan. Thus the GWM plan could be designed to produce more accurate results than the interim status GWM plan. The guidelines manual provides for a HSWA corrective action GWM plan, which is consistent with federal requirements, to be submitted in lieu of any other GWM certification required.

Comment:

The imposition of GWM is done regardless of the amount or type of mixture exempted at a facility. There is no rational justification for GWM from an environmental standpoint.

Response:

The regulations allows for certification of a GWM plan approved by the Chief. This discretion allows the Chief to approve a plan taking into consideration the amount and type of mixture, and the frequency with which it will be found in the wastewater treatment system. The guidelines manual explains various scenarios for different type of certifications.

At this time, there is not enough information to conclusively prove that exempted waste mixtures will not cause groundwater pollution. Therefore, this Agency deems it necessary to require a GWM plan for facilities handling exempted waste mixtures.

Comment:

One commentor pointed out that hazardous wastes generated from itslaboratory is disposed of via waste water treatment facilities (WWTF). With the proposed mixture rules, these WWTF will be required to install expensive GWM equipment. If the GWM requirement is to be retained, it should be applicable only to generators having more than 100kg/month of hazardous waste. Hazardous waste produced at a site but not passing through the treatment facility would be unfairly subjected to GWM under the mixture rule. Federal rules do not require GWM for small quantity generators (SQG) or conditional exempt generators. Therefore, the State also should exempt such categories from GWM requirement.

Response:

This commentor pointed out that most of its wastes are either recycled or burned for energy recovery and are not sent to a WWTF. None of that waste is subject to the mixture rule. The remainder of the commentor's hazardous waste appears to be laboratory waste. Laboratory waste which is has the hazardous characteristic of toxicity is subject to regulation under the mixture rule if the such hazardous waste exceeds one percent of the wastewater flow or one part per million on an annualized basis. If the laboraory waste does exceed this amount then it should be subject to regulation. Neither federal nor State regulations exempt a facility treating SQG wastes from GWM.

Section 3.1.2.a.4

Comment:

The form that needs to be submitted under this subsection should not require any quantitative information on wastes.

Response:

The form does not require any quantitative information. The guidelines manual for mixture rule exemption contains this form.

Comment:

The form required to be submitted may be subject to public notice which can delay the qualification for exemption. Also, notification of "receipt" of waste everytime a waste water treatment facility receives waste can be a significant administrative burden.

No form has yet been designed and thus could delay the exemption procedure. The requirement of a form should therefore be deleted.

Response:

The form will not be subject to public notice. The form needs to be submitted only once before claiming an exemption. The language of this subsection has been modified to reflect this. The form has been designed by DWM and is included in the guidelines manual.

Section 3.1.2.c.2.ii(b)

Comment:

This is not proposed new language. The exemption found in Section 3.1.2.c.2.ii(b) includes contents of Sections 3.1.5.a.3.i, ii, and iii. These provisions are not included in the federal analogue of 40 CFR §261.3(c)(2)(ii)(b).

Response:

As the commentor has rightly pointed out, this subsection was not newly proposed, but was included in the proposed rules for the sake on continuity of the new rules. Therefore, the subsection is not subject to comments at this time. The commentor's observation, however, has been taken note of and action necessary, if any, will be taken during future modification to the hazardous waste management regulations.

General:

Comment:

The DNR should have initiated an incorporation by reference approach when adopting federal "mixture rule" regulations by highlighting areas where the State differs from the federal.

Response:

The DNR is looking into the possibility of incorporation by reference in the future. Since such a step involves analysis of potential effects of such a step, this approach cannot be adopted at this time.

STATE OF WEST VIRGINIA
DEPARTMENT OF NATURAL RESOURCES
CHARLESTON 25305

October 28, 1986

ARCH A. MOORE, JR.
Governor

RONALD R. POTESTA
Director

MICHAEL A. FOTOS
Deputy Director

MEMORANDUM TO: Mixture Rule File (DIR-R86-7)

FROM: Ron Shipley
Special Assistant to the Director

SUBJECT: 10/27/86 PUBLIC HEARING

Hearing held from 7:00 to 7:10 p.m.

Attendance: Ron Shipley
N. V. Raman
Ann Bradley
Bob Worden
Ed Sabatino (American Cyanamid)
Ed French (Olin)

Oral comments (in written form) attached

PREAMBLE

Introduction

In recognition of the express statutory provisions contained in § 20-5E et seq., regarding duplication and consultation, and for the purpose of achieving maximum effectiveness while imposing the least burden of duplicative requirements on those persons subject to these regulations, the Director has attempted in these regulations to create a workable hazardous waste management program. The complexity of the regulations and the number of rule-making agencies involved made this a difficult task, and there is likely to remain a number of areas which will require continued cooperation, coordination, and consultation among the agencies. Towards this effort, the Director of the Department of Natural Resources expects to employ the use of Memorandums of Agreement which will outline the specific areas of responsibilities between the various agencies, particularly with regard to the permits to be issued by the Chief of the Division of Water Resources and the Director of the Air Pollution Control Commission.

Summary of Specific Sections

Section 2 of these regulations is promulgated by the Director of the Department of Natural Resources and contains the definitions of the words and phrases used in these regulations.

Section 3 of these regulations is promulgated by the Director of the Department of Natural Resources and provides the criteria for identifying a hazardous waste and a list of hazardous wastes that have been identified by the Director.

Section 4 of these regulations is promulgated by the Director of the Department of Natural Resources and contains the notification requirements applicable to those persons engaged in hazardous waste activities, and is promulgated pursuant to authority contained in § 20-5E-6(a)(12). The purpose of Section 4.00 is to provide a means for the State of West Virginia to obtain information from all persons who engage in hazardous waste activities.

Section 5 of these regulations, is promulgated by the Director and established standards applicable to transporters of hazardous waste by air and/or water by adopting and incorporating by reference 40 CFR Part 263 and are promulgated under authority of § 20-5E-6(a) (12).

Section 6 of these regulations is promulgated by the Director of the Department of Natural Resources and contains requirements for generators of hazardous waste which include recordkeeping, reporting, and originating a manifest for off-site shipments.

Section 7 [Reserved]

Section 8 is promulgated by the Director and the Water Resources Board and establishes the standards for owners and operators of hazardous waste treatment, storage, and disposal facilities.

Section 9, in its proposed form, contained standards for facility owners and operators to comply with during interim status. These standards have been deleted in the final regulations inasmuch as Chapter 20, Article 5E, Section 10 governs the hazardous waste activities of facilities during interim status. Section 9 has been reserved for future regulations to be promulgated by the Director.

Section 10 established interim standards for land disposal facilities. Section 10 standards have been deleted because they will be superceded upon final promulgation of the final Section 8 standards.

Section 11 of these regulations is promulgated by the Director under the authority of Chapter 20, Article 5E, Section 6(a)(4) and requires the Director to promulgate rules and regulations respecting compliance with permits for treatment, storage, or disposal under Chapter 20, Article 5E, Section 8. Additionally, the Director is required by Chapter 20, Article 5E, Section 6(a)(5) to promulgate rules and regulations specifying the terms and conditions under which the Chief shall issue, modify, suspend, revoke, or deny permits.

Section 12 is promulgated by the Director under the authority of Chapter 20, Article 5E, Section 6(a)(1), (a)(4), and (a)(12). This section establishes the location standards for all hazardous waste management facilities.

Sections 13 establishes financial requirements for existing and new facilities. The Director adopted and incorporated by reference 40 CFR Part 264, Subpart H, as published in the Code of Federal Regulations on July 1, 1982 with modifications.

Section 14 [Reserved]

Section 15 is promulgated by the Director establishes the requirements on deed and lease disclosures, and approvals for land disturbance.

Section 16 is promulgated by the Director and provides a mechanism for persons desiring to notify the Water Resources Board or the Director of changes in the federal Solid Waste Disposal Act, or the regulations promulgated thereunder.

WEST VIRGINIA
MANUFACTURERS ASSOCIATION

SUITE 414
405 CAPITOL STREET
CHARLESTON, WV 25301
TELEPHONE (304) 342-2123

COMMENTS OF THE WEST VIRGINIA MANUFACTURERS ASSOCIATION ON THE ADVANCE NOTICE OF PROPOSED RULEMAKING OF THE WEST VIRGINIA DEPARTMENT OF NATURAL RESOURCES UNDER THE WEST VIRGINIA HAZARDOUS WASTE MANAGEMENT PROGRAM

Prepared By

THE ENVIRONMENTAL CONTROL COMMITTEE OF THE
WEST VIRGINIA MANUFACTURERS ASSOCIATION

and

ROBINSON & McELWEE

Submitted
June 25, 1986

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COMMENTS OF THE WEST VIRGINIA MANUFACTURERS ASSOCIATION ON THE ADVANCE NOTICE OF PROPOSED RULEMAKING OF THE WEST VIRGINIA DEPARTMENT OF NATURAL RESOURCES UNDER THE WEST VIRGINIA HAZARDOUS WASTE MANAGEMENT PROGRAM

A. INTRODUCTION

On June 11, 1986, the Department of Natural Resources ("DNR") filed an Advance Notice of Proposed Rulemaking ("ANPR") with the Secretary of State, announcing the Agency's intention to propose modifications to the DNR's Hazardous Waste Management Regulations relating to the "mixture rule" which currently appears at Section 3.1.2.a.2.ii of the DNR Hazardous Waste Management Regulations. Our organization has been highly critical of this provision of the regulations since it was initially promulgated. In a rulemaking petition filed May 4, 1982, the West Virginia Manufacturers Association ("WVMA") urged the DNR to amend this regulation to reflect the language of the counterpart regulation promulgated by the U. S. Environmental Protection Agency ("EPA"). West Virginia Manufacturers Association, Petition of West Virginia Manufacturers Association For Rule-Making Pursuant to W.Va. Code Section 20-5E-18(c) and Notification of Amendments to EPA Regulations (May 4, 1982) (before the Director of the Department of Natural Resources and the State Water Resources Board). In a series of conversations with the DNR Director and his staff, our organization has repeatedly emphasized the vital need for a change in the current State "mixture rule." We are encouraged that the DNR is sensitive to the difficulties that have been created by its current restrictive provision and welcome the opportunity to set forth our objections to the current regulation in these comments.

B. NEED TO CHANGE CURRENT REGULATION

In the ANPR beginning at page 9, the DNR has listed eight "industry concerns" with the current State "mixture rule." The WVMA believes the listed reasons to be valid, factual, and significant, and we believe that these concerns should be "Agency concerns," as well as concerns of industry over the current harsh rule. We have not repeated all of these concerns in these comments, but have chosen, in the paragraphs below, to add further detail regarding certain of these concerns and to raise others for the Agency's consideration.

1. The Current Regulation is Overbroad and Ignores the Non-Hazardous Nature of Many Mixtures and Any Subsequent Treatment or Dilution Which May Occur

The current West Virginia "mixture rule" provides that any mixture of a solid waste with a listed hazardous waste will be deemed a hazardous waste. The "mixture rule" totally ignores the nature of the resultant mixture, the degree or lack thereof of any hazard attributable to the resultant mixture and it further ignores subsequent treatment of the mixture which may occur and any other changes to the wastes which may affect its hazardousness. Conversely, under the EPA exemptions to the "mixture rule" an attempt is made to take into account the subsequent treatment, dilution or other changes which so affect the nature of the wastes as to warrant the exclusion of these mixtures from the group of wastes statutorially defined as "hazardous wastes". EPA's characterization of its former "mixture rule," which was noted in the ANPR, bears repeating here as a criticism of the State rule:

> The Agency believes that the "mixture rule", as presently drafted, sweeps too broadly when applied to all mixtures of wastewater and listed hazardous wastes. Strict application of the "mixture rule" would cause to be hazardous wastes a mixture of large volumes of non-hazardous wastewater and the relatively small amounts of listed hazardous wastes which are introduced into the wastewater as a result of normal manufacturing operations or on-site laboratory operations.

46 Fed. Reg. 56582, 56583 (1981).

This criticism remains a valid comment on the State "mixture rule" and a justification for its change.

2. The West Virginia "Mixture Rule" Violates the Mandate of West Virginia Law That the State Hazardous Waste Program Be Integrated with Other State Environmental Programs So That Duplication Is Avoided to the Maximum Extent Practicable

In the State Hazardous Waste Management Act, W.Va. Code Section 20-5E-1 et seq. (1985 Repl. Vol.) ("the State Act"), the DNR Director is delegated the following duty:

> The Director shall integrate all provisions of this article for purposes of administration and enforcement and shall avoid duplications to the maximum extent practicable, with the appropriate provisions of the Water Pollution Control Act . . .

W. Va. Code Section 20-5E-5(b) (1985 Repl. Vol.)

Under the West Virginia State Water Pollution Control Act, W.Va. Code Section 20-5A-1 et seq. (1985 Repl. Vol.), the Chief of the Division of Water Resources and the State Water Resources Board are charged with the responsibility of regulating discharges to waters of the State and adopting water quality standards for State waters, which, by definition, include both surface waters

and groundwater. Thus, the mandate of West Virginia Code Section 20-5E-5(b) is that the DNR Director integrate the state hazardous waste program with the State Water Pollution Control Act and "avoid duplications to the maximum extent practicable" with the provisions of the State Water Pollution Control Act. The adoption of the exemptions provided under the federal regulation will allow the DNR Director to perform his mandatory duty of integration and avoiding duplication with respect to the State Water Pollution Control Act.

3. The Delisting Process Is Not an Appropriate Mechanism for Addressing the Overbroad Scope of the State Mixture Rule

Under the current State "mixture rule," mixtures of non-hazardous and listed hazardous wastes will be hazardous wastes "unless excluded under Section 16." Section 16.2 of the DNR regulations allows a person to petition to "exclude a waste at a particular generating facility" from the lists of hazardous wastes. The petition process set out in Section 16.2 contemplates a "delisting" petition to be filed first with the EPA Administrator.

