TSD File Inventory Index

Date: January 21, 2003

Initial: C M Generao

Facility Name: Daimler-Chrysler Corporation (Plymouth Road Complex - One Folder Site)

Facility Identification Number: MID 099 113 169

A.1 General Correspondence		**B.2 Permit Docket (B.1.2)**	
A.2 Part A / Interim Status	X	.1 Correspondence	
.1 Correspondence	X	.2 All Other Permitting Documents (Not Part of the ARA)	
.2 Notification and Acknowledgment	X	**C.1 Compliance - (Inspection Reports)**	
.3 Part A Application and Amendments		**C.2 Compliance/Enforcement**	X
.4 Financial Insurance (Sudden, Non Sudden)		.1 Land Disposal Restriction Notifications	
.5 Change Under Interim Status Requests		.2 Import/Export Notifications	
.6 Annual and Biennial Reports		**C.3 FOIA Exemptions - Non-Releasable Documents**	
A.3 Groundwater Monitoring		**D.1 Corrective Action/Facility Assessment**	X
.1 Correspondence		.1 RFA Correspondence	
.2 Reports		.2 Background Reports, Supporting Docs and Studies	X
A.4 Closure/Post Closure		.3 State Prelim. Investigation Memos	
.1 Correspondence		.4 RFA Reports	
.2 Closure/Post Closure Plans, Certificates, etc		**D. 2 Corrective Action/Facility Investigation**	
A.5 Ambient Air Monitoring		.1 RFI Correspondence	
.1 Correspondence		.2 RFI Workplan	
.2 Reports		.3 RFI Program Reports and Oversight	
B.1 Administrative Record		.4 RFI Draft /Final Report	

Total - 1

.5 RFI QAPP		.7 Lab data, Soil Sampling/Groundwater	
.6 RFI QAPP Correspondence		.8 Progress Reports	
.7 Lab Data, Soil-Sampling/Groundwater		**D.5 Corrective Action/Enforcement**	
.8 RFI Progress Reports		.1 Administrative Record 3008(h) Order	
.9 Interim Measures Correspondence		.2 Other Non-AR Documents	
.10 Interim Measures Workplan and Reports		**D.6 Environmental Indicator Determinations**	
D.3 Corrective Action/Remediation Study		.1 Forms/Checklists	
.1 CMS Correspondence		**E. Boilers and Industrial Furnaces (BIF)**	
.2 Interim Measures		.1 Correspondence	
.3 CMS Workplan		.2 Reports	
.4 CMS Draft/Final Report		**F Imagery/Special Studies** (Videos, photos, disks, maps, blueprints, drawings, and other special materials.)	X
.5 Stabilization		**G.1 Risk Assessment**	
.6 CMS Progress Reports		.1 Human/Ecological Assessment	
.7 Lab Data, Soil-Sampling/Groundwater		.2 Compliance and Enforcement	
D.4 Corrective Action Remediation Implementation		.3 Enforcement Confidential	
.1 CMI Correspondence		.4 Ecological - Administrative Record	
.2 CMI Workplan		.5 Permitting	
.3 CMI Program Reports and Oversight		.6 Corrective Action Remediation Study	
.4 CMI Draft/Final Reports		.7 Corrective Action/Remediation Implementation	
.5 CMI QAPP		.8 Endangered Species Act	
.6 CMI QAPP Correspondence		.9 Environmental Justice	

Note: Transmittal Letter to Be Included with Reports.
Comments: Documents do not justify individual folder per schedule

A.2 Part A/
Interim Status

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION 5
RCRA ACTIVITIES
P.O. BOX A3587
CHICAGO, ILLINOIS 60690

Attn: James Allen : 5/16/90
Chrysler Plymouth Road Office
14250 Plymouth Rd
Detroit, MI 48232

RE: EPA ID #: MID099113169

In response to your request of 5/90 the following information has been updated:

(1.) Name of Installation: Listed Above
(2.) Contact Person: Listed Above
(3.) Ownership: Chrysler Corporation
(4.) Telephone: (313) 493-3018

If you have questions, please contact Sharon Kiddon at (312)886-6173.

Sincerely,

Arthur S. Kawatachi

Arthur S. Kawatachi
Information Section
RCRA Program Management Branch

cc: State Agency
File

Please print or type with ELITE type (12 charact... per inch) in the unshaded areas only

Approved. OMB No. 2050-0028. Expires 10-30-91
GSA No. 0246-EPA-OT

United States Environmental Protection Agency
Washington, DC 20460

6554

EPA Notification of Hazardous Waste Activity

Please refer to the *Instructions for Filing Notification* before completing this form. The information requested here is required by law *(Section 3010 of the Resource Conservation and Recovery Act).*

For Official Use Only

Comments	Installation's EPA ID Number	Approved	Date Received (yr. mo. day)
C C 8	C F MID099113169 T/A C 1		

I. Name of Installation

Chrysler Plymouth Road Office

II. Installation Mailing Address

Street or P.O. Box	City or Town	State	ZIP Code
C 3 14250 Plymouth Road	C 4 Detroit	MI	48232

III. Location of Installation

Street or Route Number	City or Town	State	ZIP Code
C 5 Same	C 6		

IV. Installation Contact

Name and Title *(last, first, and job title)*	Phone Number *(area code and number)*
C 2 James R Allen	313 493 3018

V. Ownership

A. Name of Installation's Legal Owner	B. Type of Ownership *(enter code)*
C R Chrysler Corporation	P

VI. Type of Regulated Waste Activity *(Mark 'X' in the appropriate boxes. Refer to instructions.)*

A. Hazardous Waste Activity

- [X] 1a. Generator
- [ ] 1b. Less than 1,000 kg/mo.
- [ ] 2. Transporter
- [ ] 3. Treater/Storer/Disposer
- [ ] 4. Underground Injection
- [ ] 5. Market or Burn Hazardous Waste Fuel *(enter 'X' and mark appropriate boxes below)*
  - [ ] a. Generator Marketing to Burner
  - [ ] b. Other Marketer
  - [ ] c. Burner

B. Used Oil Fuel Activities

- [ ] 6. Off-Specification Used Oil Fuel
  - [ ] a. Generator Marketing to Burner
  - [ ] b. Other Marketer
  - [ ] c. Burner
- [ ] 7. Specification Used Oil Fuel Marketer *(or On site Burner)* Who First Claims the Oil Meets the Specification

RECEIVED MAY 14 1990 U.S. EPA REGION V ARS — PMS

VII. Waste Fuel Burning: Type of Combustion Device *(enter 'X' in all appropriate boxes to indicate type of combustion device(s) in which hazardous waste fuel or off-specification used oil fuel is burned. See instructions for definitions of combustion devices.)*

[ ] A. Utility Boiler [ ] B. Industrial Boiler [ ] C. Industrial Furnace

VIII. Mode of Transportation *(transporters only – enter 'X' in the appropriate box(es)*

[ ] A. Air [ ] B. Rail [ ] C. Highway [ ] D. Water [ ] E. Other *(specify)*

IX. First or Subsequent Notification

Mark 'X' in the appropriate box to indicate whether this is your installation's first notification of hazardous waste activity or a subsequent notification. If this is not your first notification, enter your installation's EPA ID Number in the space provided below.

[ ] A. First Notification [X] B. Subsequent Notification *(complete item C)*

C. Installation's EPA ID Number: MID099113169

ID - For Official Use Only														
C W													T/A	C 1

X. Description of Hazardous Wastes *(continued from front)*

A. Hazardous Wastes from Nonspecific Sources. Enter the four-digit number from 40 CFR Part 261.31 for each listed hazardous waste from nonspecific sources your installation handles. Use additional sheets if necessary.

1	2	3	4	5	6
7	8	9	10	11	12

B. Hazardous Wastes from Specific Sources. Enter the four-digit number from 40 CFR Part 261.32 for each listed hazardous waste from specific sources your installation handles. Use additional sheets if necessary.

13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30

C. Commercial Chemical Product Hazardous Wastes. Enter the four-digit number 40 CFR Part 261.33 for each chemical substance your installation handles which may be hazardous waste. Use additional sheets if necessary.

31	32	33	34	35	36
37	38	39	40	41	42
43	44	45	46	47	48

D. Listed Infectious Wastes. Enter the four-digit number 40 CFR Part 261.34 for each hazardous waste from hospitals, veterinary hospitals, or medical and research laboratories your installation handles. Use additional sheets if necessary.

49	50	51	52	53	54

E. Characteristics of Nonlisted Hazardous Wastes. Mark 'X' in the boxes corresponding to the characteristics of nonlisted hazardous wastes your installation handles. *(See 40 CFR Parts 261.21 - 261.24)*

☐ 1. Ignitable *(D001)* ☐ 2. Corrosive *(D002)* ☐ 3. Reactive *(D003)* ☐ 4. Toxic *(D000)*

XI. Certification

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Signature	Name and Official Title *(type or print)*	Date Signed
James R. Allen	JAMES R. ALLEN FACILITY MANAGER	5/9/90

Estimated burden: Public reporting burden for this collection of information is estimated to be 3 hours, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Chief, Information Policy Branch, PM-223, U.S. Environmental Protection Agency, 401 M St., S.W., Washington, D.C. 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, D.C. 20503.

EPA

ACKNOWLEDGEMENT OF NOTIFICATION OF HAZARDOUS WASTE ACTIVITY
(VERIFICATION)

This is to acknowledge that you have filed a Notification of Hazardous Waste Activity for the installation located at the address shown in the box below to comply with Section 3010 of the Resource Conservation and Recovery Act *(RCRA)*. Your EPA Identification Number for that installation appears in the box below. The EPA Identification Number must be included on all shipping manifests for transporting hazardous wastes; on all Annual Reports that generators of hazardous waste, and owners and operators of hazardous waste treatment, storage and disposal facilities must file with EPA; on all applications for a Federal Hazardous Waste Permit; and other hazardous waste management reports and documents required under Subtitle C of RCRA.

EPA I.D. NUMBER → • MID099113169

AMERICAN MOTORS CORP AMTEK
14250 PLYMOUTH RD
DETROIT MI 48232

INSTALLATION ADDRESS → 14250 PLYMOUTH RD
DETROIT MI 48232

EPA Form 8700-12B (4-80) 10/19/84

m 10/22/84

Please print or type with ELITE type *(12 characters/inch)* in the unshaded areas only.

Form Approved OMB No. 158-S79016
GSA No. 0246-EPA-OT

EPA

U.S. ENVIRONMENTAL PROTECTION AGENCY

NOTIFICATION OF HAZARDOUS WASTE ACTIVITY

INSTALLATION'S EPA I.D. NO.	NOT ON P/O
NAME OF INSTALLATION	
II. INSTALLATION MAILING ADDRESS	
III. LOCATION OF INSTALLATION	

RECEIVED
OCT 05 1984
WMD-RAU
EPA, REGION V

PLEASE PLACE LABEL IN THIS SPACE

INSTRUCTIONS: If you received a preprinted label, affix it in the space at left. If any of the information on the label is incorrect, draw a line through it and supply the correct information in the appropriate section below. If the label is complete and correct, leave Items I, II, and III below blank. If you did not receive a preprinted label, complete all items. "Installation" means a single site where hazardous waste is generated, treated, stored and/or disposed of, or a transporter's principal place of business. Please refer to the INSTRUCTIONS FOR FILING NOTIFICATION before completing this form. The information requested herein is required by law *(Section 3010 of the Resource Conservation and Recovery Act).*

DETACH

FOR OFFICIAL USE ONLY

COMMENTS: C

INSTALLATION'S EPA I.D. NUMBER	APPROVED	DATE RECEIVED (yr., mo., & day)
F MID099113169 T/A C 1	A	841005

I. NAME OF INSTALLATION

AMTEK

II. INSTALLATION MAILING ADDRESS

STREET OR P.O. BOX	CITY OR TOWN	ST.	ZIP CODE
31 42500 PLYMOUTH RD	DETROIT MICH	MI	48232

III. LOCATION OF INSTALLATION

STREET OR ROUTE NUMBER	CITY OR TOWN	ST.	ZIP CODE

IV. INSTALLATION CONTACT

NAME AND TITLE *(last, first, & job title)*	PHONE NO. *(area code & no.)*
PHELPS III JOHN MGR	313-493-3981

V. OWNERSHIP

A. NAME OF INSTALLATION'S LEGAL OWNER: C 8

DETACH

B. TYPE OF OWNERSHIP *(enter the appropriate letter into box)*

F = FEDERAL
M = NON–FEDERAL

M

VI. TYPE OF HAZARDOUS WASTE ACTIVITY *(enter "X" in the appropriate box(es))*

- [XX] A. GENERATION
- [ ] B. TRANSPORTATION *(complete item VII)*
- [ ] C. TREAT/STORE/DISPOSE
- [ ] D. UNDERGROUND INJECTION

VII. MODE OF TRANSPORTATION *(transporters only – enter "X" in the appropriate box(es))*

- [ ] A. AIR
- [ ] B. RAIL
- [ ] C. HIGHWAY
- [ ] D. WATER
- [ ] E. OTHER *(specify):*

VIII. FIRST OR SUBSEQUENT NOTIFICATION

Mark "X" in the appropriate box to indicate whether this is your installation's first notification of hazardous waste activity or a subsequent notification. If this is not your first notification, enter your Installation's EPA I.D. Number in the space provided below.

- [XX] A. FIRST NOTIFICATION
- [ ] B. SUBSEQUENT NOTIFICATION *(complete item C)*

C. INSTALLATION'S EPA I.D. NO.

IX. DESCRIPTION OF HAZARDOUS WASTES

Please go to the reverse of this form and provide the requested information.

I.D. – FOR OFFICIAL USE ONLY

S												T/A	C
W													1
1	2										13	14	15

IX. DESCRIPTION OF HAZARDOUS WASTES *(continued from front)*

A. HAZARDOUS WASTES FROM NON–SPECIFIC SOURCES. Enter the four–digit number from 40 CFR Part 261.31 for each listed hazardous waste from non–specific sources your installation handles. Use additional sheets if necessary.

1	2	3	4	5	6
F 003	F 005				
7	8	9	10	11	12

B. HAZARDOUS WASTES FROM SPECIFIC SOURCES. Enter the four–digit number from 40 CFR Part 261.32 for each listed hazardous waste from specific industrial sources your installation handles. Use additional sheets if necessary.

13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30

C. COMMERCIAL CHEMICAL PRODUCT HAZARDOUS WASTES. Enter the four–digit number from 40 CFR Part 261.33 for each chemical substance your installation handles which may be a hazardous waste. Use additional sheets if necessary.

31	32	33	34	35	36
37	38	39	40	41	42
43	44	45	46	47	48

D. LISTED INFECTIOUS WASTES. Enter the four–digit number from 40 CFR Part 261.34 for each listed hazardous waste from hospitals, veterinary hospitals, medical and research laboratories your installation handles. Use additional sheets if necessary.

49	50	51	52	53	54

E. CHARACTERISTICS OF NON–LISTED HAZARDOUS WASTES. Mark "X" in the boxes corresponding to the characteristics of non–listed hazardous wastes your installation handles. *(See 40 CFR Parts 261.21 – 261.24.)*

- [X] 1. IGNITABLE (D001)
- [X] 2. CORROSIVE (D002)
- [ ] 3. REACTIVE (D003)
- [X] 4. TOXIC (D000)

X. CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

SIGNATURE	NAME & OFFICIAL TITLE *(type or print)*	DATE SIGNED
Sherman C. Hyatt	Manager, Facilities & Equipment	10/1/84

KIDD
S

CHRYSLER MOTORS

Chrysler Motors Corporation

January 7, 1988

R.C.R.A. Activities
U.S.E.P.A. Region 5
P. O. Box A 3587
Chicago, Illinois 60690

Dear Sir:

RE: MID 099113169

American Motors Corporation, 14250 Plymouth Road, Detroit, Mi. 48227, has been purchased by Chrysler Corporation. Any correspondence to this facility should be addressed to Richard J. Brown, Jeep Eagle Division, (Same address as above)

Thank you for your cooperation.

R. J. Brown

R. J. Brown
Environmental Coordinator

RECEIVED
JAN 11 1988
SWD - AIS
U.S. EPA, REGION V

14250 Plymouth Road
Box 33514
Detroit MI 48232-5514

American Motors Corporation
14250 Plymouth Road
Detroit, Michigan 48232

REGISTERED MAIL - RETURN RECEIPT REQUESTED

October 1, 1984

EPA Region V
RCRA Activities
P. O. Box 7861
Chicago, Illinois 60680

RECEIVED
OCT 05 1984
WMD-RAIU
EPA, REGION V

Subject: EPA Identification Number

Dear Sir:

Pursuant to Section 3002 of RCRA, American Motors Corporation is requesting generator status with the accompanying generator number be assigned to the Amtek facility. Due to larger volumes associated with increased activities at this testing and laboratory facility, the present small quantity generator classification is no longer appropriate. Attached, please find the completed EPA form 8700-12. An expeditious issuance of a generator number would be most appreciated.

Please address any additional questions to the writer on extension (313) 493-3981.

Sincerely,

H. John Phelps III

H. John Phelps III
Manager, Solid Waste Activities

HJP/mg

/0325m

U.S. Environmental Protection Agency

Biennial Reporting System (BRS)

Query Results

BRS Facility Summary Report

Facility Information:

HANDLER NAME:	CHRYSLER CORP., JEEP AND TRUCK	**HANDLER ID:**	MID09911
STREET 1:	14250 PLYMOUTH ROAD, 514-13-22	**REPORTING YEAR:**	1997
STREET 2:			
CITY:	DETROIT	**GENERATOR STATUS:**	1 = LQG
STATE:	MI	**ONSITE PERMITTED STORAGE:**	1 = No RC
ZIP CODE:	482273086	**ONSITE PERMITTED TREATMENT:**	1 = NO T
COUNTY:	WAYNE	**ONSITE EXEMPT TREATMENT:**	=

Mailing Information:

HANDLER NAME:	CHRYSLER CORP., JEEP AND TRUCK
STREET 1:	14250 PLYMOUTH ROAD, 514-13-22
STREET 2:	
CITY:	DETROIT
STATE:	MI
ZIP CODE:	482273086

Basic Waste Information:

Note: Please note that the wastes shown in the following table are in tons.

WASTE TYPE	NATIONAL REPORT	FEDERAL WASTE	TOTAL WASTE
GENERATION		21.5	21.5
MANAGEMENT			
WASTE_RECEIVED			
WASTE SHIPPED		21.5	21.5
INCINERATION			
DISPOSAL			
ACUTE GENERATION			

C.2 Compliance/ Enforcement

Waste, Pesticides and Toxics Division

Type of Document: ☐ Notice of Violation
☐ No Violation Letter
☒ Letter of Acknowledgment after Returning to Compliance
☐ Information Request

Facility Name : **Selfridge ANG**

Facility Location: **14250 Plymouth Road**

City: **Detroit** **State:** **Michigan 48227-3042**

U.S. EPA ID: **MID 099 113 169**

Assigned Staff: **Duncan Campbell** **Phone:** **6-4555**

Name	Signature	Date
Author		01/02/03
Regional Counsel		
Section Chief	for Paul Little	01-03-03

Directions/Request for Clerical Support:

After the Section Chief signs this sheet and original letter:

1. Date stamp the cover letter;
2. Make four copies of the contents of this folder:
   - One copy for the RCRA fileroom;
   - One copy for the section file;
   - One copy for the branch file; and
   - One copy for the official file copy.
3. Make any additional copies for cc's or bcc's.
4. Mail the original certified mail and distribute office copies and cc's and bcc's.

   7001 0320 0006 0177 2480

   Once the certified mail receipt is returned:
5. File the certified mail receipt (green card), with this sign-off sheet and the official file copy, and take to 7th floor RCRA file room.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF:

DE-9J

JAN 03 2003

CERTIFIED MAIL 7001 0320 0006 0177 2480
RETURN RECEIPT REQUESTED

John L. Troy, CHMM
Manager, Environmental Compliance Programs
Facilities Services and Program Management
DaimlerChrysler Corporation
CIMS 485-01-73
Auburn Hills, Michigan 48326-2766

Re: DaimlerChrysler Plymouth Road Complex
Detroit, Michigan 48227-3042
EPA I.D. MID 099 113 169

Dear Mr. Troy:

On August 27, 2002, representatives of the United States Environmental Protection Agency (U.S. EPA) and Michigan Department of Environmental Quality (MDEQ) inspected DaimlerChrysler's Plymouth Road Complex, located in Detroit, Michigan. In response to violations of Michigan Part 111 Administrative Rule R299.9306, identified during the inspection, U.S. EPA issued a Notice of Violation (NOV) to you on November 26, 2002. U.S. EPA received your December 18, 2002, information responding to our NOV.

This letter is to inform you that U.S. EPA has reviewed the information and determined that additional enforcement action need not be taken at this time. This letter does not limit your liability for compliance with all the applicable provisions of Resource Conservation Recovery Act, and the Michigan Part 111 Administrative Rules. U.S. EPA and MDEQ will continue to evaluate your facility for compliance with these requirements in the future.

Recycled/Recyclable · Printed with Vegetable Oil Based Inks on 50% Recycled Paper (20% Postconsumer)

If you have any questions or concerns regarding this matter, please contact Duncan Campbell at 312/886-4555.

Sincerely,

for Paul Little, Chief
Enforcement and Compliance Assurance Branch
Compliance Section 2

cc: Jeanette Noechel, MDEQ, Detroit

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF:

DE-9J

JAN 03 2003

CERTIFIED MAIL 7001 0320 0006 0177 2480
RETURN RECEIPT REQUESTED

John L. Troy, CHMM
Manager, Environmental Compliance Programs
Facilities Services and Program Management
DaimlerChrysler Corporation
CIMS 485-01-73
Auburn Hills, Michigan 48326-2766

Re: DaimlerChrysler Plymouth Road Complex
Detroit, Michigan 48227-3042
EPA I.D. MID 099 113 169

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This letter is to inform you that U.S. EPA has reviewed the information and determined that additional enforcement action need not be taken at this time. This letter does not limit your liability for compliance with all the applicable provisions of Resource Conservation Recovery Act, and the Michigan Part 111 Administrative Rules. U.S. EPA and MDEQ will continue to evaluate your facility for compliance with these requirements in the future.

Recycled/Recyclable • Printed with Vegetable Oil Based Inks on 50% Recycled Paper (20% Postconsumer)

If you have any questions or concerns regarding this matter, please contact Duncan Campbell at 312/886-4555.

Sincerely,

for Paul Little, Chief
Enforcement and Compliance Assurance Branch
Compliance Section 2

cc: Jeanette Noechel, MDEQ, Detroit

DAIMLERCHRYSLER

DaimlerChrysler Corporation

December 18, 2002

Mr. Duncan Campbell
Environmental Protection Specialist – ECAB
Waste, Pesticides & Toxics Division
United States - Environmental Protection Agency, Region 5
77 West Jackson Boulevard, DE-9J
Chicago, IL 60604-3511

Dear Mr. Campbell,

In response to your letter dated November 26, 2002, regarding the combined United States Environmental Protection Agency (U.S. EPA) and Michigan Department of Environmental Quality (MDEQ) Resource Conservation and Recovery Act (RCRA) inspection conducted at DaimlerChrysler's Plymouth Road Office Complex (PROC) on August 27, 2002, we submit the following:

Item 1) Relative to R299.9306 (2), requiring generators to mark containers with the words "Hazardous Waste" when accumulating as much as 55 gallons of hazardous waste.

Response: This issue was considered resolved at the time of the inspection as stated in the September 13, 2002 letter from the MDEQ and your letter of November 26, 2002, requiring no further action.

Item 2) Relative to R299.9306 (1)(a)(i), requiring generators to comply with the provisions of 40 CFR, Part 265, subpart I. 40 CFR - 265.173 (a) requires that containers holding hazardous waste must always be closed during storage, except when it is necessary to add or remove waste. Please provide verification that measures have been taken to close this container.

Response: The one 55 gallon drum in the "old car wash" area that was open during the time of the inspection has been closed and the area supervisors and lab technicians have been reinstructed regarding the importance of keeping the container closed except when adding or removing waste.

Item 3) Relative to R299.9306 (1)(d), requiring owners and operators to comply with the provisions of 40 CFR, Part 265, subparts C and D. 40 CFR - Part 265.35 requires that proper aisle space be maintained to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of facility operations in an emergency, unless aisle space is not needed for any of these purposes. Please provide U.S. EPA with information which explains how DCC will create aisle spacing inside the two bays which serve as secondary containment for hazardous waste containers.

Response: In the future, hazardous waste containers will not be stacked two high and adequate aisle spacing will be provided to allow unobstructed access to the containers. If the storage shed nears full capacity, waste drums will be staged in the dock area adjacent to the storage shed. The dock itself has a perimeter curb providing secondary containment for all stored wastes and the storage shed is an integrated self contained unit with a functioning fire suppression system actually providing tertiary containment.

A Company of the DaimlerChrysler Group

DaimlerChrysler Corporation
1000 Chrysler Drive
Auburn Hills MI USA 48326-2766

Item 4) Relative to R299.9306 (1)(d), requiring owners and operators to comply with the provisions of 40 CFR, Part 265, subparts C and D. 40 CFR - Part 265.55 requires that at all times there must be at least one employee either on the facility premises or on call with the responsibility of coordinating all emergency response measures. Please provide U.S. EPA with information demonstrating that all personnel who assume the responsibilities of emergency coordinator receive initial and annual training in hazardous waste management.

Response: The PROC Incident Commander and his alternates are trained in hazardous waste management and incident command (please refer to Attachment A).

Additional Areas of Concern:

In response to the stated additional areas of concern regarding environmental personnel being present on site (page 3, paragraph 2 of U.S.-EPA, Region 5 letter) we submit the following:

A) The PROC Incident Commander and his alternates have training in incident command, hazardous waste management, and emergency response. They are available either on-site or are on call at all times. As a result, in any emergency, properly trained individuals will be available to respond.

In response to the additional area of concern regarding the aerosol can recycling operation (page 3, paragraph 3 of U.S.-EPA, Region 5 letter), we submit the following:

B) The manufacturer recommends changing the carbon filter every 4,000 cans, which PROC has done from the time it began this recycling process. In light of the concerns regarding the recycling of aerosol cans, DaimlerChrysler Plymouth Road Office Complex has chosen to cease the aerosol can recycling operation and manage both aerosol cans and their contents as hazardous waste. Since the cans are no longer punctured and recycled, all your concerns over the aerosol cans have been resolved.

If you have any questions regarding the above responses, please contact me at (248) 512-4705.

Sincerely,

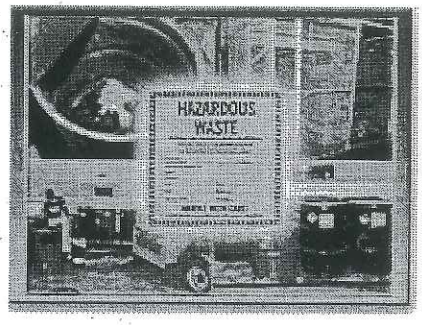
John L. Troy
Manager, Environmental Compliance Programs
Facilities Services and Program Management
DaimlerChrysler Corporation, CIMS: 485-01-73
1000 Chrysler Drive
Auburn Hills, MI 48307-2766

cc: Ms. Jeanette M. Noechel, MDEQ
Mr. Charles Moeser, DaimlerChrysler
Mr. Ron Szymanski, DaimlerChrysler

Attachments: A – Training records (copies)

1 DaimlerChrysler Training Course Overview

The full waste management training course includes this introductory section and 9 additional modules. Each module and the topic it covers are described below.



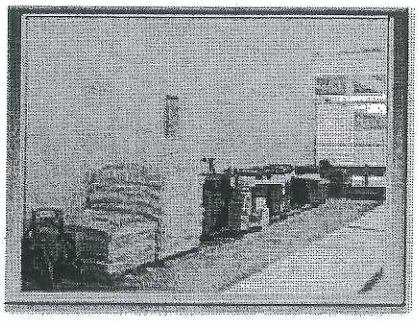
Hazardous Waste Identification (Module 2)

To properly manage hazardous waste, you must first know what a hazardous waste is. The Hazardous Waste Identification Module describes how you can tell if a waste is or is not hazardous. Module 2 also describes hazardous waste generators and the types of waste generated at your facility. The objectives of the Hazardous Waste Identification Module are to make sure you (1) know the kinds of hazardous waste being generated at your facility and (2) understand why they are hazardous.

Labels (Module 3)

Proper labeling is essential to ensuring good waste management. Labeling also facilitates worker safety and is required by regulations.

The objective of the Labels Module is to communicate DaimlerChrysler's labeling practices to those individuals responsible for labeling the waste containers. Module 3 discusses when labels are required, the different types of labels, which labels should be placed on which containers, and who is responsible for labeling the containers.

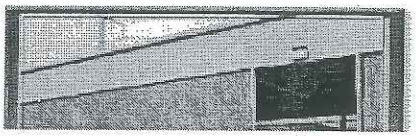


Collection and Segregation (Module 4)

Properly collecting and segregating generated wastes is an important aspect of DaimlerChrysler's hazardous waste management program. The Collection and Segregation Module instructs you on waste handling requirements, proper container usage, and waste segregation or separation.

The objective of this module is to ensure that you understand the proper procedures for collecting waste and for segregating or separating wastes.

Accumulation Areas (Module 5)



Hazardous waste accumulation areas are the locations a facility identifies for the

accumulation of hazardous waste pending its shipment off site. DaimlerChrysler accumulation areas are designed to facilitate proper hazardous waste management. Regulations identify two types of accumulation areas for hazardous waste generators. One type is a "satellite accumulation area" and the other is a "90-day accumulation area." The Accumulation Areas Module describes both types of areas and their operating requirements.

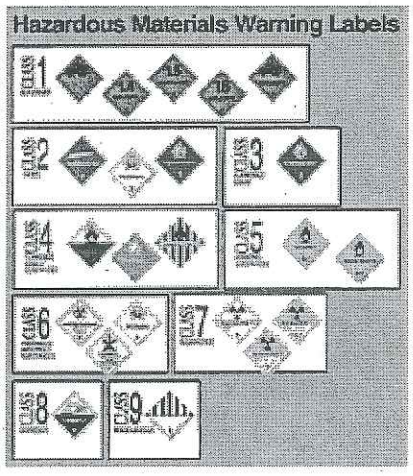
The objective of the Accumulation Areas Module is to ensure that you understand how each type of hazardous waste accumulation area is operated and the regulatory requirements that must be satisfied. Module 5 also identifies the type and location of accumulation areas at your facility.

Inspections (Module 6)

Good hazardous waste management is accomplished, in part, through inspections conducted by DaimlerChrysler personnel. Inspections are a way to check facility practices and operations against corporate procedures for hazardous waste management to ensure regulatory compliance. Every work area and accumulation area must be inspected regularly to ensure proper waste management.

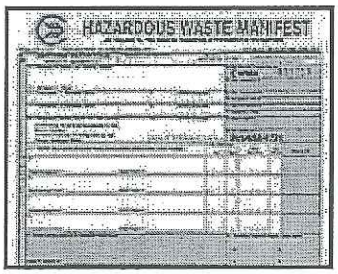
The objective of the Inspections Module is to ensure that you understand what an inspection should cover and why inspections are important.

Shipping (Module 7)



Hazardous wastes that are classified, labeled, and accumulated must be shipped off site within 90 days. The Shipping Module covers DaimlerChrysler's hazardous waste shipping procedures for the United States. Specifically, this module discusses hazardous waste manifests, Land Disposal Restriction notifications/certifications, packaging, placarding, and transporting.

The objective of the Shipping Module is to ensure that you understand the procedures and requirements for shipping waste off site for treatment and/or disposal.

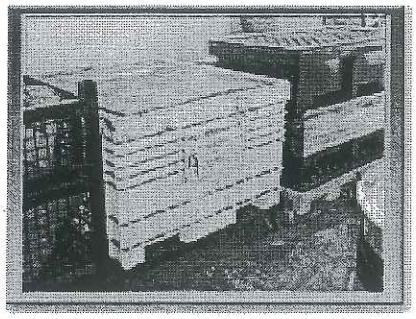


click on image to enlarge it

Records and Reports (Module 8)

DaimlerChrysler's records and reports document hazardous waste management and are the facility's proof of compliance. The objective of the Records and Reports Module is to identify and describe the documents and reports that DaimlerChrysler must maintain to (1) satisfy regulatory and corporate requirements and (2) ensure good waste management.

Incident/Spill Response (Module 9)



All DaimlerChrysler facilities must have plans in place to address environmental, health, and safety emergencies. Requirements for these plans are specified by federal, state, and local regulations as well as DaimlerChrysler. Your facility has an Episode Plan that addresses these requirements. The Episode Plan describes the actions to be taken in the event of a medical emergency, fire, natural disaster, or oil or chemical spill.

Pollution Prevention and Waste Minimisation (Module 10)

There are many ways to manage the wastes and emissions generated by DaimlerChrysler operations. Two of the most important ways are Pollution Prevention and Waste Minimization.

The Pollution Prevention and Waste Minimization Module describes these two concepts and how they are used within DaimlerChrysler. The objectives of this module are to ensure that you understand:

- What pollution prevention and waste minimization are and how they are used in waste management.
- DaimlerChrysler pollution prevention policies.
- Some of the regulations requiring pollution prevention and waste minimisation.
- Your facility's pollution prevention goals.

Appendix A

PROC DOCUMENTIATION SHEET OF: Env. Haz Waste Shipping

LOCATION: Facilities Office

DEPARTMENT: 1680

DATE OF TRAINING: 07/10/02

SUPERVISOR: G. Shay J. Garbiacik

Modules 1, 2, 3, 7, 9

LAST FOUR OF SS# OR DCID	LAST NAME (Print) Smith	FIRST NAME Mary	SIGNATURE Mary Smith
[redacted]	GARDNER	DAVE	[signature]
[redacted]	NICOL	JIM	[signature]

TRAINER AK

Appendix A

Electricians

PROC DOCUMENTIATION SHEET OF: Universal Waste - Relampers

LOCATION: PROC-Facilities Conf. Room DEPARTMENT: 1100/1680

DATE OF TRAINING: 07/26/02 SUPERVISOR: Dave Gardner / Bob Post / Jim Beale

Modules 1-5, 9, 10

LAST FOUR OF SS# OR DCID	LAST NAME (Print) Smith	FIRST NAME Mary	SIGNATURE Mary Smith
Non-responsiv [redacted]	STEWART	GARY	[signature]
N o [redacted]	Huffman	Chris	[signature]
Non-respon [redacted] Non- [redacted]	Doyle	John	[signature]
Non- [redacted]	Montgomery	Willie	[signature]
[redacted] N [redacted]	[illegible]	MARCUS	[signature]
[redacted] N [redacted] ✓	GARDNER	DAVE	[signature]
Non-responsive [redacted] ✓	Beale	JIM	[signature]
Non [redacted]	HUBBARD	DAVID	[signature]

TRAINER AK

Certificate of Attendance

Gerard J. Van de Vyver

has attended the 20th annual
DaimlerChrysler Environmental Seminar
Hazardous Waste Training (RCRA)

Conducted on October 2, 2002

Environmental
Compliance
Services

1807 W. Slaughter Ln. #200-392
Austin, Texas 78748

John Tidwell
Instructor

ECSI, Inc.

Appendix A

CERTIFICATE OF COMPLETION

This certifies that

Angela Kovtun

has completed 3.1 CEU (31 hours) of training on the RCRA hazardous waste regulations.
Courses completed are entitled:

RCRA Fundamentals
Critical Generator Issues
Advanced RCRA Topics I
Advanced RCRA Topics II and Land Disposal Restrictions I
Land Disposal Restrictions II

Training provided by

McCoy and Associates, Inc.

November 18, 19, 20, 21 & 22, 2002

Miami, Florida

Signature of Instructor

Signature of Instructor

Appendix A

Certificate of Attendance

Eric M. Lee

has attended the 20th annual
DaimlerChrysler Environmental Seminar
Hazardous Waste Training (RCRA)

Conducted on October 2, 2002

Environmental
Compliance
Services

1807 W. Slaughter Ln. #200-392
Austin, Texas 78748

John Tidwell
Instructor

Appendix A

Certificate of Attendance

Gerard J. Van de Vyver

has attended the 19th annual
DaimlerChrysler Environmental Seminar
Hazardous Waste and Transportation (DOT) Training

Conducted on October 2, 2001

Environmental
Compliance
Services

1807 W. Slaughter Ln. #200-392
Austin, Texas 78748

Instructor

Appendix A

3

Appendix A

Certificate of Attendance

Angela Kovtun

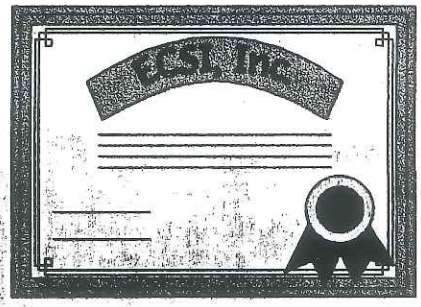
has attended the 19th annual
DaimlerChrysler Environmental Seminar
Hazardous Waste and Transportation (DOT) Training

Conducted on October 2, 2001

ECS
Environmental
Compliance
Services

1807 W. Slaughter Ln. #200-392
Austin, Texas 78748

John Tidwell
Instructor



Certificate of Attendance

Eric M. Lee

has attended the 19th annual
DaimlerChrysler Environmental Seminar
Hazardous Waste and Transportation (DOT) Training

Conducted on October 2, 2001

Environmental
Compliance
Services

1807 W. Slaughter Ln. #200-392
Austin, Texas 78748

Instructor

ECSI, Inc

Appendix A

Appendix A

Clayton
GROUP SERVICES

Certifies that

David Gardner

has satisfactorily completed an
8-Hour Incident Command Refresher Training Course
that satisfies the requirements of the
OSHA Hazardous Waste Operations and Emergency Response (HAZWOPER) Standard
(29 CFR 1910.120)

Course Location: DaimlerChrysler Corporation
UAW-DaimlerChrysler Technology Training Center
Warren, Michigan

Course Date: December 6, 2001

Stephen D. Paul, CIH
Senior Consultant
Occupational Health and Safety
Detroit Regional Office

Clayton
GROUP SERVICES

Certifies that

Jerry Van de Vyver

has satisfactorily completed an
8-Hour Incident Command Refresher Training Course
that satisfies the requirements of the
OSHA Hazardous Waste Operations and Emergency Response (HAZWOPER) Standard
(29 CFR 1910.120)

Course Location: DaimlerChrysler Corporation
UAW-DaimlerChrysler Technology Training Center
Warren, Michigan

Course Date: December 6, 2001

Stephen D. Paul, CIH
Senior Consultant
Occupational Health and Safety
Detroit Regional Office

Appendix A

Appendix A

Clayton
GROUP SERVICES

Certifies that

Angela Kovtun

has satisfactorily completed an
24-Hour Incident Command Initial Training Course
that satisfies the requirements of the
OSHA Hazardous Waste Operations and Emergency Response (HAZWOPER) Standard
(29 CFR 1910.120)

Course Location: DaimlerChrysler Corporation
UAW-DaimlerChrysler Technology Training Center
Warren, Michigan

Course Dates: December 4-6, 2001

Stephen D. Paul, CIH
Senior Consultant
Occupational Health and Safety
Detroit Regional Office

CERTIFICATE OF TRAINING

GZA
GeoEnvironmental, Inc.

THIS CERTIFIES THAT

Eric M. Lee

Has Completed the 8-Hour Hazardous Waste Operations (HAZWOPER)
Refresher Course per 29 CFR 1910.120(e)(8)

October 12, 2001
Date

Auburn Hills, Michigan
Location

Instructor

Mark P. Malchik, CIH, CSP
Director, Occupational Safety & Health

Printed on recycled paper.

Appendix A

7001 0320 0006 0177 3395

U.S. Postal Service
CERTIFIED MAIL RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

OFFICIAL USE

John Troy

Postage	$ 0.60
Certified Fee	2.30
Return Receipt Fee (Endorsement Required)	1.75
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	$ 4.65

USPO CHICAGO IL LOOP STA NOV 26 2002 Postmark Here

DE-9J

Sent To: USEPA ATTN Duncan Campbell
Street, Apt. No.; or PO Box No.: 77 West Jackson Blvd
City, State, ZIP+4: Chicago IL 60604

PS Form 3800, January 2001 — See Reverse for Instructions

UNITED STATES POSTAL SERVICE

ROYAL OAK MI 480 PM 02 DEC 2002

First-Class Mail
Postage & Fees Paid
USPS
Permit No. G-10

• Sender: Please print your name, address, and ZIP+4 in this box •

U.S. EPA
77 West Jackson Blvd
Chicago, IL 60604
ATTN: Duncan Campbell [DE-9J]

60604+3908

SENDER: *COMPLETE THIS SECTION*

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

John Troy
Environmental Compliance
Daimler Chrysler Corp
CIMS 485-01-73
1000 Chrysler Drive
Auburn Hills MI 48326

COMPLETE THIS SECTION ON DELIVERY

A. Received by *(Please Print Clearly)* Irene Czarnecki

B. Date of Delivery

C. Signature

X Irene Czarnecki ☐ Agent ☐ Addressee

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☒ Certified Mail ☐ Express Mail
☐ Registered ☒ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? *(Extra Fee)* ☐ Yes

2. Article Number *(Copy from service label)* 7001 0320 0006 0177 3395

PS Form 3811, July 1999 Domestic Return Receipt 102595-99-M-1789

CHESTERFIELD MI 48309 DEC 24 2002 USPS

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF:

NOV 26 2002

DE-9J

CERTIFIED MAIL 7001 0320 0006 0177 3395
RETURN RECEIPT REQUESTED

John L. Troy, Manager
Environmental Compliance Programs
Facilities Services & Program Management
DaimlerChrysler Corporation
CIMS 485-01-73
1000 Chrysler Drive
Auburn Hills, MI 48326-2766

Re: Notice of Violation
RCRA Compliance Inspection
DaimlerChrysler Plymouth Road Complex
Detroit, MI 48227-3042
MID 099 113 169

Dear Mr. Troy:

On August 27, 2002, United States Environmental Protection Agency (U.S. EPA) and Michigan Department of Environmental Quality (MDEQ) representatives inspected your installation located in Detroit, Michigan. The purpose of the inspection was to evaluate compliance with certain requirements of the Resource Conservation and Recovery Act (RCRA); specifically, those regulations related to the generation, treatment and storage of hazardous waste. A copy of the inspection report is enclosed for your reference.

Based on information provided by DaimlerChrysler Corporation (DCC) personnel, review of records, and physical observations by the inspectors, U.S. EPA and MDEQ have determined that your installation is engaged in the management of hazardous waste. We also determined that DCC is violating the following requirements of the Michigan Part 111 Administrative Rules:

1) R 299.9306(2) requires generators to mark containers with the words "Hazardous Waste" when accumulating as much as 55 gallons of hazardous waste.

During the inspection, the U.S. EPA inspector observed one 55 gallon container in the "Old Paint Booth" area that had not been marked with the words hazardous waste. DCC responded to MDEQ on October 18, 2002, that it had marked this drum with the word

Recycled/Recyclable . Printed with Vegetable Oil Based Inks on 100% Recycled Paper (50% Postconsumer)

Hazardous Waste on August 28, 2002. U.S. EPA requires no further corrective measure pertaining to this container;

2) R 299.9306(1)(a)(i) requires that the generator comply with the provisions of 40 C.F.R. part 265, subpart I. 40 C.F.R. §265.173(a) requires that containers holding hazardous waste must always be closed during storage, except when it was necessary to add or remove waste.

During the inspection, the U.S. EPA observed one 55 gallon container that was open in the "Old Car Wash" area. At the time of the inspection this container was functioning as a satellite container. DCC did not reference that it had taken a corrective measure to close this satellite container in its October 18, 2002 response to MDEQ. Please provide verification that measures have been taken to close this container;

3) R 299.9306(1)(d) requires that the generator comply with the requirements for owners and operators in the provisions of 40 C.F.R. subparts C and D. 40 C.F.R. § 265.35 requires the owner or operator to maintain aisle space to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of facility operations in an emergency, unless aisle space is not needed for any of these purposes.

During the inspection, the inspectors observed approximately 24 - 55 gallon hazardous waste containers stored in the left and center bays. These hazardous waste containers were stacked two high and were not arranged such that DCC personnel could not have unobstructed access to all sides of the containers. Please provide U.S. EPA with information which explains how DCC will create aisle spacing inside the two bays which serve as secondary containment for hazardous waste containers; and

4) R 299.9306(1)(d) requires that the generator comply with the requirements for owners and operators in the provisions of 40 C.F.R. subparts C and D. 40 C.F.R. § 265.55 requires that at all times there must be at least one employee either on the facility premises or on call (i.e., available to respond to an emergency by reaching the facility within a short period of time) with the responsibility of coordinating all emergency response measures. This emergency coordinator must, amongst other things, be thoroughly familiar with the location and characteristics of waste handled and the location of all the records within the facility.