Assuming that a waste which is the subject of a delisting petition in West Virginia by virtue of the "mixture rule" would not be a hazardous waste under the federal regulations, the filing of delisting petition with the federal agency should be a pro forma matter. However, in order for the State to approve a delisting petition, a detailed and costly administrative review may be necessary. Presumably, the DNR

would follow the guidance manual used by EPA which requires extensive and expensive analyses of the wastestream to be delisted. See U.S. Environmental Protection Agency, Petitions To Delist Hazardous Wastes: A Guidance Manual (April 1985). Even if the State were to adopt a more limited procedure for delisting the types of wastestreams that are not hazardous wastes under the federal regulations, the limited environmental significance of the waste streams does not justify the commitment of resources necessary by private industry and the State in order to process such delisting petitions. The enormous magnitude of the other tasks that merit the attention and resources of DNR and private industry in meeting the goals of the State Hazardous Waste Management Act, not to mention the added burdens created by the Hazardous and Solid Waste Amendments of 1984 ("HSWA"), cannot be ignored. The squandering of public and private resources on the regulation of wastestreams which are already regulated under other laws, as in the case with the West Virginia "mixture rule," cannot be justified.

4. The Complete Segregation of Mixtures from Other Waste-Streams Is Not a Viable Option Because of Technical Infeasibility and Disproportionate Costs

One way to avoid wastewater treatment facilities from being classified as hazardous waste management facilities under the current State "mixture rule" would be to segregate all hazardous wastes so that they never enter the facility's wastewater treatment system. EPA noted in its November 17, 1981 rulemaking that had the segregation of hazardous and

non-hazardous wastes needed in order to comply with its former rule was not easily or inexpensively accomplished. See 46 Fed. Reg. 56582. Consistent with EPA's conclusion, members of our organization have found the segregation of such waste to be technically and economically infeasible.

Physical separation in most instances would necessitate dual waste collection and handling systems. The system that would have to be constructed to adequately deal with the West Virginia hazardous waste mixtures would handle a small quantity of waste but, because of engineering and design complexities, its cost would approach that of the main wastewater treatment unit. Furthermore, the use of such a system could result in an increased safety hazard, e.g., where ignitable wastes were collected and concentrated, rather than being added to the wastewater treatment unit where immediate dilution would occur.

In a limited sampling of 12 WVMA members, 50% estimated that the cost to construct a system to allow for segregation of the wastes would be prohibitive - would force shutdown of their plants. The remaining 6 members estimated costs in excess of $21 million for waste segregation and handling.

As mentioned previously, we believe that forcing industry to expend the funds necessary to effectuate a complete segregation of these wastes would constitute a squandering of private resources when it is considered that the end result of these efforts is to prevent wastes from entering a wastewater treatment facility that is designed to handle them.

5. The Potential Cost Impact of the Current Mixture Rule on West Virginia Industry Is Significant

In an effort to quantify the additional cost that is created for West Virginia industry by the continued existence of the "mixture rule" under our State regulations, the WVMA conducted a limited survey of its members. Certain members were asked to estimate the costs that would be incurred if they were required to obtain a hazardous waste permit for their wastewater treatment facilities because the State "mixture rule" was not changed. In preparing this estimate, we asked members to take into account, where possible, anticipated impacts of the HSWA. Recognizing that the quantification of these costs is difficult from the limited number of members who offered an estimate (12), the costs attributable to the current "mixture rule" in West Virginia were in excess of $56 million in capital expenditures and in excess of $2.5 million per year in operating costs.

6. The Changes Made by HSWA May Force West Virginia Industry To Abandon Their Current Wastewater Treatment Facilities if the West Virginia Mixture Rule Is Not Changed

An additional reason to amend the State regulations to include the federal exemptions at this time is to avoid the heavy impact of HSWA on State facilities. In particular, absent individual petitions demonstrating that a particular method of land disposal is protective of human health and the environment, EPA will ban all hazardous wastes from land disposal facilities on a staggered time schedule. See generally 42 U.S.C.S. Section 6924 (1986 Cum. Supp.) (listing dates by which various wastes

will be barred from land disposal). Because EPA is defining "land disposal" facilities broadly to include not only landfills, but also surface impoundments, waste piles, concrete bunkers, and other similar facilities, see 51 Fed. Reg. 1761 (Jan. 14, 1986), HSWA may prohibit the addition of even the de minimis quantities of these wastes to wastewater treatment facilities, and further may require the construction of entirely new wastewater treatment systems, just to address these relatively small quantities of wastes which may be entering wastewater treatment facilities. The impact of HSWA on these facilities is not entirely clear, but we believe it is fair to state that HSWA will significantly aggravate the compliance burden on these facilities merely as a result of the failure to change the West Virginia regulation.

C. NEED TO ADOPT FEDERAL LANGUAGE

1. The DNR Should Adopt the Federal Exemption Language Because It Is Simple, Clear and Has Proven To Be Workable

The WVMA urges the DNR to adopt exemptions to the "mixture rule" as they appear in the federal regulations at 40 C.F.R. Section 261.3(a)(2). A draft State regulation which would adopt the federal language is included with these comments as Exhibit A.

Included as Exhibit B is an alternative draft regulation which would simply incorporate by reference the federal mixture rule. This second option is included in recognition of the DNR's expressed interest in adopting an "incorporation by

reference" approach to updating State hazardous waste regulations. Facilities around the country have operated under the federal language since 1981. Despite the concern raised in the ANPR, we are aware of no cases where the EPA mixture rule was used as a "loophole" to allow industry to engage in the indiscriminate dumping of wastes into wastewater treatment systems. Indeed, we believe the absence of significant problems under the federal rule tends to underscore its soundness. The federal language should be used because it is simple and clear. In the five years of its existence, no changes to this rule have been proposed by EPA. In a nutshell, it would appear that the federal language is working well and should not be "fixed."

Finally, if West Virginia were to adopt the federal language, the State could be certain that it would not create problems for purposes of retaining RCRA final authorization. Clearly, such language would meet the "equivalency" test which is applied by EPA in its review for final authorization purposes.

2. The Adoption of the Federal Language Will Help West Virginia Industry Maintain A Competitive Position

Members of our organization have advised DNR directly of the impact of the current "mixture rule" on their competitive position with regard to comparable facilities in other states. In particular, members have cited to the DNR particular product lines that were lost because of the company's inability to assure that wastes associated with the product would not be deemed hazardous wastes and therefore, increase the costs of managing those wastes - all attributable to West Virginia's "mixture

rule". A survey of surrounding states suggests that Ohio, Maryland, Virginia, Kentucky, Tennessee, North Carolina, South Carolina, Delaware and Indiana all have incorporated the federal version of the "mixture rule" with its limited exemptions, as a part of their statutory or regulatory definition of hazardous wastes. Copies of the pertinent regulations from these states are included as Exhibit C to these comments. We firmly believe that West Virginia's failure to conform its "mixture rule" to the federal language is a prime example of the additional, but unnecessary, regulatory burdens that are placed upon industry in this State which are not faced by our competitors in other states. This type of "more restrictive" regulation in West Virginia is destructive to the State's economy, discouraging to new business looking to the State for potential business development. These negative aspects of the regulation are compounded by the fact that it results in no measurable environmental benefit.

D. RESPONSE TO SPECIFIC AGENCY CONCERNS

In the paragraphs that follow, we will respond to certain of the concerns raised by the DNR in the ANPR with respect to the federal version of the "mixture rule."

1. The Federal Mixture Rule Has Proven Administratively "Workable" and in Addition to Avoiding Violations of State Law, Contains Other Incentives for Compliance.

In the ANPR, the Agency has raised a question about the "administrative workability" of the federal "mixture rule". In

particular, the Agency is unclear as to the nature of the "demonstration" that are required in order to qualify for one of the mixture exemptions. We disagree with the statement in the ANPR that EPA has provided no guidance on what constitutes an acceptable demonstration. See ANPR at 6. With respect to the exemption for certain spent solvent concentrations, EPA provided the following guidance in the November 17, 1981 Federal Register:

> The Agency does not intend to determine compliance with this provision by requiring that generators actually monitor the concentration of spent solvents in untreated wastewater. Instead, the generator must be able to demonstrate that the maximum amount of solvents used during a week, divided by the average weekly flow of the influent into the headworks of the final wastewater treatment step, would not exceed the standards established herein. This demonstration can be made through an audit of various records already maintained at most facilities including invoices showing solvent purchases, lists indicating to whom and how much solvent was distributed and other, similar, operating records. An EPA inspector would look to such documents to verify the computation made by the generator.

46 Fed. Reg. 56585 (Nov. 17, 1981) (col. 2).

We believe the guidance provided above is direct and explicit.

The demonstration discussed by EPA above would be appropriate for establishing both initial and continuing eligibility for the exemption. Furthermore, the DNR regulations impose a self-reporting obligation upon any generator with respect to notification of hazardous waste activities under Section 4 of the DNR regulations and the permitting requirements of Section 11. Over and above these protections, the Chief of the Water Resources Division retains the right of inspection and

entry at all reasonable times at any facility where hazardous wastes have been managed. See W.Va. Code Section 20-5E-12. (1985 Repl. Vol.).

2. The Quantification of "De Minimis" Levels is Unnecessary and Undesirable

The ANPR states the DNR's concern with respect to the "de minimis" rule that "without establishing a quantitative limit, large quantities resulting from spills, etc. of hazardous wastes may not be regulated under the Hazardous Waste Program". ANPR at 7. While this statement may be factually correct, it does not state a legitimate concern. There are other regulatory programs in place that address these issues. Any spills, large or small, of hazardous substances to wastewater treatment facilities are covered under the federal Superfund law. CERCLA was enacted in part to provide an emeregency response mechanism to spills of hazardous substances. See, e.g., New York v. Shore Realty Corp., 22 ERC 1625 (2nd Cir. 1985). Thus, where a spill creates an environmental problem, the purpose of CERCLA is to force a clean-up in such situations. Such infrequent, non-routine types of events should not be forced into the pigeon-hole of an on-going regulatory/permitting program like RCRA, but rather should properly be left in the domain of CERCLA.

Furthermore, the concern expressed in the ANPR over the need to quantify "de minimis" levels ignores the fact that a mature, complex regulatory program is currently in place to address water quality issues under the State Water Pollution Control Act and the National Pollutant Discharge Elimination

System (NPDES) Program. Through the use of monitoring and reporting requirements, effluent limitations, biomonitoring and other provisions made available in the State water law in its implementing regulations, the Chief of the Division of Water Resources has the authority to regulate any pollutant which will harm human health or the environment.

Thus, even ignoring the legal restrictions on the jurisdiction of the State hazardous waste program, with other environmental programs already in place for the purpose of addressing the clean-up of spill events and general water quality concerns, it makes no sense to attempt to stretch the scope of the hazardous waste program to encompass concerns more readily addressed by other, more appropriate, environmental programs.

3. No Environmental Risk Is Created from the Adoption of the Federal Mixture Rule

The ANPR discusses generally Agency concerns over the contamination of groundwater from unlined surface impoundments. The ANPR goes on to state that "inability to monitor and regulate [exempt] mixtures may increase environmental risks." First of all, this comment ignores the limited nature of the exemption that exists under the federal language. The exempt mixtures should generally be less than one percent of the overall wastestream. See 46 Fed. Reg. 56583 (Nov. 17, 1981) (discussing data provided by CMA). Clearly, the non-hazardous portion of the wastestream would be a far greater contributor in the event of groundwater contamination. Secondly, the comment totally ignores the purpose and goals of the State Water Pollution Control Act.

As discussed previously, this Act seeks the protection of all State waters, including groundwater. While we recognize that the State program with regard to the adoption of standards for groundwater is still developing, both the Department of Natural Resources and the Water Resources Board are working diligently to adopt groundwater standards for West Virginia. Furthermore, the Water Resources Board has made it clear that, under the State Water Pollution Control Act, the Chief of the Water Resources Division has the authority to act to require groundwater monitoring when there is good cause to believe that contamination of the groundwater is occurring. All of this authority exists independent of the State Hazardous Waste Management Act. In addition to the contravening mandate of W.Va. Code Section 20-5E-5(b), it is inefficient, not to mention presumptuous, of the Hazardous/Solid Waste Branch to attempt to regulate under the hazardous waste law, groundwater which may be contaminated from essentially non-hazardous waste management facilities because of perceived inadequacies in the State program for the protection of groundwater under the State Water Pollution Control Act.

4. There Is No Evidence That the EPA Mixture Rule Would Create a Health Risk That Would Require the Exempted Wastes to be Regulated As Hazardous Waste

The ANPR states that the "EPA mixture rule exemption levels for spent solvents are considerably higher than the recommended levels in water for health protection." The notice then cites the exemption level for methylene chloride as 25,000 ppb and compares it with the "recommended health level" of 1.9

ppb. The Agency goes on to note that assuming a 95% removal efficiency "the discharge will contain 1,250 ppb of this compound, which is almost 600 times the allowable health protection level." ANPR at 8. This reasoning is defective and the conclusion reached is incorrect for a number of reasons.

First, the 1.9 ppb number is the EPA ambient water quality criteria for methylene chloride. It is not, and was never intended to be an end-of-pipe effluent limitation - nevertheless, this is how the number is used in the ANPR illustration. Second, our members have experienced removal rates as high as 100% for methylene chloride. This blatant assumption that other regulatory agencies are not carrying out their statutory responsibilities has no basis in fact.