During the inspection, DCC personnel explained that the facility's Incident Commander was not notified when the inspectors arrived because he was not familiar with the facility's hazardous waste management. Later, DCC personnel told the U.S. EPA inspector that DCC does not train its Plymouth Road Complex personnel to emergency response level, and although the Incident Commander had been thoroughly trained in the implementation of the facility's Episode Plan, which satisfies the RCRA requirement for

Contingency Plans, he had not received initial nor annual training in hazardous waste management. Also, one of the designated alternates to the Incident Commander did not know the location of all records pertaining to the management of hazardous waste at Plymouth Road. Please provide U.S. EPA with information demonstrating that all personnel who assume the responsibilities of emergency coordinator receive initial and annual training in hazardous waste management.

Area of Concern:

The inspectors arrived at the Plymouth Road Complex at approximately 8:30am. We introduced ourselves and the purpose of our visit to the main receptionist who contacted an administrative assistant. The administrative assistant came out into the lobby and explained that the Facility's entire environmental staff was in Auburn Hills at the CTC. When the environmental manager was notified of our presence he immediately began driving back to the Plymouth Road Complex to be available for the inspection. This took approximately an hour. During this time there was no one available on-site to take us to areas that generate hazardous waste. It was learned during the inspection that the entire environmental department co-locates between the two locations. This raises the concern that in an emergency, no environmental staff may be present at the Plymouth Road location even though the Incident Commander and First Responders are on hand.

R 299.9503(1)(i) exempts generators from seeking an operating license when treatment occurs at the site of generation when hazardous waste is first placed in a container. DCC punctures aerosol cans at the Plymouth Road Complex. The contents from some of these aerosol cans may become hazardous waste once they have been drained from the aerosol can. MDEQ commented on this practice in its September 13, 2002 Letter of Warning. DCC responded to MDEQ's comments on October 18, 2002. DCC stated that most of the aerosol cans utilize carbon dioxide as a propellant. U.S. EPA concluded that for those instances in which the propellant is carbon dioxide, the puncturing of the aerosol can would not be considered treatment. U.S. EPA based its conclusion on the fact that carbon dioxide is not a RCRA regulated constituent. U.S. EPA further concluded that the liquid contents from aerosol cans do not undergo a physical or chemical change and therefore do not meet the definition of treatment found at Michigan Part 111 Administrative Rule 299.9108(k). However, U.S. EPA recommends that DCC follow a "best management" practice and adopts the manufacturer's guidelines for changing the activated carbon filters.

According to Section 3008(a) of RCRA, U.S. EPA may issue an order assessing a civil penalty for any past or current violation requiring compliance immediately or within a specified time period. Although this letter is not such an order, you are hereby requested to submit a response in writing to this office no later than thirty (30) days after receipt of this letter documenting the actions, if any, which have been taken since the inspection to establish compliance with the

above requirements.

You should submit your response to Duncan Campbell, United States Environmental Protection Agency, Region 5, 77 West Jackson Boulevard, DE-9J, Chicago, Illinois 60604. You should also send a copy of your response to Jeanette M. Noechel at the MDEQ-Detroit Office, 3058 West Grand Blvd., Suite 2-300, Detroit, Michigan 48202.

If you have any questions regarding this letter, please contact Duncan Campbell of my staff at (312) 886-4555.

Sincerely yours,

for Paul Little, Chief
Compliance Section #2
Enforcement and Compliance Assurance Branch
Waste, Pesticides and Toxics Division

Enclosure

cc: Jeanette M. Noechel, MDEQ - Detroit Office

U.S. ENVIRONMENTAL PROTECTION AGENCY

Region 5

RCRA INSPECTION REPORT

GENERAL FACILITY INFORMATION

U.S. EPA ID #:	MID 099 113 169				
Facility Name:	DaimlerChrysler Corporation - Plymouth Road Office Complex			Phone #:	(248) 512-4705
Facility Location:	14250 Plymouth Road			County:	Wayne
City:	Detroit	State: MI	Zip Code:	48227-3042	
Legal Owner:	DaimlerChrysler Corp.	Address: CIMS 485-01-73 1000 Chrsyler Drive	City: Auburn Hills	State: MI	Zip Code: 48326-2766
Region/District	MDEQ - Detroit Office	Inspection Date: 08/27/02	Start Time: 8:30 am	End Time:	2:00pm
Weather:	Sunny/low 90's				

NOTIFICATION INFORMATION (EPA Form 8700-12)/TYPE OF FACILITY

Notified On:		Regulated As:	LQG

TYPE OF INSPECTION : CEI- EPA led inspection. The Michigan DEQ inspected the facility for compliance with Part 121, Liquid Industrial Wastes, Michigan Compiled Laws 324.12101 et seq. of the Natural Resources and Environmental Protection Act, 1994 PA 451 as amended (NREPA) .

INSPECTION PARTICIPANTS

U.S. EPA Inspector	Duncan Campbell	(312) 886-4555
MDEQ Inspector	Jeanette M. Noechel	(313) 456-4664

DCC - Plymouth Road Office Complex:	John L. Troy	Manager, Environmental Compliance Programs/Facility Services & Program Management	Telephone: (248) 512-4705
	Jerry Van de Vyer	Environmental & Safety Compliance	(248) 512-4721
	Angela Kouton		
	Eric Lee		

Additional Information

NAC Codes- 336111 or 336112 **SIC - 3711**	**Primary** Automobile Manufacturing: Research & Development Primary function is testing of product lines
Other Environmental Permits-	AIR/AFS M10038363
Persistent Bioaccumulative Toxics (PBTs) or Chemicals of Concern (COC)-	?
Used Oil -	Generates liquid industrial waste and used oil.
Universal Wastes -	Fluorescent lamps

Facility Description - In 1984 this building was the headquarters for American Motors Company [AMC]. DaimlerChrysler [DCC] has modified the building numerous times since purchasing AMC. Presently, this complex provides research and development [R&D] support to Chrysler Division products. Numerous garages [quadrants] perform specialized test on production models. Some prototype testing is also conducted here. There are 3,200 employees at the Plymouth Road complex, most of whom are engaged in engineering or planning.

Until recently, DCC contracted many support functions that are now performed at the Plymouth Road complex. These functions were performed at facilities owned and operated by the third party entities. DCC has dissolved many of these relationships and relocated these functions to the Plymouth Road complex. DCC has also consolidated R&D functions performed at other DCC facilities to the Plymouth Road Complex.

As a result of these consolidations DCC shipped its inventories of raw materials which would no longer be needed to the Plymouth Road complex. Over the last two years DCC has evaluated each of these raw materials to determine whether they would be used for their intended purpose or if they should be discarded. Based on information gained during the inspection, it was concluded that DCC's hazardous waste generation rates have come primarily from the categorical elimination of consolidated inventories. Over the last couple of years generation of hazardous waste from product testing or research conducted at Plymouth Road has been low enough that this facility would be considered a small quantity generator..

DCC's management also decided to close down the emission testing laboratories at Plymouth Road. Twelve Underground Storage Tanks (UST) were removed in 2001 when this decision was made. These emission testing functions were moved to the Chelsea, Michigan facility.

DCC conducts no wet chemistry activities at Plymouth Road. Overall, there are approximately 27-32 locations where waste is generated at Plymouth Road. Of these, DCC environmental management identified five areas where hazardous waste is generated. Hazardous waste is generated in the following areas: 1) Engine Buildup, 2) Sterolithography, 3) Painter's Room, 4) Chassis Development and 5) Impact Lab. The balance of the waste generation is defined as liquid industrial waste and regulated by MDEQ under its Part 121 rules.

During early August, DCC updated its original Notification for this facility. DCC updated the facility contacts but maintained that its generator status continues to be that of Large Quantity Generator.

Inspection:

U.S. EPA was represented by Duncan Campbell who led the inspection while MDEQ was represented by Jeanette Noechel. The inspection began with introductions in DCC's Plymouth Road lobby. John Troy, Manager, Environmental Compliance Programs, and Jerry Van de Vyver, Environmental & Safety Compliance, represented DCC's Plymouth Road Complex [the Facility]. The inspectors were escorted back through the connecting building into the environmental team's work space. Mr. Troy explained that he manages a staff of three who perform environmental functions for both Plymouth Road Complex and the Central Tech Center (CTC). CTC is located at the Corporate Headquarters in Auburn Hills. Mr. Troy explained that most of the time his staff performs its environmental work from the CTC location.

At EPA's request Mr. Troy provide an overview of the R & D functions that result in the generation of solid waste at this facility. Most of the solid waste is generated within "garages" located on the ground floor. Solid waste generation results from technical staff performing specific product testing or prototype development. Mr. Troy explained that there are five garages that generate solid waste which is also a hazardous waste.

The following five areas were inspected to determine compliance with RCRA and the Michigan Part 111 and 121 Administrative Rules:

First, the Engine Build Lab, located in Building #4 was inspected. Technicians rebuild engines in this garage. Solid waste is generated as a result of wiping down engine parts. Adjacent to the main work area in the Engine Build is a small alcove where both the raw materials and waste are stored. On the wall, directly above several c as, a display showed the proper placement of hazardous waste labels on containers. The display provided an example of the type of information required to be placed on a hazardous waste label. The EPA inspector assumed these instructions were specific to the management of solid waste generated as a result of cleaning parts in the Engine Build area. One 55 gallon satellite container positioned immediately below the display had a funnel inserted into the 2" bung hole. From examples provided in the display the EPA inspector assumed the contents of the container came from waste mineral spirits. The EPA inspector concluded that the open container contained hazardous waste due to its ignitability [D001] and the Facility was in violation of the Michigan Part 111 Administrative Rule 299.9306(2) that requires satellite containers be marked with the words hazardous waste and closed as required by 40 CFR § 265.173. Later, Mr. Troy learned that the container in question served as a satellite for accumulating used oil. The Facility failed to mark the container with the words "Used Oil" as required under R 299.11003(1)(x). R 299.11003(1)(x) references the federal requirements found at 40 CFR §279.22(c). By leaving a funnel in the 2" bung hole, the Facility failed to keep the container closed except when material was being added.

The EPA inspector did not see disposal containers for the spent paper fabric [rags] within either the main workspace or the alcove. The EPA inspector asked a technician where the rags were disposed of when they were too dirty to perform the cleaning function. The technician stated that rags were disposed of in the trash bins located at each workstation.

The EPA inspector then interviewed the supervisor of the Engine Build area. The supervisor stated that organic solvents containing mineral spirits were no longer used to wipe down parts. The supervisor showed the EPA inspector the current solvent used to wipe down parts. This solvent is a water based cleaner known by the trade name IPAK . After being told this information, the EPA inspector looked around at several workstations and found no evidence that organic solvents are regularly being used.

A second room, behind the main work area of the Engine Buildup garage was inspected. The Facility's environmental management described this room as the "old paint booth.." The paint booth was configured with a re-circulation unit which captured spent solvent used to clean the paint guns. The spent solvent was contained underneath a grated floor and pumped through a filtration device. After the solvent had been cleaned in the

filtration device is was ready to be used again. Although the equipment still exists, their was no indication that the Facility uses the system now. Several 55 gallon containers, both empty and partially filled, were positioned along one wall of this room. One of these containers functioned in a dual capacity, as both a satellite accumulation container, and a container in which treatment was performed. The Facility's maintenance personnel collect aerosol cans from various garages and bring them to this room to be punctured. Most of these aerosol cans are empty. Occasionally, an aerosol can is brought to this room that contains significant amounts of residual product. The aerosol cans are punctured releasing the residual propellant, typically carbon dioxide, and any remaining contents into the container.

The Facility has installed an Aerosolv aerosol can recycling device into the 2" bung on the top of this satellite container. The Facility has installed a filter into the smaller bung hole. The puncturing of aerosol cans is performed manually, one can at a time. The liquid collects in the 55 gallon container, while the propellant is captured in the filter. The propellant forms droplets in the filter which fall back into the container as liquid.

The manufacturer's literature indicates that the filter cartridge contains 1 1/4 pounds of activated carbon. At the time of the inspection the Facility's environmental managers were uncertain how frequent these activated carbon filters were exchanged. The EPA inspector explained that even though some of the aerosol cans would be considered RCRA empty when placed into the puncturing device the Facility was performing treatment on those aerosol containers that contained residual amounts of raw material. The EPA inspector explained that in the act of puncturing the can the propellant changed from a gas to a liquid. It is at this point when the contents become a spent material that is being accumulated prior to disposal. One type of aerosol can collected at the Facility is Mopar Brake Parts Cleaner. This material is used by the Facility as an organic solvent cleaner in various garages at the Facility. The Material Safety Data Sheet indicates the spent brake cleaner becomes a hazardous waste for the characteristic of ignitability [Flash Point of 0 F°] and carries with it the EPA Hazardous Waste Number D001. The Facility failed to mark this satellite container with the hazardous waste number and the words "Hazardous Waste" as required by Michigan Part 111 Administrative Rule 299.9306(2). These two acts of noncompliance were corrected during the inspection.

The EPA inspector requested information about the carbon filter which is used to capture volatile air emissions from the 55 gallon container. The EPA inspector explained to the Facility that the act of emptying aerosol cans may be considered waste stabilization. Assuming this is an accurate application of the definition of treatment found at 40 CFR §260.10 this container would be regulated as a Level 3 container under subpart CC and require air emission controls to capture volatile organic concentrations. The EPA inspector is researching the applicability of subpart CC air emission controls to this satellite container that is also engaged in the act of treating a hazardous waste.

The punctured aerosol cans are collected and managed as processed scrap metal as defined at 40 C.F.R §261.1(c)(10). Processed scrap metal is excluded from RCRA requirements.

Second, the "Old Car Wash" was inspected. DCC no longer uses this area to wash cars or any other equipment. Oil filters are crushed in one corner of this area. Aerosol cans of various products are punctured into a 55 gallon container that has been equipped with an Aerosolv System. The Aerosolv can puncturing device was installed into the 2" bung hole on top of a 55 gallon container. This container was marked with the words hazardous waste but was observed open. Again, the EPA inspector requested information that would establish how frequently the activated carbon filter is changed. This can puncturing function appeared to be identical to that observed in the Spray Booth area of the Engine Buildup Lab. Again, the EPA inspector explained that this container may be regulated as both a satellite container and also a treatment container requiring compliance with Level 3 air emission standards.

Third, the Stereolithography Lab located in Building 6, Floor 1, Column W48, was inspected. Robots are used to build prototype parts with plastic resin. The equipment is cleaned using denatured alcohol. Spent fiber wipe are disposed of in a satellite container. This satellite container was appropriately marked as containing hazardous waste which is manifested off-site for final disposal.

Fourth, the Electrical/Painter's Room located in Building 6, Floor 1, Column W44, was inspected. Painting is

performed outside on Facility buildings and equipment by contractors. No painting is conducted in this room. Hazardous waste is generated when the painters have completed their painting outside and return the equipment t his room where they clean it. The solvent is sprayed through delivery hoses and the spray guns and captured in a small satellite container. At the time of the inspection, the satellite was closed and marked as hazardous waste. However, Michigan Part 111 Administrative Rule 299.9306(2) requires the generator to mark the satellite with hazardous waste number on the container. The generator may in the alternative, substitute the chemical name for the hazardous waste number. The Facility had failed to mark the satellite container with either the hazardous waste number(s) or the chemical name(s).

Fifth, the Chassis Development, located in Building 7, Floor 1, Column T54 was the next area inspected. Plastic fuel tanks are removed from chassis in this area. The Facility technicians tip the tanks to drain out the gas. Once the gas has been drained a product called Reemulse is added to the plastic tank. Reemulse renders any residual gas "inert." making it permissible to dispose of the liquid into the sanitary sewer. Along one wall the Facility has positioned all of the waste and product containers for the Chassis Development garage. Technicians also drains oil filters in this area. The filters are then crushed. One 55 gallon container is utilized to accumulate used oil. The container was properly marked as Used Oil. Another container was being used as a satellite container to collect spent rags from fuel tank cleanup. This satellite was appropriately marked as hazardous waste. However, this satellite accumulation container was missing the applicable hazardous waste number as required by Michigan Part 111 Administrative Rule 299.9306(2).

Sixth, Column L79 located in the large corridor leading to the next hazardous waste generation point. MDEQ observed another oil draining operation,. The MDEQ inspector observed one full container of used oil that was properly marked with the words Used Oil, but was open. This was corrected immediately. There was also a 55 gallon container that had a funnel inserted into the large bung hole. This container was considered open because no oil was being added to the container at the time. This was also corrected immediately. Finally, the MDEQ inspector observed a filter crusher which was attached to the wall. At the bottom of the crusher a hose had been c nected to a container in order to capture any residual used oil in the filter. MDEQ suggested the constant drip i. ne hose be corrected.

Seventh, the Impact Lab, located in Building 8, G79. The Facility generates spent stoddard solvent as a result of functions it performs within this lab. One satellite container containing hazardous waste was observed in the Impact Lab. The satellite was appropriately marked as hazardous waste. In this instance the hazardous waste number(s) had been marked on the container. The container was also observed to be closed. No other waste were observed within the Impact Lab.

Eight, the Drum Storage area on the dock. The dock is used to accumulate hazardous waste containers prior to offering them for transport for final disposal. The dock is also used to store non-hazardous waste and containers of raw materials. Two underground storage tanks storing virgin gasoline are located on the east end of the dock. The dock is constructed of concrete and has a height equivalent to the floor of a conventional semi-trailer. The dock has a roof with walls made from wire mesh. All hazardous waste containers [55 gallon] are accumulated within three large double door cabinets. The center and left cabinets form one bay. At the time of the inspection hazardous waste containers were stacked two high. In the second and third bay there were twenty-four 55 gallon containers of hazardous waste. These containers were stacked in such a way that no aisle space existed between the rows. All containers were closed, in good condition, labeled with the words hazardous waste and supplied with information about the hazardous waste number(s). Outside of the cabinets the inspectors observed a satellite container of spent gasoline pads. This was an open-headed container with the lid sitting on top, but did not have a ring securing the lid to the container. The satellite was only partially full. The physical management of the hazardous waste is performed by contracted labor. The contractor was not present and thus it was assumed that he was not actively adding gasoline pads to the satellite.

P ecords Reviews:

Manifest for 2001 and 2002 were made available to the inspectors. The Facility is now shipping its waste gas to Michigan Recovery as a recoverable product gasoline is currently being shipped to Michigan Recovery as a recoverable product [waste fuel being used as fuel]. The EPA and MDEQ representatives were told that Facility

was actively engaged in compiling information to satisfy an internal environmental audit.

Training records for the staff responsible for managing hazardous waste at the Facility were not available. EPA and MDEQ were told that the records were being assembled at the CTC location in preparation for completing an internal audit. The Facility's environmental management do not train first responders in the RCRA requirements. Those trained to first responder level include all technicians. House-keeping functions at the Facility are not performed by United Auto Workers. House-keeping is performed by Joe Calcaterra and Associates. Calcaterra and Associates trains its own employees to respond to the Facility's Episode Plan. These training records were not available for review at the time of the inspection. The training records for the Incident Commander include certificates for Emergency Response. These certificates were not available for inspection on August 27, 2002. The Facility has a central document entitled "Episode Plan." SPCC, OSHA, RCRA and SARA emergency information are preserved in this one document. It was last edited on November 1999. At the time of the inspection, the Facility had hired TRIAD to update the 1999 version. TRIAD routinely performs this every three years.

Area of concern:

1) The U.S. EPA and MDEQ inspectors arrived at the Plymouth Road Complex at approximately 8:30am. They introduced themselves to the receptionist and explained the purpose of their visit. The receptionist contacted someone. An administrative assistant came out of the secured area and explained to the inspectors that the Facility's entire environmental staff was in Auburn Hills at the CTC. The environmental manager immediately began driving back to the Plymouth Road Complex to be available for the inspection. This took approximately an hour. During this time there was no one available on-site to take us to areas that generate hazardous waste. It was learned during the inspection that the entire environmental department co-locate between the two locations. This raises the concern that in an emergency, the environmental staff may not be present at the Plymouth Road location even though the Incident Commander and First Responders are on hand.

2) The U.S. EPA inspector learned that the primary emergency contact [D.C. Gardner] was not thoroughly familiar with the location and characteristics of waste handled. Mr. Troy explained that Mr. Gardner is the Incident Commander and is knowledgeable about all elements of the Plymouth Road Complex Episode Plan. But Mr. Gardner has not been trained in all aspects of RCRA hazardous waste management. This is why he was not called when the inspectors arrived at the facility. It was discovered during the inspection that Mr. Van de Vyer, an alternate Incident Commander, was not familiar with the location of all records within the facility. At the time of the inspection, many records had been removed from the Plymouth Road Complex and taken to CTC where they were being assembled and used as references to complete an internal audit of the facility.

The Episode Plan is one document that meets the regulatory requirements for RCRA, SPCC, SARA, and OSHA. DCC does not train employees to all levels of emergency response. DCC trains all Plymouth Road employees to the Awareness level as 1st Responders. This means that plant security are trained to convey information to the Incident Commander and then to cordon off the area. the location of all records within the facility.

3) The MDEQ inspector noted three instances were the Facility had failed to supply the hazardous waste number(s) on satellite containers as required by Michigan Part 111 Administrative Rule 299.9306(2). These acts of noncompliance have been corrected according to the Facility's October 18, 2002, response to MDEQ's September 13, 2002 Letter of Warning.

Report submitted by _____ Date 11/20/02

Reviewed by _____ Date _____

OFFICIAL FILE COPY

ENFORCEMENT AND COMPLIANCE ASSURANCE BRANCH

Author	Compliance Section 2 Section Chief	ORC Concurrence
11/25/02	for Chief 11-25-02	AJ 11/25/02

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY
DETROIT

JOHN ENGLER
GOVERNOR

RUSSELL J. HARDING
DIRECTOR

November 25, 2002

Mr. John L. Troy, CHMM
Manager, Environmental Compliance Programs
Facilities Services and Program Management
DaimlerChrysler Corporation
CIMS 485-01-73
1000 Chrysler Drive
Auburn Hills, Michigan 48326-2766

Dear Mr. Troy:

SUBJECT: MID 099 113 169

This correspondence is written to acknowledge receipt of your letters dated October 18, 2002 and November 21, 2002, which itemizes actions taken by DaimlerChrysler Plymouth Road Office Complex, (hereafter Facility), located at 14250 Plymouth Road, Detroit, Michigan, to correct violations in one or more of the following: Part 111, Hazardous Waste Management, Michigan Compiled Laws (MCL) 324.11101 et seq. and Part 121, Liquid Industrial Wastes, MCL 324.12101 et seq. of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended; Subtitle C of the federal Resource Conservation and Recovery Act of 1976, as amended, and any administrative rules or regulations promulgated pursuant to these Acts. These violations were observed by staff of the Department of Environmental Quality (DEQ) during an inspection conducted on August 27, 2002, and the Facility was notified of these violations in a letter dated September 13, 2002.

This is to notify the Facility that based on the information in your October 18, 2002 and November 21, 2002 letters, staff of the DEQ has determined that the Facility has corrected the violations identified with regard to the regulations cited. However, please note that this letter applies only to violations cited by the DEQ. Other violations may be cited by USEPA in a separate correspondence, and are not addressed by this letter.

However, this determination does not preclude nor limit the DEQ's ability to initiate other enforcement action, under state or federal law, as deemed appropriate.

If you have any questions, please feel free to contact me.

Sincerely,

Jeanette M Noechel

Jeanette M. Noechel
Environmental Quality Analyst
Waste and Hazardous Materials Division
313-456-4664

cc: Ms. Sarah Lile, Detroit Department of Environmental Affairs
Mr. Duncan Campbell, USEPA Region 5
Dr. Benedict N. Okwumabua, DEQ, WHMD

Michael Cunningham

11/27/02 01:57 PM

To: nashaj@state.mi.us, baldwinf@state.mi.us, merrickj@state.mi.us
cc: Paul Little/R5/USEPA/US@EPA, Duncan Campbell/R5/USEPA/US@EPA, Allan Batka/R5/USEPA/US@EPA
Subject: Notification of Administrative Actions in Michigan

As agreed to in our April 24, 2001 State/U.S. EPA Enforcement Action Communications Plan, U.S. EPA is notifying you of three Administrative Actions taken in the State of Michigan.

On November 26, 2002, U.S. EPA sent a Notice of Violation to DaimlerChrysler Corporation in Auburn Hills
(MID 099 113 169). The contact for this action is Duncan Campbell (312) 886-4555.

On November 27, 2002, U.S. EPA sent a Notice of Violation to the Sherwin Williams Company in Holland
(MID 006 020 929) and to Burdick and Jackson in Muskegon (MID 072 575 731). The contact for these actions is
Alan Batka (312) 353-7316.

DAIMLERCHRYSLER

Jerry Van de Vyver CPEA
Environmental & Safety Compliance

DaimlerChrysler Corporation
CIMS 485-01-73
1000 Chrysler Drive
Auburn Hills MI USA
48326-2766
Phone 248.512.4721
Fax 248.512.4697
Pager 313.714.8379

e-mail: gjv4@daimlerchrysler.com

DAIMLERCHRYSLER

John L. Troy, CHMM
Manager
Environmental Compliance Programs
Facilities Services &
Program Management

Pager 313.606.2449
e-mail: jlt8@daimlerchrysler.com

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STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY
WASTE MANAGEMENT DIVISION

JEANETTE M. NOECHEL
ENVIRONMENTAL QUALITY ANALYST

DETROIT OFFCE
CADILLAC PLACE
3058 WEST GRAND BLVD., SUITE 2-300
DETROIT, MICHIGAN 48202

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www.michigan.gov

DAIMLERCHRYSLER

DaimlerChrysler Corporation

November 21, 2002

Ms. Jeanette M. Noechel
Environmental Quality Analyst
Waste Management Division
Michigan Department of Environmental Quality
Cadillac Place
3058 West Grand Boulevard, Suite 2-300
Detroit, Michigan 48202-6058

Dear Ms. Noechel,

In reference to our telephone conversation on November 11, 2002, you had questions regarding the two aerosol can recycling operations at DaimlerChrysler's Plymouth Road Office Complex. Specifically, secondary containment of the liquid waste collection drums, types of propellants other than carbon dioxide, disposal of filters from the operations and the potential for liquids to squirt from a punctured drum were of concern.

In response to your questions, I submit the following information:

1) The drums used to collect liquid wastes from the aerosol can recycling operation by the old spray booth and the old car wash areas were placed on/or in secondary containment pallets/over-pack containers to prevent potential spillage.

2) Occasionally defective aerosol cans containing propane propellants are collected and managed in the same manner. For this reason, we manage drum air filters that capture propellant emissions as hazardous waste. When the filters reach the end of their useful lives (recycling of approximately 4000 cans per manufacturer specifications), it is disposed of as hazardous waste.

3) Regarding the potential for liquids to squirt from a punctured drum, you recommended putting a single liquid waste drum in the center of a four-drum spill pallet or moving both recycling operations to the drum accumulation area. This method would be a way to address your concerns.

In light of the concerns regarding the recycling of aerosol cans, DaimlerChrysler Plymouth Road Office Complex has chosen to cease the aerosol can recycling operation and manage both aerosol cans and their contents as hazardous waste. Since the cans are no longer punctured and recycled, and since they are being properly managed as a hazardous waste, all your concerns over the aerosol cans have been resolved.

If you have any questions regarding the above responses, please contact me at (248) 512-4705.

Sincerely,

John L. Troy

John L. Troy
Manager, Environmental Compliance Programs
Facilities Services and Program Management
DaimlerChrysler Corporation
CIMS: 485-01-73
1000 Chrysler Drive
Auburn Hills, MI 48307-2766

cc: Mr. Duncan Campbell, USEPA
Mr. W. Charles Moeser, DaimlerChrysler
Mr. Ron Szymanski, DaimlerChrysler

Duncan Campbell
11/14/02 08:24 AM

To: Michael Beedle
cc:
Subject: Michigan regs

Mike-

I did an inspection with your buddy Jeanette Noechel. I'm writing my report. During the inspection I heard her say that it is a Michigan requirement that the waste codes are plastered on the label for a container. I seem to recall that she was referring to satellite containers at the time. I'm looking through the regs and cannot find any reference to this. Are you familiar with this? Also, she also said that their used oil rules require containers be closed. It makes sense, but I can't find it. Do you have any clues?

DC

Duncan Campbell

11/07/02 07:47 AM

To: Jeanette Noechel <NOECHELJ@michigan.gov>
cc: Duncan Campbell/R5/USEPA/US@EPA, Jeanette Noechel <NOECHELJ@michigan.gov>
Subject: Re: Daimler Chrysler PROC

Thanks for the update. Several times I have started my inspection report only to drop it again before completing it. Although it is not done I am attaching it for your review. Please feel free to comment on its accuracy. My notes are unclear about the car wash area and the old spray booth. I make the statement that we saw some containers but am now unsure whether they were all empty except for the satellite which had the puncturing device attached to it. I do recall the satellite did not have any marking/label on it. If the other containers in the room contained HW, where they labeled and dated? Also, my notes are unclear where maintenance collects the cans and what the cans contain? I recall asking and being told that they no longer use brake cleaner to clean parts in the engine build and Jeep Diesel application shop in Building 4 but recall seeing a collection of these cans in the car wash area.

Inspection report.w

Jeanette Noechel <NOECHELJ@michigan.gov>

Jeanette Noechel <NOECHELJ@michigan.gov>

11/07/02 07:30 AM

To: Duncan Campbell/R5/USEPA/US@EPA
cc: Jeanette Noechel <NOECHELJ@michigan.gov>
Subject: Daimler Chrysler PROC

They provided a response to my letter on October 18th. I've reviewed it, and while I still have a few questions on the aerosol can puncturing process, it's likely I'll be returning them to compliance from my point of view. Do you have any comments or questions relating to their October 18th response? Let me know soon...thanks.

Thought of the day: Getting an idea should be like sitting down on a pin:
it should make you jump up and do something--E. L. Simpson

Jeanette M. Noechel
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Waste and Hazardous Materials Division
Cadillac Place
3058 West Grand Boulevard, Suite 2-300
Detroit, Michigan 48202
Phone: 313-456-4664
Fax: 313-456-4662
Main: 313-456-4700
E-mail address: NOECHELJ@michigan.gov

Chrysler PROC

11/07/02 07:30

AM

They provided a response to my letter on October 18th. I've reviewed it, and while I still have a few questions on the aerosol can puncturing
process, it's likely I'll be returning them to compliance from my point
of view. Do you have any comments or questions relating to their October 18th response? Let me know soon...thanks.

Thought of the day: Getting an idea should be like sitting down on a pin:
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DAIMLERCHRYSLER

DaimlerChrysler Corporation

October 18, 2002

Ms. Jeanette M. Noechel
Environmental Quality Analyst
Waste Management Division
Michigan Department of Environmental Quality
Cadillac Place
3058 West Grand Boulevard, Suite 2-300
Detroit, Michigan 48202-6058

Dear Ms. Noechel,

In response to your letter dated September 13, 2002, regarding the combined hazardous waste management inspection conducted at DaimlerChrysler's Plymouth Road Office Complex on August 27, 2002, we submit the following:

Relative to Part 121, Section 12113(1), all vehicles, containers and tanks used to hold liquid industrial wastes must be closed or covered when not in use.

Item 1 a) This issue was considered resolved at the time of the inspection as stated in the September 13, 2002 letter.

b) The liquid on top of the drum was waste oil that was cleaned up following your review. The pad used to absorb the used oil on the drum was placed in a 55-gallon drum for waste pads. The drum was properly labeled "Used Oil" as required, the bung cap was put in place, the funnel was closed and the operators were re-instructed regarding the proper maintenance of the satellite station. All of these activities took place after the inspection on August 27, 2002.

c) This issue was considered resolved at the time of the inspection as stated in the letter.

Relative to R299.9306(2), satellite containers of hazardous waste must be marked with the waste code(s) of the waste or the chemical name or names of the waste in the container.

Item 2 a) The drum for collection of waste liquids from the aerosol can puncturing operation by the old spray booth area has been labeled "hazardous waste" with the proper waste code and chemical name on August 28, 2002.

b) The drum for collection of waste liquids from the aerosol can puncturing operation in the car wash area has been labeled "hazardous waste" with the proper waste code and chemical name on August 28, 2002.

c) The drum for collection of waste paint in the painter's room has been labeled "hazardous waste" with the proper waste code and chemical name on August 28, 2002.

A Company of the DaimlerChrysler Group

DaimlerChrysler Corporation
1000 Chrysler Drive
Auburn Hills MI USA 48326-2766

In response to the comments/issues that were not specific violations, we submit the following. First, with respect to aerosol cans:

A) We recycle our aerosol cans as part of a scrap metal recycling process. Puncturing the cans is a necessary part of that process. Aerosol cans the facility collects are generally void of their contents at the time of puncturing. This leaves them with a very small gas charge (if any) that is released into the enclosed drum at the time of puncture. On occasion, defective aerosol cans are collected and punctured in the same manner, again, into the enclosed drum. The propellant (typically carbon dioxide) that remains in any aerosol can is sealed into the 55-gallon collection drum and passes through a filtration unit mounted to the secondary opening on the drum. The puncture unit itself is threaded to a 55-gallon drum and does not allow gasses or liquids to release to the atmosphere. The filtration unit is threaded to the secondary opening of the 55-gallon drum and absorbs gaseous emissions released from punctured aerosol cans. What appears to be a top lid is actually a safety device to hold the aerosol can in place during the puncturing operation. Both units form a seal to the 55-gallon drum and would not leak if the drum were to tip over. Emissions are captured by the filtration unit. The manufacturer's specification sheets and background information for the Aerosolv® equipment are included (attachment A) for your review.

Liquid wastes accumulated in the drum are disposed of as hazardous waste and the filter is removed after approximately 4000 aerosol cans have been punctured (per manufacturer's specifications) and also disposed of as hazardous waste.

With respect to documenting hazardous waste container inspections and maintain those records on site for at least three years.

B) Regarding Plymouth Road Office Complex's hazardous waste container inspection records, please find enclosed (attachment B) the inspection sheets for August, 2002 and June, 2001 as requested. These records are maintained onsite at the Plymouth Road Office Complex.

If you have any questions regarding the above responses, please contact me at (248)512-4705.

Sincerely,

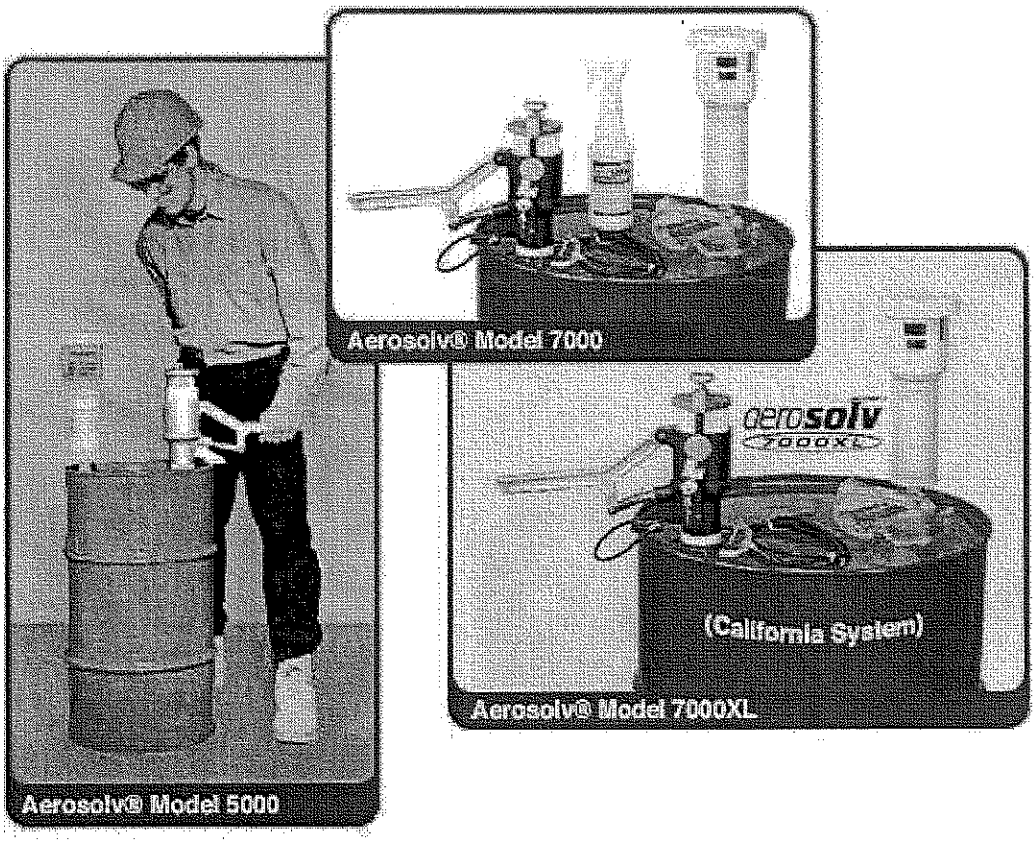
John L. Troy
Manager, Environmental Compliance Programs
Facilities Services and Program Management
DaimlerChrysler Corporation
CIMS: 485-01-73
1000 Chrysler Drive
Auburn Hills, MI 48307-2766

cc: Mr. Duncan Campbell, USEPA
Mr. Charles Moeser, DaimlerChrysler
Mr. Ron Szymanski, DaimlerChrysler

Attachments: A - The Aerosolv System Specification Data and related information
B - Copies of August 2002 and June 2001 hazardous waste container inspections

The Aerosolv® System

The Aerosolv® Aerosol Can Recycling System Comes in Three Models.

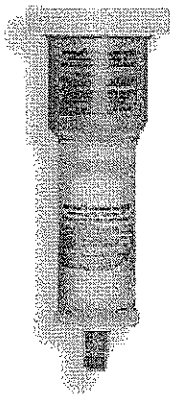


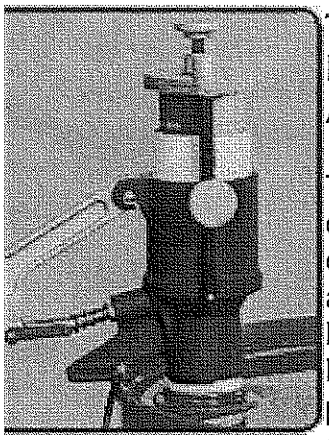
Aerosolv® Model 5000 Includes Puncturing Device, #6163 Combination Coalescing Activated Carbon Filter, Anti-Static Wire, and Safety Goggles

Aerosolv® Model 7000XL Aerosol Can Recycling System, includes: Advanced Puncturing Device-Teflon Coated, Automatic Shut-off Valve, #7163 Combination Colormetric Carbon Filter with Automatic Check Valve, Drum Cover, Drum Under Containment, Anti-Static Wire, and Safety Goggles

Aerosolv® Model 7000 Includes Advanced Puncturing Device, #7163 Combination Colormetric Carbon Filter, Aerosolv VOC Free Cleaner/Degreaser, Anti-Static Wire, and Safety Goggles

Details of the Aerosolv® System





The Aerosolv® Aerosol Can Recycling System Simplifies Aerosol Can Disposal.

The Aerosolv® puncturing unit threads directly to the 2" bung of any 30 gallon or 55 gallon drum. Simply place an aerosol can into the Aerosolv® unit and lock the safety cap. With a press of the handle, a carbide-tipped puncture pin pierces the dome of the can. The carbide tip is non sparking, one of many safety features you'll appreciate about the Aerosolv® system.

Liquids Collect Directly Into the Drum.

That's the neatest feature of the Aerosolv® system. Residual liquids collect safely in the drum, ready for eventual transportation without further handling. And one 55 gallon drum will hold the residual liquids from 4,000 spent aerosol cans. As *solid* waste, the same cans would require at least forty 55 gallon lab pack drums at a disposal cost of $10,000 or more.

Residual Propellant Is Filtered Of VOC's.

The Aerosolv® Combination Filter threads directly to the 3/4" bung of the drum, one of the many safety features incorporated into the Aerosolv® System. Although not required by RCRA for aerosol can disposal, the filter addresses air quality and emissions standards.

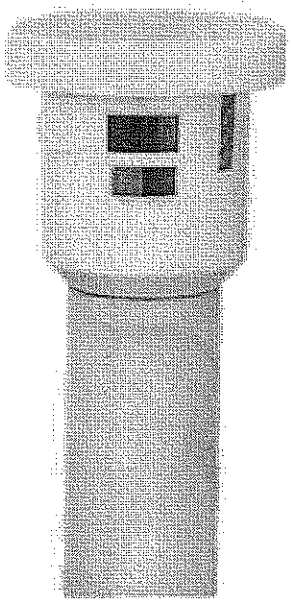
The Combination Filter Does Two Things.

The base of the Combination Filter is the Coalescing Cartridge. In it, the specially designed filter media coalesces microscopic liquids from the escaping propellant and forms them into droplets. The droplets collect in the reservoir of the Coalescing Cartridge and can be easily drained, directly into the drum if desired, by opening the drain valve on the bottom. Dry propellant then moves throught the Activated Carbon Cartridge which absorbs hydrocarbons and odor.

The Model 5000 Filter Cartridge Contains 1 1/4 Pounds of Activated Carbon.

Made from ground coconut shell, the activated carbon promotes rapid evacuation of the propellant from even a full aerosol can. Independent lab tests indicate the VOC removal is significant: the propellant from a *full* can measured 70% below the OSHA Short Term Exposure Limit (STEL) for Toluene and 95% below for Xylene. From an empty can, the propellant measured 98% below the STEL for both. Total hydrocarbon emissions measured 70% below the 300 ppm desired limitation.

The Model 7000XL Uses an Advanced Filtering System.



Colormetric carbon cartridge incorporates a check valve that automatically shuts off filter when not in use.

The Aerosolv® Model 7000XL offers Convenience:

- **Threads directly to the 2" bung of any standard drum.**
- **Aerosolv is portable and does not require a power source. Easily operated by hand.**
- **Puncturing unit and filter incorporate a check valve that automatically shuts off both units when not in use.**
- **Collects liquid contents directly into drum ready to be recycled or managed as hazardous waste in compliance with state regulations.**
- **Increases opportunities for recycling and waste reduction of cans and their contents.**
- **Accommodates aerosol cans in a wide assortment of shapes and sizes.**
- **Filter threads directly to the 3/4" bung of the drum.**
- **Colormetric Carbon Cartridge of filter indicates replacement as needed.**

The Aerosolv® Model 7000XL includes features for Safety:

- **Allows puncturing of aerosol cans without worker contact.**
- **Residual contents are safely collected in the drum.**
- **Filter coalesces V.O.C.'s for collection in filter reservoir.**
- **Anti-Static Wire enhances operational safety.**
- **Designed to prohibit unsafe usage-will not accept**

propane bottles or aerosol cans inserted "right side up."

The Result? Recyclable Steel and RCRA Compliance.

After using the Aerosolv® system, you've got an empty steel can with a small, smooth-edged hole. In as little as five seconds. No spills. No jagged edges. And, no compressed gas, so it's ready for recycling with your other scrap steel.

For More Information:

Lab reports documenting punctured can residues, spent filter residues and filter efficiency are yours for the asking. So is an informative 5 minute video, which describes and demonstrates the benefits of Aerosolv® in reducing solid waste and increasing recycling. For information, or to put Aerosolv® to work for you, go to our Ordering Information page, or call (800) 843-6808.