On the same point, the ANPR states that "the risk reduction associated with the EPA mixture rule is based on dilution potential in the wastewater treatment system rather than reduction by treatment since the effect of the wastewater treatment plant on such pollutants is not well understood." ANPR at 9. This statement ignores the following comments by EPA in its November 17, 1981 rulemaking:

> [T]he Agency considered the factors listed in Section 261.11(a)(3) [factors to be considered in designating a hazardous waste] to make a judgment about the concentration of spent solvents for each group that it deemed would not cause the wastewater mixture, if improperly managed, to pose a substantial hazard to human health or the environment. An important factor in the consideration was the reduction of spent solvent concentrations that typically would be achieved in the treatment of the wastewater mixture before its intended or unintended (e.g., subsurface leakage) release into the environment. The Agency reasoned

> that virtually all of the wastewater mixtures covered by today's amendment will be given treatment, and that this treatment will typically be biological, physical or chemical treatment capable of reducing the spent solvent concentrations in the wastewater, particularly at the low concentrations assured by the limits selected. The Agency concluded that, if the spent solvent concentrations in the wastewater mixture prior to treatment are limited to 1 and 25 ppm, the wastewater treatment process will typically reduce these concentrations in any releases of the wastewater to levels that do not pose a substantial harm to human health or the environment. Indeed, effluent guidelines, data and data submitted by API indicate that wastewater treatment typically reduces these concentrations to a range of 10-100 ppb, levels that approach the Water Quality Criteria which the Agency considered as a guide in assessing the relevant factors.

46 Fed. Reg. 56584-85 (Nov. 17, 1981).

Finally, the ANPR states that the "de minimis" loss provision, without any quantitative limits, can pose health risks. ANPR at 9. We agree with the Agency that, under certain conditions, major spills of hazardous substances to wastewater treatment facilities may result in some risk of harm to human health or the environment. However, such spills are not intended to come within the scope of the "de minimis" exemption. More significantly, neither DNR nor EPA could issue an NPDES permit which would create a known health risk. Once again, the statement in the ANPR totally ignores the permitting process under the State Water Pollution Control Act and the Clean Water Act. Where there are no established health protection standards, the Water Resources Division Hazardous/Solid Waste Branch, in issuing a permit, makes a judgment just as if it were establishing quantitative limits for "de minimis" losses.

5. The DNR's Concern Over the Effect of EPA Exempted Waste Mixtures on Wastewater Treatment Plants Is Unjustified

One of the more illogical comments in the ANPR is the suggestion that the addition of mixtures exempted under the EPA mixture rule to wastewater treatment plants will be harmful to biological treatment systems or other treatment units. It seems clear to us that a manufacturing operation would not have designed its wastewater treatment and collection system so that these mixtures could be easily added and treated in the system, if there was any likelihood that the addition of these mixtures would damage the treatment system. Therefore, as we interpret this concern expressed in the ANPR, it has no basis in fact.

6. Options Other Than Adopting EPA Regulations Are Inappropriate And Ill-Advised

For all the reasons discussed in these comments, other than the option of adopting of the federal mixture rule, the regulatory options presented on pages 11 through 14 of the ANPR are impractical and unsupportable. There has been no evidence that the federal rule does not work or that there is some scientifically supportable basis that compels the application of a different rule for West Virginia.

7. Relief For Industry Must Be Provided In The Form of Emergency Regulations

The WVMA is particularly concerned with the need for prompt action to address the defects in West Virginia's mixture rule. Our members are currently at various stages in the permitting of their hazardous waste facilities. A revision to the

mixture rule would reduce the efforts associated with permitting units which handle no hazardous waste other than those which would be exempt under the federal mixture rule. Furthermore, the first land disposal ban under HSWA becomes effective November 8, 1986. As mentioned previously, the use of surface impoundments for treating these waste mixtures may become unlawful after that date. Finally, the requirement under HSWA to retrofit or close surface impoundments by November 1988 compels design and engineering work to begin immediately if all waste mixtures treated in State surface impoundments remain hazardous under the West Virginia program.

The serious economic disruption that would result if the DNR failed to promptly amend the mixture rule is sufficient to justify amendment of the rule by emergency regulation under the State Administrative Procedures Act. For all these reasons, amendments to the mixture rule should be promulgated as emergency rules.

E. CONCLUSION

The WVMA appreciates this opportunity to provide comments on the ANPR. As in the past, and as evidenced by these comments, our organization is prepared to work cooperatively with the Agency to develop a reasonable and responsible hazardous waste program for West Virginia.

Respectfully submitted,

WEST VIRGINIA MANUFACTURERS ASSOCIATION

EXHIBIT A

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.~~ It is a mixture of a waste and a hazardous waste that is listed in Section 3.4 solely because it exhibits one or more of the characteristics of hazardous waste identified in Section 3.3, unless the resultant mixture no longer exhibits any characteristic of hazardous waste identified in Section 3.3.

3.1.2.a.2.iii It is a mixture of a waste and one or more hazardous wastes listed in Section 3.4 and has not been excluded from this paragraph under Section 16 of these regulations; however, the following mixtures of solid wastes and hazardous wastes listed in Section 3.4 are not hazardous wastes (except by application of Sections 3.1.2.a.2.iv or 3.1.2.a.2.i) if the generator can demonstrate that the mixture consists of wastewater the discharge of which is subject to regulation under either W.Va. Code Section 20-5A-1 et seq (including wastewater at facilities which have eliminated the discharge of wastewater) and:

3.1.2.a.2.iii.A One or more of the following spent solvents listed in Section 3.4.2 - carbon tetrachloride, tetrachloroethylene, trichoroethylene - provided that the maximum total weekly usage of these solvents (other than the amounts that can be demonstrated not to be discharged to wastewater) divided by the average weekly flow of wastewater into the headworks of the facility's wastewater treatment or pretreatment system does not exceed 1 part per million; or

3.1.2.a.2.iii.B One or more of the following spent solvents listed in Section 3.4.2 - methylene chloride, 1, 1, 1-trichloroethane, chlorobenzene, o-dichlorobenzene, cresols, cresylic acid, nitrobenzene, toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, spent chlorofluorocarbon solvents - provided that the maximum total weekly usage of these solvents (other than the amounts that can be demonstrated not to be discharged to wastewater) divided by the average weekly flow of wastewater into the headworks of the facility's wastewater treatment or pretreatment system does not exceed 25 parts per million; or

3.1.2.a.2.iii.C One of the following wastes listed in Section 3.4.3 - heat exchanger bundle cleaning sludge from the petroleum refining industry (EPA Hazardous Waste No. K050); or

3.1.2.a.iii.D A discarded commercial chemical product, or chemical intermediate listed in Section 3.4.4, arising from de minimis losses of these materials from manufacturing operations in which these materials are used as raw materials or are produced in the manufacturing process. For purposes of this subsection, "de minimis" losses include those from normal material handling operations (e.g. spills from the unloading or transfer of materials from bins or other containers, leaks from pipes, valves or other devices used to transfer materials); minor

leaks of process equipment, storage tanks or containers; leaks from well-maintained pump packings and seals; sample purgings; relief device discharges; discharges from safety showers and rinsing and cleaning of personal safety equipment; and rinsate from empty containers or from containers that are rendered empty by that rinsing; or

3.1.2.a.iii.E. Wastewater resulting from laboratory operations containing toxic (T) wastes listed in Section 3.4, provided that annualized average flow of laboratory wastewater does not exceed one percent of total wastewater flow into the headworks of the facility's wastewater treatment or pre-treatment system, or provided the wastes, combined annualized average concentration does not exceed one part per million in the headworks of the facility's wastewater treatment or pre-treatment facility. Toxic (T) wastes used in laboratories that are demonstrated not to be discharged to wastewater are not to be included in this calculation.

3.1.2.a.~~iii~~ iv It exhibits any of the characteristics of hazardous waste identified in Section 3.3.

EXHIBIT B

3.1.2.a.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~~ the Director hereby adopts and incorporates by reference 40 C.F.R. Section 261.3(a)(2)(iii) and (iv) as of the date specified in Section 1.6.

EXHIBIT C

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(b) Any off-specification commercial chemical product or manufacturing chemical intermediate which, if it met specifications, would have the generic name listed in Tables 3.1-3 and 4, Appendix 3.1.

(c) Any residue remaining in a container or inner liner removed from a container that has been used to hold any commercial chemical product or manufacturing chemical intermediate having the generic names listed in Table 3.1-3, Appendix 3.1, or any container or inner liner that has been used to hold any off-specification chemical product and manufacturing chemical intermediate which, if it met specifications, would have the generic name listed in Table 3.1-3, Appendix 3.1, unless:

(1) The container or inner liner has been triple-rinsed using a solvent capable of removing the commercial chemical product or manufacturing chemical intermediate; or

(2) The container or inner liner has been cleansed by another method that has been shown in the scientific literature, or by tests conducted by the generator, to achieve equivalent removal; or

(3) In the case of a container, the inner liner that prevented contact of the commercial product or manufacturing chemical intermediate with the container has been removed.

(d) 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 Tables 3.1-3 and 3.1-4, Appendix 3.1, 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 Tables 3.1-3 and 3.1-4, Appendix 3.1.

(e) The commercial chemical products manufacturing chemical intermediates or off-specification commercial 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 the small quantity exclusion defined in Section 3.03.05. 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 listed in Table 3.1-3, Appendix 3.1.

(f) Discarded commercial chemical products, manufacturing chemical intermediates, off-specification commercial chemical products, container residues and spill residues thereof which are hazardous wastes but are not identified as acutely hazardous, are listed in Table 3.1-4, Appendix 3.1. These listed materials are subject to the small quantity exclusion defined in Sections 3.03.01 and 3.03.06. 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.

3.11.05 Mixtures of Solid Waste and One or More Listed Hazardous Wastes. A mixture of solid waste and one or more hazardous wastes listed in this Section is defined as a hazardous waste (see Section 2.80). However, the following mixtures are not hazardous wastes if:

(a) They do not meet the criteria contained in Sections 2.80(a)(2)(i) and (ii); and

(b) The generator can demonstrate that the mixture consists of wastewater the discharge of which is subject to regulation under either Section 402 or Section 307(b) of the Clean Water Act (including wastewater at facilities which have eliminated the discharge of wastewaters); and

(c) They are mixtures of such wastewaters and either of the following:

(1) One or more of the following spent solvents listed in Table 3.1-1, Appendix 3.1 — carbon tetrachloride, tetrachloroethylene, trichloroethylene — provided that the maximum total weekly usage of these solvents (other than the amounts that can be demonstrated not to be discharged to wastewater) divided by the average weekly flow of wastewater into the headworks of the facility's wastewater treatment or pre-treatment system does not exceed one part per million; or

(2) One or more of the following spent solvents listed in Table 3.1-1, Appendix 3.1—methylene chloride, 1,1,1-trichloroethane, chlorobenzene, o-dichlorobenzene, cresols, cresylic acid, nitrobenzene, toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, spent chlorofluorocarbon solvents—provided that the maximum total weekly usage of these solvents (other than the amounts that can be demonstrated not to be discharged to wastewater) divided by the average weekly flow of wastewater into the headworks of the facility's wastewater treatment or pre-treatment system does not exceed 25 past per million; or

(3) Heat exchanger bundle cleaning sludge from the petroleum refining industry (EPA Hazardous Waste Number K050, Table 3.1-2, Appendix 3.1); or

(4) A discarded commercial chemical product, or chemical intermediate as described in Section 3.11.04 and listed in Tables 3.1-3 and 3.1-4, Appendix 3.1, arising from de minimis losses of these materials from manufacturing operations in which these materials are used as raw materials or are produced in the manufacturing process. For the purposes of this Section, de minimis losses include those from the normal material handling operations (e.g. spills from unloading or transfer of materials from bins or other containers, leaks from pipes, valves or other devices used to transfer materials); minor leaks of process equipment, storage tanks or containers; leaks from well-maintained pump packings and seals; sample purgings; relief device discharges; discharges from safety showers and rinsing and cleaning personal safety equipment; and rinsate from empty containers or from containers that are rendered empty by that rinsing; or

(5) Wastewater resulting from laboratory operations containing toxic wastes (T) listed in Appendix 3.1, provided either:

(i) The annualized average flow of laboratory wastewater does not exceed one percent of the total wastewater flow into the headworks of the facility's wastewater treatment or pre-treatment system, or

(ii) combined annualized average concentration of such wastes does not exceed one part per million in the headworks of the facility's wastewater treatment or pre-treatment facility. Toxic (T) waste used in laboratories that are demonstrated not to be discharged to wastewater are not to be included in this calculation.

3.12 Changes to Identification and Listing of Hazardous Wastes

3.12.01 General Changes.

(a) The Administrator may from time to time add or delete wastes listed in Subpart D of Part 261, Title 40, Code of Federal Regulation (40 CFR 261). Upon

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PART 261—IDENTIFICATION AND LISTING OF HAZARDOUS WASTE

Subpart A—General

§261.1 Purpose and scope.

(a) This Part identifies those solid wastes which are subject to regulation as hazardous wastes under Parts 262 through 265 and Parts 122 through 124 of these Regulations and which are subject to the notification and requirements of 7 *Del. C.* §§6304, 6306 and 6307.

In this part:

(1) Subpart A defines the terms "solid waste" and "hazardous waste," identifies those wastes which are excluded from regulation under Parts 262 through 265 and 122 through 124 and establishes special management requirements for hazardous waste produced by small quantity generators and hazardous waste which is used, reused, recycled or reclaimed.

(2) Subpart B sets forth the criteria used by DNREC to identify characteristics of hazardous waste and to list particular hazardous wastes.

(3) Subpart C identifies characteristics of hazardous waste.

(4) Subpart D lists particular hazardous wastes.

(b) This Part identifies only some of the materials which are hazardous under 7 *Del. C.* §6310 and §6308.

A material which is not a hazardous waste identified in this part is still a hazardous waste for purposes of those sections if:

(1) In the case of 7 *Del. C.* §6310, DNREC has reason to believe that the material may be a hazardous waste within the meaning of 7 *Del. C.* §6302(7).

(2) In the case of 7 *Del. C.* §6308, the statutory elements are established.

§261.2 Definition of solid waste.

(a) A solid waste is any garbage, refuse, sludge or any other waste material which is not excluded under §261.4(a).

(b) 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:

(1) Is discarded or is being accumulated, stored or physically, chemically or biologically treated prior to being discarded; or

(2) Has served its original intended use and sometimes is discarded; or

(3) is a manufacturing or mining by-product and sometimes is discarded.

(c) A material is "discarded" if it is abandoned (and not used, re-used, reclaimed or recycled) by being:

(1) Disposed of; or

(2) Burned or incinerated, except where the material is being burned as a fuel for the purpose of recovering usable energy; or

(3) Physically, chemically, or biologically treated (other than burned or incinerated) in lieu of or prior to being disposed of.

(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.

(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.

§261.3 Definition of Hazardous Waste.

(a) A solid waste, as defined in §261.2, is a hazardous waste if:

(1) It is not excluded from regulation as a hazardous waste under §261.4(b); and

(2) It meets any of the following criteria:

(i) It exhibits any of the characteristics of hazardous waste identified in Subpart C.

(ii) It is listed in Subpart D and has not been excluded from the lists in Subpart D under Part 260 Subpart C of these Regulations.

(iii) It is a mixture of a solid waste and a hazardous waste that is listed in Subpart D solely because it exhibits one or more of the characteristics of hazardous waste identified in Subpart C, unless the resultant mixture no longer exhibits any characteristic of hazardous waste identified in Subpart C.

(iv) It is a mixture of solid waste and one or more hazardous wastes listed in Subpart D and has not been excluded from this paragraph under Part 260 Subpart C of these Regulations; however, the following mixtures of solid wastes and hazardous wastes listed in Subpart D are not hazardous wastes (except by application of paragraph (a)(2)(i) or (ii) of this Section) if the generator can demonstrate that the mixture consists of wastewater the discharge of which is subject to regulation under either Section 402 or Section 307(b) of the Clean Water Act (including wastewater at facilities which have eliminated the discharge of wastewater) and:

(A) One or more of the following spent solvents listed in §261-31—carbon tetrachloride, tetrachloroethylene trichloroethylene—provided that the maximum total weekly usage of these solvents (other than the amounts that can be demonstrated not to be discharged to wastewater) divided by the average weekly flow of wastewater into the headworks of the facility's wastewater treatment or pre-treatment system does not exceed 1 part per million or

(B) One or more of the following spent solvents listed in §261.31—methylene chloride, 1,1,1-trichloroethane, chlorobenzene, 0—dichlorobenzene, cresols, cresylic acid, nitrobenzene, toluene, methylethylketone, carbon disulfide, isobutanol, pyridine, spent chlorofluoro carbon solvents—provided that the maximum total weekly usage of these solvents (other than the amounts that can be demonstrated not to be discharged to wastewater) divided by the average weekly flow of wastewater into the headworks of the facility's wastewater treatment or pre-treatment system does not exceed 25 parts per million; or

(C) One of the following wastes listed in §261.32—heat exchanger bundle cleaning sludge form the petroleum refining industry (EPA Hazardous Waste No. K050); or

(D) A discarded commercial chemical product, or chemical intermediate listed in §261.33 arising from *de minimis* losses of these materials from manufacturing operations in which these materials are used as raw materials or are produced in the manufacturing process. For purposes of this sub-paragraph, "de minimis" losses include those from normal material handling operations (e.g. spills from the un-

loading or transfer of materials from bins or other containers, leaks from pipes, valves or other devices used to transfer materials); minor leaks of process equipment storage tanks or containers; leaks from well-maintained pump packings and seals; sample purgings; relief device discharges; discharges from safety showers and rinising and cleaning of personal safety equipment; and rinsate from empty containers or from containers that are rendered empty by that rinsing; or

(E) Wastewater resulting from laboratory operations containing toxic (T) wastes listed in Subpart D, provided that the annualized average flow of laboratory wastewater does not exceed one percent of total wastewater flow into the headworks of the facility's wastewater treatment or pre-treatment system, or provided the wastes, combined annualized average concentration does not exceed one part per million in the headworks of the facility's wastewater treatment or pre-treatment facility. Toxic (T) wastes used in laboratories that are demonstrated not to be discharged to wastewater are not to be included in this calculation.

(b) A solid 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.

(1) In the case of a waste listed in Subpart D, when the waste first meets the listing description set forth in Subpart D.

(2) In the case of a mixture of solid waste and one or more listed hazardous wastes, when a hazardous waste listed in Subpart D is first added to the solid waste.

(3) In the case of any other waste (including a waste mixture), when the waste exhibits any of the characteristics identified in Subpart C.

(c) Unless and until it meets the criteria of paragraph (d):

(1) A hazardous waste will remain a hazardous waste.

(2) Any solid 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.

(d) Any solid waste described in paragraph (c) of this section is not a hazardous waste if it meets the following criteria:

(1) In the case of any solid waste, it does not exhibit any of the characteristics of hazardous waste identified in Subpart C.

(2) In the case of a waste which is a listed waste under Subpart D, contains a waste listed under Subpart D, or is derived from a waste listed in Subpart D, it also has been excluded from paragraph (c) under Part 260 Subpart C of these regulations.

§261.4 Exclusions.

(a) Materials which are not solid wastes. The following materials are not solid wastes for the purpose of this Part:

(1) (i) Domestic sewage: and

(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.

(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) Irrigation return flows.

(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.

(5) Materials subjected to in-situ mining techniques which are not removed from the ground as part of the extraction process.

(b) Solid wastes which are not hazardous wastes. The following solid wastes are not hazardous waste:

(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)

(2) Solid wastes generated by any of the following and which are returned to the soils as fertilizers:

(i) The growing and harvesting of agricultural crops.

(ii) The raising of animals, including animal manures.

(3) Mining overburden returned to the mine site.

(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.

(5) Drilling fluids, produced waters, and other wastes associated with the exploration development, or production of crude oil, natural gas or geothermal energy.

(6)(i) Wastes which fail the test for the characteristics of EP toxicity because chromium is present or are listed in Subpart D due to the presence of chromium which do not fail the test for the characteristic of EP toxicity 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:

(A) The chromium in the waste is exclusively (or nearly exclusively) trivalent chromium; and

(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

(C) the waste is typically and frequently managed in non-oxidizing environments.

(ii) Specific wastes which meet the standard in (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:

(A) Chrome (blue) trimmings 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; and shearling.

(B) Chrome (blue) shavings 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; and shearling.

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Rule 3. Identification and Listing of Hazardous Waste: General

320 IAC 4.1-3-1 Purpose and scope

Sec. 1. (a) 320 IAC 4.1-3 through 320 IAC 4.1-6 identify those solid wastes which are subject to regulation as hazardous wastes under 320 IAC 4.1-7 through 320 IAC 4.1-54 and which are subject to the notification requirements of 320 IAC 4.1-2. In 320 IAC 4.1-3 through 320 IAC 4.1-6:

(1) 320 IAC 4.1-3 defines the terms "solid waste" and "hazardous waste," identifies those wastes which are excluded from regulation under 320 IAC 4.1-7 through 320 IAC 4.1-54, and establishes special management requirements for hazardous waste produced by small quantity generators and hazardous waste which is used, re-used, recycled, or reclaimed.

(2) 320 IAC 4.1-4 sets forth the criteria used by the Board to identify characteristics of hazardous waste and to list particular hazardous wastes.

(3) 320 IAC 4.1-5 identifies characteristics of hazardous waste.

(4) 320 IAC 4.1-6 lists particular hazardous wastes.

(b) These Rules identify only some of the materials which are hazardous wastes as defined by IC 13-7-1-2(17), including IC 13-7-8.5-3(b). A material which is not a hazardous waste identified by these Rules is still a hazardous waste for purposes of those sections if:

(1) In the case of 320 IAC 4.1-55-1, the Board has reason to believe that the material may be a hazardous waste within the meaning of IC 13-7-1-2(17).

(2) In the case of IC 13-7-12-1, the statutory elements are established.

320 IAC 4.1-3-2 Definition of solid waste

Sec. 2. (a) A solid waste is any garbage, refuse, sludge, or any other waste material which is not excluded under 320 IAC 4.1-3-4.

(b) 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:

(1) is discarded or is being accumulated, stored, or physically, chemically, or biologically treated prior to being discarded; or

(2) has served its original intended use and sometimes is discarded; or

(3) is a manufacturing or mining by-product and sometimes is discarded.

(c) A material is "discarded" if it is abandoned (and not used, re-used, reclaimed, or recycled) by being:

(1) *disposed of*; or

(2) burned or incinerated except where the material is being burned as a fuel for the purpose of recovering usable energy; or

(3) physically, chemically, or biologically treated (other than burned or incinerated) in lieu of or prior to being disposed of.

(d) A material is "diposed of" if it is discharged, deposited, injected, 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.

(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 which is typically processed through the next step of the process within a short time.

320 IAC 4.1-3-3 Definition of hazardous waste

Sec. 3. (a) A solid waste, as defined in 320 IAC 4.1-3-2, is a hazardous waste if:

(1) it is not excluded from regulation as a hazardous waste under 320 IAC 4.1-3-4(b); and

(2) it meets any of the following criteria:

(i) It exhibits any of the characteristics of hazardous waste identified in 320 IAC 4.1-5.

(ii) It is listed in 320 IAC 4.1-6 and has not been excluded from the lists in 320 IAC 4.1-6 under 320 IAC 4.1-1-4.

(iii) It is a mixture of a solid waste and a hazardous waste that is listed in 320 IAC 4.1-6 solely because it exhibits one or more of the characteristics of hazardous waste identified in 320 IAC 4.1-5, unless the resultant mixture no longer exhibits any characteristic of hazardous waste identified in 320 IAC 4.1-5.

(iv) It is a mixture of solid waste and one or more hazardous wastes listed in 320 IAC 4.1-6 and has not been excluded from this paragraph under 320 IAC 4.1-1-4; however, the following mixtures of solid wastes and hazardous wastes listed in 320 IAC 4.1-1-6 are not hazardous wastes (except by application of paragraph (a)(2)(i) or (ii) of this section) if the generator can demonstrate that the mixture consists of wastewater, the discharge of which is subject to regulation under either Section 402 or Section 307(b) of the Clean Water Act (33 USC 1342 or 33 USC 1317) (including wastewater at facilities which have eliminated the discharge of wastewater), and:

(A) One or more of the following spent solvents listed in 320 IAC 4.1-6-2—carbon tetrachloride, tetrachloroethylene, trichloroethylene—provided that the maximum total weekly usage of these solvents (other than the amounts that can be demonstrated not to be discharged to wastewater) divided by the average weekly flow of wastewater into the headworks of the facility's wastewater treatment or pretreatment system does not exceed one part per million; or

(B) One or more of the following spent solvents listed in 320 IAC 4.1-6-2—methylene chloride, 1, 1, 1-trichloroethane, chlorobenzene, o-dichlorobenzene, cresols, cresylic acids, nitrobenzene, toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, spent chloroflorocarbon solvents—provided that the maximum total weekly usage of these solvents (other than the amounts that can be demonstrated not to be discharged to wastewater) divided by the average weekly flow of wastewater into the headworks of the facility's wastewater treatment or pretreatment system does not exceed 25 parts per million; or

(C) One of the following wastes listed in 320 IAC 4.1-6-3—heat exchanger bundle cleaning sludge from the petroleum refining industry (EPA Hazardous Waste No. K050); or

(D) A discarded commercial chemical product, or chemical intermediate listed in 320 IAC 4.1-6-4, arising from de minimis losses of these materials from manufacturing operations in which these materials are used as raw materials or are produced in the manufacturing process. For purposes of this subparagraph, "de minimis" losses include those from normal material handling operations (e.g., spills from the unloading or transfer of materials from bins or other containers, leaks from pipes, valves, or other devices used to transfer materials); minor leaks of process equipment, storage tanks, or containers; leak from well maintained pump packings and seals; sample purgings; relief device discharges; discharges from safety showers and rinsing and cleaning of personal safety equipment; and rinsate from empty containers or from containers that are rendered empty by that rinsing; or

(E) Wastewater resulting from laboratory operations containing toxic (T) wastes listed in 320 IAC 4.1-6, provided that the annualized average flow of laboratory wastewater does not exceed one percent of total wastewater flow into the headworks of the facility's wastewater treatment or pretreatment system, or provided the wastes' combined annualized average concentration does not exceed one part per million in the headworks of the facility's wastewater treatment or pretreatment facility. Toxic (T) wastes used in laboratories that are demonstrated not to be discharged to wastewater are not to be included in this calculation.

(b) A solid 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:

(1) In the case of a waste listed in 320 IAC 4.1-6, when the waste first meets the listing description set forth in 320 IAC 4.1-6.

(2) In the case of a mixture of solid waste and one or more listed hazardous wastes, when a hazardous waste listed in 320 IAC 4.1-6 is first added to the solid waste.

(3) In the case of any other waste (including a waste mixture), when the waste exhibits any of the characteristics identified in 320 IAC 4.1-5.

(c) Unless and until it meets the criteria of paragraph (d):

(1) A hazardous waste will remain a hazardous waste.

(2)(i) Except as otherwise provided in paragraph (c)(2)(ii) of this section, any solid 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 prescription run-off) is a hazardous waste.

(ii) The following solid wastes are not hazardous 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 stablization of spent pickle liquor from the iron and steel industry (SIC codes 331 and 332).

(d) Any solid waste described in paragraph (c) of this section is not a hazardous waste if it meets the following criteria:

(1) In the case of any solid waste, it does not exhibit any of the characteristics of hazardous waste identified in 320 IAC 4.1-5.

(2) In the case of a waste which is a listed waste in 320 IAC 4.1-6, contains a waste listed in 320 IAC 4.1-6, or is derived from a waste listed in 320 IAC 4.1-6, it also has been excluded from paragraph (c) pursuant to 320 IAC 4.1-1.