RCRA - HAZARDOUS WASTE (OUTSIDE DRUM YARD) ACCUMULATION AREA WEEKLY INSPECTION REPORT

PLANT LOCATION Plymouth Road Office Complex

PER 40 CFR 265.16(a) - LEGAL REQUIREMENT

Description of Items Checked	Ok	Not Ok	Remarks	Date Corrected
Drums Corroded/Leaking/Spills	✓	☐		
Drums Closed/Secured	✓	☐		
Waste Labels: Attached	✓	☐		
Completed DOT Names Including NOS Names	✓	☐		
Completed EPA /State Waste Codes	✓	☐		
Legible and Completed	✓	☐		
Complete Accumulation Start or Finish Date	✓	☐		
Multiple Labels Defaced	✓	☐		
DOT Labels Attached	✓	☐		
Segregation of Waste By Type	✓	☐		
Signage for SQ Generator	✓	☐		
Spill Containment Adequate	✓	☐		
Precipitation Removed, if applicable	✓	☐		
(50') NFPA Buffer for Ignitables or Reactives from Property Line	✓	☐		
"No Smoking" Sign Posted, for ignitables, Reactives, or Incompatible Wastes	✓	☐		
Fire/Spill Control Equipment, if applicable	✓	☐		
Alarms/Communications Available	✓	☐		

Signature	Title	Telephone #	Date
R.E. [illegible]	ESCC	733-2486	6-6-01

RCRA - HAZARDOUS WASTE (OUTSIDE DRUM YARD) ACCUMULATION AREA WEEKLY INSPECTION REPORT

PLANT LOCATION Plymouth Road Office Complex

PER 40 CFR 265.16(a) - LEGAL REQUIREMENT

Description of Items Checked	Ok	Not Ok	Remarks	Date Corrected
Drums Corroded/Leaking/Spills	✓	☐		
Drums Closed/Secured	✓	☐		
Waste Labels: Attached	✓	☐		
Completed DOT Names Including NOS Names	✓	☐		
Completed EPA /State Waste Codes	✓	☐		
Legible and Completed	✓	☐		
Complete Accumulation Start or Finish Date	✓	☐		
Multiple Labels Defaced	✓	☐		
DOT Labels Attached	✓	☐		
Segregation of Waste By Type	✓	☐		
Signage for SQ Generator	✓	☐		
Spill Containment Adequate	✓	☐		
Precipitation Removed, if applicable	✓	☐		
(50') NFPA Buffer for Ignitables or Reactives from Property Line	✓	☐		
"No Smoking" Sign Posted, for ignitables, Reactives, or Incompatible Wastes	✓	☐		
Fire/Spill Control Equipment, if applicable	✓	☐		
Alarms/Communications Available	✓	☐		

Signature	Title	Telephone #	Date
K. E. Dan	ESCC	733-2486	June 13, 2001

RCRA - HAZARDOUS WASTE (OUTSIDE DRUM YARD) ACCUMULATION AREA WEEKLY INSPECTION REPORT

PLANT LOCATION Plymouth Road Office Complex

PER 40 CFR 265.16(a) - LEGAL REQUIREMENT

Description of Items Checked	Ok	Not Ok	Remarks	Date Corrected
Drums Corroded/Leaking/Spills	✓	☐		
Drums Closed/Secured	✓	☐		
Waste Labels:				
Attached	✓	☐		
Completed DOT Names Including NOS Names	✗	☐		
Completed EPA /State Waste Codes	✓	☐		
Legible and Completed	✗	☐		
Complete Accumulation Start or Finish Date	✓	☐		
Multiple Labels Defaced	✓	☐		
DOT Labels Attached	✓	☐		
Segregation of Waste By Type	✓	☐		
Signage for SQ Generator	✓	☐		
Spill Containment Adequate	✓	☐		
Precipitation Removed, if applicable	✓	☐		
(50') NFPA Buffer for Ignitables or Reactives from Property Line	✓	☐		
"No Smoking" Sign Posted, for ignitables, Reactives, or Incompatible Wastes	✓	☐		
Fire/Spill Control Equipment, if applicable	✓	☐		
Alarms/Communications Available	✓	☐		

Signature	Title	Telephone #	Date
K. E. Dm	ESCC	733-2486	June 20, 2001

RCRA - HAZARDOUS WASTE (OUTSIDE DRUM YARD) ACCUMULATION AREA WEEKLY INSPECTION REPORT

PLANT LOCATION Plymouth Road Office Complex

PER 40 CFR 265.16(a) - LEGAL REQUIREMENT

Description of Items Checked	Ok	Not Ok	Remarks	Date Corrected
Drums Corroded/Leaking/Spills	✓			
Drums Closed/Secured	✓			
Waste Labels: Attached	✓			
Completed DOT Names Including NOS Names	✓			
Completed EPA /State Waste Codes	✓			
Legible and Completed	✓			
Complete Accumulation Start or Finish Date	✓			
Multiple Labels Defaced	✓			
DOT Labels Attached	✓			
Segregation of Waste By Type	✓			
Signage for SQ Generator	✓			
Spill Containment Adequate	✓			
Precipitation Removed, if applicable	✓			
(50') NFPA Buffer for Ignitables or Reactives from Property Line	✓			
"No Smoking" Sign Posted, for Ignitables, Reactives, or Incompatible Wastes	✓			
Fire/Spill Control Equipment, if applicable	✓			
Alarms/Communications Available	✓			

Signature	Title	Telephone #	Date
K. E. Dam	ESCC	733-2486	June 21, 2001

RCRA - HAZARDOUS WASTE (OUTSIDE DRUM YARD) ACCUMULATION AREA WEEKLY INSPECTION REPORT

PLANT LOCATION Plymouth Road Office Complex

PER 40 CFR 265.16(a) - LEGAL REQUIREMENT

Description of Items Checked	Ok	Not Ok	Remarks	Date Corrected
Drums Corroded/Leaking/Spills	✓	☐		
Drums Closed/Secured	✓	☐		
Waste Labels: Attached	✓	☐		
Completed DOT Names Including NOS Names	✓	☐		
Completed EPA /State Waste Codes	✓	☐		
Legible and Completed	✓	☐		
Complete Accumulation Start or Finish Date	✓	☐		
Multiple Labels Defaced	✓	☐		
DOT Labels Attached	✓	☐		
Segregation of Waste By Type	✓	☐		
Signage for SQ Generator	✓	☐		
Spill Containment Adequate	✓	☐		
Precipitation Removed, if applicable	✓	☐		
(50') NFPA Buffer for Ignitables or Reactives from Property Line	✓	☐		
"No Smoking" Sign Posted, for ignitables, Reactives, or Incompatible Wastes	✓	☐		
Fire/Spill Control Equipment, if applicable	✓	☐		
Alarms/Communications Available	✓	☐		

Signature	Title	Telephone #	Date
K. E. D[illegible]	ESCC	733-2486	June 27, 2001

RCRA - HAZARDOUS WASTE (OUTSIDE DRUM YARD) ACCUMULATION AREA WEEKLY INSPECTION REPORT

PLANT LOCATION Plymouth Road Office Complex

PER 40 CFR 265.16(a) - LEGAL REQUIREMENT

Description of Items Checked	Ok	Not Ok	Remarks	Date Corrected
Drums Corroded/Leaking/Spills	✓			
Drums Closed/Secured	✓			
Waste Labels: Attached	✓			
Completed DOT Names Including NOS Names	✓			
Completed EPA /State Waste Codes	✓			
Legible and Completed	✓			
Complete Accumulation Start or Finish Date	✓			
Multiple Labels Defaced	✓			
DOT Labels Attached	✓			
Segregation of Waste By Type	✓			
Signage for ~~SQ~~ LQ Generator	✓			
Spill Containment Adequate	✓			
Precipitation Removed, if applicable	✓			
(50') NFPA Buffer for Ignitables or Reactives from Property Line	✓			
"No Smoking" Sign Posted, for Ignitables, Reactives, or Incompatible Wastes	✓			
Fire/Spill Control Equipment, if applicable	✓			
Alarms/Communications Available	✓			

Signature	Title	Telephone #	Date
[signature]	ESCC	722-4702 ~~733-2486~~	08/06/02

RCRA - HAZARDOUS WASTE (OUTSIDE DRUM YARD) ACCUMULATION AREA WEEKLY INSPECTION REPORT

PLANT LOCATION Plymouth Road Office Complex

PER 40 CFR 265.16(a) - LEGAL REQUIREMENT

Description of Items Checked	Ok	Not Ok	Remarks	Date Corrected
Drums Corroded/Leaking/Spills	✓			
Drums Closed/Secured	✓			
Waste Labels:				
Attached	✓			
Completed DOT Names Including NOS Names	✓			
Completed EPA /State Waste Codes	✓			
Legible and Completed	✓			
Complete Accumulation Start or Finish Date	✓			
Multiple Labels Defaced	✓			
DOT Labels Attached	✓			
Segregation of Waste By Type	✓			
Signage for ~~SQ Generator~~ Large Quantity	✓			
Spill Containment Adequate	✓			
Precipitation Removed, if applicable	✓			
(50') NFPA Buffer for Ignitables or Reactives from Property Line	✓			
"No Smoking" Sign Posted, for ignitables, Reactives, or Incompatible Wastes	✓			
Fire/Spill Control Equipment, if applicable	✓			
Alarms/Communications Available	✓			

Signature	Title	Telephone #	Date
Angela A. Koch	ESCC	722-4702 ~~733-2486~~	08/13/02

RCRA - HAZARDOUS WASTE (OUTSIDE DRUM YARD) ACCUMULATION AREA WEEKLY INSPECTION REPORT

PLANT LOCATION Plymouth Road Office Complex

PER 40 CFR 265.16(a) - LEGAL REQUIREMENT

Description of Items Checked	Ok	Not Ok	Remarks	Date Corrected
Drums Corroded/Leaking/Spills	✓	☐		
Drums Closed/Secured	✓	☐		
Waste Labels: Attached	✓	☐		
Completed DOT Names Including NOS Names	✓	☐		
Completed EPA /State Waste Codes	✓	☐		
Legible and Completed	✓	☐		
Complete Accumulation Start or Finish Date	✓	☐		
Multiple Labels Defaced	✓	☐		
DOT Labels Attached	✓	☐		
Segregation of Waste By Type	✓	☐		
Signage for ~~SQ~~ Large Generator	✓	☐		
Spill Containment Adequate	✓	☐		
Precipitation Removed, if applicable	✓	☐		
(50') NFPA Buffer for Ignitables or Reactives from Property Line	✓	☐		
"No Smoking" Sign Posted, for Ignitables, Reactives, or Incompatible Wastes	✓	☐		
Fire/Spill Control Equipment, if applicable	✓	☐		
Alarms/Communications Available	✓	☐		

Signature	Title	Telephone #	Date
Angela A. Kotter	ESCC	7224702 ~~733-2486~~	8/20/02

RCRA - HAZARDOUS WASTE (OUTSIDE DRUM YARD) ACCUMULATION AREA WEEKLY INSPECTION REPORT

PLANT LOCATION Plymouth Road Office Complex

PER 40 CFR 265.16(a) - LEGAL REQUIREMENT

Description of Items Checked	Ok	Not Ok	Remarks	Date Corrected
Drums Corroded/Leaking/Spills	✓	☐		
Drums Closed/Secured	✓	☐		
Waste Labels: Attached	✓	☐		
Completed DOT Names Including NOS Names	✓	☐		
Completed EPA /State Waste Codes	✓	☐		
Legible and Completed	✓	☐		
Complete Accumulation Start or Finish Date	✓	☐		
Multiple Labels Defaced	✓	☐		
DOT Labels Attached	✓	☐		
Segregation of Waste By Type	✓	☐		
Signage for ~~SQ~~ Large Generator	✓	☐		
Spill Containment Adequate	✓	☐		
Precipitation Removed, if applicable	✓	☐		
(50') NFPA Buffer for Ignitables or Reactives from Property Line	✓	☐		
"No Smoking" Sign Posted, for ignitables, Reactives, or Incompatible Wastes	✓	☐		
Fire/Spill Control Equipment, if applicable	✓	☐		
Alarms/Communications Available	✓	☐		

Signature	Title	Telephone #	Date
[signature]	ESCC	722-4702 ~~733-2486~~	8/26/02

Attachment B- 10

RCRA - HAZARDOUS WASTE (OUTSIDE DRUM YARD) ACCUMULATION AREA WEEKLY INSPECTION REPORT

PLANT LOCATION Plymouth Road Office Complex

PER 40 CFR 265.16(a) - LEGAL REQUIREMENT

Description of Items Checked	Ok	Not Ok	Remarks	Date Corrected
Drums Corroded/Leaking/Spills	✓			
Drums Closed/Secured	✓			
Waste Labels: Attached	✓			
Completed DOT Names Including NOS Names	✓			
Completed EPA /State Waste Codes	✓			
Legible and Completed	✓			
Complete Accumulation Start or Finish Date	✓			
Multiple Labels Defaced	✓			
DOT Labels Attached	✓			
Segregation of Waste By Type	✓			
Signage for ~~SQ~~ Large Generator	✓			
Spill Containment Adequate	✓			
Precipitation Removed, if applicable	✓			
(50') NFPA Buffer for Ignitables or Reactives from Property Line	✓			
"No Smoking" Sign Posted, for ignitables, Reactives, or Incompatible Wastes	✓			
Fire/Spill Control Equipment, if applicable	✓			
Alarms/Communications Available	✓			

Signature	Title	Telephone #	Date
[signature]	ESCC	722-4702 ~~733-2486~~	8/30/02

* Completed on 8/30/02 due to Laborday vacation
– Compte on – 9/06/02

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY
DETROIT

JOHN ENGLER
GOVERNOR

RUSSELL J. HARDING
DIRECTOR

September 13, 2002

Mr. John L. Troy, CHMM
Manager, Environmental Compliance Programs
Facilities Services and Program Management
DaimlerChrysler Corporation
CIMS 485-01-73
1000 Chrysler Drive
Auburn Hills, Michigan 48326-2766

Dear Mr. Troy:

SUBJECT: MID 099 113 169

On August 27, 2002, staff of the Department of Environmental Quality (DEQ) and the United States Environmental Protection Agency (USEPA) conducted an inspection of DaimlerChrysler Plymouth Road Office Complex, (hereafter Facility), located at 14250 Plymouth Road, Detroit, Michigan, to evaluate compliance of that facility with Part 111, Hazardous Waste Management, Michigan Compiled Laws (MCL) 324.11101 et seq. and Part 121, Liquid Industrial Wastes, MCL 324.12101 et seq. of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA); Subtitle C of the federal Resource Conservation and Recovery Act of 1976, as amended, and any administrative rules or regulations promulgated pursuant to these Acts. A copy of the completed inspection form can be obtained by contacting this office.

As a result of the inspection, staff of the DEQ has determined that the above facility is in violation of the following. Please note however, that USEPA was the lead agency on this inspection, and additional violations may be forthcoming on separate correspondence. This correspondence addresses only Michigan-specific violations and issues:

1. Part 121, Section 12113(1), all vehicles, containers and tanks used to hold liquid industrial waste must be closed or covered when not in use. The following issues were noted:

   a) One container of either used oil or naphtha, in the Engine Build Up Lab, had an open funnel. This funnel was closed shortly thereafter. This issue is considered resolved and no further response is necessary.

   b) One drum in the Engine Build Up Lab was observed with liquid material pooled on the top of the drum. This material is considered to be in an open container and must be removed and properly characterized and disposed of. Please document clean up and disposal of the liquids observed on the top of the drum.

c) In area L 79, one drum of used oil was observed with an open bung. This bung was replaced shortly thereafter. This issue is considered resolved and no further response is necessary.

2. R 299.9306(2), satellite containers of hazardous waste must be marked with the waste code(s) of the waste or the chemical name or names of the waste in the container. The following issues were noted:

a) One drum of waste liquids collected from the aerosol can puncturing operation, observed unmarked, in the old paint booth area.

b) One drum of waste liquids, collected from the aerosol can puncturing operation, observed unmarked, in the car wash area.

c) One drum of paint waste was observed unmarked in the painter's room.

Please document that these containers have been properly marked with the waste code(s) of the waste or the chemical name or names of the waste in the container.

The following comments/issues, which are not specific violations, were identified:

A. R 299.9503(1)(i) pertains to generator on site treatment of a hazardous waste. The puncturing of the aerosol cans may be considered treatment of a hazardous waste. During the inspection, it was indicated that the aerosol cans may or may not be empty, and it was unclear if the 'empty' cans would be at atmospheric pressure or not. If the puncturing of the cans releases the gases (the cans are not at atmospheric pressure when punctured), if the gas is a hazardous waste, then the requirements of R 299.9503 must be complied with by the Facility. The Facility must document the following information to this office:

- If the cans being punctured are at atmospheric pressure or are still pressurized and containing gasses.
- If the cans are pressurized when punctured, what gasses are released (the treatment aspect of the process).
- If the cans are pressurized when punctured, how the released gases are managed.
- If the aerosol puncturing equipment is open when the top lid is ajar and no can is in the unit (i.e., if the drum were to tip with the unit in that position, would waste leak out of the drum or would volatile materials escape from the drum and vent to the atmosphere).

If the cans are pressurized when punctured, and if the gasses released would be a hazardous waste, the aerosol can puncturing process would be considered treatment of a hazardous waste and the process would have to comply with the requirements of R 299.9503.

B. R 299.9306(1)(a)(i) requires a generator of hazardous waste to document inspections of hazardous waste containers and maintain those records on site for at least three years. Please provide copies of hazardous waste container inspection records from August, 2002 and June, 2001 to this office, to document compliance with this regulation. Please also document that these records are maintained on site, and are not kept at DaimlerChrysler's Auburn Hills location.

The Facility must respond to the violations, and is requested to respond to the comments/issues noted in this letter. Please submit documentation to this office regarding those actions taken to address the violations and the comments/issues by **October 21, 2002**. The DEQ will evaluate the response, determine the Facility's compliance status and notify you of this determination.

This letter of warning does not preclude nor limit the DEQ's ability to initiate any other enforcement action, under state or federal law, as deemed appropriate.

Enclosed, for your information, is a short information sheet on waste minimization; an information sheet on recycling fluorescent bulbs; and information on polychlorinated biphenyl (PCB) ballasts.

If you have any questions, please feel free to contact me.

Sincerely,

Jeanette M Noechel

Jeanette M. Noechel
Environmental Quality Analyst
Waste Management Division
313-456-4664

drs

Enclosures

cc: Ms. Sarah Lile, Detroit Department of Environmental Affairs
Mr. Duncan Campbell, USEPA
Dr. Benedict N. Okwumabua, DEQ, WMD

Jeanette Noechel <NOECHELJ@michigan.gov>

08/30/02 09:46 AM

To: Duncan Campbell/R5/USEPA/US@EPA
cc: Lawrence AuBuchon <AUBUCHOL@michigan.gov>, Jeanette Noechel <NOECHELJ@michigan.gov>
Subject: Daimler Chrysler Inspection

I need to know what information you need from me re: the inspection and in what format.

Do you want a copy of my notes?

Do you want any information on any specific violations, such as used oil or state specific requirements? Incidentally, the aisle space requirement (for hw containers, not for used oil containers) is a federal requirement, not just a state requirement (40 CFR 265.35).

I will begin to move forward on my letter. I am expecting that my letter will include Part 121 violations and any state-specific requirements. If I am incorrect on this please let me know.

Let me know how you want to handle this. Thanks.

Thought of the day: They looked like two little boys playing soldier. They seemed to
be having a wonderful time, too wonderful in fact. It made me a little sad, somehow--
Eleanor Roosevelt, on observing FDR and Churchill deep in animated discussion after
Pearl Harbor.

Jeanette M. Noechel
Michigan DEQ, Waste Management Division
Cadillac Place
3058 West Grand Boulevard, Suite 2-300
Detroit, Michigan 48202
Phone: 313-456-4664
Fax: 313-456-4662
Main: 313-456-4700
E-mail address: NOECHELJ@michigan.gov

Duncan Campbell

08/28/02 10:56 AM

To: Jeanette Noechel <NOECHELJ@michigan.gov>
cc: Duncan Campbell/R5/USEPA/US@EPA, Jeanette Noechel <NOECHELJ@michigan.gov>
Subject: Re: Photos taken at Daimler Chrysler

Thanks for the photos. And also, thanks for the assistance. Your knowledge of several specific items helped fill in some holes in my understanding of the significance of the requirement for the emergency contacts to have RCRA knowledge and also the significance of having a complete analysis of a waste in defense of "generator knowledge."

Again, I sincerely apologize for all the confusion I caused from setting tentative dates for this inspection in the past.

DC

I only noted the container with the aerosol cans in the spray booth area. As for the car wash area, I noted one drum of oil filters (crushed), one container holding aerosol cans (the puncturing operation) and a bunch of fuel tanks, some of which contained the Reemulse-W.

I looked at the aerosol can puncturing process only from the point of view of treatment of a hw by a generator under Rule 503 in Part 111. I am presuming that you will address any Subpart CC issues associated with this activity, as it does appear to be treatment in our book. If this is incorrect please let me know.

Any other questions, please let me know. Thanks.

Thought of the day: Getting an idea should be like sitting down on a pin:
it should make you jump up and do something--E. L. Simpson

Jeanette M. Noechel
Michigan Department of Environmental Quality
Waste and Hazardous Materials Division
Cadillac Place
3058 West Grand Boulevard, Suite 2-300
Detroit, Michigan 48202
Phone: 313-456-4664
Fax: 313-456-4662
Main: 313-456-4700
E-mail address: NOECHELJ@michigan.gov

>>> <Campbell.Duncan@epamail.epa.gov> 11/07/02 09:01AM >>>

Thanks for the update. Several times I have started my inspection report only to drop it again before completing it. Although it is not done I am attaching it for your review. Please feel free to comment on
its accuracy. My notes are unclear about the car wash area and the old
spray booth. I make the statement that we saw some containers but am now unsure whether they were all empty except for the satellite which had the puncturing device attached to it. I do recall the satellite did
not have any marking/label on it. If the other containers in the room contained HW, where they labeled and dated? Also, my notes are unclear
where maintenance collects the cans and what the cans contain? I recall
asking and being told that they no longer use brake cleaner to clean parts in the engine build and Jeep Diesel application shop in Building 4
but recall seeing a collection of these cans in the car wash area.
(See attached file: Inspection report.wpd)

Jeanette Noechel <NOECHELJ@michigan.gov>

To: Duncan Campbell/R5/USEPA/US@EPA
cc: Jeanette Noechel <NOECHELJ@michigan.gov>
Subject: Daimler

MID099113169

DAIMLERCHRYSLER

DaimlerChrysler Corporation

RECEIVED
AUG 14 2002
PROGRAM MANAGEMENT BRANCH
Waste, Pesticides & Toxics Division
U.S. EPA - REGION 5

August 8, 2002

EPA Region V
Sharon Kiddon (DR-7J)
77 West Jackson Blvd.
Chicago, IL 60604

To Whom it May Concern,

Please note that the manifests listed below originating from DaimlerChrysler's Plymouth Road Office Complex in Detroit exceeded the 45-day return time limit from the TSDF. Facility environmental staff confirmed that all four shipments reached their proper destinations. Copies of the original manifests with the associated signatures were obtained from the TSDF's on January 25th and 30th, 2002. The manifest copies are on file at the facility.

Manifest #	Date
MI 8195564	06/11/01
MI 3346398	10/16/01
MI 3346402	10/27/01
MI 3346403	10/27/01

If you have any further questions, please contact me at (248) 512-4705.

Sincerely,

John Troy
Manager, Environmental Compliance Programs
Facilities Technical Services
DaimlerChrysler Technical Center & Plymouth Road Office Complex

RECEIVED
AUG 23 2002
RCRA RECORDS ROOM
Waste, Pesticides & Toxics Division
U.S. EPA – REGION 5

DaimlerChrysler Corporation
1000 Chrysler Drive CIMS 485-01-73
Auburn Hills MI USA 48326-2766

DEQ WASTE MANAGEMENT DIVISION
MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

DO NOT WRITE IN THIS SPACE
ATT. ☐ DIS. ☐ REJ. ☐ PR. ☐

Failure to file may subject you to criminal and/or civil penalties under Sections 324.11151 or 324.12118 MCL.

Please print or type.

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: MID 099 113 169
Manifest Document No.: 01012
2. Page 1 of 1
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
DAIMLERCHRYSLER PLYMOUTH RD OFFICE COMPLEX
14240 PLYMOUTH RD. DETROIT, MI ~~48288~~ 48227
14250

4. Generator's Phone (313) 493-2395

A. State Manifest Document Number: MI 8195564
B. State Generator's ID:

5. Transporter 1 Company Name: DIH, INC.
6. US EPA ID Number: MID 049 370 869
C. State Transporter's ID: 277
D. Transporter's Phone: 810-755-2090

7. Transporter 2 Company Name:
8. US EPA ID Number:
E. State Transporter's ID:
F. Transporter's Phone:

9. Designated Facility Name and Site Address
PERMA-FIX OF MICHIGAN
18550 ALLEN ROAD
BROWNSTOWN, MI 48192
10. US EPA ID Number: MID 096 963 194
G. State Facility's ID:
H. Facility's Phone: 1-800-282-9251

11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID NUMBER).	HM	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. SUMP SLUDGE (NON HAZARDOUS NON RCRA)		001	TT	500	G	029L
b.						
c. Received 01/30/02 Angela A. Korln						
d.						

J. Additional Descriptions for Materials Listed Above
SCHEDULE # CM 1411
APPROVAL # AME 16907

K. Handling Codes: a. b. c. d.

RECEIVED
AUG 23 2002
RCRA RECORDS ROOM
Waste, Pesticides & Toxics Division
U.S. EPA — REGION 5

15. Special Handling Instructions and Additional Information

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR; if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: [signature]
Signature: X Priscilla Stevenson
Date: Month 05 Day 11 Year 01

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: [signature]
Signature: [signature]
Date: Month 06 Day 11 Year 01

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name:
Signature:
Date: Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: [signature]
Signature: [signature]
Date: Month 06 Day 11 Year 01

GENERATOR / TRANSPORTER / FACILITY

ALL SPILLS MUST BE REPORTED TO THE MICHIGAN POLLUTION EMERGENCY ALERTING SYSTEM, IN MICHIGAN AT 1-800-292-4706 OR OUT OF STATE AT 517-373-7660 AND THE NATIONAL RESPONSE CENTER AT 1-800-424-8802 24 HOURS PER DAY.

#01012

EPA Form 8700-22 (Rev. 9/89) EQP 5110

DNR
MICHIGAN DEPARTMENT OF NATURAL RESOURCES

DO NOT WRITE IN THIS SPACE
ATT. ☐ DIS. ☐ REJ. ☐ PR. ☐

Required under authority of Act 64, P.A. 1979, as amended and Act 136, P.A. 1969.

Failure to file is punishable under section 299.548 MCL or Section 10 of Act 136, P.A. 1969.

Please print or type

Form Approved. OMB No. 2050-0039 Expires 9-30-94

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. MI DD 8089 9972 6 | Manifest Document No.
2. Page 1 of 1
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
DaimlerChrysler Plymouth Road Office Complex
12250 Plymouth Road
Detroit, MI 48239-2056 K. Davis 514-43-22

4. Generator's Phone (313) 493-2486

A. State Manifest Document Number MI 3346398
B. State Generator's ID

5. Transporter 1 Company Name
ENVIRONMENTAL QUALITY LTD.
6. US EPA ID Number MI 0000013292
C. State Transporter's ID
D. Transporter's Phone

7. Transporter 2 Company Name
8. US EPA ID Number
E. State Transporter's ID
F. Transporter's Phone

9. Designated Facility Name and Site Address
PSC-Petroleum
481 Lycaste
Detroit, MI 48214
10. US EPA ID Number MI D980615298
G. State Facility's ID
H. Facility's Phone

11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID NUMBER).

	HM	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.	N/H
a.	X RQ, Waste Gasoline 3, UN1203, PG II (ERG #128)	001	TT	6180	G	D003 D001 D018	
b.							
c.							
d.							

Received 01/25/02
Angela A. Kirk

RECEIVED JAN 1 1 2002 LITIGATION STRATEGY & CLASS ACTIONS THE GENERAL COUNSEL

J. Additional Descriptions for Materials Listed Above
APPROVAL # WF 093671

K. Handling Codes for Wastes Listed Above
a/ / b/ / c/ / d/ /

15. Special Handling Instructions and Additional Information
Emergency Info: Chemtrec 800-424-9300

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

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Printed/Typed Name: Kenneth E. Davis | Signature: Kenneth E. Davis | Date: Month 1 Day 16 Year 01

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Scott K. McArthur | Signature: Scott K. McArthur | Date: Month 1 Day 16 Year 01

18. Transporter 2 Acknowledgement or Receipt of Materials
Printed/Typed Name | Signature | Date: Month Day Year

FACILITY

19. Discrepancy Indication Space

RECEIVED AUG 23 2002 RCRA RECORDS ROOM Waste Reduction & Toxics Division U.S. EPA – REGION 5

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: J. Reynolds | Signature: J. Reynolds | Date: Month 1 Day 17 Year 01

EPA Form 8700-22 (Rev. 9/88)

GENERATOR 2ND COPY

PR 5110 Rev. 10/92

ALL SPILLS MUST BE REPORTED TO THE MICHIGAN POLLUTION EMERGENCY ALERTING SYSTEM, CENTER AT 1-800-424-8802 24 HOURS PER DAY.

CHIGAN AT 1-800-292-4706 OR OUT OF STATE AT 517-373-7660 AND THE NATIONAL RESPONSE

#01024

DNR
MICHIGAN DEPARTMENT OF NATURAL RESOURCES

DO NOT WRITE IN THIS SPACE
ATT. ☐ DIS. ☐ REJ. ☐ PR. ☐

Required under authority of Act 64, PA 1979, as amended and Act 136, PA 1969

Failure to file is punishable under section 299.548 MCL or Section 10 of Act 136, PA 1969

Please print or type

Form Approved. OMB No. 2050-0039 Expires 9-30-94

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. MID099113169 Manifest Document No. 01022

2. Page 1 of 1

Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
Daimler Chrysler Plymouth Road Office Complex
14250 Plymouth Rd
Detroit, MI 48227-3086 KE Davis 514-13-22

4. Generator's Phone (313) 493-2486

5. Transporter 1 Company Name
Power Vac Service, Inc

6. US EPA ID Number MID098003072

7. Transporter 2 Company Name

8. US EPA ID Number

9. Designated Facility Name and Site Address
ADVANCED RESOURCE RECOVERY
27140 PRINCETON P.O. BOX 330
INKSTER, MI 48141

10. US EPA ID Number MID057002602

A. State Manifest Document Number MI 3346402
B. State Generator's ID
C. State Transporter's ID
D. Transporter's Phone
E. State Transporter's ID
F. Transporter's Phone
G. State Facility's ID
H. Facility's Phone 313-724-8600

GENERATOR

	11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID NUMBER). HM	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.	N/H
a.	Other Waste, Sand-Gravel-Water	001	TT	00400	G	029L	N
b.							
c.	RECEIVED 01/30/02 Angela A. Korth						
d.							

J. Additional Descriptions for Materials Listed Above
Approval # S26-01841-1001B 18418

K. Handling Codes for Wastes Listed Above
a/ /
b/ /
c/ /
d/ /

15. Special Handling Instructions and Additional Information

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

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Printed/Typed Name: Kenneth E. Davis
Signature: Kenneth E. Davis
Date: Month Day Year 10 27 01

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Everett G. Bastin
Signature: Everett G. Bastin
Date: Month Day Year 10 27 01

18. Transporter 2 Acknowledgement or Receipt of Materials
Printed/Typed Name
Signature
Date: Month Day Year

FACILITY

19. Discrepancy Indication Space

RECEIVED
AUG 23 2002
RCRA RECORDS ROOM
Waste, Pesticides & Toxics Division
U.S. EPA — REGION 5

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: Derrick Owens
Signature: Derrick Owens
Date: Month Day Year 10 27 01

EPA Form 8700-22 (Rev. 9/88)

TSDF COPY

PR 5110 Rev. 10/92

DNR
MICHIGAN DEPARTMENT OF NATURAL RESOURCES

DO NOT WRITE IN THIS SPACE
ATT. ☐ DIS. ☐ REJ. ☐ PR. ☐

Required under authority of Act 64, PA 1979, as amended and Act 136, PA 1969

Failure to file is punishable under section 299.548 MCL or Section 10 of Act 136, P.A. 1969

Please print or type

Form Approved. OMB No. 2050-0039 Expires 9-30-94

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. MID099113169 Manifest Document No. 01029

2. Page 1 of 1

Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
Daimler Chrysler Plymouth Road Office Complex
14250 Plymouth Rd
Detroit MI 48227-3086

4. Generator's Phone (313) 493-2486

5. Transporter 1 Company Name: Power Vac Service Inc
6. US EPA ID Number: MID098003072

7. Transporter 2 Company Name:
8. US EPA ID Number:

9. Designated Facility Name and Site Address
Advanced Resource Recovery
27140 Princeton P.O. Box 330
Inkster, MI 48141
10. US EPA ID Number: MID057002602

A. State Manifest Document Number: MI 3346403
B. State Generator's ID:
C. State Transporter's ID:
D. Transporter's Phone: 313-533-7670
E. State Transporter's ID:
F. Transporter's Phone:
G. State Facility's ID:
H. Facility's Phone: 313-724-8600

11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID NUMBER).

	HM	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	Waste No.	N/H
a.	NON-HAZ WASTE WATER	001	TT	8500	G	029L	N
b.							
c.	RECEIVED 01/30/02 Angela A. Kovler						
d.							

J. Additional Descriptions for Materials Listed Above
Approval # WIT-01899-1001B T8421

K. Handling Codes for Wastes Listed Above
a/ /
b/ /
c/ /
d/ /

15. Special Handling Instructions and Additional Information

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

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Printed/Typed Name: Kenneth E Davis
Signature: Kenneth E Davis
Date: Month Day Year 10 27 01

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Nathaniel Bonson
Signature: Nathaniel Bonson
Date: Month Day Year 10 27 01

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name:
Signature:
Date: Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: MICHAEL BIRKETT
Signature: Michael Birkett
Date: Month Day Year 10 27 01

GENERATOR / TRANSPORTER / FACILITY

#01029

EPA Form 8700-22 (Rev. 9/88)

TSDF COPY

PR 5110 Rev. 10/02

RECEIVED AUG 23 2002 RCRA RECORDS ROOM Waste, Pesticides & Toxics Division U.S. EPA—REGION 5

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF THE INSPECTOR GENERAL
NORTHERN DIVISION
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

July 1, 1998

MEMORANDUM

SUBJECT: Resource Conservation and Recovery Act Significant Non-Compliers

FROM: Anthony C. Carrollo /s/
Divisional Inspector General for Audits
Northern Division

TO: David A. Ullrich
Acting Regional Administrator
Region 5

Beginning in July, my office will perform an audit of significant non-complier identification and enforcement under the Resource Conservation and Recovery Act (RCRA). We selected this area for review because similar Office of Inspector General reviews in Regions 1, 3, and 10 indicated that state enforcement of RCRA regulations may not always be consistent with or as stringent as EPA enforcement. A copy of the audit plan write-up is attached. Our overall objective is to evaluate significant non-complier identification and enforcement at the state and regional level. The specific objectives are:

- Did the classification of the violator and the related enforcement action comply with the policy in effect at the time?
- Was the classification correctly recorded in the Resource Conservation and Recovery Information System?
- Did EPA/state ensure that the facility returned to compliance, and was this adequately documented?
- If the enforcement was performed under the 1996 enforcement policy, was the action taken in a timely manner?

We will contact Howard Levin, Region 5 audit coordinator, to schedule an entrance conference as soon as possible. To facilitate starting the audit, we would appreciate having Region 5 managers involved in significant non-complier identification and enforcement activities attend the entrance conference.

If you have any questions concerning this audit, please contact Chuck Allberry at 353-4222.

Attachment

ecc: Howard Levin, Region 5 Audit Liaison
Norman Niedergang, Office of RCRA, Region 5
Tinka Hyde, OECA, Region 5
Gail Ginsberg, ORC, Region 5
Carole Jacobson, Audit Liaison, OIG
Norm Roth, DIGA-HAD

REVIEW OF SIGNIFICANT NON-COMPLIER IDENTIFICATION AND ENFORCEMENT

Background

The Agency's March 15, 1996, Enforcement Response Policy (ERP) establishes two types of RCRA violators: Significant Non-Compliers (SNC) and other Secondary Violators (SV). The 1996 ERP defines SNCs as:

> those facilities which have caused actual exposure or a substantial likelihood of exposure to hazardous waste or hazardous waste constituents; are chronic or recalcitrant violators; or deviate substantially from the terms of a permit, order, agreement or from RCRA statutory or regulatory requirements.

SVs are defined as:

> typically first time violators and/or violators which pose no actual threat or a low potential threat of exposure to hazardous waste or constituents. A facility classified as a SV should not have a history of recalcitrant or non-compliant conduct. Violations associated with a SV should be of a nature to permit prompt return to compliance with all applicable rules and regulations.

This represents a change from the categories of violators defined in the previous ERP, issued December 1987. In the 1987 ERP there were four categories of violators defined: High Priority Violators, Significant Non-Compliers, Medium Priority Violators, and Low Priority Violators.

If a facility is an SV, according to the 1996 ERP, an informal enforcement action is the minimally appropriate enforcement response. In an informal enforcement action, a facility receives a notification of its non-compliance and must correct the non-compliance by an established date. Compliance assistance efforts as set forth in the Compliance Incentives for Small Business policy may also be offered to an SV. A formal enforcement action with economic sanctions is appropriate for a facility which has been designated as an SNC or for an SV which has failed to return to compliance following an informal enforcement action. Formal enforcement initiates a civil, criminal, or administrative process resulting in an enforceable agreement or order.

Although EPA is responsible for developing the RCRA hazardous waste program, states play a crucial role in implementing the program. RCRA encourages EPA to authorize states to run their own hazardous waste programs as an alternative to direct implementation by EPA. In addition, the recently developed National Environmental Performance Partnership System (NEPPS) is intended to further state program self-management and flexibility while improving environmental and programmatic accountability to Congress and the public. Accountability is also essential for measuring performance and meeting the requirements of the Government

Performance and Results Act (GPRA). OECA has established a new set of performance measures for fiscal 1996/1997 named Reporting for Enforcement and Compliance Assurance Priorities (RECAP). Significant Noncompliance is one of the fiscal 1996/1997 RECAP measures for the RCRA program area.

Reasons for Selection

States have a direct and significant impact on this performance measure. State inspectors conduct a large proportion of RCRA inspections, and states are primarily responsible for identifying SNCs and taking formal enforcement actions against them. During previous audit work in Regions 1, 3 and 10, we found indications that enforcement of RCRA regulations by states may not always be consistent with or as stringent as enforcement by EPA. Therefore, it is important to determine whether states are identifying SNCs in accordance with federal policy. For the RCRA hazardous waste program to be effective in reducing risks to human health and the environment, it is essential that facilities out of compliance with RCRA regulations be identified and brought back into compliance.

Expected Benefits

An audit to evaluate state and regional effectiveness in SNC identification and enforcement could promote consistency across RCRA programs in states and regions, improve accountability, and reduce risks to human health and the environment from hazardous waste.

Audit Objective

The overall audit objective is to evaluate SNC identification and enforcement at the state and regional level. The specific objectives are:

- Did the classification of the violator and the related enforcement action comply with the policy in effect at the time?
- Was the classification correctly recorded in the Resource Conservation and Recovery Information System?
- Did EPA/state ensure that the facility returned to compliance, and was this adequately documented?
- If the enforcement was performed under the 1996 enforcement policy, was the action taken in a timely manner?

Scope

We will review RCRA enforcement files. We will compare information in the files with state or regional enforcement actions taken against facilities, and interview officials concerning enforcement processes and individual cases.

Location and Resources

Field work will be conducted by the Northern Audit Division. The audit team will consist of an auditor-in-charge and two other auditors. The work will be conducted at Region 5 and at one selected state.

BRS Facility Waste Detail Repo

Generated Waste Shipped To Offsite Facilities:

OFFSITE FACILITY ID: MID060975844
NAME: MICHIGAN RECOVERY SYSTEMS INC.
ADDRESS: 36345 VAN BORN ROAD
ROMULUS, MI 481740000

TONS SENT	TONS GENERATED	ORIGIN CODE	FORM CODE	SOURCE CODE	WASTE CODE1	WASTE CODE2	WASTE CODE3	WASTE CODE4
14.664	14.664	1 = PRDCTN/SERVICE ACT.	B209 = Organic P,I,L, or V	A58 = Discard out-of-date	D001 = Ignitable waste	D018 = Benzene	D035 = Methyl ethyl ketone	

OFFSITE FACILITY ID: MID980615298
NAME: PETROCHEM PROCESSING GRP. OF NORTRU, INC
ADDRESS: 421 LYCASTE
DETROIT, MI 482140000

TONS SENT	TONS GENERATED	ORIGIN CODE	FORM CODE	SOURCE CODE	WASTE CODE1	WASTE CODE2	WASTE CODE3	WAS COD
3.523	3.523	1 = PRDCTN/SERVICE ACT.	B102 = Aq. wst/low tox org	A59 = Oth prod ot/int proc	D001 = Ignitable waste	D018 = Benzene		
.175	.175	1 = PRDCTN/SERVICE ACT.	B102 = Aq. wst/low tox org	A94 = Laboratory wastes	D001 = Ignitable waste			
3.168	3.168	1 = PRDCTN/SERVICE ACT.	B203 = Nonhalogenated solvt	A06 = Spray rinsing	D001 = Ignitable waste			

Generated Waste Managed On Site:

Note: EPA has no records of Generated Waste Managed On Site for this Facility.

Waste Received From Offsite Facilities:

Note: EPA has no records of Waste Received From Offsite Facilities for this Facility.

U.S. Environmental Protection Agency

Facility Registry System (FRS)

Recent Additions | Contact Us | Print Version EF Search: GO!

EPA Home > Envirofacts > FRS > Report

Facility Detail Report

Report Error

FRS

Facility Name:	CHRYSLER CORPORATION JEEP AND TRUCK
Location Address:	14250 PLYMOUTH ROAD, 514-13-22
Supplemental Address:	
City Name:	DETROIT
State	MI
County Name:	WAYNE
ZIP/Postal Code:	482273086
EPA Region:	05
Congressional District Number:	15
Legislative District Number:	
HUC Code:	04090004
Federal Facility:	NO
Tribal Land :	
Latitude:	42.372871
Longitude:	-83.183569
Method:	ADDRESS MATCHING-HOUSE NUMBER
Reference Point Description:	PLANT ENTRANCE (GENERAL)
Supplemental Environmental Interests:	

Report Facility Discrepancy

Map this facility

Environmental Interests

Organizations

Affiliation Type	Name	DUNS Number	Information System	Mailing Address	Report Discrepancy
OPERATOR	NAME NOT REPORTED		RCRAINFO	View	Report
OWNER/OPERATOR		148721491	AIRS/AFS		Report

Alternative Names

Alternative Name
CHRYSLER CORP
CHRYSLER WEST PLYMOUTH ROAD OFFICE
DAIMLERCHRYSLER PLYMOUTH RD OFFICE CMPLX

Query executed on: AUG-23-2002

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Last updated on Friday, August 23rd, 2002
http://oaspub.epa.gov/enviro/fii_query_dtl.disp_program_facility

PHILIP SERVICES

Waste Characterization Report

Petro-Chem Processing
421 Lycaste - Detroit, MI 48214

Approval # 089024

F. IS WASTE ANY OF THE FOLLOWING? *At Least One Box Must Be Checked.*

☐ Radioactive ☐ Ignitable Solid ☐ Pyrophoric ☐ Water Reactive ☐ Biological ☐ Oxidizer
☐ Shock Sensitive ☐ Reactive (other) ☐ Activated Carbon ☐ Asbestos ☐ Reactive Metal Powders ☒ None Apply
☐ Nitro Cellulose/Lacquer Dust ☐ NIOSH Human-Positive Carcinogens ☐ NESHAP Wastes (Benzene, etc.)

G. USEPA / STATE WASTE IDENTIFICATION

1. Hazardous Waste (40CFR 261 Subparts C & D or MI Act 451 Part 111) or Liquid Industrial Waste (MI Act 451 Part 121)? ☒ Yes ☐ No
2. Regulated by TSCA? ☐ Yes ☒ No (PCBs, etc.)
3. List ALL Applicable Waste Codes: D001

H. SHIPPING INFORMATION

1. Is this a DOT Hazardous Material (49CFR 172.101 & 173 Subpart D)? ☒ Yes ☐ No 2. Reportable Quantity (RQ) in pounds 12,000
3. DOT Shipping Name Waste Flammable liquid N.O.S. Hazard Class ____ UN/NA ____
PG II ERG 128 Hazardous Constituents for "n.o.s." Napthalene, xylene, Naptha
4. Method of Shipment: ☐ Bulk Liquid ☐ Bulk Solid ☒ Container (Size / Type): 55g Dr Inner Containers (Loose-Packs) ☐ Yes ☒ No
5. Number of Units to Ship Now: 1 6. Anticipated Volume / Units per Year: 1 or ☐ One Time

I. SPECIAL HANDLING INFORMATION ____

J. LAND DISPOSAL RESTRICTION NOTIFICATION ATTACHED ☐ YES ☒ NO

K. CERTIFICATION STATEMENT

I hereby represent and warrant that I have personally examined and am familiar with the information contained and submitted in this and all attached documents. Based on my inquiry and personal knowledge of those individuals responsible for supplying or obtaining the information, the information contained herein is true, accurate, and complete to the best of my knowledge and belief. Furthermore, no material fact has been omitted as to make this information misleading. I understand that others may rely on this representation and warranty in the handling and processing of the waste material described herein. If this box is checked ☐, I request Petro-Chem not to correct any inconsistencies. Any corrections Petro-Chem makes will be consistent with the results of the sample characterization and/or regulatory requirements. A faxed copy of the final profile will be sent for my records.