320 IAC 4.1-3-4 Exclusions

Sec. 4. (a) Materials which are not solid wastes. The following materials are not solid wastes for the purposes of 320 IAC 4.1-3 to 320 IAC 4.1-6:

(1)(i) Domestic sewage; and

(ii) Any mixture of domestic sewage and other wastes that passed through a sewer system to a publicly-owned treatment works (POTW) for treatment. "Domestic sewage" means untreated sanitary wastes that pass through a sewer system.

(2) Industrial wastewater discharges that are point source discharges subject to regulation under Section 402 of the Clean Water Act (33 USC 1342), as amended.

[Note: 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) Irrigation return flows.

(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.

(5) Materials subjected to in-situ mining techniques which are not removed from the ground as part of the extraction process.

(b) Solid wastes which are not hazardous wastes. The following solid wastes are not hazardous wastes:

(1) Household waste, including household waste that has been collected, transported, stored, treated, disposed, recovered (e.g., refuse-derived fuel), or reused. "Household waste" mean any waste material (including garbage, trash, and sanitary wastes in septic tanks) derived from households (including single and multiple residences, hotels, and motels).

(2) Solid wastes generated by any of the following and which are returned to the soils as fertilizers:

(i) The growing and harvesting of agricultural crops.

(ii) The raising of animals, including animal manure.

(3) Mining overburden returned to the mine site.

(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.

(5) Drilling fluids, produced waters, and other wastes associated with the exploration, development, or production of crude oil, natural gas, or geothermal energy.

(6)(i) Wastes which fail the test for the characteristic of EP toxicity because chromium is

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(9) All submissions required by this paragraph must be certified on behalf of the applicant by the signature of a person authorized to sign a permit application or a report under rule 3745-50-42 of the Administrative Code.

(10) Based on the results of the trial burn, the operating requirements shall be set in the final permit according to rule 3745-57-45 of the Administrative Code.

(C) For the purposes of allowing operation of a new hazardous waste incinerator following completion of the trial burn and prior to final modification of the permit conditions to reflect the trial burn results, the permit may contain conditions, including but not limited to allowable waste feeds and operating conditions sufficient to meet the requirements of rule 3745-57-45 of the Administrative Code, in the permit to a new hazardous waste incinerator. These permit conditions will be effective for the minimum time required to complete sample analysis, data computation and submission of the trial burn results by the applicant, and modification of the facility permit.

(1) Applicants must submit a statement, with "part B" of the permit application, which identifies the conditions necessary to operate in compliance with the performance standards of rule 3745-57-43 of the Administrative Code during this period. This statement should include, at a minimum, restrictions on waste constituents, waste feed rates, and the operating parameters in rule 3745-57-45 of the Administrative Code.

(2) The director will review this statement and any other relevant information submitted with "part B" of the permit application and recommend those requirements for this period most likely to meet the performance standards of rule 3745-57-43 of the Administrative Code based on his engineering judgment.

(D) For the purposes of determining feasibility of compliance with the performance standards of rule 3745-57-43 of the Administrative Code and of determining adequate operating conditions under rule 3745-57-45 of the Administrative Code, the applicant for a permit to an existing hazardous waste incinerator may prepare and submit a trial burn plan and perform a trial burn in accordance with paragraphs (B)(2) to (B)(9) of this rule. Applicants who submit trial burn plans and receive approval before submission of a permit application must complete the trial burn and submit the results, specified in paragraph (B)(6) of this rule, with "part B" of the permit application. If completion of this process conflicts with the date set for submission of the "part b" application, the applicant must contact the director to establish a later date for submission of the "part B" application or the trial burn results. If the applicant submits a trial burn plan with "part B" of the permit application, the trial burn must be conducted and the results submitted within a time period to be specified by the director.

3745-51-01 Purpose and scope. This chapter identifies those wastes which are subject to regulation as hazardous wastes.

(Comment: Generators and transporters of hazardous waste and hazardous waste facilities are required to notify U.S. EPA of such activity pursuant to section 3010 of the Resource Conservation and Recovery Act. U.S. EPA will provide such information to Ohio EPA.)

3745-51-02 Definition of Waste.

(A) A "waste" is any garbage, refuse, sludge or any other waste material which is not excluded under paragraph (A) of rule 3745-51-04 of the Administrative Code.

(B) An "other waste material" is any solid, liquid, semi-solid or contained gaseous material, resulting from industrial, commercial, mining or agricultural operations, or from communition activities which:

(1) Is discarded or is being accumulated, stored or physically, chemically or biologically treated prior to being discarded;

(2) Has served its original intended use and sometimes is discarded; or

(3) Is a manufacturing or mining byproduct and sometimes is discarded.

(C) A material is "discarded" if it is abandoned (and not used, reused, reclaimed or recycled) by being:

(1) Disposed of

(2) Burned or incinerated, except where the material is being burned as a fuel for the purpose of recovering usable energy; or

(3) Physically, chemically, or biologically treated (other than burned or incinerated) in lieu of or prior to being disposed of.

(D) A meterial 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.

(E) A "manufacturing or mining byproduct" 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.

3745-51-03 Definition of Hazardous Waste.

(A) A waste, as defined in rule 3745-51-02 of the Administrative Code, is a hazardous waste if:

(1) It is not excluded from regulation as a hazardous waste under paragraph (B) of rule 3745-51-04 of the Administrative Code, and

(2) It meets any of the following criteria:

(a) It exhibits any of the characteristics of hazardous waste identified in rules 3745-51-20 to 3745-51-24 of the Administrative Code.

(b) It is listed in 40 CFR Sections 261.31 to 261.33, as amended, as a hazardous waste.

(c) It is listed in this chapter as a hazardous waste.

(d) It is a mixture of a waste and a hazardous waste that is listed in 40 CFR Sections 261.31 to 261.33, as amended, or in this chapter solely because it exhibits one or more of the characteristics of hazardous waste identified in 40 CFR Sections 261.20 to 261.24 or in rules 3745-51-20 to 3745-51-24 of the Administrative Code, unless the resultant mixture no longer exhibits any characteristic of hazardous waste identified in 40 CFR Sections 261.20 to 261.24 or in rules 3745-51-20 to 3745-51-24 of the Administrative Code.

(e) It is a mixture of waste and one or more hazardous wastes listed in 40 CFR

Section 261.31 to 261.33, as amended, or in this chapter; however, the following mixtures of wastes and hazardous wastes listed in 40 CFR Section 261.31 to 261.33, as amended, or in this chapter are not hazardous wastes (except by application of paragraphs (A)(2)(a) to (A)(2)(c) of this rule) if the generator can demonstrate that the mixture consists of wastewater, the discharge of which is subject to regulation under either Section 402 or Section 307(b) of the Clean Water Act (including wastewater at facilities which have eliminated the discharge of wastewater) and;

(i) One or more of the following spent solvents listed in 40 CFR Section 261.31 — carbon tetrachloride, tetrachloroethylene, trichloroethylene — provided that the maximum total weekly usage of these solvents (other than the amounts that can be demonstrated not to be discharged to wastewater) divided by the average weekly flow of wastewater into the headworks of the facility's wastewater treatment or pretreatment system does not exceed one part per million; or

(ii) One or more of the following spent solvents listed in 40 CFR Section 261.31 — methylene chloride, 1, 1, 1-trichloroethane, chlorobenzene, o-dichlorobenzene, cresols, cresylic acid, nitrobenzene, toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, spent chlorofluorocarbon solvents — provided that the maximum total weekly usage of these solvents (other than the amounts that can be demonstrated not to be discharged to wastewater) divided by the average weekly flow of wastewater into the headworks of the facility's wastewater treatment or pretreatment system does not exceed twenty-five parts per million; or

(iii) One of the following wastes listed in 40 CFR Section 261.32 — heat exchanger bundle cleaning sludge from the petroleum refining industry "EPA Hazardous Waste No. K050"; or

(iv) A discarded commercial chemical product, or chemical intermediate listed in 40 CFR Section 261.33, arising from de minimis losses of these materials from manufacturing operations in which these materials are used as raw materials or are produced in the manufacturing process. For purposes of this paragraph, "de minimis losses" include those from normal material handling operations (e.g., spills from the unloading or transfer of materials from bins or other containers, leaks from pipes, valves or other devices used to transfer materials); minor leaks of process equipment, storage tanks or containers; leaks from well-maintained pump packings and seals; sample purgings; relief device discharges; discharges from safety showers and rinsing and cleaning of personal safety equipment; and rinsate from empty containers or from containers that are rendered empty by that rinsing; or

(v) Wastewater resulting from laboratory operations containing toxic (T) wastes listed in 40 CFR Sections 261.31 to 261.33, as amended, or in this chapter, provided that the annualized average flow of laboratory wastewater does not exceed one percent of total wastewater flow into the headworks of the facility's wastewater treatment or pretreatment system, or provided the wastes' combined annualized average concentration does not exceed one part per million in the headworks of the facility's wastewater treatment or pretreatment facility. Toxic (T) wastes used in laboratories that are demonstrated not to be discharged to wastewater are not to be included in this calculation.

(B) A waste which is not excluded from regulation under paragraph (A) (1) of this rule becomes a hazardous waste when any of the following events occur:

(1) In the case of a waste listed in this chapter or in 40 CFR Sections 261.31 through 261.33, as amended, as a hazardous waste, when the waste first meets such listing description.

(2) In the case of a mixture of waste and one or more listed hazardous wastes, when a hazardous waste listed in this chapter is first added to the waste.

(3) In the case of any other waste (including a waste mixture), when the waste exhibits any of the characteristics identified in rules 3745-51-20 to 3745-51-24 of the Administrative Code.

(C) Unless and until it meets the criteria of paragraph (D) of this rule:

(1) A hazardous waste will remain a hazardous waste.

(2)(a) Except as otherwise provided in paragraph (C)(2)(b) of this rule, 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.*

(b) The following wastes are not hazardous 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).

(D) Any waste described in paragraph (C) of this rule is not a hazardous waste if it meets the following criteria:

(1) It does not exhibit any of the characteristics of hazardous waste identified in rules 3745-51-20 to 3745-51-24 of the Administrative Code, and

(2) In the case of a waste which is listed as a hazardous waste in this chapter or in 40 CFR Section 261.31 to 261.33, as amended, contains such a hazardous waste, or is derived from such a hazardous waste, such hazardous waste has been excluded pursuant to 40 CFR Section 260.20 and 260.22.

(E) The burden of proof in demonstrating that a waste is not hazardous pursuant to paragraph (D) of this rule shall be upon the person making such claim.

(F) The director shall advise the public of changes to the lists of hazardous wastes in this chapter, in 40 CFR Sections 261.31 to 261.33 and of exclusions pursuant to 40 CFR Section 260.22

3745-51-04 Exclusions.

(A) The following materials are not wastes for the purpose of this chapter:

(1) Domestic sewage; and

(a) Any mixture of domestic sewage and other wastes that passes through a sewer system to a publicly-owned treatment works for treatment.

(b) As used in this chapter, "domestic sewage" means untreated sanitary wastes that pass thorugh a sewer system.

(2) Industrial wastewater discharges that are point source discharges subject to regulation under Section 402 of the Clean Water Act except discharges of hazardous waste in underground injection wells. 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

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Commissioner and such information must be transmitted by the document control officer in accordance with part (c)2 of this paragraph. The person submitting the Proprietary Information shall be notified when such occurs.

(e) *Release to EPA* — Notwithstanding any requirement of this paragraph seemingly to the contrary, Proprietary Information may be released to the U.S. Environmental Protection Agency in connection with the Commissioner's or Board's implementation or his or its responsibilities pursuant to the Act or as necessary to comply with federal law. Any such release of Proprietary Information to EPA, however, will be made with a confidentiality claim and shall be accompanied by the written statement received by the Department pursuant to subpart (a)2(viii) of this paragraph. Any transmittal of Proprietary Information to EPA shall be subject to the requirements of subparagraph (d) of this paragraph. The Commissioner shall notify the submitter of Proprietary Information of the release of such information to EPA as soon as practicable — to be no later than 5 days after such release — following receipt of EPA's request for the information.

1200-1-11-.02. IDENTIFICATION AND LISTING OF HAZARDOUS WASTE

(1) *General*

(a) *Purpose and Scope*—This Rule identified those wastes which are subject to regulation as hazardous wastes under these Rules. In this Rule:

1. Paragraph (1) defines the terms "wastes" and "hazardous waste," identified those wastes which are excluded from regulation under these Rules or portions of these Rules and establishes special management requirements for hazardous waste produced by small quantity generators and hazardous waste which is used, re-used, recycled or reclaimed.

2. Paragraph (2) sets forth the criteria used by the Department to identify characteristics of hazardous waste and to list particular hazardous wastes.

3. Paragraph (3) identifies characteristics of hazardous waste.

4. Paragraph (4) lists particular hazardous wastes.

(b) *Definition of Waste*

1. A "waste" is any garbage, refuse, sludge or any other waste material which is not excluded under part (d)1 of this paragraph.

2. 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:

(i) Is discarded or is being accumulated, stored or physically, chemically or biologically treated prior to being discarded; or

(ii) Has served its original intended use and sometimes is discarded; or

(iii) Is a manufacturing or mining by-product and sometimes is discarded.

3. A material is "discarded" if it is abandoned (and not beneficially or legitimately used, re-used, reclaimed or recycled) by being subjected to:

(i) Disposal; or

(ii) Burning or incineration, except where the material is being burned as a fuel for the purpose of recovering usable energy; or

(iii) Physical, chemical, or biological treatment (other than burning or incineration) in lieu of or prior to disposal.

4. 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.

(c) *Definition of Hazardous Waste*

1. A waste, as defined in subparagraph (b) of this paragraph is a hazardous waste if:

(i) It is not excluded from regulation as a hazardous waste under part (d)2 of this paragraph; and

(ii) It meets any of the following criteria:

(I) It exhibits any of the characteristics of hazardous waste identified in paragraph (3).