Printed Name: Kenneth E. Davis Title: Envir. & Safety Specialist

Generator's Signature: Kenneth E. Davis Date: 07-24-00

L. GENERATOR'S CHAIN OF CUSTODY RECORD

INSTRUCTIONS: Collect a representative 1-pint sample of the waste described in the above referenced PETRO-CHEM PROFILE using an appropriate container. If the sample is oil, we will need a one (1) quart sample. A representative sample is one obtained using any of the applicable sampling methods cited in 40 CFR 261-Appendix 1. Fill in the sampling information in the spaces provided below. Complete all items on the label, then remove the label and affix it to the sample bottle. If you have problems obtaining a representative sample of your waste, please contact your PHILIP SERVICES sales representative.

1. ____
SAMPLING METHOD: *(indicate method / utensils employed in sampling)*

2. ____
SAMPLE SOURCE: *(indicate drum, tank, pit, etc.)*

3. SAMPLE LABEL FOR SAMPLE SUBMITTAL: Sample No. ____
Complete the attached label, peel off, and affix to your sample container.

If applicable, sample label will be attached here

Ship the sample and this form to: PETRO-CHEM PROCESSING
421 Lycaste - Detroit, MI 48214
(313) 824 5840 • SALES FAX: (313) 824 5423
EPA ID: MID 980 615 298

4. CHAIN OF CUSTODY *Each person who handles the sample must sign below when the sample passes from one to another.*

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time

Rev 1 - 4/20/99

EPA United States Environmental Protection Agency

Handler Menu

RCRA

DAIMLERCHRYSLER PLYMOUTH RD OFFICE CMPLX **DETROIT** **MID099113169**

The following Source(s) exist for this handler:

Act Loc	Source	Sequence	Receipt Date
MI	N	1	10/5/1984

All Data

Add/Update Notification Source Form

Add/Update Part A Form

Universe Calculations

Go To

URL: /Handler/HAND_main.asp

EPA United States Environmental Protection Agency

Handler Information

RCRAInfo

DAIMLERCHRYSLER PLYMOUTH RD OFFICE CMPLX **DETROIT** **MID099113169**

Select the information to process:

Basic Handler Information

Handler Id	Handler Name	Facility Identifier	Extract Flag	Region	State	Universes
MID099113169	DAIMLERCHRYSLER PLYMOUTH RD OFFICE CMPLX		X	05	MI	LQG

Previous Name Information

Act Loc	Receive Date	Handler Name

Location Address Information

Act Loc	Street No.	Street	City	County	State	Zip	Land Type	State District
MI		14250 PLYMOUTH RD	DETROIT	WAYNE	MI	48227		

Mailing Address Information

Act Loc	Street No.	Street	City	State	Zip
MI		14250 PLYMOUTH RD	DETROIT	MI	48227

Contact Information

Act Loc	Type	Title	First Name	Last Name	Phone	Street	City	State	Zip
MI	A	~~R~~	~~JAMES~~	~~ALLEN~~	313-493-3018	14250 PLYMOUTH RD	DETROIT	MI	48232
MI	N	~~ENV/SAFETY~~	~~GERARD J~~	~~VAN DE VYVER~~	313-493-3018	14250 PLYMOUTH RD	DETROIT	MI	48227

NOW INFORMATION IN LAST 2 WEEKS

Owner Information

Act Loc	Seq	Indicator	Type	Change Date	Owner/Operator Name	Phone	Street	City	State	Zip
MI	1	CO	P		CHRYSLER CORP	312-555-1212	ADDRESS NOT REPORTED	CITY NOT REPORTED	AK	99998

Operator Information

Act Loc	Seq	Indicator	Type	Change Date	Owner/Operator Name	Phone	Street	City	State	Zip
MI	2	CP	P		NAME NOT REPORTED	312-555-1212	ADDRESS NOT REPORTED	CITY NOT REPORTED	AK	99998

Miscellaneous Information

Act Loc	Previous Id	Second Id	Ack Flag	Ack Date	River Basin	TSD Date	Non-notifier	Off-site receipt	Accessibility
MI									

Location Coordinates			
Act Loc	Source	Latitude Measure	Longitude Measure
MI			

Environmental Priority Ranking			
Act Loc	EPR Date	EPR Status	EPR Notes

SIC Information				
Act Loc	Seq	Source	Code	Primary
MI	0001	R	3711	P

Other Permit Information			
Act Loc	Number	Type	Permit Description
MI	23532000135	Q	

Activity Summary Information										
Act Loc	Source	Seq	Receipt Date	Gen - Fed Reg.	Trans - Fed Reg.	TSD - Fed Reg.	HW Fuel - Fed Reg.	Used Oil - Fed Reg.	UIC	Recy
MI	N	1	10/5/1984	LQG - R	-	-	-	-		

Hazardous Waste Stream Information						
Act Loc	Sequence	Source	Date	Amount	Unit of Measure	Desc
MI	0001	N	10/5/1984	0		

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Full Document:	
Title:	CLARIFICATION ON THE AMOUNT, TYPE, AND FREQUENCY OF TRAINING REQUIRED FOR PERSONNEL HANDLING HAZARDOUS WASTE AT FACILITIES
Date:	10/07/93
To:	Citizen
From:	Denit
Organization of Recipient:	NA
Description:	generator personnel training requirements; personnel must have training in proper waste handling and emergency procedures for waste at facility; personnel moving waste from satellite accumulation areas to 90-day (or 180-day) generator accumulation area must have appropriate training; emergency coordinator must be accessible
Part(s) & Subpart(s):	262 Subpart C
Section(s):	262.34
Statutory Citation(s):	NA
Topic(s):	Generators; Hazardous Waste; Large Quantity Generators (LQG)
Approximate Number of Hardcopy Pages:	3
Fax-On-Demand Code:	11779
EPA Document Number:	NA
RPC Number:	10/07/93 - 4
RPPC Number (if applicable):	9451.1993(02)
NTIS Number (if applicable):	NA
OSWER Directive Number (if applicable):	NA
Ordering & Availability:	Contact the RCRA, Superfund & EPCRA Call Center at (800) 424-9346

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9451.1993(02)

United States Environmental Protection Agency
Washington, D.C. 20460
Office of Solid Waste and Emergency Response

October 7, 1993

Mr. Mark Bell
1001 Fannin Street
Suite 2050
Houston, Texas 77002-6778

Mr. Mark Bell:

Thank you for your letter of February 3, 1993, in which you requested clarification on the amount, type, and frequency of hazardous waste training for persons working in and around facilities where hazardous waste is handled. We apologize for the delay in our response.

The type of information you request is best provided based on a site-specific assessment of each situation. This assessment can be made by the authorized State agency (or, if the State is not authorized, the EPA Regional office) that implements the hazardous waste program in the State in which the facility is located. Also note that under Section 3009 of RCRA (42 U.S.C. Section 6929), States retain authority to promulgate regulatory requirements that are more stringent than federal regulatory requirements.

In general, EPA requires generators of more than 1,000 kilograms per month (kg/mo) of hazardous waste (or more than 1 kg/mo of acutely hazardous waste) who accumulate waste on site, to comply with the same personnel training requirements as treatment, storage, and disposal facilities (40 CFR 262.34 and 265.16). The generator's training program must be "designed to ensure that facility personnel are able to respond effectively to emergencies by familiarizing them with emergency procedures, emergency equipment, and emergency systems..." (40 CFR 265.16(a)(2)).

These requirements are intended to ensure that personnel are adequately prepared to properly handle the types of hazardous wastes that are managed at the facility and to respond to any emergencies that are likely to arise.

The regulations at 40 CFR part 262, 264 and 265, do not specifically address some of the scenarios you present. We have provided information from Federal Register preamble discussions and EPA guidance documents listed below to assist you in developing appropriate training programs. We recommend however, that determinations on information such as this be obtained from your State (or appropriate Regional office).

Additional information on personnel training for persons who work with hazardous waste can be found in:

RCRA Personnel Training Guidance Manual, U.S. EPA, September 1980, EPA FW-915. Order from: National Technical Information Service (703)487-4650, Order number PB87-193 348. Cost: $27.00.

Permit Applicant's Guidance Manual For the General Facility Standards of 40 CFR 264, U.S. EPA, September 1980, EPA FW 915. Order from: National Technical Information Service (703)487-4650, Order number PB87-151 064. Cost: $44.50.

You also may find the following Federal Register notice preamble discussions to be helpful:

49 FR 49570 December 20, 1984;
51 FR 10164 March 24, 1986; and,
45 FR 33182 May 19, 1980.

Generally, 40 CFR Part 262.34(d)(5)(iii) provides that "The generator must ensure that all employees are thoroughly familiar with proper waste handling and emergency procedures, relevant to their responsibilities during normal facility operation and emergencies." Thus, if a person is handling hazardous waste, he or she should have had training in proper waste handling and emergency procedures appropriate to the types of waste handled, the management methods used, and the hazards presented by the waste type and waste management method. In addition "there must be at least one employee either on the premises or on call...with the responsibility for coordinating all emergency response measures..." (40 CFR 262.34(d)(5)(i)). This may apply when wastes are taken from a satellite accumulation area to a 90-day storage area and to persons who will be responsible for managing the waste (e.g., persons managing wastes in drums and tanks.)

Is it the Incident Commander's Responsibility

but do they have to be trained in RCRA

If you have further questions about training needs, contact your authorized State agency (or, if the State is not authorized, the EPA Regional office) that implements the hazardous waste program in the State in which the facility is located. If you have questions about this letter, contact Ann Codrington of my staff at (202) 260-8551.

Sincerely,
Jeffrey D. Denit
Acting Director,
Office of Solid Waste

Department of Environmental Quality
Michigan.gov
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Common Waste Generator Violations

The following violations index is organized into categories of common waste generator violations. The violation categories are not listed by severity or frequency of findings. Click on the category to access the list of violations commonly found. These violations have been identified during hazardous waste and liquid industrial waste inspections by Michigan Department of Environmental Quality (DEQ) Waste Management Division staff. This is not a comprehensive list of all the requirements staff look for while doing inspections.

CONTAINER

EMERGENCY PLANNING AND TRAINING

RECORDKEEPING

USED OIL

WASTE ACCUMULATION AREA

WASTE DETERMINATION

If you are looking for specific information about a facility's compliance history, contact the Waste Management Division district office that oversees the area where the facility is located. If you are looking for environmental information about a facility or area, you may want to visit the National Institute for the Environment?s Your Neighborhood site to access various US Environmental Protection Agency (EPA) databases.

If you are unfamiliar with hazardous waste requirements, you may want to review other sources for more information. Click on highlighted text to access guidance documents on a particular subject or link to another internet site. For example, the DEQ Guide to Understanding Hazardous Waste Management in Michigan and EPA?s RCRA Orientation Manual and Understanding the Hazardous Waste Rules, A Handbook for Small Businesses provide overviews of the requirements. Additional information is available in the DEQ publications Conditionally Exempt Small Quantity Generator, Small Quantity Generator Requirements and Small Quantity Generator Management Practices. State waste regulations can be downloaded or purchased from the Waste Management Division. Many state rules adopt federal requirements. The federal waste regulations can be downloaded or purchased from the US Government Printing Office by calling 202-512-1800. Additional resource links are included under the various violations.

up

CONTAINER

Hazardous waste generators are required to put waste into containers that are compatible with the type of waste that is placed in it, use containers that are in good condition, properly label the containers, and keep the containers closed. In addition, there are pre-transporter requirements regarding packaging and labeling shipping containers according to US Department of Transportation (US DOT) regulations [R 299.9305 and R 299.9306].VIOLATIONS INCLUDE:

1. Listing incorrect or incomplete information on hazardous waste labels
    - Missing the accumulation date (the date you first put waste into the container)
    - Missing the words "Hazardous Waste"
    - Missing the hazardous waste number
2. Failing to keep the containers closed, except when waste is added or removed
    - Leaving funnels in place that are not screwed into bung and do not have the capability of being kept closed
3. Failing to have appropriate US DOT placards available for transporters

Above are common generator violations that have been identified during hazardous waste inspections by Department of Environmental Quality (DEQ), Waste Management Division staff. The violations are not listed by severity or frequency of findings. The hazardous waste administrative rules referenced are promulgated under Part 111 of the Natural Resources and Environmental Protection Act, 1994 PA, as amended (Act 451).

ADDITIONAL RESOURCE LINKS:

- US DOT regulations specify the containers, placards, etc that must be used during hazardous materials transportation
- Michigan State Police, Motor Carrier Division, Hazardous Materials Unit guidance on placarding, shipping papers, transporting hazardous materials, etc.
- Labeling requirements and sample labels for transportation, accumulation, universal waste (link to be developed)

up

EMERGENCY PLANNING AND TRAINING

Hazardous waste generators are required to be prepared and be able to respond to incidents involving hazardous waste releases, and report any releases under specific conditions [R 299.9306].PLANNING VIOLATIONS INCLUDE:

1. Large Quantity Generators
    - Missing current written Contingency Plan
    - Missing, outdated, or incomplete emergency coordinator and other contacts information including addresses and home phone numbers
    - Missing list of emergency equipment and description of its capabilities
    - Missing facility map showing location of emergency equipment
    - Failing to include an evacuation plan that includes the signal to begin evacuation, evacuation routes and alternative evacuation routes
    - Failing to mail plan to local emergency responders
    - Failing to keep documentation that outside organizations, such as fire department, police, hospitals, local

emergency planning committees, etc. were contacted

2. Small Quantity Generators
   - Missing, outdated, or incomplete emergency posting information by telephones for Small Quantity Generators
   - Failing to make arrangements with outside organizations, such as fire department, police, hospitals, local emergency planning committees, etc., that you would need to call if an emergency occurred.

TRAINING VIOLATIONS INCLUDE:

1. Missing or incomplete documented records of required training for Large Quantity Generators
   - Missing job title
   - Missing job description
   - Missing employee name
2. Missing written training description for Large Quantity Generators
3. Failing to have Large Quantity Generator employees trained annually
4. Using other emergency training programs required by other regulations, including videos or seminars, which do not have a portion clearly devoted to the hazardous waste requirements and does not cover the facility?s contingency plan

Above are common generator violations that have been identified during hazardous waste inspections by Department of Environmental Quality (DEQ), Waste Management Division staff. The violations are not listed by severity or frequency of findings. The hazardous waste administrative rules referenced are promulgated under Part 111 of the Natural Resources and Environmental Protection Act, 1994 PA, as amended (Act 451).

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- Michigan State Police, Emergency Management Division has guidance workbooks for emergency planning.
- EPA?s Chemical Emergency Preparedness and Prevention Office has various emergency preparedness and response publications.
- EPA?s RCRA, Superfund & EPCRA Hotline Training Modules contain an introduction and regulatory summary for various topics.
- DEQ Spill Reporting Requirements has a summary of various release reporting requirements.
- DEQ Pollution Incident Prevention Plan Informational Packet contains planning requirements under Part 31, Water Resources Protection, of Act 451. The suggested format/contents may be used by a Small Quantity Generator or Conditionally Exempt Small Quantity Generator who choose to develop a written emergency response plan and are not required to prepare a plan under other regulations.
- Department of Consumer and Industry Services, Occupational Health Division maintains a list of HAZWOPER trainers. Call 517-322-1608 to obtain a copy or download the educational handout material order form. If you hire training providers to do your training, you will need to confirm with them if they will incorporate hazardous waste training pertinent to your company?s activities into the program.

up

RECORDKEEPING

Hazardous waste generators are required to properly prepare, maintain, and submit copies of various records [R 299.9304, R 299.9307, R 299.9308, and R 299.9311].VIOLATIONS INCLUDE:

1. Failing to have a copy of manifest signed by designated facility within the applicable timeframe
2. Failing to send manifest copies within the applicable timeframe to the Waste Management Division; and if sending to an out of state treatment, storage, and disposal facility, failing to send manifest copies to both the Waste Management Division and the other state agency
3. Using wrong generator identification number on manifests or other reports (for example using a Michigan identification number instead of the facility?s EPA identification number if they had been issued both numbers, or for those companies which have several sites, writing down another one of their site numbers instead of the site number where the waste was generated)
4. Missing or incorrect waste codes or USDOT descriptions on manifests
5. Missing copy of EPA?s biennial hazardous waste report for Large Quantity Generators
6. Missing land disposal restriction (LDR) notification and waste analysis documents
7. Missing or incomplete information on the LDR documents such as categories, underlying hazardous constituents, and manifest numbers
8. Listing LDR information that is inconsistent with waste characterization

Above are common generator violations that have been identified during hazardous waste inspections by Department of Environmental Quality (DEQ), Waste Management Division staff. The violations are not listed by severity or frequency of findings. The hazardous waste administrative rules referenced are promulgated under Part 111 of the Natural Resources and Environmental Protection Act, 1994 PA, as amended (Act 451).

ADDITIONAL RESOURCE LINKS:

- Manifest Tracking Log
  - Small Quantity Generator and Conditionally Exempt Small Quantity Generator Timetable Flowchart
  - Large Quantity Generator Timetable Flowchart
- EPA?s biennial reporting system database
- EPA?s Land Disposal Restriction resource index
- USDOT shipping descriptions

299.9810

→ 299.11003(1)(x)

up

USED OIL

Used oil generators have specific used oil and spent filter management requirements regarding waste oil characterization, accumulation, shipping and disposal under several different regulations. Waste Management Division inspectors are looking for compliance with the used oil management requirements under Part 111 Hazardous Waste Management administrative rules [R 299.9809 through R 299.9816] and Part 121 Liquid Industrial Waste.VIOLATIONS INCLUDE:

1. Failing to label used oil containers and tanks with the words "Used Oil"
2. Failing to keep the containers closed, except when waste is added or removed

emergency planning committees, etc. were contacted

2. Small Quantity Generators
   - Missing, outdated, or incomplete emergency posting information by telephones for Small Quantity Generators
   - Failing to make arrangements with outside organizations, such as fire department, police, hospitals, local emergency planning committees, etc., that you would need to call if an emergency occurred.

TRAINING VIOLATIONS INCLUDE:

1. Missing or incomplete documented records of required training for Large Quantity Generators
   - Missing job title
   - Missing job description
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2. Missing written training description for Large Quantity Generators
3. Failing to have Large Quantity Generator employees trained annually
4. Using other emergency training programs required by other regulations, including videos or seminars, which do not have a portion clearly devoted to the hazardous waste requirements and does not cover the facility?s contingency plan

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3. Using wrong generator identification number on manifests or other reports (for example using a Michigan identification number instead of the facility?s EPA identification number if they had been issued both numbers, or for those companies which have several sites, writing down another one of their site numbers instead of the site number where the waste was generated)
4. Missing or incorrect waste codes or USDOT descriptions on manifests
5. Missing copy of EPA?s biennial hazardous waste report for Large Quantity Generators
6. Missing land disposal restriction (LDR) notification and waste analysis documents
7. Missing or incomplete information on the LDR documents such as categories, underlying hazardous constituents, and manifest numbers
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Above are common generator violations that have been identified during hazardous waste inspections by Department of Environmental Quality (DEQ), Waste Management Division staff. The violations are not listed by severity or frequency of findings. The hazardous waste administrative rules referenced are promulgated under Part 111 of the Natural Resources and Environmental Protection Act, 1994 PA, as amended (Act 451).

ADDITIONAL RESOURCE LINKS:

- Manifest Tracking Log
  - Small Quantity Generator and Conditionally Exempt Small Quantity Generator Timetable Flowchart
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1. Failing to label used oil containers and tanks with the words "Used Oil"
2. Failing to keep the containers closed, except when waste is added or removed

- Leaving funnels in place that are not screwed into bung and do not have the capability of being kept closed

3. Leaving containers exposed to weather or vandals
4. Failing to analyze and retain total halogen testing records for used oil
5. Failing to have records of liquid industrial waste, including used oil, that was shipped with a consolidated manifest
6. Failing to use manifest, when required, for liquid industrial waste shipments
7. Failing to have a copy of manifest signed by designated facility
8. Failing to send manifest copies to appropriate state agencies within the applicable timeframe
9. Using wrong generator identification number on manifests (for example using a Michigan identification number instead of the facility?s EPA identification number if they had been issued both numbers, or for those companies which have several sites, writing down another one of their site numbers instead of the site number where the waste was generated)

Above are common generator violations that have been identified during hazardous waste and liquid industrial waste inspections by Department of Environmental Quality (DEQ), Waste Management Division staff. The violations are not listed by severity or frequency of findings. The hazardous waste administrative rules referenced are promulgated under Part 111 of the Natural Resources and Environmental Protection Act, 1994 PA, as amended (Act 451)."

ADDITIONAL RESOURCE LINKS:

- Recycled Materials Market Directory for a list of companies who recycle used oil and filters
- Manifest Tracking Log
  - Small Quantity Generator and All Liquid Industrial Waste Shipments Timetable Flowchart
  - Large Quantity Generator Timetable Flowchart
- US DOT regulations specify the containers, placards, etc that must be used during hazardous materials transportation
- Michigan State Police, Motor Carrier Division, Hazardous Materials Unit guidance on placarding, shipping papers, transporting fuel oil, etc.
- Labeling requirements and sample labels for transportation and accumulation (link to be developed)

up

WASTE ACCUMULATION AREA

Hazardous waste generators have specific requirements regarding how and where they accumulate their hazardous waste, including requirements for satellite accumulation [R 299.9306].VIOLATIONS INCLUDE:

1. Failing to conduct weekly inspections. Missing or incomplete written documentation of inspections by Large Quantity Generators.
2. Exceeding the allowable on-site accumulation time frame for hazardous waste.
3. Having inadequate space or aisle width to properly inspect containers and for emergency personnel access.
4. Failing to have labels visible for inspections.
5. Leaving containers exposed to weather or vandals.

6. Lacking or inadequate secondary containment including:
   - Lacking or inadequate resistant coating and having cracked surfaces on secondary containment,
   - Lacking or inadequate squirt protection, and
   - Failing to have containers elevated or base of containment sloped to drain or sump, when required.

SATELLITE ACCUMULATION

Generators may choose to accumulate waste in limited amounts at or near the point of generation under specific conditions. This practice is commonly referred to as satellite accumulation [R 299.9306(2)].

VIOLATIONS INCLUDE:

1. Missing the words "Hazardous Waste" on container.
2. Missing the hazardous waste number or chemical name that identifies the contents on container.
3. Exceeding the allowable volume for each satellite site (total of 55 gallons of hazardous waste or one quart of acute or severely toxic hazardous waste).
4. Failing to keep the container at or near the point of waste generation. Lacking operator control of the process that generates the waste that goes into the satellite container.
5. Failing to keep satellite containers closed, except when waste is added or removed.
6. Forgetting to list the date the satellite container(s) reaches the 55 gallons limit and failing to manage it under all of the applicable hazardous waste accumulation area requirements within the allowable timeframe.

Above are common generator violations that have been identified during hazardous waste inspections by Department of Environmental Quality (DEQ), Waste Management Division staff. The violations are not listed by severity or frequency of findings. The hazardous waste administrative rules referenced are promulgated under Part 111 of the Natural Resources and Environmental Protection Act, 1994 PA, as amended (Act 451).

ADDITIONAL RESOURCE LINKS:

- Weekly Hazardous Waste Maintenance Checklist is a form to assist in documenting weekly inspections. This form is not required to be used.
- Satellite Accumulation Areas WMD operational memo 111-2 (link to be developed)

up

WASTE DETERMINATION

Hazardous waste generators are required to determine if the waste is a hazardous waste by either knowledge of the waste stream or by testing it, and maintain records of that determination [R 299.9302].VIOLATIONS INCLUDE:

1. Failing to properly identify all the hazardous waste generated at the business. Commonly overlooked wastes include, but is not limited to, partially empty aerosol cans, electric lamps, electronic equipment, batteries, antifreeze, rags and other textiles, sorbents, spent paint filters, spent activated carbon filter media, and sand blasting residue.

2. Failing to have waste evaluations documented and keep records for at least 3 years.
3. Managing universal waste, such as electric lamps, mercury devices, batteries, and pesticides, incorrectly [R 299.9228].

Above are common generator violations that have been identified during hazardous waste inspections by Department of Environmental Quality (DEQ), Waste Management Division staff. The violations are not listed by severity or frequency of findings. The hazardous waste administrative rules referenced are promulgated under Part 111 of the Natural Resources and Environmental Protection Act, 1994 PA, as amended (Act 451).

ADDITIONAL RESOURCE LINKS:

Hazardous Waste Identification EPA Hotline Training Module discusses how to identify hazardous waste

Solid and Hazardous Waste Exclusions EPA Hotline Training Module discusses the regulatory exclusions of some waste streams from the hazardous waste regulations

EPA?s waste identification resource index provides a list of various publications or EPA clarifications about hazardous waste characterizations.

up

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Common Waste Generator Violations

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1. Large Quantity Generators
    - Missing current written Contingency Plan
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    - Missing facility map showing location of emergency equipment
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TRAINING VIOLATIONS INCLUDE:

1. Missing or incomplete documented records of required training for Large Quantity Generators
   - Missing job title
   - Missing job description
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5. Missing copy of EPA?s biennial hazardous waste report for Large Quantity Generators
6. Missing land disposal restriction (LDR) notification and waste analysis documents
7. Missing or incomplete information on the LDR documents such as categories, underlying hazardous constituents, and manifest numbers
8. Listing LDR information that is inconsistent with waste characterization

Above are common generator violations that have been identified during hazardous waste inspections by Department of Environmental Quality (DEQ), Waste Management Division staff. The violations are not listed by severity or frequency of findings. The hazardous waste administrative rules referenced are promulgated under Part 111 of the Natural Resources and Environmental Protection Act, 1994 PA, as amended (Act 451).

ADDITIONAL RESOURCE LINKS:

- Manifest Tracking Log
  - Small Quantity Generator and Conditionally Exempt Small Quantity Generator Timetable Flowchart
  - Large Quantity Generator Timetable Flowchart
- EPA?s biennial reporting system database
- EPA?s Land Disposal Restriction resource index
- USDOT shipping descriptions

up

USED OIL

Used oil generators have specific used oil and spent filter management requirements regarding waste oil characterization, accumulation, shipping and disposal under several different regulations. Waste Management Division inspectors are looking for compliance with the used oil management requirements under Part 111 Hazardous Waste Management administrative rules [R 299.9809 through R 299.9816] and Part 121 Liquid Industrial Waste.VIOLATIONS INCLUDE:

1. Failing to label used oil containers and tanks with the words "Used Oil"
2. Failing to keep the containers closed, except when waste is added or removed

- Leaving funnels in place that are not screwed into bung and do not have the capability of being kept closed

3. Leaving containers exposed to weather or vandals
4. Failing to analyze and retain total halogen testing records for used oil
5. Failing to have records of liquid industrial waste, including used oil, that was shipped with a consolidated manifest
6. Failing to use manifest, when required, for liquid industrial waste shipments
7. Failing to have a copy of manifest signed by designated facility
8. Failing to send manifest copies to appropriate state agencies within the applicable timeframe
9. Using wrong generator identification number on manifests (for example using a Michigan identification number instead of the facility?s EPA identification number if they had been issued both numbers, or for those companies which have several sites, writing down another one of their site numbers instead of the site number where the waste was generated)

Above are common generator violations that have been identified during hazardous waste and liquid industrial waste inspections by Department of Environmental Quality (DEQ), Waste Management Division staff. The violations are not listed by severity or frequency of findings. The hazardous waste administrative rules referenced are promulgated under Part 111 of the Natural Resources and Environmental Protection Act, 1994 PA, as amended (Act 451)."

ADDITIONAL RESOURCE LINKS:

- Recycled Materials Market Directory for a list of companies who recycle used oil and filters
- Manifest Tracking Log
  - Small Quantity Generator and All Liquid Industrial Waste Shipments Timetable Flowchart
  - Large Quantity Generator Timetable Flowchart
- US DOT regulations specify the containers, placards, etc that must be used during hazardous materials transportation
- Michigan State Police, Motor Carrier Division, Hazardous Materials Unit guidance on placarding, shipping papers, transporting fuel oil, etc.
- Labeling requirements and sample labels for transportation and accumulation (link to be developed)

up

WASTE ACCUMULATION AREA

Hazardous waste generators have specific requirements regarding how and where they accumulate their hazardous waste, including requirements for satellite accumulation [R 299.9306].VIOLATIONS INCLUDE:

1. Failing to conduct weekly inspections. Missing or incomplete written documentation of inspections by Large Quantity Generators.
2. Exceeding the allowable on-site accumulation time frame for hazardous waste.
3. Having inadequate space or aisle width to properly inspect containers and for emergency personnel access.
4. Failing to have labels visible for inspections.
5. Leaving containers exposed to weather or vandals.

6. Lacking or inadequate secondary containment including:
   - Lacking or inadequate resistant coating and having cracked surfaces on secondary containment,
   - Lacking or inadequate squirt protection, and
   - Failing to have containers elevated or base of containment sloped to drain or sump, when required.

SATELLITE ACCUMULATION

Generators may choose to accumulate waste in limited amounts at or near the point of generation under specific conditions. This practice is commonly referred to as satellite accumulation [R 299.9306(2)].

VIOLATIONS INCLUDE:

1. Missing the words "Hazardous Waste" on container.
2. Missing the hazardous waste number or chemical name that identifies the contents on container.
3. Exceeding the allowable volume for each satellite site (total of 55 gallons of hazardous waste or one quart of acute or severely toxic hazardous waste).
4. Failing to keep the container at or near the point of waste generation. Lacking operator control of the process that generates the waste that goes into the satellite container.
5. Failing to keep satellite containers closed, except when waste is added or removed.
6. Forgetting to list the date the satellite container(s) reaches the 55 gallons limit and failing to manage it under all of the applicable hazardous waste accumulation area requirements within the allowable timeframe.

Above are common generator violations that have been identified during hazardous waste inspections by Department of Environmental Quality (DEQ), Waste Management Division staff. The violations are not listed by severity or frequency of findings. The hazardous waste administrative rules referenced are promulgated under Part 111 of the Natural Resources and Environmental Protection Act, 1994 PA, as amended (Act 451).

ADDITIONAL RESOURCE LINKS:

- Weekly Hazardous Waste Maintenance Checklist is a form to assist in documenting weekly inspections. This form is not required to be used.
- Satellite Accumulation Areas WMD operational memo 111-2 (link to be developed)

up

WASTE DETERMINATION

Hazardous waste generators are required to determine if the waste is a hazardous waste by either knowledge of the waste stream or by testing it, and maintain records of that determination [R 299.9302].VIOLATIONS INCLUDE:

1. Failing to properly identify all the hazardous waste generated at the business. Commonly overlooked wastes include, but is not limited to, partially empty aerosol cans, electric lamps, electronic equipment, batteries, antifreeze, rags and other textiles, sorbents, spent paint filters, spent activated carbon filter media, and sand blasting residue.

2. Failing to have waste evaluations documented and keep records for at least 3 years.
3. Managing universal waste, such as electric lamps, mercury devices, batteries, and pesticides, incorrectly [R 299.9228].

Above are common generator violations that have been identified during hazardous waste inspections by Department of Environmental Quality (DEQ), Waste Management Division staff. The violations are not listed by severity or frequency of findings. The hazardous waste administrative rules referenced are promulgated under Part 111 of the Natural Resources and Environmental Protection Act, 1994 PA, as amended (Act 451).

ADDITIONAL RESOURCE LINKS:

Hazardous Waste Identification EPA Hotline Training Module discusses how to identify hazardous waste

Solid and Hazardous Waste Exclusions EPA Hotline Training Module discusses the regulatory exclusions of some waste streams from the hazardous waste regulations

EPA?s waste identification resource index provides a list of various publications or EPA clarifications about hazardous waste characterizations.

up

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WASTE MANAGEMENT GUIDANCE

CONTINGENCY PLAN AND EMERGENCY PROCEDURES AND THE ARRANGEMENTS WITH LOCAL EMERGENCY SERVICES FOR FULLY REGULATED GENERATORS

Following is a summary and excerpts of the federal regulations regarding contingency planning and emergency procedures for Michigan's large quantity generators as required by the hazardous waste regulations. These facilities may also be subject to other regulations that require emergency planning and preparedness and are subject to other hazardous waste management requirements. For more information on those requirements and common violations found during inspections, see the Waste Management Guidance documents available on the Internet at www.deq.state.mi.us/wmd and the Michigan Manufacturers' Guide to Environmental and Safety and Health Regulations at www.deq.state.mi.us/ead/pub/caap/manufguide. The Michigan State Police, Emergency Management Division also has emergency planning guidance available at www.msp.state.mi.us. Federal requirements for large quantity generators are summarized in the US Environmental Protection Agency fact sheet at www.epa.gov/epaoswer/hazwaste/gener/lqgfact.txt.

Large quantity generators of hazardous waste are regulated under Part 111, Hazardous Waste Management, Michigan Compiled Laws (MCL) 324.11101 et seq. (Part 111) of Michigan's Natural Resources and Environmental Protection Act; 1994 PA 451, as amended and Subtitle C of the Resource Conservation and Recovery Act of 1976, as amended (RCRA), and any administrative rules or regulations promulgated pursuant to these acts.

Rule 306(1)(d) promulgated under the Natural Resources and Environmental Protection Act 1994 PA 451, Chapter 3: Waste Management, Part 111 Hazardous Waste Management, requires facilities that generate over 1000 kilograms (2200 lbs.) of hazardous waste or 1 kilogram (2.2 lbs.) of acutely or severely toxic hazardous waste, in a calendar month, to write a contingency plan with emergency procedures. In addition, arrangements must be made with local emergency services.

Arrangements with Local Emergency Services

The facility must attempt to make the following arrangements, as appropriate for the type of waste handled at the facility and the potential need for the services of these organizations. Specifically, these arrangements are to familiarize local police, fire departments, and local and state emergency response teams[1] with the layout of the facility, properties of the hazardous waste handled at the facility and associated hazards, places where facility personnel would normally be working, entrances to roads inside the facility and possible evacuation routes. Where more than one police and fire department might respond to an emergency, agreements must be reached designating the primary emergency authority(s). If you use outside contractors to respond to emergencies, arrangements must be made with emergency response contractors and emergency response suppliers. You also must make arrangements to familiarize local hospitals with the properties of hazardous waste handled at the facility and the types of injuries or illnesses that could result from fires, explosions or releases at the facility.

Since a copy of the contingency plan must be sent to the emergency organizations, the cover letter can deal with the arrangements. Suggested language in the cover letter should explain briefly why a copy of the plan is being sent, inviting the organization to tour the facility and designate a contact person in the facility to answer questions and to outline expected

emergency response. It is recommended you keep a copy of the cover letter for documentation purposes that the plan was submitted.

Contingency Plan and Emergency Procedures

The Contingency Plan and Emergency Procedures must be designed to minimize hazards to human health or the environment from fires, explosions or any unplanned sudden or non-sudden releases of hazardous waste or hazardous waste constituents to air, soil or surface water.

The plan must list names, addresses and phone numbers (home and office) of the primary emergency coordinator and alternates. We recommend that there be at least one alternate emergency coordinator since someone has to be available to respond to emergencies at all times which includes weekends, evenings, and holidays. Having more than one alternative will minimize the burden on the primary and first alternate and allow more flexibility when you schedule who will cover non work hours. The primary and alternate emergency coordinators must have the authority to carry out the plan. If outside emergency response contractors are used this will include coordinating with them on who will be authorized to engage their services.

The plan must include a list of all emergency equipment at the facility such as fire extinguishing systems, communication or alarm systems, spill control equipment, etc., where the equipment is located, a physical description of each item and a brief outline of its capabilities. A verbal discussion of the location of the emergency equipment is not effective when there is an emergency. It is recommended that a floor plan of the facility have the locations of the fire extinguishing systems (fire extinguisher's, sprinklers, hoses, fire hydrants), communication or alarm systems (alarm boxes or phones for page), spill control equipment (adsorbents, spill kits, shovels) located on the map with easy symbols to understand. Then the written portion of the plan can have the physical description of the equipment and capabilities.

You must include an evacuation plan that describes signal(s) to be used to begin evacuation, evacuation routes and alternate evacuation routes in cases where the primary route could be blocked by release of hazardous waste or fire. Again, a verbal discussion is cumbersome and not efficient in an emergency. Recommend that the primary and secondary routes be clearly marked on the floor plan described above. Then the written portion can give the signals to be used. Since one of the first questions a facility will be asked by any emergency service, if the facility had to be evacuated, is a count of persons still left in the facility and possible location.

Subsequently, it is also recommended that the evacuation routes include two outside areas where staff should assemble (using the one upwind of the facility). This way a count can be made which will be even more accurate if compared to the guest book and time cards that were also evacuated with staff.

The plan must include the emergency procedures as mandated under 265.56, which deals with emergency situations that could threaten human health or the environment. Copies of the plan must be maintained on-site and submitted to the local police department; fire department, hospital, state, and emergency response teams that may be called on to provide emergency service. This plan must be amended whenever the regulations change, the plan fails in an emergency, the facility changes, facility emergency procedure change, the emergency coordinators change or the emergency equipment changes.

[1] At the time of this update, the State of Michigan does not have a state emergency response team to respond to individual facility situations. Unless requested, contingency plans prepared by large quantity generators under these hazardous waste regulations do not need to be submitted to either the Department of Environmental Quality or to the State Police Emergency Management Division.

Subpart C -- Preparedness and Prevention

§ 265.30 Applicability.

The regulations in this subpart apply to owners and operators of all hazardous waste facilities, except as § 265.1 provides otherwise.

§ 265.31 Maintenance and operation of facility.

Facilities must be maintained and operated to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment.

§ 265.32 Required equipment.

All facilities must be equipped with the following, unless none of the hazards posed by waste handled at the facility could require a particular kind of equipment specified below:

(a) An internal communications or alarm system capable of providing immediate emergency instruction (voice or signal) to facility personnel;

(b) A device, such as a telephone (immediately available at the scene of operations) or a hand-held two-way radio, capable of summoning emergency assistance from local police departments, fire departments, or State or local emergency response teams;

(c) Portable fire extinguisher's, fire control equipment (including special extinguishing equipment, such as that using foam, inert gas, or dry chemicals), spill control equipment, and decontamination equipment; and

(d) Water at adequate volume and pressure to supply water hose streams, or foam producing equipment, or automatic sprinklers, or water spray systems.

§ 265.33 Testing and maintenance of equipment.

All facility communications or alarm systems, fire protection equipment, spill control equipment, and decontamination equipment, where required, must be tested and maintained as necessary to assure its proper operation in time of emergency.

§ 265.34 Access to communications or alarm system.

(a) Whenever hazardous waste is being poured, mixed, spread, or otherwise handled, all personnel involved in the operation must have immediate access to an internal alarm or emergency communication device, either directly or through visual or voice contact with another employee, unless such a device is not required under § 265.32.

(b) If there is ever just one employee on the premises while the facility is operating, he must have immediate access to a device, such as a telephone (immediately available at the scene of operation) or a hand-held two-way radio, capable of summoning external emergency assistance, unless such a device is not required under § 265.32.

§ 265.35 Required aisle space.

The owner or operator must maintain aisle space to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of facility operation in an emergency, unless aisle space is not needed for any of these purposes.

§ 265.36 [Reserved]

§ 265.37 Arrangements with local authorities.

(a) The owner or operator must attempt to make the following arrangements, as appropriate for the type of waste handled at his facility and the potential need for the services of these organizations:

(1) Arrangements to familiarize police, fire departments, and emergency response teams with the layout of the facility, properties of hazardous waste handled at the facility and associated hazards, places where facility personnel would normally be working, entrances to roads inside the facility, and possible evacuation routes;

(2) Where more than one police and fire department might respond to an emergency, agreements designating primary emergency authority to a specific police and a specific fire department, and agreements with any others to provide support to the primary emergency authority;

(3) Agreements with State emergency response teams, emergency response contractors, and equipment suppliers; and

(4) Arrangements to familiarize local hospitals with the properties of hazardous waste handled at the facility and the types of injuries or illnesses, which could result from fires, explosions, or releases at the facility.

(b) Where State or local authorities decline to enter into such arrangements, the owner or operator must document the refusal in the operating record.

Subpart D -- Contingency Plan and Emergency Procedures

§ 265.50 Applicability.

The regulations in this subpart apply to owners and operators of all hazardous waste facilities, except as § 265.1 provides otherwise.

§ 265.51 Purpose and implementation of contingency plan.

(a) Each owner or operator must have a contingency plan for his facility. The contingency plan must be designed to minimize hazards to human health or the environment from fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water.

(b) The provisions of the plan must be carried out immediately whenever there is a fire, explosion, or release of hazardous waste or hazardous waste constituents which could threaten human health or the environment.

§ 265.52 Content of contingency plan.

(a) The contingency plan must describe the actions facility personnel must take to comply with §§ 265.51 and 265.56 in response to fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water at the facility.

(b) If the owner or operator has already prepared a Spill Prevention, Control, and Countermeasures (SPCC) Plan in accordance with part 112 of this chapter, or part 1510 of Chapter V, or some other emergency or contingency plan, he need only amend that plan to incorporate hazardous waste management provisions that are sufficient to comply with the requirements of this part.

(c) The plan must describe arrangements agreed to by local police departments, fire departments, hospitals, contractors, and State and local emergency response teams to coordinate emergency services, pursuant to § 265.37.

(d) The plan must list names, addresses, and phone numbers (office and home) of all persons qualified to act as emergency coordinator (see § 265.55), and this list must be kept up to date. Where more than one person is listed, one must be named as primary emergency coordinator and others must be listed in the order in which they will assume responsibility as alternates.

(e) The plan must include a list of all emergency equipment at the facility (such as fire extinguishing systems, spill control equipment, communications and alarm systems (internal and external), and decontamination equipment), where this equipment is required. This list must be kept up to date. In addition, the plan must include the location and a physical description of each item on the list, and a brief outline of its capabilities.

(f) The plan must include an evacuation plan for facility personnel where there is a possibility that evacuation could be necessary. This plan must describe signal(s) to be used to begin evacuation, evacuation routes, and alternate evacuation routes (in cases where the primary routes could be blocked by releases of hazardous waste or fires).

§ 265.53 Copies of contingency plan.

A copy of the contingency plan and all revisions to the plan must be:

(a) Maintained at the facility; and

(b) Submitted to all local police departments, fire departments, hospitals, and State and local emergency response teams that may be called upon to provide emergency services.

§ 265.54 Amendment of contingency plan.

The contingency plan must be reviewed, and immediately amended, if necessary, whenever:

(a) Applicable regulations are revised;

(b) The plan fails in an emergency;

(c) The facility changes -- in its design, construction, operation, maintenance, or other circumstances -- in a way that materially increases the potential for fires, explosions, or releases of hazardous waste or hazardous waste constituents, or changes the response necessary in an emergency;

(d) The list of emergency coordinators changes; or

(e) The list of emergency equipment changes.

§ 265.55 Emergency coordinator.

At all times, there must be at least one employee either on the facility premises or on call (i.e., available to respond to an emergency by reaching the facility within a short period of time) with the responsibility for coordinating all emergency response measures. This emergency coordinator must be thoroughly familiar with all aspects of the facility's contingency plan, all operations and activities at the facility, the location and characteristics of waste handled, the location of all records within the facility, and the facility layout. In addition, this person must have the authority to commit the resources needed to carry out the contingency plan.

[Comment: The emergency coordinator's responsibilities are more fully spelled out in § 265.56. Applicable responsibilities for the emergency coordinator vary, depending on factors such as type and variety of waste(s) handled by the facility, and type and complexity of the facility.]

§ 265.56 Emergency procedures.

(a) Whenever there is an imminent or actual emergency situation, the emergency coordinator (or his designee when the emergency coordinator is on call) must immediately:

(1) Activate internal facility alarms or communication systems, where applicable, to notify all facility personnel; and

(2) Notify appropriate State or local agencies with designated response roles if their help is needed.

(b) Whenever there is a release, fire, or explosion, the emergency coordinator must immediately identify the character, exact source, amount, and a real extent of any released materials. He may do this by observation or review of facility records or manifests and, if necessary, by chemical analysis.

(c) Concurrently, the emergency coordinator must assess possible hazards to human health or the environment that may result from the release, fire, or explosion. This assessment must consider both direct and indirect effects of the release, fire, or explosion (e.g., the effects of any toxic, irritating, or asphyxiating gases that are generated, or the effects of any hazardous surface water run-offs from water or chemical agents used to control fire and heat-induced explosions).

(d) If the emergency coordinator determines that the facility has had a release, fire, or explosion, which could threaten human health, or the environment, outside the facility, he must report his findings as follows:

(1) If his assessment indicates that evacuation of local areas may be advisable, he must immediately notify appropriate local authorities. He must be available to help appropriate officials decide whether local areas should be evacuated; and

(2) He must immediately notify either the government official designated as the on-scene coordinator for that geographical area (in the applicable regional contingency plan under part 1510 of this title), or the National Response Center (using their 24-hour toll free number 800/424-8802). The report must include:

(i) Name and telephone number of reporter;

(ii) Name and address of facility;

(iii) Time and type of incident (e.g., release, fire);

(iv) Name and quantity of material(s) involved, to the extent known;

(v) The extent of injuries, if any; and

(vi) The possible hazards to human health, or the environment, outside the facility.

(e) During an emergency, the emergency coordinator must take all reasonable measures necessary to ensure that fires, explosions, and releases do not occur, recur, or spread to other hazardous waste at the facility. These measures must include, where applicable, stopping processes and operations, collecting and containing released waste, and removing or isolating containers.

(f) If the facility stops operations in response to a fire, explosion or release, the emergency coordinator must monitor for leaks, pressure buildup, gas generation, or ruptures in valves, pipes, or other equipment, wherever this is appropriate.

(g) Immediately after an emergency, the emergency coordinator must provide for treating, storing, or disposing of recovered waste, contaminated soil or surface water, or any other material that results from a release, fire, or explosion at the facility.

[Comment: Unless the owner or operator can demonstrate, in accordance with § 261.3(c) or (d) of this chapter, that the recovered material is not a hazardous waste, the owner or operator becomes a generator of hazardous waste and must manage it in accordance with all applicable requirements of parts § § 262, 263, and 265 of this chapter.]

(h) The emergency coordinator must ensure that, in the affected area(s) of the facility:

(1) No waste that may be incompatible with the released material is treated, stored, or disposed of until cleanup procedures are completed; and

(2) All emergency equipment listed in the contingency plan is cleaned and fit for its intended use before operations are resumed.

(i) The owner or operator must notify the Regional Administrator, and appropriate State and local authorities, that the facility is in compliance with paragraph (h) of this section before operations are resumed in the affected area(s) of the facility.

(j) The owner or operator must note in the operating record the time, date, and details of any incident that requires implementing the contingency plan. Within 15 days after the incident, he must submit a written report on the incident to the Regional Administrator. The report must include:

(1) Name, address, and telephone number of the owner or operator;

(2) Name, address, and telephone number of the facility;

(3) Date, time, and type of incident (e.g., fire, explosion);

(4) Name and quantity of material(s) involved;

(5) The extent of injuries, if any;

(6) An assessment of actual or potential hazards to human health or the environment, where this is applicable; and

(7) Estimated quantity and disposition of recovered material that resulted from the incident.

(1/25/01: doc/y/contingency rest of new: EAB)

This document was revised on January 25, 2001. Be advised that subsequent law, rule and other information may change the applicability of this document. This document is a summarization of state and federal rules and regulations and is not to be used as a substitution for the actual regulations. This document is not intended to convey any rights to any parties nor create any duties or responsibilities under law. This document and matters addressed herein are subject to revision.

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PLYMOUTH ROAD OFFICE COMPLEX
EMERGENCY CONTACT INFORMATION LIST

Agency or Institution	Phone Number
INCIDENT COMMANDERS	
D.C. Gardner -- PRIMARY	(313) 493-2742 Tie-Line 733-2742 Pager (313) 714-8660
G.J. Van de Vyver -- ALTERNATE	(248) 512-4721 Tie-Line 722-4721 Pager (313) 714-8428
A.A. Kovtun – ALTERNATE	(248) 512-4702 Tie-Line 722-4702 Pager (313) 714-8428
E.M. Lee -- ALTERNATE	(248) 512-4707 Tie-Line 722-4707 Pager (313) 709-1906
Plant Security	(313) 493-3911 Tie-Line 733-3911
EMERGENCY CONTACTS	
DaimlerChrysler Technology Center Security Information Center	776-8888 (tie line) or (248) 576-8888 776-8889 (tie line) or (248) 576-8889
Detroit Fire Department	911 or (313) 596-2900
Detroit Police Department	911 or (313) 596-5200
Grace Hospital	(313) 966-3045
Midwest Health Center	(313) 581-2600
Detroit Industrial Clinic	(313) 831-3130
City of Detroit Water and Sewerage Department	(313) 224-4775
City of Detroit Emergency Management Division (LEPC)	911 or (313) 596-1441
SPILL CONTRACTORS	
Marine Pollution Control	(800) 521-8232
Inland Waters	(313) 841-5800
John Pomroy & Associates (asbestos only)	(248) 549-6086 Pager (888) 944-9397
GOVERNMENT AGENCIES	
MDEQ Pollution Emergency Alert System	(800) 292-4706
Michigan State Fire Marshall / MDEQ UST Division	(800) 642-4878 / (313) 392-6521
National Response Center	(800) 424-8802
U.S. Environmental Protection Agency - Region 5	(312) 353-2318
Michigan OSHA	(517) 322-1817 business hours (800) 858-0397 all other hours

Home phone numbers and addresses for facility personnel are available in the Security Office.

PSC PHILIP SERVICES

[newcert.frx]

Petro-Chem Processing
421 Lycaste, Detroit, MI 48214
(313) 824-5840 MID 980615298

Prequal #: W087860
Status: ACCEPTED 05/08/2000
Received on: 05/05/2000
Analyzed on:
Expires:
Salesperson: 01
Customer #:
PO #:

Generator:	Customer:	Transporter:
Name: DAIMLERCHRYSLER CORP.	DAIMLERCHRYSLER CORP.	PSC-NORTRU TRANSPORTATION,
Address: 14250 Plymouth Road Detroit, MI 48227	14250 Plymouth Road Detroit, MI 48227	11700 Freud Detroit, MI 48214
Phone/fax: 313-493-2486, 313-493-8462	313-493-2486, 313-493-8462	313 824-5840,
Contact: Ken Davis	Ken Davis	William Qualls
EPA/St ID#: MID099113169	MID099113169	MID021067275

Stream name: RAGS W/AUTO FLUIDS
How generated: RAGS USED TO CLEAN UP SPILLS
Frequency: not supplied
Process: M125

Physical properties:

Water React: No	Pesticide: No	Oxidizer: No	Phys State: SOLID	BTU/lb:	
Shock Sens: No	Herbicide: No	Dioxin: No	Layers: SINGLE	pH:	0.00
Explosive: No	Infect/Etologic: No	NESHAP: No	Water: 0.00	Flash pt:	NONE
Phenolics: No	OSHA Carcinogen: No		Chloride:	Viscosity:	BLK/BROWN
Cyanides: No	Radiation: No		Sulfides:	Density:	0.80 lb/gal
			PCBs:	Free Liq %:	0

Composition:	Concentration (%):	Supplemental Analysis:	Concentration (ppm):
1. RAGS WITH:	100		
2. GAS, ENGINE OIL, TRANSMISSION			
3. FLUID, HYDRAULIC BRAKE FLUID			
4. WINDSHIELD WASHER FLUID,			
5. POWER STEERING FLUID AND			
6. ANTI-FREEZE			
7.			
8.			

Material disposition:
Conditions: CHECK PCB

Handling info:

Manifest info:
DOT name: WASTE SOLIDS CONTAINING FLAMMABLE LIQUID, N.O.S.
Hazard class: 4.1
DOT ID#: UN3175
Packing group: II
Placards:
Labels:
Waste code(s): D001,D018
State code(s):
Erg#: 32
RQ: YES
Major:
(Emerg. Info.): GASOLINE

PLEASE REFERENCE PROFILE NUMBER ON DRUM AND IN SECTION J OF THE MANIFEST

This report will serve to inform you that Petro-Chem, Inc. and its affiliated firms have all the appropriate authorities, licenses, and permits for, and will accept your waste that has been characterized on 05/05/2000 and identified by Prequal # W087860.

I hereby certify that all information submitted in this and all attached documents contains true and accurate descriptions of this waste material, and all relevant information regarding known or suspected hazards in the posession of the generator has been disclosed.

Generator's Signature_____ Date_____

PHILIP SERVICES

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Petro-Chem Processing
421 Lycaste, Detroit, MI 48214
(313) 824-5840 MID 980615298

Prequal #: WF 089024
Status: ACCEPTED 08/11/2000
Received on: 08/09/2000
Analyzed on:
Expires:
Salesperson: 01
Customer #:
PO #:

	Generator:	Customer:	Transporter:
Name:	DAIMLERCHRYSLER CORP.	PSC-SMALL QUANTITY SERVICES	( )
Address:	14250 Plymouth Road	515 Lycaste	
	Detroit, MI 48227	Detroit, MI 48214	,
Phone/fax:	313-493-2486, 313-493-8462	800 767-6070, 313 824-5423	,
Contact:	Ken Davis	Don Bodrie	
EPA/St ID#:	MID099113169		

Stream name: WASTE STODDARD, NAPHTHA, DIESEL FUEL MIX
Process: M061
How generated: CARBURETOR FLOW TESTING
Frequency: 1 Drums, Metal every Year

Physical properties:

Water React: No	Pesticide: No	Oxidizer: No	Phys State: LIQUID	BTU/lb: >5000
Shock Sens: No	Herbicide: No	Dioxin: No	Layers: SINGLE	pH: 6.00
Explosive: No	Infect/Etiologic: No	NESHAP: No	Water: 5.00	Flash pt: 101-140
Phenolics: No	OSHA Carcinogen: No		Chloride: 5	Viscosity: CLEAR
Cyanides: No	Radiation: No		Sulfides: 0	Density: 0.80 lb/gal
			PCBs: 0	Free Liq %: 0

Composition:		Concentration (%):	Supplemental Analysis:	Concentration (ppm):
1.	008052-41-3	30-50		
2.	068334-30-5	20-50		
3.	000091-20-3	<3		
4.	001330-20-7	<3		
5.	064742-89-8	<5		

Material disposition:
Conditions: CHECK PCB, pH, COMPATIBILITY

Handling Info:

Manifest Info:
DOT name: WASTE FLAMMABLE LIQUIDS, N.O.S.
Hazard class: 3
DOT ID#: UN1993
Packing group: II
Placards:
Labels: FLAMMABLE
Erg#: 128
Waste code(s): D001
RQ: YES
State code(s):
Major: Naphthalene, Xylene, Naphtha
(Emerg. Info.):

PLEASE REFERENCE PROFILE NUMBER ON DRUM AND IN SECTION J OF THE MANIFEST

This report will serve to inform you that Petro-Chem, Inc. and its affiliated firms have all the appropriate authorities, licenses, and permits for, and will accept your waste that has been characterized on 08/09/2000 and identified by Prequal # W089024.

I hereby certify that all information submitted in this and all attached documents contains true and accurate descriptions of this waste material, and all relevant information regarding known or suspected hazards in the posession of the generator has been disclosed.

Generator's Signature_____ Date_____

Waste Characterization Report

approved

PHILIP SERVICES

Petro-Chem Processing
421 Lycaste - Detroit, MI 48214

Approval # 089024

Customer Service Rep: Linda Harris

Philip Services Sales Rep: _____

A. GENERATOR INFORMATION

1. Name: Daimler Chrysler Corp.
2. USEPA ID # MID 099 113169
3. Facility Address: 14250 Plymouth Rd.
4. SIC Code: 3734
5. City: Detroit State: MI Zip Code: 48227
6. Contact: Ken Davis Title: _____ Phone: (313) 493-2486 Fax: (313) 493-8462

B. BILLING INFORMATION

☐ SAME AS ABOVE – Go to Section C

1. Company Name: _____
2. Philip Services Company: ☐ No ☐ Yes _____
3. Address: _____
4. City: _____ State: _____ Zip Code: _____
5. Attention: _____ Phone: ( ) _____ Fax: ( ) _____

C. WASTE INFORMATION

1. Name of Waste/Common Chemical Name: Waste Stoddard, Naptha, Diesel Fuel Mixture
2. Process Generating Waste (*be specific*): Carburetor Flow Testing
3. Generator has provided the following: ☐ Profile Only ☒ MSDS ☐ Sample ☐ Outside Analysis
4. Form Code _____ Source Code _____ Origin Code _____

D. PHYSICAL CHARACTERISTICS OF WASTE

1. Color:	2. Physical State @ 70° F:	3. Layers:	4. Specific Gravity:	5. Free Liquids:
☒ White/Clear ☐ Black/Brown ☐ Other _____	☐ Solid ☐ Semi Solid/Sludge ☒ Liquid ☐ Monolith ☐ Debris ☐ Heated (<140 F)	☐ Multi layered ☐ Bi-Layered ☒ Single Phased	☐ <0.8 ☐ 1.0 – 1.2 ☒ 0.8 – 1.0 ☐ 1.3 – 1.4 Exact / Other _____	☐ No ☒ Yes 100 %

6. pH: ☐ NA ☐ ≤ 2 ☐ 2 – 4 ☐ 4 – 6 ☒ 6 – 8 ☐ 8 – 10 ☐ 10 – 12.5 ☐ ≥ 12.5
7. Liquid Flash Point: ☐ <73°F ☐ 73 – 100°F ☒ 101 – 140°F ☐ 141 – 200°F ☐ >200°F ☐ None ☒ Closed Cup ☐ Open Cup
8. Fuel Blending: BTU/lb: _____ Chloride: 0 % Water: 0 % Free ☐ Miscible ☐ ☐ Heated (<140)

E. TOTAL COMPOSITION OF WASTE - *THE TOTAL COMPOSITION MUST BE EQUAL TO OR GREATER THAN 100%*

1. Where applicable include sludge & water as constituents:

	MIN	MAX		MIN	MAX
008052-41-3	30	60 %			%
068334-30-5	20	50 %			%
000091-20-3	1	3 %			%
001330-20-7	1	3 %			%
064742-89-8	1	5 %			%
TOTAL:		121 %	TOTAL:		%

2. Indicate if this waste contains any of the following:

☐ Lab Analysis ☒ Generator Knowledge

		Not Present	Concentration		Not Present	Concentration
PCB		☒	ppm	Aromatic Amine	☒	ppm
Dioxin		☒	ppm	Pesticides	☒	ppm
Phenolics		☒	ppm	Rodenticides	☒	ppm
Cyanides	Reactive	☒	ppm	Fungicides	☒	ppm
	Total	☒	ppm	Urea/Thiourea	☒	ppm
Sulfides	Reactive	☒	ppm	Phenols	☒	ppm
	Total	☒	ppm	Quinones	☒	ppm
Phosphorus Cmpds.		☒	ppm			

3. Metals: Indicate if this waste contains any of the following metals, and which test method was used.

☐ TCLP ☐ TOTAL ☒ Generator Knowledge

Arsenic (As)	D004	☒	< 5 ppm		ppm
Barium (Ba)	D005	☒	<100 ppm		ppm
Cadmium (Cd)	D006	☒	< 1 ppm		ppm
Chromium (Cr)	D007	☒	< 5 ppm		ppm
Lead (Pb)	D008	☒	< 5 ppm		ppm
Mercury (Hg)	D009	☒	< 0.2 ppm		ppm
Selenium (Se)	D010	☒	< 1 ppm		ppm
Silver (Ag)	D011	☒	< 5 ppm		ppm
Thallium (Tl)		☒	<120 ppm		ppm
Sulfur (S)		☒	<5000 ppm		ppm

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Petro-Chem Processing
421 Lycaste, Detroit, MI 48214
(313) 824-5840 MID 980615298

Prequal #:	WF 089024	Received on:	08/09/2000	Salesperson:	01
Status:	ACCEPTED 08/11/2000	Analyzed on:		Customer #:	
		Expires:		PO #:	

	Generator:	Customer:	Transporter:
Name:	DAIMLERCHRYSLER CORP.	DAIMLERCHRYSLER CORP.	PSC-NORTRU TRANSPORTATION, INC.
Address:	14250 Plymouth Road Detroit, MI 48227	14250 Plymouth Road Detroit, MI 48227	11700 Freud Detroit, MI 48214
Phone/fax:	313-493-2486, 313-493-8462	313-493-2486, 313-493-8462	313 824-5840,
Contact:	Ken Davis	Ken Davis	William Qualls
EPA/St ID#:	MID099113169	MID099113169	MID021087275

Stream name: WASTE STODDARD, NAPHTHA, DIESEL FUEL MIX — Process: M061
How generated: CARBURETOR FLOW TESTING
Frequency: 1 Drums, Metal every Year

Physical properties:

				Phys State:	LIQUID	BTU/lb:	>5000
Water React:	No	Pesticide:	No	Oxidizer: No	Layers:	SINGLE	pH: 6.00
Shock Sens:	No	Herbicide:	No	Dioxin: No	Water:	5.00	Flash pt: 101-140
Explosive:	No	Infect/Etologic:	No	NESHAP: No	Chloride:	5	Viscosity: CLEAR
Phenolics:	No	OSHA Carcinogen:	No		Sulfides:	0	Density: 0.80 lb/gal
Cyanides:	No	Radiation:	No		PCBs:	0	Free Liq %: 0

Composition:		Concentration (%):	Supplemental Analysis:	Concentration (ppm):
1.	008052-41-3	30-50		
2.	068334-30-5	20-50		
3.	000091-20-3	<3		
4.	001330-20-7	<3		
5.	064742-89-8	<5		

Material disposition:
Conditions: CHECK PCB, pH, COMPATIBILITY

Process Codes:

Manifest info:
DOT name: WASTE FLAMMABLE LIQUIDS, N.O.S. — Placards:
Hazard class: 3 — DOT ID#: UN1993 — Packing group: II — Labels: FLAMMABLE
Waste code(s): D001 — Erg#: 128
State code(s): — RQ: YES
Major: Naphthalene, Xylene, Naphtha
(Emerg. Info.):

PLEASE REFERENCE PROFILE NUMBER ON DRUM AND IN SECTION J OF THE MANIFEST

This report will serve to inform you that Petro-Chem, Inc. and its affiliated firms have all the appropriate authorities, licenses, and permits for, and will accept your waste that has been characterized on 08/09/2000 and identified by Prequal # W089024.

This quotation and approval number will be VOID unless a signed quotation is on file with the PSC-Detroit Sales office. Any loads arriving at the facility will be placed on hold until all documentation has been received. Any cost associated with this will be the sole responsibility of the customer. PSC can not be held liable for any delays due to incomplete documentation.

Customer Signature _____ Date_____

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Petro-Chem Processing
421 Lycaste, Detroit, MI 48214
(313) 824-5840 MID 980615298

Prequal #:	WT 087860	Received on:	05/05/2000	Salesperson:	01
Status:	ACCEPTED 05/08/2000	Analyzed on:		Customer #:	
		Expires:		PO #:	

	Generator:	Customer:	Transporter:
Name:	DAIMLERCHRYSLER CORP.	DAIMLERCHRYSLER CORP.	PSC-NORTRU TRANSPORTATION, INC.
Address:	14250 Plymouth Road Detroit, MI 48227	14250 Plymouth Road Detroit, MI 48227	11700 Freud Detroit, MI 48214
Phone/fax:	313-493-2486, 313-493-8462	313-493-2486, 313-493-8462	313 824-5840,
Contact:	Ken Davis	Ken Davis	William Qualls
EPA/St ID#:	MID099113169	MID099113169	MID021087275

Stream name: RAGS W/AUTO FLUIDS
How generated: RAGS USED TO CLEAN UP SPILLS
Frequency: not supplied
Process: M125

Physical properties:

Water React:	No	Pesticide:	No	Oxidizer:	No	Phys State:	SOLID
Shock Sens:	No	Herbicide:	No	Dioxin:	No	Layers:	SINGLE
Explosive:	No	Infect/Etologic:	No	NESHAP:	No	Water:	0.00
Phenolics:	No	OSHA Carcinogen:	No			Chloride:	
Cyanides:	No	Radiation:	No			Sulfides:	
						PCBs:	

BTU/lb:	
pH:	0.00
Flash pt:	NONE
Viscosity:	BLK/BROWN
Density:	0.80 lb/gal
Free Liq %:	0

Composition:	Concentration (%):	Supplemental Analysis:	Concentration (ppm):
1. RAGS WITH:	100		
2. GAS, ENGINE OIL, TRANSMISSION			
3. FLUID, HYDRAULIC BRAKE FLUID			
4. WINDSHIELD WASHER FLUID,			
5. POWER STEERING FLUID AND			
ANTI-FREEZE			
8.			

Material disposition:
Conditions: CHECK PCB

Process Codes:

Manifest info:
DOT name: WASTE SOLIDS CONTAINING FLAMMABLE LIQUID, N.O.S.
Hazard class: 4.1 DOT ID#: UN3175 Packing group: II
Placards:
Labels:
Waste code(s): D001,D018
Erg#: 32
State code(s):
RQ: YES
Major: GASOLINE
(Emerg. Info.):

PLEASE REFERENCE PROFILE NUMBER ON DRUM AND IN SECTION J OF THE MANIFEST

This report will serve to inform you that Petro-Chem, Inc. and its affiliated firms have all the appropriate authorities, licenses, and permits for, and will accept your waste that has been characterized on 05/05/2000 and identified by Prequal # W087860.

This quotation and approval number will be VOID unless a signed quotation is on file with the PSC-Detroit Sales office. Any loads arriving at the facility will be placed on hold until all documentation has been received. Any cost associated with this will be the sole responsibility of the customer. PSC can not be held liable for any delays due to incomplete documentation.

Customer Signature _____ Date_____

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Petro-Chem Processing
421 Lycaste, Detroit, MI 48214
(313) 824-5840 MID 980615298

Prequal #:	WF 062504	Received on:	05/12/1995	Salesperson:	01
Status:	ACCEPTED 05/14/1995	Analyzed on:		Customer #:	
		Expires:		PO #:	

	Generator:	Customer:	Transporter:
Name:	DAIMLERCHRYSLER CORP.	DAIMLERCHRYSLER CORP.	PSC-NORTRU TRANSPORTATION, INC.
Address:	14250 Plymouth Road Detroit, MI 48227	14250 Plymouth Road Detroit, MI 48227	11700 Freud Detroit, MI 48214
Phone/fax:	313-493-2486, 313-493-8462	313-493-2486, 313-493-8462	313 824-5840,
Contact:	Ken Davis	Ken Davis	William Qualls
EPA/St ID#:	MID099113169	MID099113169	MID021087275

Stream name: PAINT RELATED MATERIAL
How generated: MAINT. & FACITITIES PAINTING
Frequency: 500 Gallons every Year
Process: M061

Physical properties:

Water React:	No	Pesticide:	No	Oxidizer:	No	Phys State:	
Shock Sens:	No	Herbicide:	No	Dioxin:	No	Layers:	
Explosive:	No	Infect/Etologic:	No	NESHAP:	No	Water:	0.00
Phenolics:	No	OSHA Carcinogen:	No			Chloride:	
Cyanides:	No	Radiation:	No			Sulfides:	
						PCBs:	

BTU/lb:	
pH:	0.00
Flash pt:	
Viscosity:	
Density:	0.00 lb/gal
Free Liq %:	0

Composition:	Concentration (%):	Supplemental Analysis:	Concentration (ppm):
1.			

Material disposition:
Conditions: CHECK PCB

Process Codes:

Manifest info:
DOT name: RQ WASTE PAINT RELATED MATERIAL
Hazard class: 3 DOT ID#: UN1263 Packing group: II
Waste code(s): F003,F005,D001,D021,D027,D035
State code(s):
Major:
(Emerg. Info.):
RQ:
Placards:
Labels: FLAMMABLE
Erg#: 127

PLEASE REFERENCE PROFILE NUMBER ON DRUM AND IN SECTION J OF THE MANIFEST

This report will serve to inform you that Petro-Chem, Inc. and its affiliated firms have all the appropriate authorities, licenses, and permits for, and will accept your waste that has been characterized on 05/12/1995 and identified by Prequal # W062504.

This quotation and approval number will be VOID unless a signed quotation is on file with the PSC-Detroit Sales office. Any loads arriving at the facility will be placed on hold until all documentation has been received. Any cost associated with this will be the sole responsibility of the customer. PSC can not be held liable for any delays due to incomplete documentation.

Customer Signature _____ Date _____

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Petro-Chem Processing
421 Lycaste, Detroit, MI 48214
(313) 824-5840 MID 980615298

DCX 0081

Prequal #:	WB 043269	Received on:	10/16/1992	Salesperson:	01
Status:	ACCEPTED 05/23/2000	Analyzed on:		Customer #:	
		Expires:		PO #:	

	Generator:	Customer:	Transporter:
Name:	DAIMLERCHRYSLER CORP.	DAIMLERCHRYSLER CORP.	PSC-NORTRU TRANSPORTATION, INC.
Address:	14250 Plymouth Road Detroit, MI 48227	14250 Plymouth Road Detroit, MI 48227	11700 Freud Detroit, MI 48214
Phone/fax:	313-493-2486, 313-493-8462	313-493-2486, 313-493-8462	313 824-5840,
Contact:	Ken Davis	Ken Davis	William Qualls
EPA/St ID#:	MID099113169	MID099113169	MID021087275

Stream name: **WASTE GASOLINE** Process: **M061**
How generated:
Frequency: **not supplied**

Physical properties:

Water React:	No	Pesticide:	No	Oxidizer:	No	Phys State:	BTU/lb:
Shock Sens:	No	Herbicide:	No	Dioxin:	No	Layers:	pH: 0.00
Explosive:	No	Infect/Etologic:	No	NESHAP:	No	Water: 0.00	Flash pt:
Phenolics:	No	OSHA Carcinogen:	No			Chloride:	Viscosity:
Cyanides:	No	Radiation:	No			Sulfides:	Density: 0.00 lb/gal
						PCBs:	Free Liq %: 0

Composition:	Concentration (%):	Supplemental Analysis:	Concentration (ppm):
1.			

Material disposition:
Conditions: **CHECK PCB, COMPAT**

Process Codes:

Manifest info:
DOT name: **WASTE GASOLINE**
Hazard class: **3** DOT ID#: **UN1203** Packing group: **II** Placards:
Waste code(s): **D001,D018** Labels: **FLAMMABLE**
State code(s): RQ: **YES** Erg#: **128**
Major:
(Emerg. Info.):

PLEASE REFERENCE PROFILE NUMBER ON DRUM AND IN SECTION J OF THE MANIFEST

This report will serve to inform you that Petro-Chem, Inc. and its affiliated firms have all the appropriate authorities, licenses, and permits for, and will accept your waste that has been characterized on 10/16/1992 and identified by Prequal # W043269.

This quotation and approval number will be VOID unless a signed quotation is on file with the PSC-Detroit Sales office. Any loads arriving at the facility will be placed on hold until all documentation has been received. Any cost associated with this will be the sole responsibility of the customer. PSC can not be held liable for any delays due to incomplete documentation.

Customer Signature _____ Date_____

State of Michigan
Department of Environmental Quality

Manifest Detail Inquiry

.....Starting Manifest Date=1/1/2000.....Ending Manifest Date=8/23/2002.....Generator like MID099113169*

Manifest No	Generator ID	TSD ID	Curr Micro / Original Micro	Trans 1 / 2	Date	Lot	Waste Number	Total Quantity	U of M	Equivalent Tons
GEN - INA1470018	MID099113169	IND000646943	16770487 / 16770487	OHR000034025	12/14/2001	A	D001	55	Gallons	0
	MID099113169	IND000646943	16770487 / 16770487	OHR000034025	12/14/2001	B	D001	16	Gallons	0
	MID099113169	IND000646943	16770487 / 16770487	OHR000034025	12/14/2001	C	U228	16	Gallons	0
	MID099113169	IND000646943	16770487 / 16770487	OHR000034025	12/14/2001	D	D002	5	Gallons	0
TSD - INA1470018	MID099113169	IND000646943	16991110 / 16991110	IND000646943	1/10/2002	A	D001	55	Gallons	0
	MID099113169	IND000646943	16991110 / 16991110	IND000646943	1/10/2002	B	D001	16	Gallons	0
	MID099113169	IND000646943	16991110 / 16991110	IND000646943	1/10/2002	C	U228	16	Gallons	0
	MID099113169	IND000646943	16991110 / 16991110	IND000646943	1/10/2002	D	D002	5	Gallons	0
GEN - INA1470060	MID099113169	IND000646943	16420666 / 16420666	MI0000131292	5/29/2001	A	D001	60	Gallons	0
	MID099113169	IND000646943	16420666 / 16420666	MI0000131292	5/29/2001	B	D003	20	Gallons	0
	MID099113169	IND000646943	16420666 / 16420666	MI0000131292	5/29/2001	C	D001	40	Gallons	0
	MID099113169	IND000646943	16420666 / 16420666	MI0000131292	5/29/2001	D	029L	175	Gallons	1
TSD - INA1470060	MID099113169	IND000646943	16991111 / 16991111	IND000646943	7/11/2001	A	D001	60	Gallons	0
	MID099113169	IND000646943	16991111 / 16991111	IND000646943	7/11/2001	B	D003	20	Gallons	0
	MID099113169	IND000646943	16991111 / 16991111	IND000646943	7/11/2001	C	D001	40	Gallons	0
	MID099113169	IND000646943	16991111 / 16991111	IND000646943	7/11/2001	D	D001	175	Gallons	1
GEN - MI3346335	MID099113169	MID980615298	15622120 / 15622120	MID021087275	9/8/2000	A	F001	400	Gallons	2
	MID099113169	MID980615298	15622120 / 15622120	MID021087275	9/8/2000	B	D001	850	Pounds	0
	MID099113169	MID980615298	15622120 / 15622120	MID021087275	9/8/2000	C	D001	55	Gallons	0
TSD - MI3346335	MID099113169	MID980615298	15700494 / 15700494	None	9/8/2000	A	F001	400	Gallons	2
	MID099113169	MID980615298	15700494 / 15700494	None	9/8/2000	B	D001	850	Pounds	0
	MID099113169	MID980615298	15700494 / 15700494	None	9/8/2000	C	D001	55	Gallons	0
GEN - MI3346341	MID099113169	MID980615298	15622117 / 15622117	MID021087275	9/8/2000	A	D001	55	Gallons	0
	MID099113169	MID980615298	15622117 / 15622117	MID021087275	9/8/2000	B	D001	55	Gallons	0
	MID099113169	MID980615298	15622117 / 15622117	MID021087275	9/8/2000	C	D001	165	Gallons	1
	MID099113169	MID980615298	15622117 / 15622117	MID021087275	9/8/2000	D	D001	55	Gallons	0
TSD - MI3346341	MID099113169	MID980615298	15700493 / 15700493	None	9/8/2000	A	D001	55	Gallons	0
	MID099113169	MID980615298	15700493 / 15700493	None	9/8/2000	B	D001	55	Gallons	0
	MID099113169	MID980615298	15700493 / 15700493	None	9/8/2000	C	D001	165	Gallons	1
	MID099113169	MID980615298	15700493 / 15700493	None	9/8/2000	D	D001	55	Gallons	0

Manifest No	Generator ID	TSD ID	Curr Micro / Original Micro	Trans 1 / 2	Date	Lot	Waste Number	Total Quantity	U of M	Equivalent Tons
GEN - MI3346371	MID099113169	MID980615298	15841479 / 15622118	MID021087275	9/8/2000	A	D001	220	Gallons	1
	MID099113169	MID980615298	15841479 / 15622118	MID021087275	9/8/2000	B	D001	55	Gallons	0
	MID099113169	MID980615298	15841479 / 15622118	MID021087275	9/8/2000	C	D002	60	Gallons	0
TSD - MI3346371	MID099113169	MID980615298	15700492 / 15700492	None	9/8/2000	A	D001	220	Gallons	1
	MID099113169	MID980615298	15700492 / 15700492	None	9/8/2000	B	D001	55	Gallons	0
	MID099113169	MID980615298	15700492 / 15700492	None	9/8/2000	C	D002	60	Gallons	0
GEN - MI3346372	MID099113169	MID980615298	15622119 / 15622119	MID021087275	9/8/2000	A	D001	110	Gallons	0
	MID099113169	MID980615298	15622119 / 15622119	MID021087275	9/8/2000	B	D001	275	Gallons	1
	MID099113169	MID980615298	15622119 / 15622119	MID021087275	9/8/2000	C	D001	110	Gallons	0
TSD - MI3346372	MID099113169	MID980615298	15700495 / 15700495	None	9/8/2000	A	D001	110	Gallons	0
	MID099113169	MID980615298	15700495 / 15700495	None	9/8/2000	B	D001	275	Gallons	1
	MID099113169	MID980615298	15700495 / 15700495	None	9/8/2000	C	D001	110	Gallons	0
GEN - MI3346500	MID099113169	MID060975844	17290722 / 17232586	MID049277718	6/3/2002	A	D001	2,989	Gallons	12
TSD - MI3346500	MID099113169	MID060975844	17281238 / 17231816		6/4/2002	A	D001	2,989	Gallons	12
GEN - MI7157307	MID099113169	MID000724831	16992709 / 16770488	OHR000034025	12/14/2001	A	D009	10	Gallons	0
TSD - MI7157307	MID099113169	MID000724831	16831115 / 16831115	MI0000131292	12/18/2001	A	D009	10	Gallons	0
GEN - MI7536562	MID099113169	MID096963194	16071955 / 16071955	MID049370869	3/5/2001	A	029L	900	Gallons	4
GEN - MI8020003	MID099113169	MID980615298	15342336 / 15342336	MID021087275	5/30/2000	A	D001	440	Gallons	2
	MID099113169	MID980615298	15342336 / 15342336	MID021087275	5/30/2000	B	D001	165	Gallons	1
	MID099113169	MID980615298	15342336 / 15342336	MID021087275	5/30/2000	C	D001	220	Gallons	1
	MID099113169	MID980615298	15342336 / 15342336	MID021087275	5/30/2000	D	F003	55	Gallons	0
TSD - MI8020003	MID099113169	MID980615298	15351475 / 15351475	None	5/30/2000	A	D001	440	Gallons	2
	MID099113169	MID980615298	15351475 / 15351475	None	5/30/2000	B	D001	165	Gallons	1
	MID099113169	MID980615298	15351475 / 15351475	None	5/30/2000	C	D001	220	Gallons	1
	MID099113169	MID980615298	15351475 / 15351475	None	5/30/2000	D	F003	55	Gallons	0
GEN - MI8020004	MID099113169	MID980615298	15342335 / 15342335	MID021087275	5/30/2000	A	D001	330	Gallons	1
	MID099113169	MID980615298	15342335 / 15342335	MID021087275	5/30/2000	B	D001	55	Gallons	0
TSD - MI8020004	MID099113169	MID980615298	15351476 / 15351476	None	5/30/2000	A	D001	330	Gallons	1
	MID099113169	MID980615298	15351476 / 15351476	None	5/30/2000	B	D001	55	Gallons	0
GEN - MI8429351	MID099113169	MID980615298	16071957 / 16071957	MID021087275	3/6/2001	A	F001	440	Gallons	2
	MID099113169	MID980615298	16071957 / 16071957	MID021087275	3/6/2001	B	D001	220	Gallons	1
	MID099113169	MID980615298	16071957 / 16071957	MID021087275	3/6/2001	C	F003	220	Gallons	1
	MID099113169	MID980615298	16071957 / 16071957	MID021087275	3/6/2001	D	F003	55	Gallons	0
TSD - MI8429351	MID099113169	MID980615298	16160363 / 16160363	None	3/6/2001	A	F001	440	Gallons	2
	MID099113169	MID980615298	16160363 / 16160363	None	3/6/2001	B	D001	220	Gallons	1

Manifest No	Generator ID	TSD ID	Curr Micro / Original Micro	Tr 1 / 2	Date	Lot	Waste Number	Total Quantity	U of M	Equivalent Tons
TSD - MI8429351	MID099113169	MID980615298	16160363 / 16160363	None	3/6/2001	C	F003	220	Gallons	1
	MID099113169	MID980615298	16160363 / 16160363	None	3/6/2001	D	F003	55	Gallons	0
GEN - MI8429352	MID099113169	MID980615298	16071956 / 16071956	MID021087275	3/6/2001	A	D001	165	Gallons	1
	MID099113169	MID980615298	16071956 / 16071956	MID021087275	3/6/2001	B	D001	110	Gallons	0
	MID099113169	MID980615298	16071956 / 16071956	MID021087275	3/6/2001	C	D001	385	Gallons	2
	MID099113169	MID980615298	16071956 / 16071956	MID021087275	3/6/2001	D	D001	165	Gallons	1
TSD - MI8429352	MID099113169	MID980615298	16160362 / 16160362	None	3/28/2001	A	D001	165	Gallons	1
	MID099113169	MID980615298	16160362 / 16160362	None	3/28/2001	B	D001	110	Gallons	0
	MID099113169	MID980615298	16160362 / 16160362	None	3/28/2001	C	D001	385	Gallons	2
	MID099113169	MID980615298	16160362 / 16160362	None	3/28/2001	D	D001	165	Gallons	1
GEN - MI8504279	MID099113169	MID980615298	16412265 / 16412265	MID021087275	7/10/2001	A	D001	715	Gallons	3
	MID099113169	MID980615298	16412265 / 16412265	MID021087275	7/10/2001	B	D001	440	Gallons	2
	MID099113169	MID980615298	16412265 / 16412265	MID021087275	7/10/2001	C	F001	385	Gallons	2
	MID099113169	MID980615298	16412265 / 16412265	MID021087275	7/10/2001	D	F003	55	Gallons	0
TSD - MI8504279	MID099113169	MID980615298	16460495 / 16460495		7/10/2001	A	D001	715	Gallons	3
	MID099113169	MID980615298	16460495 / 16460495		7/10/2001	B	D001	440	Gallons	2
	MID099113169	MID980615298	16460495 / 16460495		7/10/2001	C	F001	440	Gallons	2
	MID099113169	MID980615298	16460495 / 16460495		7/10/2001	D	F003	55	Gallons	0
GEN - MI8504280	MID099113169	MID980615298	16412266 / 16412266	MID021087275	7/10/2001	B	D001	275	Gallons	1
	MID099113169	MID980615298	16412266 / 16412266	MID021087275	7/10/2001	C	D001	495	Gallons	2
TSD - MI8504280	MID099113169	MID980615298	16460496 / 16460496		7/10/2001	B	D001	275	Gallons	1
	MID099113169	MID980615298	16460496 / 16460496		7/10/2001	C	D001	440	Gallons	2
GEN - MI8809587	MID099113169	MID980615298	16992708 / 16992708	MID021087275	12/17/2001	A	D001	605	Gallons	2
	MID099113169	MID980615298	16992708 / 16992708	MID021087275	12/17/2001	B	D001	275	Gallons	1
	MID099113169	MID980615298	16992708 / 16992708	MID021087275	12/17/2001	C	029L	165	Gallons	1
	MID099113169	MID980615298	16992708 / 16992708	MID021087275	12/17/2001	D	D001	275	Gallons	1
TSD - MI8809587	MID099113169	MID980615298	16991109 / 16832398		12/27/2001	A	D001	605	Gallons	2
	MID099113169	MID980615298	16991109 / 16832398		12/27/2001	B	D001	275	Gallons	1
	MID099113169	MID980615298	16991109 / 16832398		12/27/2001	C	029L	165	Gallons	1
	MID099113169	MID980615298	16991109 / 16832398		12/27/2001	D	D001	275	Gallons	1
TSD - MI8809588	MID099113169	MID980615298	16832397 / 16832397		12/27/2001	A	D001	110	Gallons	0
GEN - MI8903321	MID099113169	MID980615298	17151400 / 17151400	MID021087275	5/3/2002	A	D001	715	Gallons	3
	MID099113169	MID980615298	17151400 / 17151400	MID021087275	5/3/2002	B	D001	330	Gallons	1
	MID099113169	MID980615298	17151400 / 17151400	MID021087275	5/3/2002	C	D001	55	Gallons	0
TSD - MI8903321	MID099113169	MID980615298	17211253 / 17211253		5/13/2002	A	D001	715	Gallons	3

Manifest No	Generator ID	TSD ID	Curr Micro / Original Micro	Trans 1 / 2	Date	Lot	Waste Number	Total Quantity	U of M	Equivalent Tons
TSD - MI8903321	MID099113169	MID980615298	17211253 / 17211253		5/13/2002	B	D001	330	Gallons	1
	MID099113169	MID980615298	17211253 / 17211253		5/13/2002	C	D001	55	Gallons	0
GEN - MI8903322	MID099113169	MID980615298	17151399 / 17151399	MID021087275	5/3/2002	A	D001	880	Gallons	4
TSD - MI8903322	MID099113169	MID980615298	17211254 / 17211254		5/13/2002	A	D001	880	Gallons	4
GEN - PAX9316366	MID099113169	PAD002390961	17071745 / 17071745	MID049277718	3/26/2002	A	D009	250	Pounds	0
	MID099113169	PAD002390961	17071745 / 17071745	MID049277718	3/26/2002	B	D009	50	Pounds	0
TSD - PAX9316366	MID099113169	PAD002390961	17052587 / 17052587	NJD054126164	3/28/2002	A	D009	250	Pounds	0
	MID099113169	PAD002390961	17052587 / 17052587	NJD054126164	3/28/2002	B	D009	50	Pounds	0

Information System	Information System ID	Environmental Interest Type	Data Source	Last Updated Date
AIRS/AFS	MI0038363	AIR MAJOR	AIRS/AFS	12/08/2000
BRS	MID099113169	LQG	HAZARDOUS WASTE REPORT	04/20/1999
FRS	110000852480	FACILITY	FRS	
NET	261630184	AIR EMISSION INVENTORY	AIR VOLUNTARY SUBMISSION	12/30/1996
RCRAINFO	MID099113169	LQG	NOTIFICATION (RCRA)	10/05/1984
TRIS	48232CHRYS14250	TRI REPORTER	TRI REPORTING FORM	06/28/1991

Facility Mailing Addresses

Affiliation Type	Delivery Point	City Name	State	Postal Code	Information System
FACILITY MAILING ADDRESS	14250 PLYMOUTH RD	DETROIT	MI	48227	RCRAINFO
FACILITY MAILING ADDRESS	14250 PLYMOUTH RD.	DETROIT	MI	48232	TRIS
OPERATOR	ADDRESS NOT REPORTED	CITY NOT REPORTED	AK	99998	RCRAINFO
REGULATORY CONTACT	14250 PLYMOUTH RD	DETROIT	MI	48232	RCRAINFO

NAICS Codes

336111 Auto Mfg
336112 Light Truck + Utility Vehicle Mfg

No NAICS Codes returned.

SIC Codes

Data Source	SIC Code	Description	Primary	Report Discrepancy
AIRS/AFS	3711	MOTOR VEHICLES AND PASSENGER CAR BODIES		Report
RCRAINFO	3711	MOTOR VEHICLES AND PASSENGER CAR BODIES		Report
TRIS	3711	MOTOR VEHICLES AND PASSENGER CAR BODIES		Report

Still there

Contacts

Affiliation Type	Full Name	Office Phone	Information System	Mailing Address	Report Discrepancy
COMPLIANCE CONTACT	~~GERARD J VAN DE VYV~~	3134932486	AIRS/AFS		Report
PUBLIC CONTACT	LISA HAUBRICK	3134932395	TRIS		Report
REGULATORY CONTACT	~~JAMES ALLEN~~	3134933018	RCRAINFO	View	Report

U.S. Environmental Protection Agency

Environmental Technology Verification Program

ETV Centers
Verified Technologies
Protocols
Test/QA Plans
Technologies Under Evaluation
Technology Testing Events
Vendors
Documents
Outreach
Calendar

What is the ETV Program?

EPA's Environmental Technology Verification (ETV) Program develops testing protocols and verifies the performance of innovative technologies to problems that threaten human health or the environment. ETV was created to accelerate the entrance of new environmental technologies into the domestic and international marketplace.

ETV
HIGHLIGHTS
- Vendors Wanted
- New Verifications

ETVoice
- Subscribe
- Current
- Archives

How Does ETV Operate?

- ETV, which began in October 1995, operates through public/private testing partnerships to evaluate the performance of environmental technology in all media: air, water, soil, ecosystems, waste, pollution prevention, and monitoring.
- Market input is conveyed by the active involvement of stakeholder groups consisting of technology buyers, sellers, permitters, consultants, financiers, exporters and others within each sector.
- Any technology vendor within each technology category selected by stakeholders for verification is welcome, but in no way required, to participate.
- All test/quality assurance plans and protocols are developed with the participation of technical experts, stakeholders, and vendors; available prior to testing; peer reviewed by other experts; and updated after testing, as appropriate.
- All test procedures, technology performance reports, and verification statements are available on the ETV Web Site within hours of finalization.
- The highest levels of quality data are assured through the implementation of the ETV Quality Management Plan which is compatible with both American and internationally accepted quality standards.

Why Does EPA's Office of Research and Development Conduct a Program to Verify the Performance of Innovative Private Sector Environmental Technologies?

- The level of environmental risk reduction that occurs in the real world is directly related to the level of performance and effectiveness of

technologies purchased or used.

- Private sector technology developers produce almost all of the new technology purchased in the United States and around the world.
- Purchasers and permitters of environmental technology need an independent, objective and high quality source of performance information in order to make informed decisions.
- Vendors with innovative, better, faster, cheaper technologies need independent evaluation to penetrate a conservative, risk-avoiding environmental marketplace.

What are the Program Outputs to Date?

- Private sector environmental technologies have been verified in such areas as drinking water systems for small communities, air pollution control technologies that reduce smog causing NOx and lower greenhouse gases, new technologies that lower emissions and costs for metal finishing shops and industrial coatings operations, and innovative monitoring technologies of all types.
- EPA's independent Science Advisory Board stated in a recent report, "The scarcity of independent and credible technology information is one critical barrier to the use of innovative environmental technologies...Verification testing information provided by the ETV program fulfills an essential need of the environmental technology marketplace."