(II) It is listed in paragraph (4) and has not been excluded from the lists in that paragraph under-Rule 1200-1-11-.01(3):

(III) It is a mixture of a waste and a hazardous waste that is listed in paragraph (4) solely because it exhibits one or more of the characteristics of hazardous waste identified in paragraph (3), unless the resultant mixture no longer exhibits any characteristic of hazardous waste identified in paragraph (3).

(IV) It is a mixture of waste and one or more hazardous wastes listed in paragraph (4) and has not been excluded from being a hazardous waste under Rule 1200-1-11-.01(3); however, the following mixtures of waste and hazardous wastes listed in paragraph (4) are not hazardous wastes (except by application of items (I) or (II) of this subpart) if the generator can demonstrate that the mixture consists of wastewater the discharge of which is subject to regulation under TCA 69-3-101 et. seq. (including wastewater at facilities which have eliminated the discharge of wastewater) and, as applicable,;

I. One or more of the following spent solvents listed in subparagraph (4)(b) - carbon tetrachloride, tetrachloroethylene, trichloroethylene - provided that the maximum total weekly usage of these solvents (other than the amounts that can be demonstrated not be discharged to waste- water) divided by the average weekly flow of wastewater into the headworks of the facility's wastewater treatment or pre-treatment system does not exceed 1 part per million; or

II. One or more of the following spent solvents listed in subparagraph (4)(b) - methylene chloride, 1,1,1,-trichloroethane, chlorobenzene, o-dichlorobenzene, cresols, cresylic acid, nitrobenzene, toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, spent chlorofluorocarbon solvents -provided that the maximum total weekly usage of these solvents (other than the amounts that can be demonstrated not to be discharged to wastewater) divided by the average weekly flow of wastewater into the headworks of the facility's wastewater treatment or pre-treatment system does not exceed 25 parts per million; or

III. One of the following wastes listed in subparagraph (4)(c) - heat exchanger bundle cleaning sludge from the petroleum refining industry (Hazardous Waste Code K050); or

IV. A discarded commercial chemical product, or chemical intermediate listed in subparagraph (4)(d), arising from *de minimis* losses of these materials from manufacturing operations in which these materials are used as raw materials or are produced in the manufacturing process. For purpose of this subitem, *"de minimis"* losses include those from normal material handling operations (e.g., spills from the unloading or transfer of materials from bins or other containers, leaks from pipes, valves, or other devices used to transfer materials); minor leaks of process equipment, storage tanks or containers; leaks from well-maintained pump packings and seals; sample purgings; relief device discharges; discharges from safety showers and rinsing and cleaning of personal safety equipment; and rinsate from empty containers or from containers that are rendered empty by that rinsing; or

V. Wastewater resulting from laboratory operations containing toxic (T) wastes listed in paragraph (4), provided that the annualized average flow of laboratory wastewater does not exceed one percent of total wastewater flow into the headworks of the facility's wastewater treatment or pre-treatment, system, or provided the wastes' combined annualized average concentration does not exceed one part per million in the headworks of the facility's wastewater treatment or pre-treatment facility. Toxic (T) wastes used in laboratories that are demonstrated not to be discharged to wastewater are not to be included in this calculation.

2. A waste which is not excluded from regulation under subpart 1(i) of this subparagraph becomes a hazardous waste when any of the following events occur:

(i) In the case of a waste listed in paragraph (4), when the waste first meets the listing description set forth in paragraph (4)

(ii) In the case of a mixture of waste and one or more listed hazardous wastes, when a hazardous waste listed in paragraph (4) is first added to the waste.

(iii) In the case of any other waste (including a waste mixture), when the waste exhibits any of the characteristics identified in paragraph (3).

3. Unless and until it meets the criteria of part 4 below:

(i) A hazardous waste will remain a hazardous waste.

(ii) 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.

4. Any waste described in part 3 of this subparagraph is not a hazardous waste if it meets the following criteria:

(i) In the case of any waste, it does not exhibit any of the characteristics of hazardous waste identified in paragraph (3).

(ii) In the case of a waste which is a listed waste under paragraph (4), contains a waste(s) listed under paragraph (4) or is derived from a waste listed in paragraph (4) it also has been excluded from part 3 of this subparagraph under Rule 1200-1-11-.01(3).

(d) *Exclusions*

1. *Materials Which Are Not Wastes*—The following materials are not wastes for the purpose of this Rule:

(i) (I) Domestic sewage; and

(II) Any mixture of domestic sewage and other wastes that passes through a sewer system to a publicly-owned treatment works for treatment.

NOTE—"Domestic sewage" means untreated sanitary wastes that pass through a sewer system (Interim final).

(ii) Industrial wastewater discharges that are point source discharges subject to permits under TCA 69-3-101 et seq.

(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.)

(iii) Irrigation return flows.

(iv) 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.

(v) Materials subjected to in-situ mining techniques which are not removed from the ground as part of the extraction process.

2. *Wastes Which Are Not Hazardous Wastes*—The following wastes are not hazardous wastes:

(i) 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.)

(ii) The following wastes generated within a farm and incidental to the operation of that farm:

(I) Wastes from the growing and harvesting of agricultural crops or from the raising of animals (including animal manures), which are returned to the soil as fertilizers; and

(II) Waste pesticides, provided the farmer triple-rinses each emptied pesticide container (using a capable solvent) and disposes of the pesticide residues on his own farm in a manner consistent with the disposal instruction on the pesticide label.

(iii) Mining overburden returned to the mine site.

(iv) 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.

(v) Wastes which fail the test for the characteristic of EP toxicity because chromium is present or are listed in paragraph (4) of this Rule due to the presence of chromium, which do not fail the test for the characteristic of EP toxicity 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:

(I) The chromium in the waste is exclusively (95% or greater) trivalent chromium; and

(II) The waste is generated from an industrial process which uses trivalent chromium exclusively (95% or greater) and the process does not generate hexavalent chromium; and

(III) The waste is managed in non-oxidizing environments.

(vi) Specific wastes which meet the standard in subpart (v) of this part (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:

(I) Chrome (blue) trimmings generated by the following subcategories of the leather tanning and finishing industry: hair pulp/chrome tan/retan/wet finish; retan/wet finish no beamhouse; through-the-blue; and shearling.

(II) Chrome (blue) shavings 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; shearling.

(III) Buffing dust generated by the following subcategories of the leather tanning and finishing industry: hair pulp/chrome

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R.61-79.261 *IDENTIFICATION AND LISTING OF HAZARDOUS WASTE*
R.61-79.261 Subpart A GENERAL

261.1 *Purpose and scope.*

(a) This regulation identifies those solid wastes which are subject to or exempt from regulation as hazardous wastes under Regulations R.61-79.124, R.61-79.262, R.61-79.263, R.61-79.264, R.61-79.265 and R.61-79.270.

(1) Subpart A defines the terms "solid waste" and "hazardous waste," identifies those wastes which are excluded from regulation and establishes special management requirements for hazardous waste produced by small quantity generators and hazardous waste produced by small quantity generators and hazardous waste which is used, reused, recycled, or reclaimed.

(2) Subpart B sets forth the criteria to identify characteristics of hazardous waste and to list particular hazardous wastes.

(3) Subpart C identifies characteristics of hazardous waste.

(4) Subpart D lists particular hazardous wastes.

(b) A material which is not a hazardous waste identified in this regulation is still a hazardous waste for purposes of these sections if the Department has reason to believe that the material may be a hazardous waste within the meaning of Section 44-56-20(6) of the S.C. Code of Laws of 1976, as amended.

261.2 *Definition of solid waste*

(a) A solid waste is any garbage, refuse, sludge or any other waste material which is not excluded under Section 261.4(a) below.

(b) 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:

(1) Is discarded or is being accumulated, stored or physically, chemically or biologically treated prior to being discarded; or

(2) Has served its original intended use and sometimes is discarded, or

(3) Is a manufacturing or mining by-product and sometimes is discarded.

(c) A material is "discarded" if it is abandoned (and not used, re-used, reclaimed or recycled) by being:

(1) Disposed of; or

(2) Burned or incinerated, except where the material is bing burned as a fuel for the purpose of recovering usable energy; or

(3) Physically, chemically, or biologically treated (other than burned or incinerated) in lieu of or prior to being disposed of.

(d) A material is "disposal 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 constitutent thereof may enter the environment or be emitted into the air or discharged into ground or surface waters.

(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 operations. The term does not include an intermeditate manufacturing or mining product which results from one of the steps in a manufacturing process and is typically processed through the next step of the process within a short time.

261.3 Definitions of hazardous waste

(a) A solid waste, as defined in Section 261.2 above is a hazardous waste if:

(1) It is not excluded from regulation as a hazardous waste under Section 261.4(b) below; and

(2) It meets any of the following criteria:

(i) It exhibits any of the characteristics of hazardous waste identified in Subpart C below.

(ii) It is listed in Subpart D below and has not been excluded from the lists in Subpart D below and under R.61-79.260 Subpart C Sections 260.20 and 260.22 of these Regulations.

(iii) It is a mixture of a solid waste and a hazardous waste that is listed in Subpart D below solely because it exhibits one or more of the characteristics of hazardous waste identified in Subpart C below unless the resultant mixture no longer exhibits any characteristics of hazardous waste identified in Subpart C.

(iv) It is a mixture of solid waste and one or more hazardous waste listed in Subpart D below, and has not been excluded from this paragraph under R.61-79.260 Subpart C Sections 260.20 and 260.22 of these Regulations; however, the following mixtures of solid wastes and hazardous wstes listed in Subpart D below are not hazardous wastes (except by application of paragraph (a)(2)(i) or (ii) of this Section) if the generator can demonstrate that the mixture consists of wastewater the discharge of which is subject to regulations under the S.C. Pollution Control Act Section 48-1-10 et seq., of the S.C. Code of Laws of 1976, as amended; and

(A) One or more of the following spent solvents listed in Section 261.31 below — carbon tetrachloride, tetrachlorethylene, trichoroethylene — provided that the maximum total weekly usage of these solvents (other than the amounts that can be demonstrated not to be discharged to wastewater) divided by the average weekly flow of wastewater into the headworks of the facility's wastewater treatment or pre-treatment system does not exceed 1 part per million; or

(B) One or more of the following spent solvents listed in Section 261.31 below — methylene chloride, 1,1, 1-trichloroethane, chlorobenzene, o-dichlorobenzene, cresols, cresylic acid, nitrobenzene, toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, spent chlorofluorocarbon solvents — provided that the maximum total weekly usage of these solvents (other than the amounts that can be demonstrated not be discharged to wastewater) divided by the average weekly flow of wastewater into the headworks of the facility's wastewater treatment or pre-treatment system does not exceed 25 parts per million; or

(C) One of the following wastes listed in Section 261.32 below — heat exchanger bundle cleaning sludge from the petroleum refining industry (Hazardous Waste No K050); or

(D) A discarded commerical chemical product, or chemical intermediate listed in Section 261.33, arising from *de minimis* losses of these materials from manufacturing operations in which these materials are used as raw materials or are produced in the manufacturing process. For purposes of this subparagraph, "*de minimis*" losses include those from normal material handling operations (e.g. spills from the unloading or transfer of materials from bins or other containers, leaks from pipes,

valves or other devices used to transfer materials); minor leaks of process equipment, storage tanks or containers; leaks from well-maintained pump packings and seals; sample purgings; relief device discharges; discharges from safety showers and rinsing and cleaning of personal safety equipment; and rinsate from empty containers or from containers that rinsing; or

(E) Wastewater resulting from laboratory operations containing toxic (T) wastes listed in Subpart D below, provided that the annualized average flow of laboratory wastewater does not exceed one percent of total wastewater flow into the headworks of the facility's wastewater treatment or pre-treatment system, or provided the wastes combined annualized average concentration does not exceed one part per million in the headworks of the facility's wastewater treatment or pre-treatment facility. Toxic (T) wastes used in laboratories that are demonstrated not to be discharged to wastewater are not to be included in this calculation.

(b) A solid 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:

(1) In the case of a waste listed in Subpart D below when the waste first meets the listing description set forth in Subpart D.

(2) In the case of of a mixture of solid waste and one or more listed hazardous wastes, when a hazardous waste listed in Subpart D below is first added to the solid waste.

(3) In the case of any other waste (including a waste mixture), when the waste exhibits any of the characteristics identified in Subpart C below.

(c) Unless and until it meets the criteria of paragraph (d):

(1) A hazardous waste will remain a hazardous waste.

(2) Any solid 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 runoff), is a hazardous waste.

(d) Any solid waste described in paragraph (c) of this section is not a hazardous waste if it meets the following criteria:

(1) In the case of any solid waste, it does not exhibit any of the characteristics of hazardous waste identified in Subpart C below.

(2) In the case of a waste which is listed waste under Subpart D below, contains a waste listed under Subpart D or is derived from a waste listed in Subpart D, it also has been excluded from paragraph (c) under R.61-79-260 Subpart C Sections 260.20 and 260.22 of these regulations.

(e) For the purposes of this regulation the wastes listed in Appendix IX will be considered hazardous.

261.4 Exclusions

(a) Materials which are not solid wastes. The following materials are not solid wastes for the purpose of this Part:

(1)(i) Domestic sewage; and

(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.

(2) Industrial wastewater discharges that are point source discharges subject to regulation under Section 48-1-10 et seq., of the S.C. Code of Laws of 1976, as amended. 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 sludge that are generated by industrial wastewater treatment.

(3) Irrigation return flows.

(4) Materials covered under Article 2 of Chapter 7 of Title 13 of the 1976 Code of Laws of S.C., as amended.

(5) Materials subjected to in-situ mining techniques which are not removed from the ground as part of the extraction process.

(b) Solid wastes which are not hazardous wastes. The following solid wastes are not hazardous wastes:

(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 garabe, trash and sanitary wastes in septic tanks) derived from households (including single and multiple residences, hotels and motels.)

(2) Solid wastes generated by any of the following and which are returned to the soils as fertilizers:

(i) The growing and harvesting of argricultural crops.

(ii) The raising of animals, including animal manures.

(3) Mining overburden return to the mine site if such overburden is handled in compliance with all applicable provisions of the S. C. Mining Act, Section 48-1920 et seq., S. C. Code of Laws, 1976, as amended.

(4) Flyash, bottom ash waste, and flue gas emission control waste generated primarily from the combustion of coal or other fossil fuel.

(5) Drilling fluids, produced waters, and other wastes associated with the exploration, development, or production of crude oil, natural gas or geothermal energy.

(6) (i) Wastes which fail the test for the characteristic of EP toxicity becaue chromium is present or are listed in Subpart D due to the presence of chromium, which do not fail the test for the characteristic of EP toxicity 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:

(A) The chromium in the waste is exclusively (or nearly exclusively) trivalent chromium; and

(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

(C) The waste is typically and frequently managed in non-oxidizing environments.

(ii) Specific wastes which meet the standard in (i)(A), (B), and (C) above (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

(A) Chrome (blue trimmings generated by the following subcategroies of the leather tanning and finishing industry: hair pulp/chrome tan/retan/wet finish; retan/wet finish; no beamhouse; through-the-blue; and shearling.

(B) Chrome (blue) shavings generated by the following subcategories of the leather tanning and finishing industry: hair pulp/chrome tan/retain/wet finish;

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decision. A person requesting a hearing must state the issues to be raised and explain why written comments would not suffice to communicate the person's views. The secretary may in any case decide on his own motion to hold an informal public hearing.

(14) After evaluating all public comments the secretary will make a final decision by notifying the petitioner. A record shall be kept of each petition and its disposition.

(c) Any person may request the addition of testing or analytical method to Rules .0029, .0032, .0033 of this Subchapter by petitioning the department. The petition must demonstrate to the satisfaction of the department that the proposed method is equal to or superior to the corresponding method prescribed in Rules .0029, .0032, and .0033 of this Subchapter, in terms of its sensitivity, accuracy, and precision (i.e., reproducibility).

(1) Each petition for the addition of a testing or analytical method must include the following information:

(A) the petitioner's name and address;

(B) a statement of the petitioner's interest in the proposed action;

(C) a description of the proposed action, including, where appropriate, suggested regulatory language;

(D) a statement of the need and justification for the proposed action, including any supporting tests, studies, or other information;

(E) a full description of the proposed method including all procedural steps and equipment used in the method;

(F) a description of the types of wastes or waste matrices for which the proposed method may be used;

(G) comparative results obtained from using the proposed method with those obtained from using the relevant or corresponding methods proscribed in Rules .0029, .0032, and .0033 of this Subchapter;

(H) an assessment of any factors which may interfere with, or limit the use of, the proposed method; and

(I) a description of the quality control procedures necessary to ensure the sensitivity, accuracy and precision of the proposed method.

(2) After receiving a petition for an equivalent method, the department may request any additional information on the proposed method which he may reasonably require to evaluate the method.

(3) The department will make a tentative decision to grant or deny a petition and will publish notice of such tentative decision, once, in a newspaper of general circulation in the locality affected.

(4) Upon written request of any interested person, the department may at its discretion hold an informal public hearing to consider oral comments on the tentative decision. A person requesting a hearing must state the issues to be raised and explain why written comments would not suffice to communicate the person's views. The department may in any case decide on its own motion to hold an informal public hearing.

(5) After evaluating all public comments the department will make a final decision by obtaining concurrence from EPA and notify the petitioner. A record shall be kept of each petition and its disposition.

(6) If the department grants the petition to permit use of a new testing method, EPA will be notified.

(d) The provisions for "variances from classification as a solid waste, standards and criteria for variance from classification as a solid waste, variance to be classified as a boiler, procedures for variances from classification as a solid waste or to be classified as a boiler" contained in 50 Fed. Reg. 661, 662, and 14,219 (1985) [to be codified as 40 CFR 260.30 to 260.33 (Subpart C)] have been adopted by reference.

(e) The provisions for "additional regulation of certain hazardous waste recycling activities on a case-by-case basis, procedures for case-by-case regulation of hazardous waste recycling activities" contained in 50 Fed. Reg. 661, 662, and 663 (1985) (to be codified as 40 CFR 260.40 to 260.41) have been adopted by reference.

.0029 Identification and Listing of Hazardous Wastes—Part 261

(a) The general provisions contained in 45 Fed. Reg. 33,119 to 33,121 (1980) (to be codified in 40 CFR 261.1 to 261.6 (Subpart A)) have been adopted by reference as amended by 45 Fed. Reg. 72,028, 72.037, 76,620, 76,623, 76,624, and 78,539 (1980) and 46 Fed. Reg. 56,588, 56,589, 47,429, 44,972 and 44,973 (1981); 48 Fed. Reg. 2,532, 14,293, 14,294, and 30,115 (1983); 49 Fed. Reg. 44,980 (1984); and 50 Fed. Reg. 663, 664, 665, 1,999 and 14,219 (1985).

(b) The provisions for "Residues of Hazardous Waste in Empty Containers" contained in 45 Fed. Reg. 78,529 (1980) (to be codified in 40 CFR 261.7 (Subpart A)) has been adopted by reference as amended by 47 Fed. Reg. 36,097 (1982); 48 Fed. Reg. 14,294 (1983); and 50 Fed. Reg. 1,999 (1985).

(c) The "Criteria for Identifying the Characteristics of Hazardous Wastes and for Listing Hazardous Wastes" contained in 45 Fed. Reg. 33,121 (1980) (to be codified in 40 CFR 261.10 and 261.11 (Subpart B)) have been adopted by reference.

(d) The "Characteristics of Hazardous Wastes" contained in 45 Fed. Reg. 33,121 and 33,122 (1980) (to be codified in 45 CFR 261,20 to 261,24 (Subpart C)) have been adopted by reference as amended by 45 Fed. Reg. 72,032 (1980) and 46 Fed. Reg. 35,247 (1981); and 48 Fed. Reg. 14,294 (1983).

(e) The "Lists of Hazardous Wastes" and the accompanying appendices (I through VIII) contained in 45 Fed. Reg. 33,122 to 33,137 (1980) (to be codified in 40 CFR 261,30 to 261,33 (Subpart D)) has been adopted by reference as amended by 45 Fed. Reg. 72,032 to 72,034, 74,890, 74,892, and 74,894 (1980); 46 Fed. Reg. 78,529, 78,537 to 78,544, 4,614 to 4,620 (1981); 49 Fed Reg. 19,923 (1984); and 50 Fed. Reg. 662, 665 and 2,000 (1985). Supplemental material contained in 45 Fed. Reg. 47,833 and 47,834 (1980) 46 Fed. Reg. 35,247 to 35,249 (1981) and 48 Fed. Reg. 14,294 and 15,256 to 15,258 (1983) have also been adopted by reference as amended by 50 Fed. Reg. 2001, 2002 and 2003 (1985).

.0030 Standards for Hazardous Waste Generators — Part 262

(a) The general provisions contained in 45 Fed. Reg. 33,142 and 33,143 (1980) (to be codified in 40 CFR 262.10 to 262.12 (Subpart A)) have been adopted by reference as amended by 45 Fed. Reg. 86,970 (1980) and 47 Fed. Reg. 1,251 (1982) and 48 Fed. Reg. 14,294 (1983).

(b) The provisions for "Manifests" contained in 45 Fed. Reg. 33,143 (1980) (to be codified in 40 CFR 262.20 to 262.23 (Subpart B)) have been adopted by reference as amended by 45 Fed. Reg. 86,973 (1980) and 49 Fed. Reg. 10,500 (1984).

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(3) Is a manufacturing or mining by-product and sometimes is discarded.

C. A material is "discarded" if it is:

(1) Disposed of;

(2) Burned or incinerated, after having served its original intended use;

(3) Physically, chemically, or biologically treated in lieu of or before being disposed of.

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 the material or any constituent of the material may enter the environment or be emitted into the air or discharged into ground or surface waters.

E. "Manufacturing or mining by-product" means 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.

F. Empty container.

(1) A container or an inner liner removed from a container that has held any hazardous waste, except a waste that is a compressed gas or that is identified in Regulation .17C of this chapter, is empty if:

(a) All wastes have been removed that can be removed using the practices commonly employed to remove materials from that type of container, for example, pouring, pumping, and aspirating; and

(b) Not more than 2.5 centimeters (1 inch) of residue remain on the bottom of the container or inner liner.

(2) A container that has held a hazardous waste that is a compressed gas is empty when the pressure in the container approaches atmospheric.

(3) A container or an inner liner removed from a container that has held a hazardous waste identified in Regulation .17C of this chapter is empty if:

(a) The container or inner liner has been triple rinsed using a solvent capable of removing the commercial chemical product or manufacturing chemical intermediate;

(b) The container or inner liner has been cleaned by another method that has been shown in the scientific literature, or by tests conducted by the generator, to achieve equivalent removal; or

(c) In the case of a container, the inner liner that prevented contact of the commercial chemical product or manufacturing chemical intermediate with the container, has been removed.

(4) Residues of Hazardous Waste in Empty Containers.

(a) Any hazardous waste remaining in either an empty container or an inner liner removed from an empty container, as defined in §F(1)—(3), is not subject to COMAR 10.51.01—10.51.09.

(b) Any hazardous waste in either a container that is not empty or an inner liner removed from a container that is not empty, as defined in §F(1)—(3), is subject to these regulations.

.03 Definition of Hazardous Waste

A. A solid waste, as defined in Regulations .02 is a hazardous waste if:

(1) It is not excluded from regulation as a hazardous waste under Regulation .04B; and

(2) It meets any of the following criteria:

(a) It exhibits any of the characteristics of hazardous waste identified in COMAR 10.51.02.

(b) It is listed in and has not been excluded from the lists by COMAR 10.51.01.04 A and C.

(c) It is a mixture of a solid waste and hazardous waste that is listed in COMAR 10.51.02 solely because it exhibits one or more of the characteristics of hazardous waste identified in COMAR 10.51.02 unless the resultant mixture no longer exhibits any characteristic of hazardous waste as identified in COMAR 10.51.02.

(d) It is a mixture of solid waste and one or more hazardous wastes listed in COMAR 10.51.02 and has not been excluded from this paragraph under COMAR 10.51.01.04; however, the following mixtures of solid wastes and hazardous wastes listed in COMAR 10.51.02 are not hazardous wastes (except by application of §A(2)(a) and (b) of this Regulation) if the generator can demonstrate that the mixture consists of wastewater, the discharge of which is subject to regulation under either §402 or §307(b) of the Clean Water Act (including wastewater at facilities which have eliminated the discharge of wastewater); and

(i) One or more of the following spent solvents listed in COMAR 10.51.02-15 — carbon tetrachloride, tetrachlorethylene, trichoroethylene — provided that the maximum total weekly usage of these solvents (other than the amounts that can be demonstrated not to be discharged to wastewater) divided by the average weekly flow of wastewater into the headworks of the facility's wastewater treatment or pre-treatment system does not exceed one part per million;

(ii) One or more of the following spent solvents listed in COMAR 10.51.02.15 — methylene chloride 1.1.1. — trichloroethane, chlorobenzene, o-dichlorobenzene, toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, spent chlorofuforocarbon solvents, cresols, cresylic acid and nitrobenzene, provided that the maximum total weekly usage of these solvents (other than the amounts that can be demonstrated not to be discharged to wastewater) divided by the average weekly flow of wastewater into the headworks of the facility's wastewater treatment or pre-treatment system does not exceed 25 parts per million;

(iii) One of the following wastes listed in COMAR 10.51.02.16 — heat exchanger bundle cleaning sludge from the petroleum refining industry (EPA Hazardous Waste No. K050);

(iv) A discarded commercial chemical product or chemical intermediate listed in COMAR 10.51.02.17 arising from de minimis losses of these materials from manufacturing operations in which these materials are used as raw materials or are produced in the manufacturing process. For purposes of this subparagraph, "de minimis" losses include those from normal material handling operations (for example, spills from the unloading or transfer of materials from bins or other containers, leaks from pipes, valves or other devices used to transfer materials); minor leaks of process equipment; storage tanks or containers; leaks from well maintained pump

packings and seal; sample purgings; relief device discharges; discharges from safety showers and rinsing and cleaning of personal safety equipment; and resinate from empty containers or from containers that are rendered empty containers or from containers that are rendered empty by that rinsing; or

(v) Wastewater resulting from laboratory operations containing toxic (T) wastes listed in COMAR 10.51.02 provided that the annualized average flow of laboratory wastewater does not exceed 1 percent of the total wastewater flow into the headworks of the facility's wastewater treatment or pre-treatment system or provided the wastes, combined annualized average concentration does not exceed one part per million in the headworks of the facility's wastewater treatment or pre-treatment facility. Toxic (T) wastes used in laboratories that are demonstrated not to be discharged to wastewater are not to be included in this calculation.

B. A solid waste which is not excluded from regulation under §A(1) becomes a hazardous waste when any of the following events occur:

(1) In the case of a waste listed in Regulations .14–.17, when the waste first meets the listing description set forth in Regulations .14–.17.

(2) In the case of a mixture of solid waste and one or more listed hazardous wastes, when a hazardous waste listed in Regulations .14–.17 is first added to the solid waste.

(3) In the case of any other waste (including a waste mixture), when the waste exhibits any of the characteristics identified in Regulation .09–.13.

C. Unless and until it meets the criteria of §D:

(1) A hazardous waste will remain a hazardous waste.

(2) Any solid 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.

D. Any solid waste described in §C is not a hazardous waste if it meets the following criteria:

(1) In the case of any solid waste, it does not exhibit any of the characteristics of hazardous waste identified in Regulations .09–.13.

(2) In the case of a waste which is a listed waste under Regulations .14–.17, contains a waste(s) listed under Regulations .14–.17, or is derived from a waste listed in Regulations .09–.13, it also has been excluded from §C under COMAR 10.51.01.04A(3) and C.