U.S. Environmental Protection Agency

Environmental Technology Verification Program

ETV Program Overview
Announcements
Verification Process
Priority Technology Categories
Application Process
Vendor Contact Lists
Map
Case Studies
ETV Name and Logo Use

Vendors

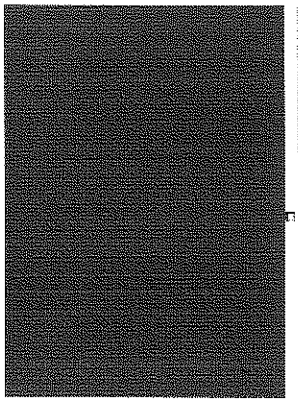
ETV Program Overview

The Environmental Technology Verification (ETV) Program was established by EPA in October 1995 to address the need for credible performance data to help businesses and communities better respond to the environmental technology choices available to them. More rapid and widespread implementation of improved technologies achieves the Agency's primary goal - a cleaner and healthier environment. Because almost all environmental technologies are developed and commercialized in the private sector, however, the need to create a program that combines government assured objectivity and quality with market-based concerns for cost control, speed, and fairness has been understood from the beginning. The challenge of integrating the public policy goals of environmental improvement and sustainability with private sector commercial demands for efficient business practices has defined all of the operational parameters of ETV. For this reason, the program's sole product is objective information on technology testing and performance contained in protocols, testing reports, and verification statements through which comparisons and decisions can be made by the many and diverse participants in the environmental marketplace - not by the government. Participation in ETV is voluntary. No approvals are granted; no standards are certified; no guarantees or recommendations are made. High quality data, responsive to customer need, is the product. ETV seeks to give decision-makers the information they need to create a more sustainable environment.

Since its inception, ETV has produced an outstanding record of accomplishment by partnering with hundreds of public and private sector individuals to bring high quality, objective information to the environmental technology marketplace. EPA research professionals and their verification partners - private sector testing organizations selected through peer-reviewed competition - work with more than 800 stakeholders in 18 separate stakeholder groups to facilitate performance evaluation of innovative, efficient, and cost-effective environmental technologies. The efficient and fully quality assured testing procedures and protocols developed by the program have set an example that has been become the world standard in performance verification in numerous technology categories. Private sector developers, whose technologies face substantial barriers to commercialization, use ETV data to market their products. States use ETV data to more rapidly permit or approve new technologies. Through the use of ETV information, buyers and the consulting engineering community discover innovations about which they are unaware or unsure of performance characteristics. EPA itself uses the information generated by ETV to help it understand the capabilities of available technologies to assist in meeting environmental goals. The entire system of real world environmental protection is helped by the improved technologies that emerge from ETV performance verification.

ETV has become the most comprehensive environmental technology verification program in the world, covering innovations as diverse as alternative fuels and systems for nitrogen oxide reduction; real time field monitors for measuring contaminants in air, water, and soil; microturbines and greenhouse gas leak prevention technologies for natural gas pipelines; *Cryptosporidium* and arsenic control in small community drinking water systems; urban infrastructure and ship ballast water control technologies; and pollution prevention technologies associated with many industries. ETV-verified technologies are now beginning to be purchased and used.

International interest in ETV has been growing steadily, as reflected by increasing program participation and expressions of interest in verification by foreign vendors, an increasing number of inquiries for training and technology transfer



vendors, an increasing number of inquiries for training and technology transfer related to environmental technology verification, and a steady rate of non-U.S. visits to the ETV Web Site. Some countries, including India, Thailand, and the Philippines, have started to develop their own environmental technology verification programs, modeled in part on the ETV Program.

New US EPA & Cal/EPA Environmental Certifications!

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Users
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Home
Read the Final Navy Report on Aerosolv®

Aerosolv® Aerosol Can Recycling System

Environmental Technology Verification

Aerosolv® is proud to be the first aerosol recovery technology to be verified by the United States Environmental Protection Agency. The ETV Joint Verification Statement can be read below. More information on the ETV program can be found on the EPA website at the following links:
http://www.epa.gov/etv/whats_new.htm
http:// www.epa.gov/etv/verifrpt.htm

THE ENVIRONMENTAL TECHNOLOGY VERIFICATION PROGRAM

ETV JOINT VERIFICATION STATEMENT

TECHNOLOGY TYPE:	**AEROSOL CAN PUNCTURING AND DRAINING**
APPLICATION:	**TREATMENT OF HAZARDOUS WASTE AEROSOL CANS CONTAINING PAINTS OR NON-HALOGENATED HYDROCARBON LUBRICANTS AND CLEANERS**
TECHNOLOGY NAME:	**AEROSOLV® AEROSOL CAN RECYCLING SYSTEM**
COMPANY:	**KATEC, INC.**
ADDRESS:	**P.O. BOX 3399 VIRGINIA BEACH, VA 23454**
PHONE:	**(800) 843-6808**
FAX:	**(757) 428-5757**
WEB SITE:	**http://www.aerosolv.com**
EMAIL:	**katec@aerosolv.com**

The U.S. Environmental Protection Agency has created the Environmental Technology Verification (ETV) Program to facilitate the deployment of

innovative or improved environmental technologies through performance verification and information dissemination. The goal of the ETV Program is to further environmental protection by substantially accelerating the acceptance and use of innovative, improved, and more cost-effective technologies. The ETV Program is intended to assist and inform those individuals in need of credible data for the design, distribution, permitting, and purchase of environmental technologies.

ETV works in partnership with recognized testing organizations to objectively and systematically document the performance of commercial ready environmental technologies. Together, with the full participation of the technology developer, they develop plans, conduct tests, collect and analyze data, and report findings. Verifications are conducted according to an established workplan with protocols for quality assurance. Where existing data are used, the data must have been collected by independent sources using similar quality assurance protocols.

EPA's ETV Program, through the National Risk Management Research Laboratory (NRMRL), has partnered with the California Department of Toxic Substances Control (DTSC) under an ETV Pilot Project to verify pollution prevention, recycling, and waste treatment technologies. This verification statement provides a summary of performance results for the Katec, Inc. Aerosolv® Aerosol Can Recycling System.

December 1999

[Home | Technical | GSA | Ordering and Pricing | Users | Update | New Products | Video]
[ETV Verification | Cal/EPA Certification | Navy Report | E-mail]

MOPAR BRAKE PARTS CLEANER, LOW ODOR

```
     TDS: 0175547                                        Cons Prod/Haz Sub: YES
    Part: 04897150AB        Standard: N/AV                    Hazwoper Haz: YES
Supplier: 82377            Prep Date: 12/20/2001           OSHA Hazardous: YES
Manufctr: 03500                  DRAFT
*******************************************************************************
********************** SECTION 01 - PRODUCT INFORMATION ***********************
*******************************************************************************
 MFG BY: PART SALES & SERVICE            DAIMLERCHRYSLER
         26311 LAWRENCE AVE   CENTERLINE     MI     48015
         EMERGENCY PHONE: 248-512-8002                AFTER HOURS: 248-576-8888
DIST BY: PART SALES & SERVICE            DAIMLERCHRYSLER
         26311 LAWRENCE AVE   CENTERLINE     MI     48015
         EMERGENCY PHONE: 248-512-8002                AFTER HOURS: 248-576-8888
DAIMLERCHRYSLER INDUSTRIAL HYGIENE: 248-512-8260      AFTER HOURS: 248-576-8888
BRAND NAME: MOPAR BRAKE PARTS CLEANER, LOW ODOR
MFG ID    : N/AV
DESCRIPTION: CLEANER/BRAKE AEROSOL (15 OZ.)
*******************************************************************************
************************** SECTION 02 - INGREDIENTS ***************************
*******************************************************************************
HAZARDOUS INGREDIENTS:              PERCENT
COMM NAME / CAS NO & CHEM NAME:      BY WGT    OSHA ACGIH CHRYS UNITS NOTATIONS
                              ***EXISTING INGREDIENTS***
ISOPROPYL ALCOHOL                     5-10  W   400   400   400 PPM
000067-63-0  2-PROPANOL (9CI)               L   500   500   500
ACETONE                               5-10  W   750   750   750 PPM
000067-64-1  ACETONE                        L  1000  1000  1000
N-HEPTANE                            60-100 W   400   400   400 PPM
000142-82-5  HEPTANE (8CI9CI)               L   500   500   500
CARBON DIOXIDE                        1-5   W  5000  5000  5000 PPM
000124-38-9  CARBON DIOXIDE (8CI9

GENERIC DESC: MATERIAL CONSISTING OF THE FOLLOWING: ALCOHOL(S), KETONES,
ALIPHATIC HYDROCARBON(S) AND PROPELLANT.
  FOR EXPLANATION OF "NOTATIONS", SEE THE HAZARD COMMUNICATION SHEET
EXPLANATIONS PAGE.
*******************************************************************************
************************* SECTION 03 - PHYSICAL DATA **************************
*******************************************************************************
BOILING POINT :     133 F            SOLUBILITY IN WATER: NEGLIGIBLE ( < 0.1% )
VAPOR PRESSURE: N/AV                   EVAP. RATE:  N/AV    REF: N/AV
VAPOR DENSITY : > 1.000 AT N/AV        SPECIFIC GRAVITY:   0.700 AT N/AV
PH AT FULL STRENGTH:   N/AP           PH AT REC. DILUT:   N/AP
%VOLATILE BY VOL   : > 96.0           VOLATILE ORGANIC COMP: N/AV     N/AV
ODOR THRESHOLD:   N/AV       PPM FOR     % POPULATION
FREEZING POINT:     N/AV                 COEFF. OF WATER/OIL DIST: N/AV
APPEARANCE & ODOR: APPEARANCE: CLEAR..... STATE: LIQUID..... ODOR: SOLVENT.....
*******************************************************************************
******************** SECTION 04 - FIRE AND EXPLOSION DATA *********************
*******************************************************************************
FLASH POINT:       0 F  SETA   IGN TEMP:  N/AV      LEL: N/AV     UEL: N/AV
SPECIAL FIRE & EXPLOSION HAZARDS: EXPOSURE TO INTENSE HEAT AND DIRECT FLAME
   MAY RESULT IN PRESSURE BUILD-UP IN CONTAINER, CAUSING WEAKENING OR RUPTURING
```

OF THE CONTAINER. KEEP CONTAINERS TIGHTLY CLOSED. ISOLATE FROM HEAT, ELECTRICAL EQUIPMENT, SPARKS AND OPEN FLAME. CLOSED CONTAINERS MAY EXPLODE WHEN EXPOSED TO EXTREME HEAT. DO NOT APPLY ON HOT SURFACES. FLAMMABLE. EXTREMELY FLAMMABLE. ESCAPING VAPORS MAY CAUSE FLASH FIRE AND MAY IGNITE EXPLOSIVELY.

EXTINGUISHING MEDIA: DRY CHEMICAL, CARBON DIOXIDE OR FOAM. DO NOT USE WATER.

SPECIAL FIREFIGHTING PROCEDURES: USE PROTECTIVE CLOTHING. USE SELF-CONTAINED BREATHING APPARATUS. REMOVE CONTAINERS FROM FIRE AREA IF POSSIBLE. USE WATER TO COOL FIRE EXPOSED CONTAINERS.

SENSITIVE TO MECHANICAL IMPACT?: NO SENSITIVE TO STATIC DISCHARGE?: YES

HAZARDOUS COMBUSTION PRODUCTS: CARBON MONOXIDE AND CARBON DIOXIDE AND IRRITATING SMOKE.

FLAME PROJECTION: > 24 IN

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********** SECTION 05 - HEALTH HAZARD DATA **********

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EFFECTS OF OVEREXPOSURE - ACUTE & CHRONIC: <<---INHALATION--->> INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING THIS PRODUCT MAY BE HARMFUL OR FATAL. ACUTE EXPOSURE WILL PRODUCE THE FOLLOWING: HEADACHE, DIZZINESS, NAUSEA AND ACUTE NERVOUS SYSTEM DEPRESSION CHARACTERIZED BY HEADACHE, DIZZINESS, STAGGERING, CONFUSION, UNCONSCIOUSNESS OR COMA. <<---SKIN CONTACT--->> DIRECT CONTACT MAY PRODUCE THE FOLLOWING: IRRITATION. SKIN CONTACT MAY PRODUCE DEFATTING AND DRYING OF SKIN. <<---EYE CONTACT--->> DIRECT CONTACT MAY PRODUCE THE FOLLOWING: DAMAGE TO EYE TISSUE AND IRRITATION AND TEARING. <<---INGESTION--->> MAY BE HARMFUL OR FATAL IF SWALLOWED. ASPIRATION (GOING DOWN THE WRONG PIPE INTO THE WINDPIPE) MAY CAUSE THE FOLLOWING: CHEMICAL PNEUMONITIS (AN INFLAMMATION OF THE LUNGS SIMILAR TO PNEUMONIA, WHICH IS CAUSED BY GETTING THE LIQUID FORM OF A CHEMICAL INTO THE LUNGS). <<---SPECIAL TOXICITY--->> CHRONIC EXPOSURE TO HIGH CONCENTRATIONS MAY PRODUCE THE FOLLOWING: DAMAGE TO THE NERVOUS SYSTEM AND/OR BRAIN DAMAGE. SYMPTOMS ARE MORE LIKELY TO OCCUR IN POORLY VENTILATED AREAS.

EMERGENCY FIRST AID PROCEDURES: <<---INHALATION--->> REMOVE TO FRESH AIR AT ONCE. ARTIFICIAL RESPIRATION IF BREATHING HAS STOPPED. CARDIAC RESUSCITATION IF INDICATED. CONTACT A PHYSICIAN. <<---SKIN CONTACT--->> REMOVE CONTAMINATED CLOTHING. WASH WITH SOAP AND WATER. APPLY SKIN CREAM IF DEFATTING OF SKIN OCCURS. IF CONDITION PERSISTS, CONSULT A PHYSICIAN. <<---EYE CONTACT--->> TO PREVENT FURTHER EYE IRRITATION, REMOVE TO FRESH AIR AT ONCE. REMOVE CONTACT LENSES TO ASSURE COMPLETE FLUSHING. RINSE EYES IMMEDIATELY WITH LARGE AMOUNTS OF WATER, OCCASIONALLY LIFTING BOTH UPPER AND LOWER LIDS. CONTINUE FOR 15 MINUTES. CONTACT A PHYSICIAN. <<---INGESTION--->> NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. DO NOT INDUCE VOMITING-PETROLEUM BASE CHEMICAL. CONTACT A PHYSICIAN.

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********** SECTION 06 - REACTIVITY DATA **********

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STABILITY: STABLE

CONDITIONS TO AVOID: HIGH TEMPERATURE, SPARKS OR OPEN FLAME.

MATERIALS TO AVOID: STRONG OXIDIZING AGENTS-CHLORINE AND PURE OXYGEN.

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

POLYMERIZATION CONDITIONS TO AVOID: POLYMERIZATION WILL NOT OCCUR.

HAZARDOUS DECOMPOSITION PRODUCTS: THERMAL DECOMPOSITION MAY PRODUCE THE FOLLOWING: CARBON MONOXIDE AND CARBON DIOXIDE.

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********** SECTION 07 - SPILL OR LEAK PROCEDURES **********

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STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: ELIMINATE ALL IGNITION SOURCES (FLAMES, HOT SURFACES AND ELECTRICAL, STATIC OR FRICTIONAL SPARKS). DO NOT USE RAGS, PAPER TOWELS, OR OTHER COMBUSTIBLE MATERIALS TO CLEAN UP SPILL, SINCE THIS MAY CREATE A FIRE HAZARD. VENTILATE AREA WITH

EXPLOSION-PROOF VENTILATION EQUIPMENT. EVACUATE PERSONNEL NOT EQUIPPED WITH PROTECTIVE CLOTHING AND EQUIPMENT. ABSORB ON A SUITABLE MEDIUM. SWEEP UP AND DISCARD IN A SUITABLE CONTAINER FOR DISPOSAL. CHECK ATMOSPHERE WITH APPROPRIATE DEVICE BEFORE ENTERING AREA.

WASTE DISPOSAL METHODS: DISPOSE OF IN A MANNER CONSISTENT WITH STATE, PROVINCIAL, LOCAL, AND FEDERAL DISPOSAL REGULATIONS.

********** SECTION 08 - SPECIAL PROTECTION **********

RESPIRATORY PROTECTION: NO SPECIAL PROTECTION NEEDED UNDER NORMAL CONDITIONS. IF THE ALLOWABLE LIMIT OF THE PRODUCT OR ANY COMPONENT IS EXCEEDED, USE THE FOLLOWING: ORGANIC VAPOR RESPIRATOR.

VENTILATION TYPE: IF THE ALLOWABLE LIMIT OF THE PRODUCT OR ANY COMPONENT IS EXCEEDED, USE THE FOLLOWING: LOCAL EXHAUST VENTILATION.

PROTECTIVE GLOVES: RECOMMENDED. BUTYL RUBBER GLOVES OR RUBBER GLOVES.

EYE PROTECTION: RECOMMENDED. SAFETY GLASSES OR USE CHEMICAL GOGGLES OR FACESHIELD UNDER NORMAL CONDITIONS. USE BOTH CHEMICAL GOGGLES AND FACESHIELD IF LIKELY TO BE SPLASHED.

OTHER PROTECTIVE EQUIPMENT: NO SPECIAL PROTECTION NEEDED UNDER NORMAL CONDITIONS.

********** SECTION 09 - SPECIAL PRECAUTIONS **********

PRECAUTIONS TO BE TAKEN IN HANDLING & STORAGE: STORE AT TEMPERATURE BELOW 120 F (49 C). STORE IN A COOL, DRY PLACE. STORE IN A WELL VENTILATED AREA. STORE IN FLAMMABLE LIQUID STORAGE ROOM. USE WITH ADEQUATE VENTILATION. AVOID USING OR STORING AT HIGH TEMPERATURES. REACTS WITH OXIDIZERS. KEEP CONTAINER TIGHTLY CLOSED WHEN NOT IN USE. DO NOT STORE IN OPEN OR UNLABELED CONTAINERS. THIS PRODUCT MAY BE HARMFUL IF INHALED--NOT INTENDED FOR BREATHING. KEEP AWAY FROM OPEN FLAME. BOND AND GROUND ALL CANS, DRUMS, MIXERS ETC. TO PREVENT STATIC SPARKS. CONTENTS ARE UNDER PRESSURE. DO NOT PUNCTURE, DROP OR SLIDE CONTAINERS. FLAMMABLE.

OTHER PRECAUTIONARY MEASURES: AVOID BREATHING MIST. AVOID BREATHING VAPOR. AVOID PROLONGED OR REPEATED SKIN CONTACT. TAKE "NO SMOKING" PRECAUTIONS. DO NOT SMOKE OR EAT WHEN HANDLING THIS SUBSTANCE; WASH THOROUGHLY AFTER USING. MAINTAIN GOOD HOUSEKEEPING AND HYGIENIC PRACTICES.

********** SECTION 10 - WASTE LABELING INFORMATION **********

DOT LABELING INFORMATION (49 CFR 100-199)

ID#: UN1950 ERG#: 126 HAZARD CLASS - PRMY: 2.1 PACKING GROUP: N/AP

PROPER SHIPPING NAME: WASTE AEROSOLS, FLAMMABLE, (EACH NOT EXCEEDING 1 L CAPACITY)

LABEL(S) REQUIRED: FLAMMABLE GAS

********** SECTION 11 - PREPARATION INFORMATION **********

PREPARATION DATE: 12/20/2001 DATA EFFECTIVE DATE: 11/19/2001

PREPARED BY: INDUSTRIAL HYGIENE
DAIMLERCHRYSLER
PHONE: 248-512-8260

PREPARED BY: STAFF
REVIEWED BY:
REVISED BY:

① BMW – Steve + Walker → "Overfiling"
② GM OSW to Matt POG → ~~NT~~ gains Bob King
↳ OECA decided to meet face to face in Atlanta
↳ No reason to ~~view~~ change view

HAZARDOUS WASTE MANAGEMENT PROGRAM ADMINISTRATIVE RULES PROMULGATED PURSUANT TO PART 111 OF THE NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION ACT, 1994 PA 451, AS AMENDED

Monday 10:30 am in Atlanta Technical issues & GM compliance issues

Effective September 11, 2000

Follow up call with GM [Michelle Fisher] ?
EPA wants ① Seperate agreements for GM & Saturn

3

DEQ

Separate docket #s ? Filing in all 3 regions

Chris + Frank + Leslie → after Monday → will see the list on Monday
No CAFO will bind state

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
WASTE MANAGEMENT DIVISION

EPA is an independent sovereign
Chris told Michelle that the dates are not changing

The Michigan Department of Environmental Quality provides equal opportunities for employment and participation in decision making processes. Both state and federal laws prohibit discrimination on the basis of race, color, national origin, religion, disability, age, marital status, or sex under the Civil Rights Act of 1964, as amended (MI PA 453 and MI PA 220, Title V of the Rehabilitation Act of 1973, as amended, and the Americans With Disabilities Act). If you believe that you have been discriminated against in any program, activity, or facility, or if you desire additional information, please write the Michigan Department of Environmental Quality, Personnel Office, P.O. Box 30473, Lansing, MI 48909, or the Michigan Department of Civil Rights, State of Michigan, Plaza Building, 1200 6th Avenue, Detroit, MI 48226. For information or assistance on this publication, contact the Michigan Department of Environmental Quality, Waste Management Division, P.O. Box 30241, Lansing, MI 48909.

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③ GM → pdf file → OGC reaction to §7006 Petition

Interpretive letter vs Require preamble

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DEPARTMENT OF ENVIRONMENTAL QUALITY

WASTE MANAGEMENT DIVISION

HAZARDOUS WASTE MANAGEMENT

Filed with the Secretary of State on September 1, 2000
These rules take effect 7 days after filing with the Secretary of State

(By authority conferred on the director and the department of environmental quality by sections 11115a, 11118, 11123, 11127, 11128, 11130, 11132, 11137, 11140, 11141, and 11145 of Act No. 451 of the Public Acts of 1994, and Executive Reorganization Order No. 1995-16, being §§324.11115a, 324.11118, 324.11123, 324.11127, 324.11128, 324.11130, 324.11132, 324.11137, 324.11140, 324.11141, 324.11145, and 324.99903 of the Michigan Compiled Laws)

R 299.9101 to R 299.9109, R 299.9202 to R 299.9204, R 299.9206, R 299.9209, R 299.9220, R 299.9222, R 299.9224 to R 299.9226, R 299.9228, R 299.9301, R 299.9304, R 299.9306, R 299.9308, R 299.9311, R 299.9401, R 299.9403, R 299.9406 to R 299.9410, R 299.9413, R 299.9501 to R 299.9506, R 299.9508, R 299.9519, R 299.9601, R 299.9605 to R 299.9608, R 299.9610, R 299.9612, R 299.9613, R 299.9619 to R 299.9623, R 299.9626, R 299.9627, R 299.9629, R 299.9701, R 299.9703, R 299.9706, R 299.9708 to R 299.9711, R 299.9803, R 299.9804, R 299.9808, R 299.9809, R 299.11001 to R 299.11005, and R 299.11103 of the Michigan Administrative Code are amended, R 299.9230, R 299.9524, R 299.9525, R 299.9635 to R 299.9638, and R 299.9817 to R 299.9821 are added to the Code, and R 299.9411 and R 299.9412 of the Code are rescinded to read as follows:

PART 1. GENERAL PROVISIONS

R 299.9101 Definitions; A, B.

Rule 101. As used in these rules:

(a) "Aboveground tank" means a device which meets the definition of "tank" in this part and which is situated in such a way that the entire surface area of the tank is completely above the plane of the adjacent surrounding surface bottom and can be visually inspected.

(b) "Act" means Act No. 451 of the Public Acts of 1994, as amended, being §324.101 et seq. of the Michigan Compiled Laws, and known as the natural resources and environmental protection act.

(c) "Act 138" means Act No. 138 of the Public Acts of 1998, as amended, being §§29.471 to 29.480 of the Michigan Compiled Laws, and known as the hazardous materials transportation act.

(d) "Act 181" means Act No. 181 of the Public Acts of 1963, being §480.14 et seq. of the Michigan Compiled Laws, and known as the motor carrier safety act.

(e) "Act 207" means Act No. 207 of the Public Acts of 1941, as amended, being §29.1 et seq. of the Michigan Compiled Laws, and known as the fire prevention act.

(f) "Act 218" means sections 3101 and 3102 of Act No. 218 of the Public Acts of 1956, as amended, being §§500.3101 and 500.3102 of the Michigan Compiled Laws.

(g) "Act 236" means Act No. 236 of the Public Acts of 1961, as amended, being §600.101 et seq. of the Michigan Compiled Laws, and known as the revised judicature act.

(h) "Act 300" means Act No. 300 of the Public Acts of 1949, as amended, being §257.1 et seq. of the Michigan Compiled Laws, and known as the Michigan vehicle code.

(i) "Act 306" means Act No. 306 of the Public Acts of 1969, as amended, being §24.201 et seq. of the Michigan Compiled Laws, and known as the administrative procedures act of 1969.

(j) "Act 368" means Act No. 368 of the Public Acts of 1978, as amended, being §333.1101 et seq. of the Michigan Compiled Laws, and known as the public health code.

(k) "Act 399" means Act No. 399 of the Public Acts of 1976, being §325.1001 et seq. of the Michigan Compiled Laws, and known as the safe drinking water act.

(l) "Active life" means the period from the initial receipt of hazardous waste at a facility until the director receives certification of final closure.

(m) "Active portion" means that portion of a facility where treatment, storage, or disposal operations are being, or have been, conducted after November 19, 1980, and which is not a closed portion. (See also "closed portion" and "inactive portion")

(n) "Active range" means a military range that is currently in service and being regularly used for range activities.

(o) "Administrator" means the administrator of the United States EPA or the administrator's designee.

(p) "Agent," when used in conjunction with the term United States importer, means an employee of the United States importer or a legally recognized representative of the United States importer who has been authorized in a lawfully executed written document, such as a power of attorney, to act on the United States importer's behalf.

(q) "Ancillary equipment" means any device, including, but not limited to, such devices as piping, fittings, flanges, valves, and pumps, that is used to distribute, meter, or control the flow of hazardous waste from its point of generation to storage or treatment tanks, between hazardous waste storage and treatment tanks to a point of disposal on-site, or to a point of shipment for disposal off-site.

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

(s) "Associated organic chemical manufacturing facility" means a facility that meets all of the following requirements:

(i) The primary SIC code at the facility is 2869 but operations may also include SIC codes 2821, 2822, and 2865.

(ii) The facility is physically co-located with a petroleum refinery.

(iii) The petroleum refinery to which the oil that is being recycled is returned also provides hydrocarbon feedstocks to the facility.

(t) "ASTM" means the American society for testing and materials.

(u) "Authorized representative" means the person who is responsible for the overall operation of a facility or an operational unit, such as the plant manager, superintendent, or person who has equivalent responsibilities.

(v) "Battery" means a device which consists of 1 or more electrically connected electrochemical cells and which is designed to receive, store, and deliver electric energy. An electrochemical cell is a system that consists of an anode, a cathode, an electrolyte, and any such connections that are needed to allow the cell to deliver or receive electrical energy. The term battery also includes an intact, unbroken battery from which the electrolyte has been removed.

(w) "Boiler" means an enclosed device which uses controlled flame combustion and which is either determined by the director to be a boiler based on the standards and procedures set forth in the provisions of 40 C.F.R. §§260.32 and 260.33, which are adopted by reference in R 299.11003, or which is in compliance with all of the following characteristics:

(i) The unit shall have physical provisions for recovering and exporting thermal energy in the form of steam, heated fluids, or heated gases.

(ii) The unit's combustion chamber and primary energy recovery section or sections shall be of an integral design. To be of an integral design, the combustion chamber and the primary energy recovery section or sections, such as waterwalls and superheaters, shall be physically formed into 1 manufactured or assembled unit. A unit in which the combustion chamber and the primary energy recovery section or sections are joined only by ducts or connections carrying flue gas is not integrally designed; however, secondary energy recovery equipment, such as economizers or air preheaters, need not be physically formed into the same unit as the combustion chamber and the primary energy recovery section. The following units are not precluded from being boilers solely because they are not of an integral design:

(A) Process heaters or units that transfer energy directly to a process stream.

(B) Fluidized bed combustion units.

(iii) While in operation, the unit shall maintain a thermal energy recovery efficiency of not less than 60% calculated in terms of the recovered energy compared with the thermal value of the fuel.

(iv) The unit shall export and utilize not less than 75% of the recovered energy calculated on an annual basis. In this calculation, credit shall not be given for recovered heat that is used internally in the same unit, such as for the preheating of fuel or combustion air and for the driving of induced or forced draft fans or feedwater pumps.

(x) "Burner" means an owner or operator of a facility that burns either used oil fuel or hazardous waste fuel.

(y) "By-product" means a material which is not one of the primary products of a production process and which is not solely or separately produced by the production process. Examples are process residues such as slags or distillation column bottoms. The term does not include a coproduct which is produced for the general public's use and which is ordinarily used in the form in which it is produced by the process.

R 299.9102 Definitions; C, D.

Rule 102. As used in these rules:

(a) "Carbon regeneration unit" means an enclosed thermal treatment device used to regenerate spent activated carbon.

(b) "CERCLA" means the comprehensive environmental response compensation and liability act of 1980, as amended, 42 U.S.C. §9601 et seq.

(c) "Certification" means a statement of professional opinion based upon knowledge or belief.

(d) "C.F.R." means the Code of Federal Regulations.

(e) "Chemical agents and munitions" means chemical agents and munitions as defined in 50 U.S.C. section 1521(j)(1).

(f) "Closed portion" means the portion of a facility that an owner or operator has closed pursuant to the approved facility closure plan and all applicable closure requirements. (See also "active portion" and "inactive portion.")

(g) "Combustion zone" means the portion of the internal capacity of an incinerator where the gas temperatures of the materials being burned are within 100 degrees Celsius of the specified operating temperature.

(h) "Commingling" means the transfer of hazardous wastes between containers or vehicles by a transporter during the course of transportation that results in the waste being mixed or repackaged.

(i) "Component" means either the tank or the ancillary equipment of a tank system.

(j) "Confined aquifer" means an aquifer that is bounded above and below by impermeable beds or by beds that have a distinctly lower permeability than that of the aquifer itself. It is an aquifer that contains confined groundwater.

(k) "Consignee" means the ultimate treatment, storage, or disposal facility in a receiving country to which the hazardous waste will be sent.

(l) "Consolidation" means the transfer of containers of hazardous wastes between transport vehicles by a transporter during the course of transportation without the containers holding the wastes being opened and without the wastes being repackaged.

(m) "Constituent" or "hazardous waste constituent" means a constituent that caused the administrator to list the hazardous waste in the provisions of 40 C.F.R. part 261, subpart D, a constituent that is listed in table I of 40 C.F.R. §261.24, or a constituent that is listed in table 201, 202, or 205 of these rules.

(n) "Construction permit" means a permit which is issued pursuant to part 111 of the act and which is for the construction of a treatment, storage, or disposal facility.

(o) "Container" means any portable device in which a material is stored, transported, treated,

disposed of, or otherwise handled.

(p) "Contingency plan" means a document that sets out an organized, planned, and coordinated course of action to be followed in case of a fire, explosion, or release of hazardous waste or hazardous waste constituents that could threaten human health or the environment.

(q) "Corrective action management unit" or "CAMU" means an area within a facility that is used only for managing remediation waste in implementing corrective action or cleanup at the facility.

(r) "Corrosion expert" means a person who, by reason of his or her knowledge of the physical sciences and the principles of engineering and mathematics acquired by a professional education and related practical experience, is qualified to engage in the practice of corrosion control on buried or submerged metal piping systems and metal tanks. The person shall be certified as being qualified by the national association of corrosion engineers or be a registered professional engineer who has certification or licensing that includes education and experience in corrosion control on buried or submerged metal piping systems and metal tanks.

(s) "Designated facility" means a hazardous waste treatment, storage, or disposal facility which has received a permit or has interim status pursuant to the provisions of title II of the solid waste disposal act; which has a license, permit, or interim status from a state that is authorized pursuant to the provisions of section 3006 of title II of the solid waste disposal act, which, if located in Michigan, has an operating license that is issued pursuant to the provisions of part 111 of the act, has a legally binding agreement with the director that authorizes operation, or is subject to the requirements of section 23(4) and (5) of part 111 of the act; or which is regulated pursuant to the provisions of R 299.9206(1)(c) or R 299.9803; and which has been designated on the manifest by the generator pursuant to the provisions of R 299.9304. If the waste is destined for a facility in an authorized state that has not yet obtained authorization to regulate the particular waste as hazardous, then the designated facility shall be a facility that is allowed by the receiving state to accept the waste.

(t) "Destination facility" means a facility that treats, disposes of, or recycles a particular category of universal waste, except for the management activities described in 40 C.F.R. §§273.13(a) and (c) and 273.33(a) and (c). A facility at which a particular category of universal waste is only accumulated is not a destination facility for purposes of managing that category of universal waste.

(u) "Dike" means an embankment or ridge which consists of either natural or man-made materials and which is used to prevent the movement of liquids, sludges, solids, or other materials.

(v) "Dioxins and furans (D/F)" means tetra, penta, hexa, hepta, and octa-chlorinated dibenzo dioxins and furans.

(w) "Director" means the director of the department of environmental quality.

(x) "Discharge" or "hazardous waste discharge" means the accidental or intentional spilling, leaking, pumping, pouring, emitting, emptying, or dumping of hazardous waste into or on any land or water.

(y) "Disposal" means the discharge, deposit, injection, dumping, spilling, leaking, or placing of any hazardous waste into or on land or water in such manner that the hazardous waste or a constituent of the hazardous waste might enter the environment, be emitted into the air, or discharged into water, including groundwater.

(z) "Disposal facility" means a facility or a part of a facility at which hazardous waste, as defined by these rules, is intentionally placed into or on any land or water and at which hazardous waste will remain after closure. The term "disposal facility" does not include a corrective action management unit into which remediation wastes are placed.

(aa) "Displacement" means the relative movement of any two sides of a fault measured in any direction.

(bb) "DOD" means the United States department of defense.

(cc) "DOT" means the United States department of transportation.

(dd) "Do-it-yourselfer used oil collection center" means any site or facility that accepts or aggregates and stores used oil collected only from household do-it-yourselfers.

(ee) "Drip pad" means an engineered structure which consists of a curbed, free-draining

base, which is constructed of nonearthen materials, and which is designed to convey preservative kick-back or drippage from treated wood, precipitation, and surface water run-on to an associated collection system at wood preserving plants.

R 299.9103 Definitions; E, F.

Rule 103. As used in these rules:

(a) "Electric lamp" means the bulb or tube portion of a lighting device specifically designed to produce radiant energy, most often in the ultraviolet, visible, and infrared regions of the electromagnetic spectrum. Examples of common electric lamps include incandescent, fluorescent, high intensity discharge, sodium vapor, mercury vapor, and neon lamps.

(b) "Element" means any constituent part of a unit or any group of constituent parts of a unit that are assembled to perform a specific function, for example, a pump seal, pump, kiln liner, or kiln thermocouple.

(c) "Elementary neutralization unit" means a device that is in compliance with both of the following requirements:

(i) Is used for neutralizing wastes that are hazardous wastes only because they exhibit the corrosivity characteristic defined in R 299.9212 or are listed in the provisions of R 299.9213 or R 299.9214 only because they exhibit the corrosivity characteristic.

(ii) Is in compliance with the definition of "tank," "tank system," "container," "transport vehicle," or "vessel" as specified in this part.

(d) "Enforceable document" means an order, a plan, or other document issued by the department either in place of an operating license for the postclosure period, or as a source of alternative requirements for hazardous waste management units, as provided under these rules. An enforceable document may include, but is not limited to, a corrective action order under part 111 of the act, a CERCLA remedy, or a closure or postclosure plan. An enforceable document shall be issued under an authority that has available all of the following remedies:

(i) The authority to sue in courts of competent jurisdiction to enjoin any threatened or continuing violation of the requirements of these documents.

(ii) The authority to compel compliance with the requirements for corrective action or other emergency response measures deemed necessary to protect human health and the environment.

(iii) The authority to access or sue to recover in court civil penalties, including fines, for violations of the requirements of these documents.

(e) "EPA" means the United States environmental protection agency.

(f) "EPA acknowledgment of consent" means the cable that is sent to EPA from the United States embassy in a receiving country which acknowledges the written consent of the receiving country to accept the hazardous waste and which describes the terms and conditions of the receiving country's consent to the shipment.

(g) "EPA identification number" means the number that is assigned by the EPA or the EPA's designee to each generator, transporter, and treatment, storage, or disposal facility. If a generator, transporter, or treatment, storage, or disposal facility manages wastes that are hazardous pursuant to the provisions of these rules, but are not hazardous pursuant to the provisions of RCRA, then "EPA identification number" shall mean an equivalent number that is assigned by the director.

(h) "EPA region" means the states and territories found in any of the 10 EPA regions identified in the provisions of 40 C.F.R. §260.10.

(i) "Equivalent method" means any testing or analytical method that is approved by the director pursuant to the provisions of R 299.9215.

(j) "Excluded scrap metal" means processed scrap metal, unprocessed home scrap metal, and unprocessed prompt scrap metal.

(k) "Existing facility" means a treatment, storage, or disposal facility that either received all necessary state-issued environmental construction or operating permits before January 1, 1980, or for which approval of construction has been received from the air pollution control commission before

November 19, 1980. Existing facilities also include those treatment, storage, or disposal facilities which were operating before January 1, 1980, under existing authority and which did not require state-issued environmental construction or operating permits.

(l) "Existing portion" means the land surface area of an existing waste management unit previously authorized and included in the original part A permit application to the EPA on which wastes have been placed before the issuance of a permit pursuant to the provisions of RCRA or an operating license pursuant to the provisions of these rules, whichever is sooner.

(m) "Existing tank system" or "existing component" means a tank system or component that is used for the storage or treatment of hazardous waste and that is in operation, or for which installation has commenced, on or before July 14, 1986. Installation will be considered to have commenced if the owner or operator has obtained all federal, state, and local approvals or permits necessary to begin physical construction of the site or installation of the tank system and if either of the following provisions applies:

(i) A continuous on-site physical construction or installation program has begun.

(ii) The owner or operator has entered into contractual obligations, which cannot be cancelled or modified without substantial loss, for physical construction of the site of installation of the tank system to be completed within a reasonable time.

(n) "Explosives or munitions emergency" means a situation involving the suspected or detected presence of unexploded ordnance, damaged or deteriorated explosives or munitions, an improvised explosive device, other potentially explosive material or device, or other potentially harmful military chemical munitions or device, that creates an actual or potential imminent threat to human heatth, including safety, or the environment, including property, as determined by an explosives or munitions emergency response specialist. Such situations may require immediate and expeditious action by an explosives or munitions emergency specialist to control, mitigate, or eliminate the threat.

(o) "Explosives or munitions emergency response" means all immediate response activities by an explosives or munitions emergency response specialist to control, mitigate, or eliminate the actual or potential threat encountered during an explosives or munitions emergency. An explosives or munitions emergency response may include in-place render-safe procedures, treatment or destruction of the explosives or munitions or transporting those items to another location to be rendered safe, treated, or destroyed. Any reasonable delay in the completion of an explosives or munitions emergency response caused by a necessary, unforeseen, or uncontrollable circumstance shall not terminate the explosives or munitions emergency. Explosives and munitions emergency responses may occur on either public or private lands and are not limited to responses at RCRA facilities.

(p) "Explosives or munitions emergency response specialist" means an individual trained in chemical or conventional munitions or explosives handling, transportation, render-safe procedures, or destruction techniques. Explosives or munitions emergency response specialists include DOD emergency explosive ordnance disposal, technical escort unit, and DOD-certified civilian or contractor personnel; and other federal, state, or local government or civilian personnel similarly trained in explosives or munitions emergency responses.

(q) "Facility" means all contiguous land and structures, other appurtenances, and improvements on the land used for treating, storing, or disposing of hazardous waste. A facility may consist of several treatment, storage, or disposal operational units, such as 1 or more landfills or surface impoundments, or combinations of operational units. For the purpose of implementing corrective action under part 111 of the act, "facility" shall include all contiguous property under the control of the owner or operator. Notwithstanding the definition of the term "facility" as it relates to corrective action, a remediation waste management site is not a facility that is subject to corrective action under R 299.9629, but is subject to the corrective action requirements of part 111 of the act and these rules if the site is located within such a facility.

(r) "Facility mailing list" means the mailing list for a facility that is maintained by the department in accordance with the provisions of 40 C.F.R. §124.10(c)(1)(ix).

(s) "Fault" means a fracture along which rocks on 1 side have been displaced with respect to

rocks on the other side.

(t) "Federal agency" means any department, agency, or other instrumentality of the federal government; any independent agency or establishment of the federal government, including any government corporation; and the United States government printing office.

(u) "Federal clean air act" means Public Law 95-95, 42 U.S.C. §1857 et seq.

(v) "Federal clean water act" means Public Law 92-500, 33 U.S.C. §1251 et seq.

(w) "Federal hazardous materials transportation act" means Public Law 93-633, 49 U.S.C. §1801 et seq.

(x) "Federal insecticide, fungicide, and rodenticide act" means 7 U.S.C. §§136 to 136y.

(y) "Federal resource conservation and recovery act" means Public Law 94-580, 42 U.S.C. §6901 et seq.

(z) "Federal safe drinking water act" means Public Law 95-190, 42 U.S.C. §300f et seq.

(aa) "Final closure" means the closure of all hazardous waste management units at the facility in accordance with all applicable closure requirements so that hazardous waste management activities pursuant to the provisions of parts 5 and 6 of these rules are no longer conducted at the facility, unless the activities are subject to the provisions of R 299.9306.

(bb) "Flood" means a flood that has a 1% chance of being equalled or exceeded in any given year.

(cc) "Floodplain" means any land area that is subject to a 1% or greater chance of flooding in any given year from any source.

(dd) "Food chain crops" means tobacco, crops grown for human consumption, and crops grown for feed for animals whose products are consumed by humans.

(ee) "Freeboard" means the vertical distance between the top of a tank or surface impoundment dike and the surface of the waste contained in the tank or surface impoundment dike.

(ff) "Free liquids" means liquids that readily separate from the solid portion of a waste at ambient temperature and pressure.

(gg) "Fugitive emissions" means air contaminant emissions that emanate from non-point emission sources or sources other than stacks, ducts, or vents.

(hh) "Functionally equivalent element" means an element which performs the same function or measurement and which meets or exceeds the performance specifications of another element.

R 299.9104 Definitions; G to I.

Rule 104. As used in these rules:

(a) "Generator" means any person, by site, whose act or process produces hazardous waste identified or listed in part 2 of these rules or whose act first causes a hazardous waste to become subject to regulation.

(b) "Geologist" means a person who, by reason of his or her knowledge of geology, mathematics, and the physical and life sciences, acquired by education and experience, is equipped to practice geology.

(c) "Groundwater" means water below the land surface in a zone of saturation.

(d) "Hazardous waste" means a hazardous waste as defined in R 299.9203.

(e) "Hazardous waste fuel" means hazardous waste burned for energy recovery in any boiler or industrial furnace that is not regulated as an incinerator or fuel produced from hazardous waste for this purpose by processing, blending, or other treatment.

(f) "Hazardous waste management unit" means a contiguous area of land on or in which hazardous waste is placed or is the largest area in which there is a significant likelihood of mixing hazardous waste constituents in the same area. Examples of hazardous waste management units include all of the following:

(i) A surface impoundment.

(ii) A waste pile.

(iii) A land treatment area.

(iv) A landfill cell.

(v) An incinerator.

(vi) A tank and its associated piping and underlying containment system.

(vii) A container storage area. A container alone does not constitute a unit. The unit includes containers and the land or pad upon which they are placed.

(viii) A miscellaneous unit.

(g) "Hazardous waste number" means the code number that is used to identify a particular type of hazardous waste.

(h) "Holocene" means the most recent epoch of the quaternary period extending from the end of the Pleistocene to the present.

(i) "Home scrap metal means scrap metal as generated by steel mills, foundries, and refineries such as turnings, cuttings, punchings, and borings.

(j) "Household do-it-yourselfer used oil" means oil that is derived from households, such as used oil generated by individuals through the maintenance of their personal vehicles.

(k) "Household do-it-yourselfer used oil generator" means an individual who generates household do-it-yourselfer used oil.

(l) "Import" means the act of bringing hazardous waste into the United States from a foreign country.

(m) "Inactive portion" means that portion of a facility that is not operated after November 19, 1980. (See also "active portion" and "closed portion.")

(n) "Inactive range" means a military range that is not currently being used, but that is still under military control and considered by the military to be a potential range area, and that has not been put to a new use that is incompatible with range activities.

(o) "Incinerator" means an enclosed device that satisfies either of the following criteria:

(i) Uses controlled flame combustion, does not meet the criteria for classification as a boiler, sludge dryer, or carbon regeneration unit, and is not listed as an industrial furnace.

(ii) Meets the definition of an infrared incinerator or plasma arc incinerator.

(p) "Incompatible waste" means a hazardous waste that is unsuitable for either of the following:

(i) Placement in a particular device or facility because it may cause the corrosion or decay of containment materials, for example, container inner liners or tank walls.

(ii) Commingling with another waste or material under uncontrolled conditions because the commingling might produce heat or pressure; fire or explosion; a violent reaction; toxic dusts, mists, fumes, or gases; or flammable fumes or gases. Examples of incompatible wastes are described in the provisions of 40 C.F.R. part 265, appendix V.

(q) "Individual generation site" means the contiguous site at or on which 1 or more hazardous wastes are generated. An individual generation site, such as a large manufacturing plant, may have 1 or more sources of hazardous waste, but is considered a single or individual generation site if the site or property is contiguous.

(r) "Industrial furnace" means any of the following enclosed devices that are integral components of manufacturing processes and that use thermal treatment to accomplish the recovery of materials or energy:

(i) Cement kilns.

(ii) Lime kilns.

(iii) Aggregate kilns.

(iv) Phosphate kilns.

(v) Coke ovens.

(vi) Blast furnaces.

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

(viii) Titanium dioxide chloride process oxidation reactors.

(ix) Methane reforming furnaces.

(x) Pulping liquor recovery furnaces.

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

(xii) Halogen acid furnaces for the production of acid from halogenated hazardous waste generated by chemical production facilities where the furnace is located on the site of a chemical production facility, the acid product has a halogen acid content of at least 3%, the acid product is used in a manufacturing process, and, except for hazardous waste burned as a fuel, hazardous waste fed to the furnace has a minimum halogen content of 20% as-generated.

(xiii) Other devices that the administrator may, after notice and comment, add to this subdivision on the basis of 1 or more of the following factors:

(A) The design and use of the device primarily to accomplish the recovery of material products.

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

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

(D) The use of the device to burn or reduce secondary materials as ingredients in an industrial process to make a material product.

(E) The use of the device in common industrial practice to produce a material product.

(F) Other factors, as appropriate.

(s) "Infrared incinerator" means any enclosed device which uses electric powered resistance heaters as a source of radiant heat followed by an afterburner using controlled flame combustion and which is not listed as an industrial furnace.

(t) "In-ground tank" means a device which satisfies the definition of "tank" specified in R 299.9108(a) and which has a portion of its wall situated, to any degree, within the ground, thereby preventing visual inspection of the external surface area of the device that is in the ground.

(u) "Injection well" means a well into which fluids are injected. (See also "underground injection.")

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

(w) "In operation" means that a facility is treating, storing, or disposing of hazardous waste.

(x) "Installation inspector" means a person who, by reason of his or her knowledge of the physical sciences and the principles of engineering acquired by a professional education and related practical experience, is qualified to supervise the installation of tank systems.

(y) "International shipment" means the transportation of hazardous waste into or out of the jurisdiction of the United States.

R 299.9105 Definitions; L to N.

Rule 105. As used in these rules:

(a) "Land disposal" means placement in or on the land and includes, but is not limited to, placement in any of the following:

(i) A landfill.

(ii) A surface impoundment.

(iii) A waste pile.

(iv) An injection well.

(v) A land treatment facility.

(vi) A salt dome formation.

(vii) A salt bed formation.

(viii) An underground mine or cave.

(ix) A concrete vault or bunker intended for disposal purposes.

The term also means placement in or on the land by means of open detonation and open burning where the residues continue to exhibit 1 or more of the characteristics of hazardous waste. The term "land disposal" does not include ocean disposal.

(b) "Landfill" means a disposal facility or part of a facility where hazardous waste is placed in or on land. The term does not include any of the following:

(i) A pile.

(ii) A land treatment facility.

(iii) A surface impoundment.

(iv) An underground injection well.

(v) A salt dome formation.

(vi) A salt bed formation.

(vii) An underground mine or cave.

(viii) A corrective action management unit.

(c) "Landfill cell" means a discrete volume of a hazardous waste landfill that uses a liner to provide isolation of wastes from adjacent cells or wastes. Examples of landfill cells are trenches and pits.

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

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

(f) "Leak detection system" means a system capable of detecting the failure of either the primary or secondary containment structure or the presence of a release of hazardous waste or accumulated liquid in the secondary containment structure. Such a system shall employ operational controls, such as daily visual inspections for releases into the secondary containment system or aboveground tanks, or consist of an interstitial monitoring device designed to continuously and automatically detect the failure of the primary or secondary containment structure or the presence of a release of hazardous waste into the secondary containment structure.

(g) "Lift" means a layer of placed materials, including a layer of compacted clay in a landfill liner or cap, or a layer of waste in a landfill.

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

(i) "Management" or "hazardous waste management" means the systematic control of the collection, source separation, storage, transportation, processing, treatment, recovery, and disposal of hazardous waste.

(j) "Manifest" means the shipping document which is originated and signed by the generator and which contains the information required by R 299.9304.

(k) "Manifest document number" means the EPA 12-digit identification number assigned to the generator and a unique 5-digit document number assigned to the manifest by the generator for recording and reporting purposes.

(l) "Method of treatment or disposal" means 1 of the major categories of treatment or disposal used for hazardous waste, including any of the following:

(i) Landfill.

(ii) Land treatment.

(iii) Thermal treatment.

(iv) Chemical treatment.

(v) Physical treatment.

(vi) Biological treatment.

(m) "Military" means the DOD, the armed services, coast guard, national guard, department of energy or other parties under contract or acting as agent for any of the parties, who handle military

munitions.

(n) "Military munitions" means all ammunition products and components produced or used by or for the OD or the United States armed services for national dedense and security, including military munitions under the control of the DOD, the United States coast guard, the United States department of energy, and national guard personnel. The term military munitions includes: confined gaseous, liquid, and solid propellants, explosives, pyrotechnics, chemical and riot control agents, smokes, and incendiaries used by DOD components, including bulk explosives and chemical warfare agents, chemical munitions, rockets, guided and ballistic missiles, bombs, warheads, mortar rounds, artillery ammunitions, small arms ammunitions, grenades, mines, torpedoes, depth charges, cluster munitions and dispensers, demolitions charges, and devices and components thereof. Military munitions do not include wholly inert items, improvised explosive devices, and nuclear weapons, nuclear devices, and nuclear components thereof. However, the term military munitions does include non-nuclear components of nuclear devices, managed under the department of energy's nuclear weapons program after all required sanitization operations under the atomic energy act of 1954, as amended, have been compiled.

(o) "Military range" means designated land and water areas set aside, managed, and used to conduct research on, develop, test, and evaluate military munitions and explosives, other ordnance, or weapon systems, or to train military personnel in their use and handling. Ranges include firing lines and positions, maneuver areas, firing lanes, test pads, detonation pads, impact areas, and buffer zones with restricted access and exclusionary areas.

(p) "Mining overburden returned to the mine site" means any material overlying an economic mineral deposit that is removed to gain access to the deposit and is then used for reclamation of a surface mine.

(q) "Miscellaneous unit" means a hazardous waste management unit where hazardous waste is treated, stored, or disposed of. The term does not include any of the following:

(i) A container.

(ii) A tank.

(iii) A surface impoundment.

(iv) A pile.

(v) A land treatment unit.

(vi) A landfill.

(vii) An incinerator.

(viii) A boiler.

(ix) An industrial furnace.

(x) An underground injection well with appropriate technical standards pursuant to the provisions of 40 C.F.R. part 146.

(xi) A unit that is eligible for a temporary operating license for research pursuant to the provisions of R 299.9501.

(xii) A corrective action management unit.

(xiii) A staging pile.

(r) "Movement" means that hazardous waste transported to a facility in an individual vehicle.

(s) "New tank system" or "new tank component" means a tank system or component that will be used for the storage or treatment of hazardous waste and for which installation has commenced after July 14, 1986. For purposes of 40 C.F.R. §§264.193(g)(2) and 265.193(g)(2), a new tank system is one for which construction commences after July 14, 1986.

(t) "NFPA" means the national fire protection association.

R 299.9106 Definitions; O to Q.

Rule 106. As used in these rules:

(a) "On-ground tank" means a device which satisfies the definition of "tank" in R 299.9108(a) and which is situated in such a way that the bottom of the tank is on the same level as the adjacent

surrounding surface so that the external tank bottom cannot be visually inspected.

(b) "On-site" means on the same or geographically contiguous property which may be divided by a public or private right-of-way if the entrance and exit between the pieces of property are at a crossroads intersection and access is by crossing, rather than going along, the right-of-way. Noncontiguous pieces of property owned by the same person but connected by a right of way which the owner controls and to which the public does not have access is also considered on-site property.

(c) "On-site treatment facility" means a facility which is for the treatment of hazardous waste in tanks or containers, which is located on the site of generation of the wastes, and which does not do either of the following:

(i) Include equipment for incineration.

(ii) Accept hazardous wastes from other generators.

(d) "Open burning" means the combustion of any material without any of the following characteristics:

(i) Control of combustion air to maintain adequate temperature for efficient combustion.

(ii) Containment of the combustion reaction in an enclosed device to provide sufficient residence time and mixing for complete combustion.

(iii) Control of the emission of the gaseous combustion products. (See also "incineration" and "thermal treatment.")

(e) "Operating license" means a license to operate a treatment, storage, or disposal facility under the authority of part 111 of the act.

(f) "Operator" means the person responsible for the overall operation of a facility.

(g) "Owner" means the person who owns a treatment, storage, or disposal facility, or part of such a facility, including the titleholder of the land on which the facility is located.

(h) "Partial closure" means the closure of a hazardous waste management unit in accordance with the applicable closure requirements of 40 C.F.R. part 265 and part 6 of these rules at a facility that contains other active hazardous waste management units. For example, partial closure may include the closure of a tank, including its associated piping and underlying containment systems, a landfill cell, surface impoundment, waste pile, or other hazardous waste management units while other units of the same facility continue to operate.

(i) "Person" means any of the following entities:

(i) An individual.

(ii) A partnership.

(iii) The state.

(iv) A trust.

(v) A firm.

(vi) A joint stock company.

(vii) A federal agency.

(viii) A corporation, including a government corporation.

(ix) An association.

(x) A municipality.

(xi) A commission.

(xii) A political subdivision of a state.

(xiii) Any interstate body.

(xiv) Any other public body created by or pursuant to state law.

(j) "Personnel" or "facility personnel" means all persons who work at, or oversee the operations of, a hazardous waste facility and whose actions or failure to act might result in noncompliance with the requirements of part 111 of the act or these rules.

(k) "Pesticide" means any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest, or intended for use as a plant regulator, defoliant, or desiccant, other than any article that meets any of the following criteria:

(i) Is a new animal drug under section 201(w) of the federal food, drug, and cosmetic act of

1938, as amended, 21 U.S.C. §301 et seq.

(ii) Is an animal drug that has been determined by regulation of the secretary of health and human services not to be a new animal drug.

(iii) Is an animal feed under section 201(x) of the federal food, drug, and cosmetic act of 1938, as amended, 21 U.S.C. §301 et seq. that bears or contains any substances identified in paragraph (i) or (ii) of this subdivision.

(l) "Petrochemical recovered oil" means oil that has been reclaimed from secondary materials from normal organic chemical manufacturing processes and oil recovered from organic chemical manufacturing processes.

(m) "Petroleum refining facility" means an establishment that is primarily engaged in producing gasoline, kerosene, distillate fuel oils, residual fuel oils, and lubricants through fractionation, straight distillation of crude oil, redistillation of unfinished petroleum derivatives, cracking, or other processes.

(n) "Pile" means any noncontainerized accumulation of solid, nonflowing hazardous waste that is used for treatment or storage.

(o) "Plasma arc incinerator" means any enclosed device which uses a high intensity electrical discharge or arc as a source of heat followed by an afterburner using controlled flame combustion and which is not listed as an industrial furnace.

(p) "Point source" means any discernible, confined, and discrete conveyance, including any of the following from which pollutants are or might be discharged:

(i) A pipe.
(ii) A ditch.
(iii) A channel.
(iv) A tunnel.
(v) A conduit.
(vi) A well.
(vii) A discrete fissure.
(viii) A container.
(ix) Rolling stock.
(x) A concentrated animal feeding operation.
(xi) A vessel or other floating craft.

This term does not include return flows from irrigated agriculture.

(q) "Primary exporter" means any person who is required to originate the manifest for a shipment of hazardous waste in accordance with R 299.9304, which specifies a treatment, storage, or disposal facility in a receiving country as the facility to which the hazardous waste will be sent and any intermediary arranging for the export.

(r) "Primary monitoring parameter" means indicator parameters, for example, specific conductance, total organic carbon, or total organic halogen; hazardous waste constituents; or reaction products which provide a reliable indication of the presence of hazardous constituents in groundwater and which, when specified in a facility operating license, are subject to all of the requirements of 40 C.F.R. part 264, subpart F.

(s) "Processed scrap metal" means scrap metal which has been manually or physically altered to either separate it into distinct materials to enhance economic value or to improve the handling of materials. Processed scrap metal includes, but is not limited to, scrap metal which has been baled, shredded, sheared, chopped, crushed, flattened, cut, melted, or separated by metal type and fines, drosses, and related materials which have been agglomerated. Shredded circuit boards being sent for recycling are not considered processed scrap and are covered under the exclusion from the definition of waste for shredded circuit boards that are being recycled in R 299.9204.

(t) "Processing" means chemical or physical operations designed to produce from used oil, or to make used oil more amenable for production of, fuel oils, lubricants, or other used oil-derived products. Processing includes all of the following:

(i) Blending used oil with virgin petroleum products.
(ii) Blending used oils to meet the fuel specifications.
(iii) Filtration.
(iv) Simple distillation.
(v) Chemical or physical separation.
(vi) Re-refining.

(u) "Prompt scrap metal" means scrap metal as generated by the metal working and fabrication industries. Prompt scrap metal, which is also known as "industrial" or "new" scrap metal, includes all of the following:

(i) Turnings.
(ii) Cuttings.
(iii) Punchings.
(iv) Borings.

(v) "Publicly owned treatment works," known as "POTW," means any device or system which is used in the treatment, including recycling and reclamation, of municipal sewage or industrial wastes of a liquid nature and which is owned by a "state" or "municipality," as defined by section 502(4) of the federal clean water act. This definition includes sewers, pipes, or other conveyances only if they convey wastewater to a POTW providing treatment.

(w) "Qualified groundwater scientist" means a scientist or engineer who has received a baccalaureate or post-graduate degree in the natural sciences or engineering, and has sufficient training and experience in groundwater hydrology and related fields as may be demonstrated by state registration, professional certifications, or completions of accredited university courses that enable that individual to make sound professional judgments regarding groundwater monitoring and contaminant fate and transport.

R 299.9107 Definitions; R, S.

Rule 107. As used in these rules:

(a) "RCRA" means the solid waste disposal act, as amended by the resource conservation and recovery act of 1976, as amended, 42 U.S.C. §6901 et seq.

(b) "Reclamation" means either processing to recover a usable product or regeneration, such as in the recovery of lead values from spent batteries and the regeneration of spent solvents.

(c) "Recreational property" means all lands that are predominately intended to provide outdoor recreational activities under the control and operation of a governmental agency, such as outdoor parks, preserves, campgrounds, and wildlife refuges.

(d) "Recycle" means use, reuse, or reclamation. Material is "used" or "reused" if it is either of the following:

(i) Employed as an ingredient in an industrial process to make a product, unless distinct components of the material are recovered as separate end products, such as when metals are recovered from metal-containing secondary materials.

(ii) Employed in a particular function or application as an effective substitute for a commercial product, such as spent pickle liquor used as phosphorus precipitant and sludge conditioner in wastewater treatment.

(e) "Recyclable material" means hazardous waste that is recycled.

(f) "Re-refining distillation bottoms" means the heavy fraction produced by vacuum distillation of filtered and dehydrated used oil. The composition of still bottoms varies with column operation and feedstock.

(g) "Regional administrator" means the regional administrator or his or her designee for the EPA region in which the facility is located.

(h) "Regulated unit" means a surface impoundment, waste pile, land treatment unit, or landfill that received hazardous waste after July 26, 1982.

(i) "Remedial action plan" or "RAP" means a special form of an operating license that a

facility owner or operator may obtain instead of a construction permit or operating license issued pursuant to the provisions of part 5 of these rules. The RAP shall authorize the treatment, storage, or disposal of hazardous remediation waste at a remediation waste management site.

(j) "Remediation waste" means all wastes and hazardous wastes, and all media, including groundwater, surface water, soils, and sediments, and debris which meet both of the following requirements:

(i) Contain a hazardous waste listed pursuant to R 299.9213 or R 299.9214 of these rules or exhibit a hazardous waste characteristic identified in R 299.9212 of these rules.

(ii) Is managed for implementing a cleanup.

(k) "Remediation waste management site" means a facility where an owner or operator is or will be treating, storing, or disposing of remediation wastes. A remediation waste mangement site is not a facility that is subject to corrective action under R 299.9629, but is subject to the corrective action requirements of part 111 of the act and these rules if the site is located in such a facility.

(l) "Representative sample" means a sample of a universe or whole that can be expected to exhibit the average properties of the universe or whole.

(m) "Retention time" means the minimum time hazardous waste is subjected continuously to a required combustion zone temperature in an incinerator.

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

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

(p) "Saturated zone" or "zone of saturation" means that part of the earth's crust in which all voids are filled with water.

(q) "Scrap metal" means bits and pieces of metal parts, such as bars, turnings, rods, sheets, wire, or metal pieces, which may be combined together with bolts or by soldering, such as radiators, scrap automobiles, and railroad car boxes, and which, when worn or superfluous, can be recycled.

(r) "Secondary monitoring parameter" means ions such as calcium, sodium, magnesium, iron, chloride, sulfate, bicarbonate, and carbonate; waste constituents; reaction products; or other parameters which provide an indication of the presence of hazardous constituents in groundwater and which are not subject to the requirements of 40 C.F.R. part 264, subpart F.

(s) "Sludge" means any solid, semisolid, or liquid waste generated from a municipal, commercial, or industrial wastewater treatment plant, water supply treatment plant, or air pollution control facility, exclusive of the treated effluent from a wastewater treatment plant.

(t) "Sludge dryer" means any enclosed thermal treatment device that is used to dehydrate sludge and that has a maximum total thermal input, excluding the heating value of the sludge itself, of 2,500 BTU per pound of sludge treated on a wet-weight basis.

(u) "Small quantity generator" means a generator who generates less than 1,000 kilograms of hazardous waste in a calendar month.

(v) "Sole source aquifer" means an aquifer designated pursuant to section 1424(e) of the federal safe drinking water act.

(w) "Sorb" means to adsorb or absorb, or both.

(x) "Sorbent" means a material that is used to soak up free liquids by either adsorption or absorption, or both.

(y) "Speculative accumulation" means accumulation before recycle. A material is not accumulated speculatively, however, if the person accumulating it can show both of the following:

(i) That the material is potentially recyclable and has a feasible means of being recycled.

(ii) That during the calendar year commencing on January 1, the amount of material that is recycled or transferred to a different site for recycling equals not less than 75% by weight or volume of the amount of that material accumulated at the beginning of the period. In calculating the percentage of turnover, the 75% requirement is to be applied to each material of the same type that is recycled in the same way. Materials accumulating in units which would be exempt from regulation under

R 299.9204(3)(a) or which are already defined as wastes shall not be included in making the calculation. Materials are no longer in this category once they are removed from accumulation for recycling.

(z) "Spent material" means any material that has been used and as a result of contamination can no longer serve the purpose for which it was produced without processing.

(aa) "Staging pile" means an accumulation of solid, non-flowing remediation waste that is not a containment building and that is used only during remedial operations for temporary storage at a facility. Staging piles shall be designated by the director in accordance with the requirements of R 299.9638.

(bb) "State" means any of the following:

(i) The several states.

(ii) The District of Columbia.

(iii) The Commonwealth of Puerto Rico.

(iv) The Virgin Islands.

(v) Guam.

(vi) American Samoa.

(vii) The Commonwealth of the Northern Mariana Islands.

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

(dd) "Sump" means any pit or reservoir which satisfies the definition of "tank" in R 299.9108(a) and those troughs or trenches connected to it that serve to collect hazardous waste for transport to hazardous waste storage, treatment, or disposal facilities. When used in conjunction with the regulation of a landfill, surface impoundment, and waste pile, a sump means any lined pit or reservoir that serves to collect liquids drained from a leachate collection and removal system or leak detection system for later removal from the system.

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

(ff) "Surface water" means a body of water whose top surface is exposed to the atmosphere and includes the Great Lakes, their connecting waters, all inland lakes and ponds, rivers and streams, impoundments, open drains, and other watercourses, except for drainage ways and ponds used solely for wastewater conveyance, treatment, or control.

R 299.9108 Definitions; T.

Rule 108. As used in these rules:

(a) "Tank" means a stationary device which is designed to contain an accumulation of hazardous waste and which is constructed primarily of nonearthen materials, such as wood, concrete, steel, or plastic, that provide structural support.

(b) "Tank system" means a hazardous waste storage or treatment tank and its associated ancillary equipment and containment system.

(c) "TEQ" means toxicity equivalence, the international method of relating the toxicity of various dioxin/furan congeners to the toxicity of 2,3,7,8-tetrachlorodibenzo-p-dioxin.

(d) "Thermal treatment" means the treatment of hazardous waste in a device that uses elevated temperatures as the primary means to change the chemical, physical, or biological character or composition of the hazardous waste. All of the following are examples of thermal treatment processes:

(i) Incineration.

(ii) Molten salt.

(iii) Pyrolysis.
(iv) Calcination.
(v) Wet air oxidation.
(vi) Microwave discharge.

(e) "Thermostat" means a temperature control device that contains metallic mercury in an ampule attached to a bimetal sensing element and includes mercury-containing ampules that have been removed from the temperature control devices in compliance with the requirements of 40 C.F.R. §§273.13(c)(2) or 273.33(c)(2).

(f) "Title II of the solid waste disposal act" means the sections of Public Law 89-272 specified in the act.

(g) "Totally enclosed treatment facility" means a facility for the treatment of hazardous waste which is directly connected to an industrial production process and which is constructed and operated in a manner that prevents the release of any hazardous waste or any constituent of a hazardous waste into the environment during treatment. An example is a pipe in which waste acid is neutralized.

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

(i) "Transportation" means the movement of hazardous waste by air, rail, highway, or water.

(j) "Transport vehicle" means a motor vehicle or railcar that is used for the transportation of cargo by any mode. Each cargo-carrying body, such as a trailer or railroad freight car, is a separate transport vehicle.

(k) "Transporter" means a person who is engaged in the off-site transportation of hazardous waste by air, rail, highway, or water.

(l) "Treatability study" means a study in which a hazardous waste is subjected to a treatment process to determine any of the following:

(i) Whether the waste is amenable to the treatment process.
(ii) What pretreatment, if any, is required.
(iii) The optimal process conditions needed to achieve the desired treatment.
(iv) The efficiency of a treatment process for a specific waste or wastes.
(v) The characteristics and volumes of residuals from a particular treatment process. Also included in this definition for the purposes of the exemptions specified in R 299.9204 (8), (9), and (10) are liner compatibility, corrosion, and other material compatibility studies and toxicological and health effects studies. A treatability study is not a means to commercially treat or dispose of hazardous waste.

(m) "Treatment" means any method, technique, or process, including neutralization, that is designed to change the physical, chemical, or biological character or composition of any hazardous waste to neutralize the waste, to recover energy or material resources from the waste, or to render the waste nonhazardous or less hazardous, safer to transport, store, or dispose of, amenable to recovery or storage, or reduced in volume. Treatment includes any activity in processing that is designed to change the physical form or chemical composition of hazardous waste to render it nonhazardous.

(n) "Treatment facility" means a facility or part of a facility at which hazardous waste, as defined by these rules, is subject to treatment.

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

(p) "Trial burn" means a test that is conducted pursuant to the requirements of a construction permit to determine if the design of an incinerator or other thermal treatment device is satisfactory.

(q) "Trial operation" means an incinerator test that is conducted pursuant to the requirements of an operating license to determine if the operation of the incinerator or other thermal treatment device is satisfactory.

R 299.9109 Definitions; U to Z.

Rule 109. As used in these rules:

(a) "Underground injection" or "well injection" means the subsurface emplacement of fluids through a bored, drilled, or driven well or through a dug well where the depth of the dug well is greater than the largest surface dimension.

(b) "Underground tank" means a device which satisfies the definition of "tank" specified in R 299.9108(a) and which has its entire surface area below the surface of, and covered by, the ground.

(c) "Unexploded ordnance" means military munitions that have been primed, fused, armed, or otherwise prepared for action, and have been fired, dropped, launched, projected, or placed in such a manner as to constitute a hazard to operations, installation, personnel, or material and remain unexploded either by malfunction, design, or any other cause.

(d) "Unfit for use tank system" means a tank system that has been determined, through an integrity assessment or other inspection, to be no longer capable of storing or treating hazardous waste without posing a threat of release of hazardous waste to the environment.

(e) "United States" means any of the following:

(i) The 50 states.

(ii) The District of Columbia.

(iii) The Commonwealth of Puerto Rico.

(iv) The United States Virgin Islands.

(v) Guam.

(vi) American Samoa.

(vii) The Commonwealth of the Northern Mariana Islands.

(f) "United States importer" means a person who has lawfully recognized resident status within the United States and who brings in, or arranges for the entry of, a shipment of hazardous waste into the United States from a foreign country. A United States importer may be any of the following persons:

(i) The person who is liable for primary payment of any United States customs duties on the hazardous waste.

(ii) An agent as defined in R 299.9101.

(iii) The treatment, storage, or disposal facility designated on the manifest.

(iv) The importer of record as designated on the United States customs entry documents.

(v) The transporter who carries the hazardous waste at the point of entry.

(vi) The consignee.

(g) "Universal waste" means any of the hazardous wastes that are identified in R 299.9228(1) and managed pursuant to the provisions of R 299.9228.

(h) "Universal waste handler" means a generator of universal waste or the owner or operator of a facility, including all contiguous property, that receives universal waste from other universal waste handlers, accumulates universal waste, and sends universal waste to another universal waste handler, a destination facility, or a foreign destination. The term universal waste handler does not include either of the following:

(i) A person who treats, disposes of, or recycles universal waste, except as provided for in 40 C.F.R. §273.13(a) or (c) or §273.33(a) or (c).

(ii) A person engaged in the off-site transportation of universal waste by air, rail, highway, or water, including a universal waste transfer facility.

(i) "Universal waste large quantity handler" means a universal waste handler who accumulates 5,000 kilograms or more total of universal waste at any time.

(j) "Universal waste small quantity handler" means a universal waste handler who does not accumulate 5,000 kilograms or more total of universal waste at any time.

(k) "Universal waste transfer facility" means any transportation-related facility, including loading docks, parking areas, storage areas, and other similar areas, where shipments of universal waste are held during the normal course of transportation for 10 days or less.

(l) "Universal waste transporter" means a person engaged in the off-site transportation of

universal waste by air, rail, highway, or water.

(m) "Unsaturated zone" or "zone of aeration" means the zone between the land surface and the water table.

(n) "Uppermost aquifer" means the geologic formation nearest the natural ground surface that is an aquifer and includes lower aquifers that are hydraulically interconnected with the aquifer within the facility's property boundary.

(o) "U.S.C." means the United States Code.

(p) "Used oil" means any oil which has been refined from crude oil, or any synthetic oil, which has been used and which as a result of the use, is contaminated by physical or chemical impurities.

(q) "Used oil aboveground tank" means a tank which is used to store or process used oil and which is not an underground storage tank as defined in 40 C.F.R. §280.12.

(r) "Used oil aggregation point" means any site or facility that accepts, aggregates, and/or stores used oil that is collected only from other used oil generation sites owned or operated by the same owner or operator of the aggregation point, from which used oil is transported to the aggregation point in shipments of not more than 55 gallons. Used oil aggregation points may also accept used oil from household do-it-yourselfers.

(s) "Used oil burner" means a facility where off-specification used oil, as defined in R 299.9809(1)(f), is burned for energy recovery in the devices identified in R 299.9814.

(t) "Used oil collection center" means any site or facility that has provided written notification of used oil management activities to the department and that accepts or aggregates and stores used oil collected from either of the following:

(i) Used oil generators regulated pursuant to the provisions of R 299.9810 who transport used oil to the collection center in shipments of not more than 55 gallons under the provisions of 40 C.F.R. §279.24.

(ii) Household do-it-yourselfers.

(u) "Used oil existing tank" means a tank that is used for the storage or processing of used oil and that is in operation, or for which installation has commenced, on or before the effective date of the amendments to these rules that establish the state's used oil program under RCRA. Installation will be considered to have commenced if the owner or operator has obtained all federal, state, and local approvals or permits necessary to begin physical construction of the tank and if either of the following provisions applies:

(i) A continuous on-site physical installation program has begun.

(ii) The owner or operator has entered into contractual obligations, which cannot be cancelled or modified without substantial loss, for installation of the tank system to be completed within a reasonable time.

(v) "Used oil fuel" means any fuel that is produced from used oil through processing, blending, or other treatment.

(w) "Used oil fuel marketer" means any person who conducts either of the following activities:

(i) Directs a shipment of off-specification used oil from his or her facility to a used oil burner.

(ii) First claims that the used oil which is to be burned for energy recovery meets the used oil specifications set forth in R 299.9809(1)(f).

(x) "Used oil generator" means any person, by site, whose act or process produces used oil or whose act first causes the used oil to become subject to regulation.

(y) "Used oil new tank" means a tank that is used for the storage or processing of used oil and for which installation has commenced after the effective date of amendments to these rules that establish the state's used oil program under RCRA.

(z) "Used oil processor/re-refiner" means a facility that processes used oil.

(aa) "Used oil tank" means a stationary device which is designed to contain an accumulation of used oil and which is constructed primarily of nonearthen materials, such as wood, concrete, steel, or plastic, that provide structural support.

(bb) "Used oil transfer facility" means any transportation-related facility, including loading

docks, parking areas, storage areas, and other areas, where shipments of used oil are held for more than 24 hours and not more than 35 days during the normal course of transportation or before an activity performed pursuant to the provisions of R 299.9813(1) or (2). Transfer facilities that store used oil for more than 35 days are subject to regulation under R 299.9813.

(cc) "Used oil transporter" means any person who transports used oil, any person who collects used oil from more than one generator and transports the collected oil, and owners and operators of used oil transfer facilities. Used oil transporters may consolidate or aggregate loads of used oil for purposes of transportation, but with the following exception, may not process used oil. Transporters may conduct incidental processing operations that occur in the normal course of used oil transportation but that are not designed to produce, or make more amenable for the production of, used oil derived products or used oil fuel.

(dd) "Vehicle" means each separate conveyance used in the transportation of hazardous waste that is one of the following:

(i) A railcar as defined in 49 C.F.R. §171.8.

(ii) A semitrailer, truck, or trailer as defined in act 300.

(iii) A truck tractor as defined in act 300, only if the hazardous waste is actually transported in the cab of the vehicle.

(ee) "Vessel" means a watercraft that is used or is capable of being used as a means of transportation on the water.

(ff) "Washout" means the movement of hazardous waste from the active portion of the facility as a result of flooding.

(gg) "Waste" means material that is defined as waste in R 299.9202.

(hh) "Waste management area" means the limit projected in the horizontal plane of the area on which waste will be placed during the active life of a regulated unit and includes horizontal space taken up by any liner, dike, or other barrier that is designed to contain waste in a regulated unit. If the facility contains more than 1 regulated unit, then the waste management area is described by an imaginary line circumscribing the several regulated units.

(ii) "Wastewater treatment unit" means a device that satisfies all of the following requirements:

(i) Is part of a wastewater treatment facility that is subject to regulation pursuant to the provisions of either section 402 or section 307(b) of the federal clean water act.

(ii) Receives and treats or stores an influent wastewater that is a hazardous waste as defined in R 299.9203, generates and accumulates a wastewater treatment sludge that is a hazardous waste as defined in R 299.9203, or treats or stores a wastewater treatment sludge that is a hazardous waste as defined in R 299.9203.

(iii) Meets the definition of "tank" or "tank system" specified in R 299.9108.

(jj) "Water (bulk shipment)" means the bulk transportation of hazardous waste that is loaded or carried on board a vessel without containers or labels.

(kk) "Well" means any shaft or pit which is dug or bored into the earth, which is generally of a cylindrical form, and which is often walled with bricks or tubing to prevent the earth from caving in.

(ll) "Wetland" means the areas defined as wetlands in part 303 of the act.

(mm) "Zone of engineering control" means an area which is under the control of the owner or operator and which, upon detection of a hazardous waste release, can be readily cleaned up before the release of hazardous waste or hazardous constituents to groundwater or surface water.

PART 2. IDENTIFICATION AND LISTING OF HAZARDOUS WASTE

R 299.9201 Purpose and scope.

Rule 201. (1) This part identifies only some of the materials which are hazardous wastes under sections 46 and 48 of part 111 of the act. A material which is not a hazardous waste identified in this part is still a hazardous waste for purposes of those sections if, in the case of section 46 of part 111 of the act, the director has reason to believe that the material may be a hazardous waste within the meaning of section 3 of part 111 of the act, and, in the case of section 48 of part 111 of the act, the statutory elements are established.

(2) The explanation of waste contained in this part applies only to wastes that also are hazardous for purposes of the rules implementing part 111 of the act. For example, it does not apply to materials such as nonhazardous scrap, paper, textiles, and rubbers that are not otherwise hazardous wastes and are recycled.

R 299.9202 "Waste" explained.

Rule 202. (1) A waste is any discarded material that is not excluded by R 299.9204 or that is not excluded by a variance granted under R 299.9202(6) and (7). A discarded material is any material that is any of the following:

(a) A material that is abandoned by being disposed of; burned or incinerated; or accumulated, stored, or treated before or instead of being abandoned by being disposed of, burned, or incinerated.

(b) A material which is recycled, or accumulated, stored, or treated before recycling, and which meets 1 of the following criteria:

(i) It is a material listed in subrule (2) of this rule and is used in a manner constituting disposal by being either of the following:

(A) Applied to or placed on the land in a manner that constitutes disposal.

(B) Used to produce products that are applied to or are placed on the land or are otherwise contained in products that are applied to or placed on the land, in which cases the product itself remains a waste. A commercial chemical product listed in R 299.9214 is not a waste if it is applied to the land and that is its ordinary manner of use.

(ii) It is a material listed in subrule (2) of this rule and it is burned to recover energy, is used to produce a fuel, or is otherwise contained in fuels, in which cases the fuel itself remains a waste. A commercial chemical product listed in R 299.9214 is not a waste if it is itself a fuel.

(iii) It is a material listed in subrule (2)(a), (b), or (c) of this rule and it undergoes reclamation, except as provided for in R 299.9204(1)(v).

(iv) It is a material listed in subrule (2)(a), (b), (c), or (d) of this rule and it undergoes speculative accumulation.

(v) It is an inherently waste-like material, having a hazardous waste number of F020, F021, F022, F023, F026, or F028, or is another waste determined by the administrator based on both of the following criteria:

(A) The materials are ordinarily disposed of, burned, or incinerated or the materials contain toxic constituents which are listed in 40 C.F.R. part 261, appendix VIII, and which are not ordinarily found in raw materials or products for which the materials substitute or are found in raw materials or products in smaller concentrations, and which are not used or reused during the recycling process.

(B) The material might pose a substantial hazard to human health and the environment when recycled.

(vi) It is an inherently waste-like material which is a secondary material, which is fed to a halogen acid furnace, and which exhibits a characteristic of a hazardous waste or is listed as a hazardous waste in accordance with part 2 of these rules, except for brominated material that meets all of the following criteria:

(A) The material contains a bromine concentration of not less than 45%.

(B) The material contains less than a total of 1% of the toxic organic compounds listed in 40 C.F.R. part 261, appendix VIII.

(C) The material is processed continually on-site in the halogen acid furnace by direct conveyance such as hard piping.

(c) It is a military munition identified as a waste under R 299.9817.

(2) Any of the following materials may be wastes under subrule (1) of this rule:

(a) Spent materials.

(b) Sludges and by-products listed in R 299.9220 to R 299.9223.

(c) Scrap metal other than excluded scrap metal.

(d) Sludges and by-products that exhibit a characteristic of hazardous waste.

(e) Commercial chemical products listed in R 299.9214.

(3) Except as provided in subrule (4) of these rules, materials are not wastes if they can be shown to be recycled by any of the following means:

(a) By being used or reused as ingredients in an industrial process to make a product if the materials are not being reclaimed.

(b) By being used or reused as effective substitutes for commercial products.

(c) By being returned to the original process from which they are generated without first being reclaimed or placed on the land. The material must be returned as a substitute for feedstock materials. If the original process to which the material is returned is a secondary process, then the materials must be managed so that they are not placed on the land.

In cases where the materials are generated and reclaimed within the primary mineral processing industry, the conditions of the exclusion under R 299.9204(1)(v) apply rather than this subrule.

(4) All of the following materials are wastes, even if the recycling involves use, reuse, or return to the original process described in subrule (3) of this rule:

(a) Materials used in a manner constituting disposal or used to produce products that are applied to the land.

(b) Materials burned for energy recovery, used to produce a fuel, or contained in fuels.

(c) Materials accumulated speculatively.

(d) Inherently waste-like materials listed in subrule (1)(b)(v) and (vi) of this rule.

(5) Respondents in actions to enforce regulations implementing part 111 of the act who raise a claim that a certain material is not waste or is conditionally exempt from regulation shall demonstrate that there is a known market or disposition for the material and that the respondent meets the terms of exclusion or exemption. In doing so, the respondent shall provide appropriate documentation, such as contracts showing that a second person uses the material as an ingredient in a production process, to demonstrate that the material is not a waste or is exempt from regulation. In addition, owners or operators of facilities claiming that they actually are recycling materials shall show that they have the necessary equipment for recycling the materials.

(6) The director may determine, on a case-by-case basis, that the following recycled materials are not wastes:

(a) Materials that are accumulated speculatively without sufficient amounts being recycled, as defined in R 299.9107(y).

(b) Materials that are reclaimed and then reused within the original production process in which they were generated.

(c) Materials that have been reclaimed, but must be reclaimed further before the materials are completely recovered.

(7) The director shall use the criteria and procedures outlined in the provisions of 40 C.F.R. §§260.31 and 260.33 for making determinations under subrule (6) of this rule.

(8) The provisions of 40 C.F.R. §§260.31, 260.33, 261.31, 261.32, and 261.33 are adopted by reference in R 299.11003, with the exception that the word "director" shall replace the word "regional administrator."

R 299.9203 "Hazardous waste" explained.

Rule 203. (1) A waste, as explained in R 299.9202, is a hazardous waste if it is not excluded from regulation pursuant to the provisions of R 299.9204(1) or (2) and if it meets any of the following criteria:

(a) It exhibits any of the characteristics of hazardous waste identified in R 299.9212.

(b) It is listed in R 299.9213 or R 299.9214 and has not been excluded from the lists pursuant to the provisions of R 299.9211.

(c) It is a mixture of a waste and 1 or more hazardous wastes that are listed in R 299.9213 or R 299.9214 and has not been excluded from this subdivision pursuant to the provisions of R 299.9211; however, mixtures of wastes and hazardous wastes that are listed in R 299.9213 and R 299.9214 are not hazardous wastes, except by application of the provisions of subdivision (a) or (b) of this subrule, if the generator can demonstrate that the mixture consists of wastewater which, with respect to discharge, is subject to regulation pursuant to the provisions of either section 402 or section 307(b) of the federal clean water act, including wastewater at facilities that have eliminated the discharge of wastewater, and is 1 of the following:

(i) One or more of the following spent solvents that are listed in R 299.9213, if the maximum total weekly usage of the 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 is not more than 1 part per million:

(A) Carbon tetrachloride.

(B) Tetrachloroethylene.

(C) Trichloroethylene.

(ii) One or more of the following spent solvents that are listed in R 299.9213, if the maximum total weekly usage of the 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 is not more than 25 parts per million:

(A) Methylene chloride.

(B) 1,1,1-Trichloroethane.

(C) Chlorobenzene.

(D) 0-dichlorobenzene.

(E) Cresols.

(F) Cresylic acid.

(G) Nitrobenzene.

(H) Toluene.

(I) Methyl ethyl ketone.

(J) Carbon disulfide.

(K) Isobutanol.

(L) Pyridine.

(M) Spent chlorofluorocarbon solvents.

(iii) One or more of the following wastes that are listed in R 299.9213 if the wastes are discharged to the refinery oil recovery sewer before primary oil/water/solids separation.

(A) Heat exchanger bundle cleaning sludge from the petroleum refining industry, K050.

(B) Crude oil storage tank sediment from petroleum refining operations, K169.

(C) Clarified slurry oil tank sediment or in-line filter/separation solids from petroleum refining operations, K170.

(D) Spent hydrotreating catalyst, K171.

(E) Spent hydrorefining catalyst, K172.

(iv) A discarded commercial chemical product, or chemical intermediate listed in R 299.9214, arising from de minimis losses of the materials from manufacturing operations in which the materials are used as raw materials or are produced in the manufacturing process. For the purpose of this

paragraph, de minimis losses include any of the following:

(A) Losses from normal material handling operations, such as spills from the unloading or transfer of materials from bins or other containers or leaks from pipes, valves, or other devices that are used to transfer materials.

(B) Minor leaks of process equipment, storage tanks, or containers.

(C) Leaks from well-maintained pump packings and seals.

(D) Sample purgings.

(E) Relief device discharges.

(F) Discharges from safety showers and the rinsing and cleaning of personal safety equipment.

(G) Rinsate from empty containers or from containers that are rendered empty by that rinsing.

(v) Wastewater which results from laboratory operations and which contains toxic (T) wastes listed in R 299.9213 or R 299.9214 if the annualized average flow of laboratory wastewater is not more than 1% of total wastewater flow into the headworks of the facility's wastewater treatment or pretreatment system or if the wastes' combined annualized average concentration is not more than 1 part per million in the headworks of the facility's wastewater treatment or pretreatment facility. Toxic (T) wastes which are used in laboratories and which are demonstrated not to be discharged to wastewater shall not be included in the calculation.

(vi) Wastewater from the production of carbamates and carbamoyl oximes, K157, if the maximum weekly usage of formaldehyde, methyl chloride, methylene chloride, and triethylamine, including all amounts that cannot be demonstrated to be reacted in the process, destroyed through treatment, or recovered, divided by the average weekly flow of process wastewater before any dilutions into the headworks of the facility's wastewater treatment system is not more than a total of 5 parts per million by weight.

(vii) Wastewater derived from the treatment of organic waste from the production of carbamates and carbamoyl oximes, K156, if the maximum concentration of formaldehyde, methyl chloride, methylene chloride, and triethylamine before any dilutions into the headworks of the facility's wastewater treatment system is not more than a total of 5 milligrams per liter.

(d) It is a mixture of a waste and a hazardous waste that meets the characteristic of severe toxicity pursuant to the provisions of R 299.9212(5).

(e) It is a used oil that contains more than 1,000 parts per million total halogens. Used oil that contains more than 1,000 parts per million is presumed to be a hazardous waste and is regulated as such under part 111 of the act and these rules. A person may rebut the presumption by demonstrating that the used oil does not contain hazardous waste. The demonstration may be made by showing that the used oil does not contain significant concentrations of halogenated hazardous constituents that are listed in 40 C.F.R. part 261, appendix VIII. The rebuttable presumption rule does not apply to the following materials:

(i) Metalworking oils or fluids that contain chlorinated paraffins if the oils or fluids are processed through a tolling agreement as specified in 40 C.F.R. §279.24(c) to reclaim the oils or fluids. The rebuttable presumption does apply, however, if the oils or fluids are recycled in any other manner or are disposed of.

(ii) Used oils that are contaminated with chlorofluorocarbons which have been removed from refrigeration units if the chlorofluorocarbons are destined for reclamation. The rebuttable presumption does apply, however, if the used oils are contaminated with chlorofluorocarbons that have been mixed with used oil from sources other than refrigeration units.

(2) A waste that is not excluded from regulation pursuant to the provisions of R 299.9204(1) or (2) becomes a hazardous waste when any of the following events occur:

(a) In the case of a waste that is listed in R 299.9213 or R 299.9214, when the waste first meets the listing description.

(b) In the case of a mixture of waste and one or more listed hazardous wastes or severely

toxic wastes, when a waste that is hazardous pursuant to the provisions of R 299.9212(5), R 299.9213, or R 299.9214 is first added to the waste.

(c) In the case of any other waste, including a waste mixture, when the waste exhibits any of the characteristics identified in R 299.9212.