.04 Exclusions.

A. Materials Which Are Not Solid Wastes. The following materials are not solid wastes for the purpose of this chapter:

(1) Domestic sewage that passes through a sewer system to a publicly-owned treatment work for treatment. "Domestic sewage" means untreated sanitary wastes that pass through a sewer system.

(2) *Industrial wastewater discharges* that are point source discharges permitted pursuant to §402 of the Clean Water Act, as amended, or permitted pursuant to Health-Environment Article, §§9-322 through 9-324.

(3) Irrigation return flows.

(4) Materials subjected to in-site mining techniques which are not removed from the ground as part of the extraction process.

B. Solid Wastes Which Are Not Hazardous Wastes. The following solid wastes are not hazardous wastes:

(1) Household waste, including household waste that has been collected, transported, stored, treated, disposed, recovered (for example, 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).

(2) Solid wastes generated by any of the following and which are returned to the soils as fertilizers:

(a) The growing and harvesting of agricultural manures;

(b) The raising of animals, including animal manures.

(3) Mining overburden returned to the mine site.

(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.

(5) Drilling fluids, produced waters, and other wastes associated with the exploration, development, or production of crude oil, natural gas, or geothermal energy.

(6) Contaminated soils and other solids recovered from spills or removed from old disposal sites containing PCB at concentrations of less than 50 ppm which shall be disposed of at approved sites only if they do not qualify as a hazardous waste under any other section of this regulation.

(7) For the purpose of disposal of waste mixtures containing insignificant amounts of CHS, which are not hazardous wastes as defined by COMAR 10.51.02.03A(2), it is the obligation of the waste generator to show that the concentration of the CHS is such that the waste mixture can be disposed of in places other than a facility.

(8) Solid waste from the extraction, beneficiation, and processing of ores and minerals (including coal), including phosphate rock and overburden from the mining of uranium ore.

(9) Cement kiln dust waste.

C. Hazardous Wastes Which Are Exempt from Certain Regulations. A hazardous waste which is generated in a product or raw material storage tank, a product or raw material transport vehicle or vessel, or in an associated non-waste-treatment manufacturing unit, is not subject to regulations until it exists the unit in which it was generated, unless the unit is a surface impoundment, or unless the hazardous waste remains in the unit more than 90 days after the unit ceases to be operated for manufacturing, or for storage or transportation of products or raw material.

D. Samples.

(1) Except as provided in §D(2), a sample of solid waste or a sample of water, soil, or air, the quantity of which is to be determined by the Department, which is collected for the sole purpose of testing to determine its characteristics or composition, is not subject to any requirement of this part of COMAR 10.51.03 — .08 or to the notification requirements of §3010 of the Resource Conservation and Recovery Act, when the sample is being:

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agement regulations, to the Department for Surface Mining Reclamation and Enforcement at sites regulated under KRS Chapter 350. Coal mining solid waste may be disposed of in the areas regulated under KRS Chapter 350 and is exempt from the permit requirements in 401 KAR 47:020 provided that:

(1) No hazardous waste is placed, stored, treated, disposed or otherwise managed under the provisions of this section; and

(2) The general requirements of KRS Chapter 224 are maintained.

Section 3. Variance and Termination. This transfer of regulatory responsibility includes the regulatory authority in 401 KAR 47:040, Section 1, to request information from the applicant, and the regulatory authority to grant a variance pursuant to 401 KAR 30:020, Section 2. This transfer of regulatory responsibility may be terminated by the cabinet at an individual mining site when any of the provisions of subsection (2) are violated and, the Department for Environmental Protection will reassume full regulatory responsibility for the individual site at such time.

401 KAR 30:070. Reference documents.

Section 1. Documents Incorporated by Reference. The documents listed in subsections (1) through (8) of this section are adopted and filed herein by reference. Copies of these documents may be obtained from the Natural Resources and Environmental Protection Cabinet, Department for Environmental Protection, Division of Waste Management, 18 Reilly Road, Frankfort, Kentucky 40601.

(1) Waste Management Policy I.2.a., "Closure of Permitted Solid Waste Sites," (July 29, 1983).

(2) Waste Management Policy IV.1.a., "Sampling Procedure-Splitting Samples," (September 15, 1983).

(3) Waste Management Policy VI.1.a., "Definition of Waste-Fuel Exemption," (October 26, 1983).

(4) Waste Management Policy VI.1.b., "Regulatory Interpretation: Sham Recycling," (April 6, 1984).

(5) Waste Management Policy VI.1.c., "Regulatory Interpretation: Mixture of "F" Listed Solvents," (April 6, 1984).

(6) Waste Management Policy VI.1.d., "Regulatory Interpretation: EPA Guidance on K061 Listing," (April 6, 1984).

(7) Waste Management Policy VI.1.e., "Regulatory Interpretation: Plating Waste Generators," (April 6, 1984).

(8) Waste Management Policy VI.1.f. (AMENDMENT), "Regulatory Interpretation: Empty Containers," (July 9, 1984).

401 KAR 31:010. General provisions for hazardous wastes.

Section 1. Purpose and Scope. (1) This chapter identifies those wastes which are subject to regulation as hazardous wastes under 401 KAR Chapters 32 through 40 and which are subject to the notification and permitting requirements of KRS 224.830 through 224.877. In this chapter:

(a) This regulation defines the terms "waste" and "hazardous waste," identifies those wastes which are excluded from regulation under 401 KAR Chapter 32 through 40 and establishes special management requirements for hazardous waste produced by small quantity generators and hazardous waste which is used, reused, recycled or reclaimed.

(b) 401 KAR 31:020 sets forth the criteria used by the cabinet to identify characteristics of hazardous waste and to list particular hazardous wastes.

(c) 401 KAR 31:030 identifies characteristics of hazardous waste.

(d) 401 KAR 31:040 lists particular hazardous wastes.

(2) The definition of waste contained in this chapter applies only with respect to the hazardous waste regulations implementing KRS 224.212, 224.213 and 224.2201 through 224.2215, and KRS 224.862 through 224.877. This chapter identifies only some of the materials which are hazardous wastes under KRS 224.033(10) and 224.071. A material which is not a hazardous waste identified in this chapter is still a hazardous waste for purposes of those sections if:

(a) In the case of KRS 224:033(10), the cabinet has reason to believe that the material may be a hazardous waste within the meaning of KRS 224.005(24)(b).

(b) In the case of KRS 224.071, the statutory elements are established.

Section 2. Definition of a Waste. (1) A waste is any garbage, refuse, sludge or any other waste material which is not excluded under Section 4(1) of this regulation.

(2) 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:

(a) Is discarded or is being accumulated, stored or physically, chemically or biologically treated prior to being discarded; or

(b) Has served its original intended use and sometimes is discarded; or

(c) Is a manufacturing or mining by-product and sometimes is discarded.

(3) A material is "discarded" if it is abandoned (and not used, re-used, reclaimed or recycled) by being:

(a) Disposed of; or

(b) Burned or incinerated, except where the material is being burned as a fuel for the purpose of recovering usable energy; or

(c) Physically, chemically, or biologically treated (other than burned or incinerated) in lieu of or prior to being disposed.

(4) 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.

(5) A "manufacturing or mining by-product" is a material that is not one (1) 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 (1) of the steps in a manufacturing or mining process and is processed through the next step of the process within a short time.

Section 3. Definition of a Hazardous Waste. (1) A Waste, as defined in Section 2 of this regulation, is a hazardous waste if:

(a) It is not excluded from regulation as a hazardous waste under Section 4(2) of this regulation; and

(b) It meets any of the following criteria:

1. It exhibits any of the characteristics of hazardous waste identified in 401 KAR 31:030.

2. It is listed in 401 KAR 31:040 and has not been excluded from the lists in Section 1(2) of 401 KAR 31:040.

3. It is a mixture of any waste and a hazardous waste that is listed in 401 KAR 31:040 solely because it exhibits one (1) or more of the characteristics of hazardous waste identified in 401 KAR 31:030, unless the resultant mixture no longer exhibits any characteristic of hazardous waste identified in 401 KAR 31:030.

4. It is a mixture of any waste and one (1) or more hazardous wastes listed in 401 KAR 31:040 and has not been excluded from this paragraph under 401 KAR 31:060 and 401 KAR 31:070; however, the following mixtures of wastes and hazardous wastes lited in 401 KAR 31:040 are not hazardous wastes. (except by applicaton of subparagraph 1 or 2 of this paragraph) if the generator can demonstrate that the mixture consists of wastewater the discharge of which is subject to regulation under either Section 402 or Section 307(b) of the Clean Water Act (including wastewater at facilities which have eliminated the discharge of wastewater) and:

a. One (1) or more of the following spent solvents listed in Section 3 of 401 KAR 31:040, carbon tetrachloride, tetrachloroethylene, trichoroethylene provided that the maximum total weekly usage of these solvents (other than the amounts that can be demonstrated not to be discharged to wastewater) divided by the average weekly flow of wastewater into the headworks of the facility's wastewater treatment or pre-treatment system does not exceed one (1) part per million; or

b. One (1) or more of the following spent solvents listed in Section 3 of 401 KAR 31:040, methylene chloride, 1,1,1-trichloroethane, chlorobenzene, orthodichlorobenzene, cresols, cresylic acid, nitrobenzene, toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, spent chlorofluorocarbon solvents provided that the maximum total weekly usage of these solvents (other than the amounts that can be demonstrated not to be discharged to wastewater) divided by the average weekly flow of wastewater into the headworks of the facility's wastewater treatment or pre-treatment system does not exceed twenty-five (25) parts per million; or

c. One (1) of the following wastes listed in Section 4 of 401 KAR 31:040, heat exchanger bundle cleaning sludge from the pertroleum refining industry (EPA Hazardous Waste No. K050); or

d. A discarded commercial chemical product, or chemical intermediate listed in Section 5 of 401 KAR 31:040, arising from de minimis losses of these materials from manufacturing operations in which these materials are used as raw materials or are produced in the manufacturing process. For purposes of this paragraph, "de minimis" losses include those from normal material handling operations (e.g., spills from the unloading or transfer of materials from bins or other containers, leaks from pipes, valves or other devices used to transfer materials); minor leaks of process equipment, storage tanks or containers; leaks from well-maintained pump packings and seals; sample purgings; relief device discharges; discharges from safety showers and rinsing and cleaning of personal safety equipment; and rinsate from empty containers or from containers that are rendered empty by that rinsing; or

e. Wasterwater resulting from laboratory operations containing toxic (T) wastes listed in 401 KAR 31:040, provided that the annualized average flow of laboratory wastewater does not exceed one (1) percent of total wastewater flow into the headworks of the facility's wastewater treatment or pre-treatment system, or provided the wastes' combined annualized average concentration does not exceed one (1) part per million in the headworks of the facility's wastewater treatment or pre-treatment facility. Toxic (T) wastes used in laboratories that are demonstrated not to be discharged to wastewater are not to be included in this calculation.

(2) A waste which is not excluded from regulation under subsection (1)(a) of this section becomes a hazardous waste when any one (1) of the following events occur:

(a) In the case of a waste listed in 401 KAR 31:040 when the waste first meets the listing description set forth in 401 KAR 31:040;

(b) In the case of a mixture of solid waste and one or more hazardous wastes, when a hazardous waste listed in 401 KAR 31:040 is first added to the waste; or

(c) In the case of any other waste (including a waste mixture), when the waste exhibits any of the characteristics identified in 401 KAR 31:030.

(3) Unless and until it meets the criteria of subsection (4) of this section:

(a) A hazardous waste will remain a hazardous waste.

(b) 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.

(4) Any waste described in subsection (3) of this section is not a hazardous waste if it meets the following criteria:

(a) In the case of any waste, it does not exhibit any of the characteristics of hazardous waste identified in 401 KAR 31:030.

(b) In the case of a waste which is a listed waste under 401 KAR 31:040, contains a waste listed under 401 KAR 31:040 or is derived from a waste listed in 401 KAR 31:040, it also has been excluded from of 401 KAR 31:060 and 401 KAR 31:070.

Section 4. Exclusions. (1) The following materials are not wastes for the purpose of this chapter:

(a) Domestic sewage and any mixture of domestic sewage and other wastes that passes through a sewer system to a publicly-owned treatment works for treatment;

(b) Industrial wastewater discharges that are point source discharges subject to regulation under Section 402 of the Clean Water Act, as amended; however, 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;

(c) Irrigation return flows;

(d) Source, special nuclear or by-product material as defined by the Atomic Energy Act of 1954, as amended, 42 USC 2011 et seq.;

(e) Materials subjected to in-situ mining techniques which are not removed from the ground as part of the extraction process;

(f) Mining overburden returned to the mine site; and

(g) Material from the extraction, beneficiation and processing of ores and minerals (including coal), including phosphate rock and overburden from the mining of uranium ore.

(2) Any waste which meets the requirements of this subsection is not a hazardous waste.

(a) 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).

(b) Agricultural wastes generated by any of the following and which are returned to the soils as fertilizers:

H. B. 3003

(By Delegate Knight)

(Introduced February 23, 1987; 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 Legislature 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.

(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.

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(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 twentieth day of February, one thousand nine hundred eighty-six, relating to the department of natural resources (hazardous waste management) are authorized.

(e) The legislative rules filed in the state register on the fifth day of March, one thousand nine hundred eighty-six, relating to the department of natural resources (hazardous waste management) are authorized.

(f) The legislative rules filed in the state register on the tenth day of October, one thousand nine hundred eighty-five, relating to the department of natural resources (hazardous waste management: small quantity generators and waste minimization certification) are authorized with the amendments set forth below:

On page 1, § 3.1.4b delete the word "or" in the reference to "paragraph (g) or (j)" and insert in lieu thereof the words "and, if applicable."

(g) The legislative rule filed in the state register on the ninth day of January, one thousand nine hundred eighty-seven, relating to the department of natural resources (hazardous waste management regulations) 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.