(3) Unless and until it meets the criteria of subrule (5) of this rule, a hazardous waste will remain a hazardous waste, and, except as provided in subrule (4) 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 runoff, is a hazardous waste. Materials that are reclaimed from wastes and that are used beneficially are not wastes and hence are not hazardous wastes pursuant to the provisions of this subrule, unless the reclaimed material is burned for energy recovery or used in a manner that constitutes disposal.

(4) All of the following wastes are not hazardous even though they are generated from the treatment, storage, or disposal of a hazardous waste, unless they exhibit 1 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, as defined by standard industrial codes 331 and 332 in the office of management and budget document entitled "Standard Industrial Classification Manual."

(b) Wastes from burning any of the materials exempted from regulation by the provisions of R 299.9206(3)(c) to (f).

(c) Nonwastewater residues, such as slag, which result from high temperature metals recovery processing of K061, K062, or F006 waste in units identified as rotary kilns, flame reactors, electric furnaces, plasma arc furnaces, slag reactors, rotary hearth furnace/electric furnace combinations, or industrial furnaces and which are disposed of in units regulated under part 115 of the act, if the residues are in compliance with the specified generic exclusion levels. Testing requirements shall be incorporated in a facility's waste analysis plan or a generator's self-implementing waste analysis plan. At a minimum, samples of residues shall be collected and analyzed quarterly or when the process or operation generating the waste changes. A person who claims this exclusion in an enforcement action shall have the burden of proving, by clear and convincing evidence, that the material meets all of the exclusion requirements.

(i) For K061 and K062 nonwastewater high temperature metals recovery residues, the specified generic exclusion levels are as follows:

(A) Antimony, 0.10 mg/l.
(B) Arsenic, 0.50 mg/l.
(C) Barium, 7.6 mg/l.
(D) Beryllium, 0.010 mg/l.
(E) Cadmium, 0.050 mg/l.
(F) Chromium (total), 0.33 mg/l.
(G) Lead, 0.15 mg/l.
(H) Mercury, 0.009 mg/l.
(I) Nickel, 1.0 mg/l.
(J) Selenium, 0.16 mg/l.
(K) Silver, 0.30 mg/l.
(L) Thallium, 0.020 mg/l.
(M) Zinc, 70 mg/l.

(ii) For F006 nonwastewater high temperature metals recovery residues, the specified generic exclusion levels are as follows:

(A) Antimony, 0.10 mg/l.
(B) Arsenic, 0.50 mg/l.
(C) Barium, 7.6 mg/l.
(D) Beryllium, 0.010 mg/l.
(E) Cadmium, 0.050 mg/l.

(F) Chromium (total), 0.33 mg/l.
(G) Cyanide (total), 1.8 mg/kg.
(H) Lead, 0.15 mg/l.
(I) Mercury, 0.009 mg/l.
(J) Nickel, 1.0 mg/l.
(K) Selenium, 0.16 mg/l.
(L) Silver, 0.30 mg/l.
(M) Thallium, 0.020 mg/l.
(N) Zinc, 70 mg/l.

(iii) For nonwastewater residues resulting from the high temperature metals recovery processing of KO61, K062, or F006 waste which meet the generic exclusion levels specified in this subdivision and which do not exhibit any hazardous waste characteristic, and which are sent to a unit regulated under part 115 of the act, the person claiming the exclusion shall send a onetime notification and certification to the director. The notification and certification shall be in compliance with all of the following provisions:

(A) The notification and certification shall be maintained at the facility.

(B) The notification and certification shall be updated by the person claiming the exclusion if the process or operation generating the waste changes or if the unit regulated under part 115 of the act that is receiving the waste changes. However, the director need only be notified on an annual basis, by the end of the calendar year, if a change occurs.

(C) The notification shall include all of the following information:

(1) The name and address of the unit regulated under part 115 of the act that is receiving the waste shipment.

(2) The EPA identification number and treatability group of the waste at the initial point of generation.

(3) The treatment standards applicable to the waste at the initial point of generation.

(D) The certification shall be signed by an authorized representative and shall include the following statement: "I certify under penalty of law that the generic exclusion levels for all constituents have been met without impermissible dilution and that no characteristic of hazardous waste is exhibited. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."

(d) Biological treatment sludge from the treatment of organic wastes from the production of carbamates and carbamoyl oximes, K156, or wastewaters from the production of carbamates and carbamoyl oximes, K157.

(e) Catalyst inert support media separated from 1 or more of the following wastes listed in R 299.9213:

(i) Spent hydrotreating catalyst, K171.

(ii) Spent hydrorefining catalyst, K172.

(5) Any waste that is described in subrule (3) of this rule is not a hazardous waste if it is in compliance with the following criteria, as applicable:

(a) In the case of any waste, it does not exhibit any of the characteristics of hazardous waste that are identified in the provisions of R 299.9212. However, a waste that exhibits a characteristic at the point of generation may still be subject to the requirements of 40 C.F.R. part 268, even if the waste does not exhibit a characteristic at the point of land disposal.

(b) In the case of a waste which is listed in the provisions of R 299.9212(5), R 299.9213, or R 299.9214, which contains a waste that is listed in these rules, or which is derived from a waste that is listed in these rules, the waste also has been excluded from regulation pursuant to the provisions of R 299.9211.

(6) Not withstanding subrules (1) to (5) of this rule and if the debris, as defined in 40 C.F.R. part 268, does not exhibit a hazardous characteristic identified in R 299.9212, the following materials are not subject to regulation under part 111 of the act and these rules, except for the

provisions of R 299.9809 to R 299.9816:

(a) Hazardous debris that has been treated using one of the required extraction or destruction technologies specified in table 1 of 40 C.F.R. §268.45. A person who claims this exclusion in an enforcement action shall have the burden of proving, by clear and convincing evidence, that the material meets all of the exclusion requirements.

(b) Debris that the director, considering the extent of contamination, has determined is no longer contaminated with hazardous waste.

(7) The office of management and budget document entitled "Standard Industrial Classification Manual" is adopted by reference in R 299.11007.

R 299.9204 Exclusions.

Rule 204. (1) The following materials are not wastes for the purpose of part 111 of the act and these rules:

(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. Domestic sewage means untreated sanitary wastes that pass through a sewer system.

(b) Industrial wastewater discharges that are point source discharges subject to regulation pursuant to the provisions of section 402 of the federal clean water act, as amended, except for discharges to injection wells.

(c) Irrigation return flows.

(d) 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.

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

(f) Pulping liquors that are reclaimed in a pulping liquor recovery furnace and then reused in the pulping process, unless the liquors are accumulated speculatively, as defined in R 299.9107(y).

(g) Spent sulfuric acid that is used to produce virgin sulfuric acid, unless the spent acid is accumulated speculatively, as defined in R 299.9107(y).

(h) Secondary materials that are reclaimed and returned to the original process or processes in which they were generated and where they are reused in the production process, if all of the following provisions apply:

(i) Only tank storage is involved, and the entire process through completion of reclamation is closed by being entirely connected with pipes or other comparable enclosed means of conveyance.

(ii) The reclamation does not involve controlled flame combustion, such as occurs in boilers, industrial furnaces, or incinerators.

(iii) The secondary materials are not accumulated in such tanks for more than 12 months without being reclaimed.

(iv) The reclaimed material is not used to produce a fuel and is not used to produce products that are used in a manner that constitutes disposal.

(i) Spent wood preserving solutions which have been reclaimed and which are reused for their original intended purpose.

(j) Wastewaters from the wood preserving process which have been reclaimed and which are reused to treat wood.

(k) Nonwastewater splash condenser dross residue from the treatment of K061 in high temperature metals recovery units, if the residue, if shipped, is shipped, in containers and is not land disposed before recovery.

(l) Oil-bearing hazardous secondary materials such as sludges, by-products, and spent materials, that are generated at a petroleum refinery (SIC code 2911) and are inserted into the petroleum refining process (SIC code 2911), including distillation, catalytic cracking, fractionation, or thermal cracking units, unless the material is placed on the land, or accumulated speculatively before being so recycled. Materials inserted into thermal cracking units are excluded under this subdivision if

the coke product does not exhibit a characteristic of a hazardous waste. Oil-bearing hazardous secondary materials may be inserted into the same petroleum refinery where they are generated, or sent directly to another refinery, and still be excluded under this subdivision. Except as provided for in subdivision (m) of this subrule, oil-bearing hazardous secondary materials generated elsewhere in the petroleum industry are not excluded under this subdivision. Residuals generated from processing or recycling materials excluded under this subdivision, where such materials as generated would have otherwise met a listing under R 299.9213 or R 299.9214, are designated as F037 wastes when disposed of or intended for disposal.

(m) Recovered oil that is recycled in the same manner and with the same conditions as described in subdivision (l) of this subrule. Recovered oil is oil that has been reclaimed from secondary materials, including wastewater, generated from normal petroleum industry practices, including refining, exploration and production, bulk storage, and transportation incident thereto (SIC codes 1311, 1321, 1381, 1382, 1389, 2911, 4612, 4613, 4789, 4922, 4923, 5171, and 5172). Recovered oil does not include oil-bearing hazardous wastes listed in part 2 of these rules. However, oil recovered from oil-bearing hazardous wastes listed in part 2 of these rules may be considered recovered oil. Recovered oil also does not include used oil as defined in R 299.9109.

(n) U.S. EPA hazardous waste numbers K060, K087, K141, K142, K143, K144, K145, K147, and K148 and any wastes from the coke by-products processes that are hazardous only because they exhibit the toxicity characteristic specified in R 299.9212 when, subsequent to generation, the materials are recycled to coke ovens or to the tar recovery process as a feedstock to produce coal tar or are mixed with coal tar before the tar's sale or refining. This exclusion is conditioned on there being no land disposal of the wastes from the point that the wastes are generated to the point that they are recycled to coke ovens or tar recovery or refining processes or are mixed with coal tar.

(o) Materials which are reclaimed from used oil and which are used beneficially if the materials are not burned for energy recovery or used in a manner that constitutes disposal of the materials.

(p) Excluded scrap metal that is being recycled

(q) Shredded circuit boards that are being recycled if both of the following requirements are met:

(i) The shredded circuit boards are stored in containers sufficient to prevent a release to the environment before recovery.

(ii) The shredded circuit boards are free of mercury switches, mercury relays, and nickel-cadmium batteries and lithium batteries.

(r) Condensates derived from the overhead gases from kraft mill steam strippers that are used to comply with 40 C.F.R. §63.446(e). This exemption applies only to combustion at the mill generating the condensates.

(s) Petrochemical recovered oil from an associated organic chemical manufacturing facility, where the oil is to be inserted into the petroleum refining process (SIC code 2911) along with normal petroleum refinery process streams, provided both the following requirements are met:

(i) The oil is hazardous only because it exhibits the characteristic of ignitability as defined in R 299.9212 or toxicity for benzene as defined in R 299.9212 and R 299.9217.

(ii) The oil generated by the organic chemical manufacturing facility is not placed on the land or speculatively accumulated before being recycled into the petroleum refining process.

(t) Spent caustic solutions from petroleum refining liquid treating processes used as a feedstock to produce cresylic or naphthenic acid unless the material is placed on the land or speculatively accumulated.

(u) Before reuse, the wood preserving wastewaters and spent wood preserving solutions described in subdivisions (i) and (j) of this subrule if all of the following requirements are met:

(i) The wood preserving wastewaters and spent wood preserving solutions are reused on-site at water borne plants in the production process for their original intended use.

(ii) Before reuse, the wastewaters and spent wood preserving solutions are managed to

prevent releases to either the land or groundwater or both.

(iii) Units used to manage wastewaters or spent wood preserving solutions before reuse can be visually or otherwise determined to prevent releases to either land or groundwater.

(iv) Drip pads used to manage the wastewaters or spent wood preserving solutions before reuse are in compliance with the provisions of 40 C.F.R. part 265, subpart W regardless of whether the plant generates a total of less than 1,000 kilograms per month of hazardous waste.

(v) Before operating pursuant to this exclusion, the plant owner or operator complies with all of the following requirements otherwise the exclusion shall not apply:

(A) Submits a onetime notification to the director stating that the plant intends to claim the exclusion, giving the date on which the plant intends to begin operating under the exclusion, and containing the following language: "I have read the applicable regulation establishing an exclusion for wood preserving wastewaters and spent wood preserving solutions and understand it requires me to comply at all times with the conditions set out in the regulations."

(B) The owner or operator maintains a copy of the onetime notification required pursuant to subparagraph (v) of this subdivision in its on-site records for a period of not less than 3 years from the date specified in the notice.

(C) If the plant voids the exclusion by not complying with the exclusion conditions and wishes to have its wastes excluded again, it shall apply to the director for reinstatement. The director may reinstate the exclusion upon finding that the plant has returned to compliance with all of the conditions and that violations are not likely to recur.

(v) Secondary materials, other than hazardous waste listed under R 299.9213 or R 299.9214, that are generated within the primary mineral processing industry from which minerals, acids, cyanide, water, or other values are recovered by mineral processing or by beneficiation if all of the following requirements are met:

(i) The secondary material is legitimately recycled to recover minerals, acids, cyanide, water, or other values.

(ii) The secondary material is not speculatively accumulated.

(iii) Except as provided under subparagraph (iv) of this subdivision of this subrule, the secondary material is stored in tanks, containers, or buildings which meet the following requirements as applicable:

(A) If using a building, the building shall be an engineered structure with a floor, walls, and a roof all of which are made of non-earthen materials providing structural support, except smelter buildings which may have partially earthen floors provided that the secondary material is stored on the non-earthen portion, have a roof which is suitable for diverting rainwater away from the foundation, and be designed, constructed, and operated to prevent significant releases of the material to the environment.

(B) If using a tank, the tank shall be free standing, not meet the definition of a surface impoundment, be manufactured of a material suitable for containment of its contents, be operated in a manner which controls fugitive dust if the tank contains any particulate which may be subject to wind dispersal, and be designed, constructed, and operated to prevent significant releases of the material to the environment.

(C) If using a container, the container shall be free standing and be manufactured of a material suitable for containment of its contents, be operated in a manner which controls fugitive dust if the tank contains any particulate which may be subject to wind dispersal, and be designed, constructed, and operated to prevent significant releases of the material to the environment.

(iv) The secondary materials are placed on pads if all of the following requirements are met:

(A) The solid mineral processing secondary materials do not contain any free liquid.

(B) The pad is designed, constructed, and operated to prevent significant releases of the secondary material into the environment.

(C) The pad provides the same degree of containment afforded by non-RCRA tanks, containers, and buildings eligible for this exclusion.

(D) The pad is designed of non-earthen material that is compatible with the chemical nature of the mineral processing secondary material.

(E) The pad is capable of withstanding physical stresses associated with placement and removal.

(F) The pad has run-on/run-off controls.

(G) The pad is operated in a manner which controls fugitive dust.

(H) The integrity of the pad is ensured through inspections and maintenance programs.

(I) The director makes a site-specific determination that the materials may be placed on a pad rather than in tanks, containers, or buildings. In making such a determination, the director shall consider whether storage on a pad poses the potential for significant releases via groundwater, surface water, and air exposure pathways. When assessing the groundwater, surface water, and air exposure pathways, the director shall consider the volume and physical and chemical properties of the secondary material, including its potential for migration off of the pad, the potential for human or environmental exposure to hazardous constituents migrating from the pad via each exposure pathway, and the possibility and extent of harm to human and environmental receptors via each exposure pathway. Before making such a determination, the director shall provide notice and the opportunity for comment to all persons potentially interested in the determination. Notice may be accomplished by placing notice of the action in major local newspapers or broadcasting notice over local radio stations.

(v) The owner or operator provides a notice to the director which identifies the following information and is updated when there is a change in the type of materials recycled or the location of the recycling process:

(A) The types of materials to be recycled.

(B) The type and location of storage units and recycling processes.

(C) The annual quantities expected to be placed in non land-based units.

(vi) For the purposes of the exclusion under R 299.9204(2)(h), mineral processing secondary materials shall be the result of mineral processing and may not include any hazardous wastes listed under R 299.9213 or R 299.9214. Listed hazardous wastes and characteristic hazardous waste generated by non-mineral processing industries are not eligible for the conditional exclusion from the definition of waste.

(w) Comparable fuels or comparable syngas fuels that meet the requirements of R 299.9230.

(2) The following wastes are not hazardous wastes for the purposes of part 111 of the act and these rules:

(a) Household waste, including household waste that has been collected, transported, stored, treated, disposed of, recovered, or reused. Household waste means any waste material, including garbage, trash, and sanitary wastes in septic tanks, that is derived from households, including single and multiple residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds, and day-use recreation areas. A resource recovery facility that manages municipal waste shall not be deemed to be treating, storing, disposing of, or otherwise managing hazardous wastes for the purposes of regulation pursuant to the provisions of these rules if the facility is in compliance with both of the following provisions:

(i) Receives and burns only household waste from single and multiple dwellings, hotels, motels, and other residential sources and waste from commercial or industrial sources that does not contain hazardous waste.

(ii) Does not accept hazardous wastes and the owner or operator of the facility has established contractual requirements or other appropriate notification or inspection procedures to assure that hazardous wastes are not received at or burned in the facility.

(b) Wastes which are generated by either of the following and which are returned to the soil as fertilizers:

(i) The growing and harvesting of agricultural crops.

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

(c) Mining overburden that is returned to the mine site.

(d) Fly ash waste, bottom ash waste, slag waste, and flue gas emission control waste that is generated primarily from the combustion of coal or other fossil fuels, except as provided by 40 C.F.R. §266.112 for facilities that burn or process hazardous waste.

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

(f) Wastes which fail the test for the toxicity characteristic because chromium is present or wastes that are listed in R 299.9213 or R 299.9214 due to the presence of chromium, which do not fail the test for the toxicity characteristic 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 all of the following provisions are met:

(i) The chromium in the waste is exclusively, or nearly exclusively, trivalent chromium.

(ii) The waste is generated from an industrial process that uses trivalent chromium exclusively, or nearly exclusively, and the process does not generate hexavalent chromium.

(iii) The waste is typically and frequently managed in nonoxidizing environments.

(g) The following specific wastes that are in compliance with the standard in subdivision (f) of this subrule, if the wastes do not fail the test for the toxicity characteristic for any other constituent and do not fail the test for any other characteristic:

(i) Chrome (blue) trimmings generated by any of the following subcategories of the leather tanning and finishing industry:

(A) Hair pulp/chrome, tan/retan/wet finish.
(B) Hair save/chrome, tan/retan/wet finish.
(C) Retan/wet finish.
(D) No beamhouse.
(E) Through-the-blue.
(F) Shearling.

(ii) Chrome (blue) shavings generated by any of the following subcategories of the leather tanning and finishing industry:

(A) Hair pulp/chrome, tan/retan/wet finish.
(B) Hair save/chrome, tan/retan/wet finish.
(C) Retan/wet finish.
(D) No beamhouse.
(E) Through-the-blue.
(F) Shearling.

(iii) Buffing dust generated by any of the following subcategories of the leather tanning and finishing industry:

(A) Hair pulp/chrome, tan/retan/wet finish.
(B) Hair save/chrome, tan/retan/wet finish.
(C) Retan/wet finish.
(D) No beamhouse.
(E) Through-the-blue.

(iv) Sewer screenings generated by any of the following subcategories of the leather tanning and finishing industry:

(A) Hair pulp/chrome, tan/retan/wet finish.
(B) Hair save/chrome, tan/retan/wet finish.
(C) Retan/wet finish.
(D) No beamhouse.
(E) Through-the-blue.
(F) Shearling.

(v) Wastewater treatment sludges generated by any of the following subcategories of the leather tanning and finishing industry:

(A) Hair pulp/chrome, tan/retan/wet finish.
(B) Hair save/chrome, tan/retan wet finish.
(C) Retan/wet finish.
(D) No beamhouse.
(E) Through-the-blue.
(F) Shearling.

(vi) Wastewater treatment sludges generated by any of the following subcategories of the leather tanning and finishing industry:

(A) Hair pulp/chrome, tan/retan/wet finish.
(B) Hair save/chrome, tan/retan/wet finish.
(C) Through-the-blue.

(vii) Waste scrap leather from the leather tanning industry, the shoe manufacturing industry, and other leather product manufacturing industries.

(viii) Wastewater treatment sludges from the production of Ti02 pigment using chromium-bearing ores by the chloride process.

(h) Waste from the extraction, beneficiation, and processing of ores and minerals, including coal, phosphate rock, and overburden from the mining of uranium ore, except as provided in 40 C.F.R. §266.112 for facilities that burn or process hazardous waste. For purposes of this subdivision of this subrule, the following provisions apply:

(i) Beneficiation of ores and minerals is restricted to the following activities: crushing; grinding; washing; dissolution; crystallization; filtration; sorting; sizing; drying; sintering; pelletizing; briqueting; calcining to remove water or carbon dioxide, or both; roasting, autoclaving, or chlorination, or any combination thereof, in preparation for leaching, except where the roasting/leaching or autoclaving/leaching or chlorination/leaching sequence produces a final or intermediate product that does not undergo further beneficiation or processing; gravity concentration; magnetic separation; electrostatic separation; flotation; ion exchange; solvent extraction; electrowinning; precipitation; amalgamation; and heap, dump, vat, tank, and in-situ leaching.

(ii) Waste from the processing of ores and minerals will include only the following wastes as generated:

(A) Slag from primary copper processing.
(B) Slag from primary lead processing.
(C) Red and brown muds from bauxite refining.
(D) Phosphogypsum from phosphoric acid production.
(E) Slag from elemental phosphorus production.
(F) Gasifier ash from coal gasification.
(G) Process wastewater from coal gasification.
(H) Calcium sulfate wastewater treatment plant sludge from primary copper processing.
(I) Slag tailings from primary copper processing.
(J) Fluorogypsum from hydrofluoric acid production.
(K) Process wastewater from hydrofluoric acid production.
(L) Air pollution control dust/sludge from iron blast furnaces.
(M) Iron blast furnace slag.
(N) Treated residue from roasting/leaching of chrome ore.
(O) Process wastewater from primary magnesium processing by the anhydrous process.
(P) Process wastewater from phosphoric acid production.
(Q) Basic oxygen furnace and open hearth furnace air pollution control dust/sludge from carbon steel production.
(R) Basic oxygen furnace and open hearth furnace slag from carbon steel production.
(S) Chloride process waste solids from titanium tetrachloride production.
(T) Slag from primary zinc processing.

(iii) Residues derived from co-processing mineral processing secondary materials with

normal beneficiation raw materials or with normal mineral processing raw materials remain excluded under subrule (2) of this rule if the owner or operator meets both of the following requirements:

(A) Processes at least 50 percent by weight normal beneficiation raw materials or normal mineral processing raw materials.

(B) Legitimately reclaims the secondary mineral processing materials.

(i) Mixtures of a waste that is excluded from regulation pursuant to the provisions of subdivision (h) of this subrule and any other waste that exhibits a hazardous waste characteristic pursuant to the provisions of R 299.9212 and that is not listed pursuant to the provisions of R 299.9213 or R 299.9214, such that the resultant mixture does not exhibit any hazardous waste characteristic that would have been exhibited by the non-excluded waste alone if the mixture had not occurred.

(j) Cement kiln dust waste, except as provided in 40 C.F.R. §266.112 for facilities that burn or process hazardous waste.

(k) Waste which consists of discarded arsenical-treated wood or wood products, which fails the test for the toxicity characteristic for hazardous waste numbers D004 through D017 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.

(l) Petroleum-contaminated media and debris that fail the test for the toxicity characteristic pursuant to the provisions of R 299.9212 for hazardous waste numbers D018 through D043 only and are subject to the corrective action regulations pursuant to the provisions of 40 C.F.R. part 280.

(m) Used chlorofluorocarbon refrigerants from totally enclosed heat transfer equipment, including mobile air conditioning systems, mobile refrigeration, and commercial and industrial air conditioning and refrigeration systems that use chlorofluorocarbons as the heat transfer fluid in a refrigeration cycle, if the refrigerant is reclaimed for further use.

(n) Non-terne plated used oil filters that are not mixed with wastes that are identified in R 299.9213 or R 299.9214, or both, if the oil filters have been gravity hot-drained using one of the following methods:

(i) Puncturing the filter anti-drain back valve or the filter dome end and hot-draining.

(ii) Hot-draining and crushing.

(iii) Dismantling and hot-draining.

(iv) Any other equivalent hot-draining method that will remove used oil.

(o) Leachate or gas condensate collected from landfills where certain wastes have been disposed of provided that all of the following requirements are met:

(i) The wastes disposed would meet one or more of the listing descriptions for hazardous waste numbers K169, K170, K171, and K172 if these wastes had been generated after February 8, 1999.

(ii) The wastes described in subparagraph (i) of this subdivision were disposed before February 8, 1999.

(iii) The leachate or gas condensate do not exhibit any characteristic of a hazardous waste and are not derived from any other listed hazardous waste.

(iv) The discharge of the leachate or gas condensate, including leachate or gas condensate transferred from the landfill to a publicly owned treatment works by truck, rail, or dedicated pipe, is subject to regulations under sections 307(b) or 402 of the federal clean water act.

(v) After February 13, 2001, the leachate or gas condensate shall no longer be exempt if it is stored or managed in a surface impoundment before discharge unless all of the following requirements are met:

(A) The surface impoundment is used to store leachate or gas condensate in response to an emergency situation.

(B) The surface impoundment has a double liner system.

(C) The leachate or gas condensate is removed from the surface impoundment and continues to be managed in compliance with the conditions of this subdivision after the emergency

ends.

(3) The following hazardous wastes are not subject to regulation pursuant to parts 3 to 10 of these rules:

(a) A hazardous waste that is generated in a product or raw material storage tank, a product or raw material transport vehicle or vessel, a product or raw material pipeline, or a manufacturing process unit or an associated nonwaste treatment manufacturing unit. This exemption does not apply in any of the following circumstances:

(i) Once the waste exits the unit in which it was generated.

(ii) If the unit is a surface impoundment.

(iii) If the hazardous waste remains in the unit more than 90 days after the unit ceases to be operated for the manufacturing, storage, or transportation of product or raw materials.

(b) Waste pesticides and pesticide residues which are generated by a farmer from his or her own use and which are hazardous wastes if the pesticide residues are disposed of on the farmer's own farm in a manner that is consistent with the disposal instructions on the pesticide container label and if the farmer empties or cleans each pesticide container in accordance with the provisions of R 299.9207.

(4) Except as provided in subrule (5) of this rule, a sample of waste or a sample of water, soil, or air that is collected for the sole purpose of testing to determine its characteristics or composition is not subject to part 111 of the act and these rules if 1 of the following provisions is met:

(a) The sample is being transported to a laboratory for the purpose of testing.

(b) The sample is being transported back to the sample collector after testing.

(c) The sample is being stored by the sample collector before transport to a laboratory for testing.

(d) The sample is being stored in a laboratory before testing.

(e) The sample is being stored in a laboratory after testing but before it is returned to the sample collector.

(f) The sample is being stored temporarily in the laboratory after testing for a specific purpose, such as until conclusion of a court case or enforcement action where further testing of the sample might be necessary.

(5) To qualify for the exemption specified in subrule (4) of this rule, a sample collector that ships samples to a laboratory and a laboratory that returns samples to a sample collector shall comply with DOT, United States postal service, or any other applicable shipping requirements. The sample collector shall only ship a volume that is necessary for testing and analysis and, if the sample collector determines that DOT, United States postal service, or other shipping requirements do not apply to the shipment of the sample, the sample collector shall package the sample so that it does not leak, spill, or vaporize from its packaging and assure that all of the following information accompanies the sample:

(a) The sample collector's name, mailing address, and telephone number.

(b) The laboratory's name, mailing address, and telephone number.

(c) The quantity of the sample.

(d) The date of shipment.

(e) A description of the sample.

(6) The exemption specified in subrule (4) of this rule does not apply if the laboratory determines that the waste is hazardous but the laboratory is no longer in compliance with any of the conditions stated in subrule (5) of this rule.

(7) Persons who generate or collect samples for the purpose of conducting treatability studies as defined in R 299.9108 are not subject to the requirements of parts 2, 3, and 4 of these rules or the notification requirements of section 3010 of RCRA and the samples are not included in the quantity determinations specified in the provisions of R 299.9205 and R 299.9306(4) when the sample is being collected and prepared for transportation by the generator or sample collector, the sample is being accumulated or stored by the generator or sample collector before transportation to a laboratory or

testing facility, or the sample is being transported to a laboratory or testing facility for the purpose of conducting a treatability study. The exemption specified in this subrule is applicable to samples of hazardous waste that are being collected and shipped for the purpose of conducting treatability studies if all of the following provisions are complied with:

(a) The generator or sample collector does not use more than 10,000 kilograms of media that is contaminated with nonacute hazardous waste, 1,000 kilograms of any nonacute hazardous waste other than contaminated media, 1 kilogram of acute or severely toxic hazardous waste, or 2,500 kilograms of media that is contaminated with acute or severely toxic hazardous waste for each process that is being evaluated for each generated waste stream in a treatability study.

(b) The mass of each sample shipment is not more than 10,000 kilograms. The 10,000-kilograms quantity may be all media contaminated with nonacute hazardous waste or may include 2,500 kilograms of media contaminated with acute or severely toxic hazardous waste, 1,000 kilograms of nonacute hazardous waste, and 1 kilogram of acute or severely toxic hazardous waste.

(c) The sample shall be packaged and transported so that it will not leak, spill, or vaporize from its packaging during shipment and so that either of the following requirements are met:

(i) The transportation of each sample shipment is in compliance with Unites States department of transportation, United States postal service, or any other applicable shipping requirements.

(ii) If the DOT, USPS, or other shipping requirements do not apply to the shipment of the sample, all of the following information shall accompany the sample:

(A) The name, mailing address, and telephone number of the originator of the sample.

(B) The name, address, and telephone number of the facility that will perform the treatability study.

(C) The quantity of the sample.

(D) The date of the shipment.

(E) A description of the sample, including its EPA hazardous waste number.

(d) The sample is shipped to a laboratory or testing facility that is exempt pursuant to the provisions of subrule (10) of this rule or has an appropriate RCRA permit, state hazardous waste license, or interim status.

(e) The generator or sample collector maintains all of the following records for 3 years after completion of the treatability study:

(i) Copies of the shipping documents.

(ii) A copy of the contract with the facility that conducts the treatability study.

(iii) Documentation that shows all of the following information:

(A) The amount of waste that is shipped pursuant to this exemption.

(B) The name, address, and EPA identification number of the laboratory or testing facility that received the waste.

(C) The date the shipment was made.

(D) If unused samples and residues were returned to the generator.

(f) The generator reports the information required pursuant to the provisions of subdivision (e)(iii) of this subrule in its biennial report.

(8) The director may grant requests on a case-by-case basis for up to an additional 2 years for treatability studies involving bioremediation. The director may grant requests on a case-by-case basis for quantity limits in excess of those specified in subrules (7)(a) and (b) and subrule (10)(d) of this rule for up to an additional 5,000 kilograms of media contaminated with nonacute hazardous waste, 500 kilograms of nonacute hazardous waste, 2,500 kilograms of media contaminated with acute or severely toxic hazardous waste, and 1 kilogram of acute or severely toxic hazardous waste. A request may be granted in response to 1 or both of the following requests:

(a) A request for authorization to ship, store, and conduct treatability studies on, additional quantities in advance of commencing treatability studies. The director shall consider all of the following factors in determining whether to grant the request:

(i) The nature of the technology.

(ii) The type of process.

(iii) The size of the unit undergoing testing, particularly in relation to scale-up considerations.

(iv) The time and quantity of material required to reach steady state operating conditions.

(v) Test design considerations such as mass balance calculations.

(b) A request for authorization to ship, store, and conduct treatability studies on, additional quantities after initiation or completion of initial treatability studies when any of the following occur:

(i) There has been an equipment or mechanical failure during the conduct of a treatability study.

(ii) There is a need to verify the results of a previously conducted treatability study.

(iii) There is a need to study and analyze alternative techniques within a previously evaluated treatment process.

(iv) There is a need to do further evaluation of an ongoing treatability study to determine final specifications for treatment.

(9) The additional quantities and time frames allowed under subrule (8) of this rule are subject to all of the provisions of this rule. The generator or sample collector shall apply to the director and shall provide, in writing, all of the following information:

(a) The reason why the generator or sample collector requires an additional quantity of the sample or time for the treatability study evaluation and the additional quantity or time needed.

(b) Documentation accounting for all samples of hazardous waste from the waste stream that have been sent for or undergone treatability studies, including all of the following information:

(i) The date that each previous sample from the waste stream was shipped.

(ii) The sample quantity of each previous shipment.

(iii) The laboratory or testing facility to which the sample was shipped.

(iv) What treatability study processes were conducted on each sample shipped.

(v) The available results of each treatability study.

(c) A description of the technical modifications or change in specifications that will be evaluated and the expected results.

(d) If further study is being required due to equipment or mechanical failure, then the applicant shall include information regarding the reason for the failure and also include a description of what procedures were established, or what equipment improvements have been made, to protect against further equipment or mechanical failure.

(e) Other information that the director considers necessary.

(10) Samples that undergo treatability studies and the laboratory or testing facility that conducts the treatability studies, to the extent the facilities are not otherwise subject to the requirements of part 111 of the act or these rules, are not subject to any of the requirements of these rules or to the notification requirements of section 3010 of RCRA if the conditions of this subrule are met. A mobile treatment unit may qualify as a testing facility subject to this subrule. If a group of mobile treatment units is located at the same site, then the limitations specified in this subrule apply to the entire group of mobile treatment units collectively as if the group were 1 mobile treatment unit. The conditions are as follows:

(a) Not less than 45 days before conducting treatability studies, the facility shall notify the director, in writing, that it intends to conduct treatability studies pursuant to this rule.

(b) The laboratory or testing facility that conducts the treatability study has an EPA identification number.

(c) Not more than a total of 10,000 kilograms of "as received" media contaminated with nonacute hazardous waste, 2,500 kilograms of media contaminated with acute or severely toxic hazardous waste, or 250 kilograms of other "as received" hazardous waste is subjected to the initiation of treatment in all treatability studies in any single day. "As received" hazardous waste refers to waste as received in the shipment from the generator or sample collector.

(d) The quantity of "as received" hazardous waste that is stored at the facility for the purpose

of evaluation in treatability studies is not more than 10,000 kilograms, the total of which may include 10,000 kilograms of media contaminated with nonacute hazardous waste, 2,500 kilograms of media contaminated with acute or severely toxic hazardous waste, 1,000 kilograms of nonacute hazardous waste other than contaminated media, and 1 kilogram of acute or severely toxic hazardous waste. The quantity limitation does not include treatment materials, including nonhazardous waste, that are added to "as received" hazardous waste.

(e) Not more than 90 days have elapsed since the treatability study for the sample was completed, or not more than 1 year, or 2 years for treatability studies involving bioremediation, has elapsed since the generator or sample collector shipped the sample to the laboratory or testing facility, whichever date occurs first.

(f) The treatability study does not involve the placement of hazardous waste on the land or the open burning of hazardous waste.

(g) The facility maintains records, for 3 years following completion of each study, that show compliance with the treatment rate limits, storage time, and quantity limits. All of the following specific information shall be included for each treatability study that is conducted:

(i) The name, address, and EPA identification number of the generator or sample collector of each waste sample.

(ii) The date the shipment was received.

(iii) The quantity of waste accepted.

(iv) The quantity of "as received" waste in storage each day.

(v) The date the treatment study was initiated and the amount of "as received" waste introduced to treatment each day.

(vi) The date the treatability study was concluded.

(vii) The date any unused sample or residues generated from the treatability study were returned to the generator or sample collector or, if sent to a designated facility, the name of the facility and the EPA identification number.

(h) The facility keeps, on-site, a copy of the treatability study contract and all shipping papers associated with the transport of treatability study samples to and from the facility for a period ending 3 years from the completion date of each treatability study.

(i) The facility prepares and submits a report to the director by March 15 of each year that estimates the number of studies and the amount of waste expected to be used in treatability studies during the current year and includes all of the following information for the previous calendar year:

(i) The name, address, and EPA identification number of the facility conducting the treatability studies.

(ii) The types, by process, of treatability studies conducted.

(iii) The names and addresses of persons for whom studies have been conducted, including their EPA identification numbers.

(iv) The total quantity of waste in storage each day.

(v) The total quantity and types of waste subjected to treatability studies.

(vi) When each treatability study was conducted.

(vii) The final disposition of residues and unused sample from each treatability study.

(j) The facility determines if any unused sample or residues generated by the treatability study are hazardous waste pursuant to the provisions of R 299.9203 and, if so, are subject to these rules, unless the residues and unused samples are returned to the sample originator pursuant to the exemption in subrule (7) of this rule.

(k) The facility notifies the director, by letter, when the facility is no longer planning to conduct any treatability studies at the site.

(11) The disposal of PCB-containing dielectric fluid and electric equipment that contains the fluid as authorized for use and as regulated pursuant to the provisions of 40 C.F.R. part 761 and fluid and equipment that are hazardous only because they fail the test for the toxicity characteristic for hazardous waste numbers D018 through D043 are not subject to regulation pursuant to parts 2 to 7

and 9 and 10 of these rules.

(12) Dredged material, as defined in 40 C.F.R. §232.2, that is subject to the requirements of a permit that has been issued pursuant to section 404 of the federal water pollution control act, 33 U.S.C. §1344, or section 103 of the marine protection, research, and sanctuaries act of 1972, 33 U.S.C. §1413, is not a hazardous waste for the purposes of part 111 of the act and these rules. For the purposes of this exemption, the term "permit" means any of the following:

(a) A permit issued by the U.S. army corps of engineers or an approved state under section 404 of the federal water pollution control act, 33 U.S.C. §1344.

(b) A permit issued by the U.S. army corps of engineers under section 103 of the marine protection, research, and sanctuaries act of 1972, 33 U.S.C. §1413.

(c) In the case of U.S. army corps of engineers civil works projects, the administrative equivalent of the permits referred to in subdivisions (a) and (b) of this subrule, as provided for in the U.S. army corps of engineers regulations.

(13) The provisions of 40 C.F.R. §261.38, part 280, and part 761 are adopted by reference in R 299.11003.

R 299.9205 Special requirements for hazardous waste generated by conditionally exempt small quantity generators.

Rule 205. (1) A generator is a conditionally exempt small quantity generator if, in a calendar month, any of the following provisions apply:

(a) He or she generates less than or equal to 100 kilograms of hazardous waste in that month and does not accumulate, at any time, more than a total of 1,000 kilograms of hazardous wastes.

(b) He or she generates or accumulates, at any time, acute hazardous waste in quantities less than or equal to the following:

(i) A total of 1 kilogram of acute hazardous wastes that are listed in table 203a, 204a, 204b, or 205a of these rules.

(ii) A total of 100 kilograms of any residue or contaminated soil, waste, or other debris resulting from the cleanup of a spill into water or on any land of any acute hazardous waste that is listed in table 203a, 204a, 204b, or 205a of these rules.

(c) He or she generates or accumulates, at any time, waste that satisfies the criteria of the characteristic of severe toxicity pursuant to the provisions of R 299.9212(5) in quantities less than or equal to 1 kilogram.

(2) Except as provided in subrules (3), (4), (7), (8), and (9) of this rule, a conditionally exempt small quantity generator's hazardous wastes are not subject to regulation pursuant to the provisions of parts 3 to 10 of these rules if the generator complies with the following requirements:

(a) The waste evaluation requirements specified in R 299.9302.

(b) Either treats or disposes of his or her hazardous waste in an on-site facility or ensures delivery to a facility that will store, treat, or dispose of the waste. If the facility is located in the United States, it shall be in compliance with 1 of the following requirements:

(i) Be permitted or licensed pursuant to the provisions of part 111 of the act for that waste type or be operating pursuant to the provisions of R 299.9502(3), (4), or (5).

(ii) Be a facility that stores or treats the waste and which is in compliance with the applicable requirements of parts 31, 55, and 115 of the act.

(iii) Be a disposal facility that is in compliance with the applicable requirements of parts 31, 55, and 115 of the act.

(iv) Be a facility that beneficially uses or reuses, or legitimately recycles or reclaims, the waste or treats the waste before the beneficial use or reuse or legitimate recycling or reclamation.

(v) Be an off-site publicly owned treatment works, if the waste is in compliance with all federal, state, and local pretreatment requirements and, if the waste is shipped by vehicle, the conditions of R 299.9503(3)(b) are met.

(vi) Be in another state and be permitted or licensed pursuant to the provisions of 40 C.F.R. part 270.

(vii) Be in another state and be in interim status pursuant to the provisions of 40 C.F.R. parts 270 and 265.

(viii) Be in another state and be authorized to manage hazardous waste by the state pursuant to a hazardous waste management program that is approved pursuant to the provisions of 40 C.F.R. part 271.

(ix) Be in another state and be permitted, licensed, or registered by that state to manage municipal waste which, if managed in a municipal waste landfill, is subject to the provisions of 40 C.F.R. part 258.

(x) Be in another state and be permitted, licensed, or registered by that state to manage nonmunicipal waste which, if managed in a nonmunicipal waste disposal unit after the effective date of these rules, is subject to the provisions of 40 C.F.R. §§257.5 to 257.30.

(xi) For universal waste managed in accordance with the provisions of R 299.9228, be a universal waste handler or destination facility in compliance with the provisions of R299.9228.

(c) Accumulates waste in an area where the waste is protected from weather, fire, physical damage, and vandals.

(d) Hazardous waste accumulation is conducted so that hazardous waste or hazardous waste constituents cannot escape by gravity into the soil, directly or indirectly, into surface or groundwaters, or into drains or sewers and so that fugitive emissions are not in violation of the provisions of part 55 of the act.

(3) If a generator exceeds the generation or accumulation limits, or both, specified in subrule (1) of this rule, then the generator and all of the accumulated hazardous wastes are subject to the following provisions:

(a) For wastes other than acute or severely toxic hazardous wastes, the special provisions of part 3 of these rules that are applicable to generators that generate between 100 kilograms and 1,000 kilograms of hazardous waste in a calendar month and the other applicable requirements of these rules. The time period specified in the provisions of R 299.9306 for the accumulation of wastes on-site begins for a conditionally exempt small quantity generator when the accumulated wastes are more than 1,000 kilograms.

(b) For waste types specified in subrule (1)(b) or (c), or both, of this rule, the requirements of part 3 of these rules that are applicable to generators that generate 1,000 kilograms or more of hazardous waste per calendar month and the other applicable requirements of these rules. The time period specified in the provisions of R 299.9306 for the accumulation of wastes on-site begins for a conditionally exempt small quantity generator when the accumulated wastes exceed 1 or more of the limits specified in subrule (1)(b) or (c) of this rule.

(4) If a person other than the conditionally exempt small quantity generator accumulates hazardous waste generated by a conditionally exempt small quantity generator, then the person and all of the accumulated hazardous wastes shall be in compliance with the following requirements:

(a) If the quantity of hazardous wastes, other than acute or severely toxic hazardous wastes, accumulated on-site is more than 1,000 kilograms, the following requirements:

(i) Place the waste in containers and comply with the provisions of 40 C.F.R. part 265, subpart I, except for the provisions of §265.176, and the containment requirements of 40 C.F.R. §264.175.

(ii) Place the waste in tanks and comply with the provisions of 40 C.F.R. §265.201 and the containment requirements of 40 C.F.R. §§265.191, 265.192, 265.193, and 265.196.

(iii) Clearly mark the date upon which each period of accumulation begins and the hazardous waste number of the waste on each container so that the information is visible for inspection.

(iv) Ensure that while the waste is being accumulated on-site, each waste container and tank is marked clearly with the words "hazardous waste."

(v) Comply with the provisions of 40 C.F.R. part 265, subpart C.

(vi) Ensure that, at all times, there is at least 1 employee either on the premises or on call who is responsible for coordinating all emergency response measures. The employee is the emergency coordinator and, if on call, shall be available to respond to an emergency by reaching the facility within a short period of time.

(vii) Post, next to the telephone, the name and telephone number of the emergency coordinator; the location of fire extinguishers and spill control material and, if present, fire alarm; and the telephone number of the fire department, unless the facility has a direct alarm.

(viii) Ensure that all employees are thoroughly familiar with proper waste handling and emergency procedures relevant to their responsibilities during normal facility operations and emergencies.

(ix) Ensure that the emergency coordinator or his or her designee responds to any emergencies that arise. An emergency coordinator shall respond as follows:

(A) If there is a fire, call the fire department or attempt to extinguish the fire using a fire extinguisher.

(B) If there is a spill, contain the flow of hazardous waste to the extent possible and, as soon as is practicable, clean up the hazardous waste and any contaminated materials or soils.

(C) If there is a fire, explosion, or other release of hazardous waste or hazardous waste constituents that could threaten human health or the environment or if the generator has knowledge that a spill has reached surface water or groundwater, then the generator shall immediately notify the department's pollution emergency alerting system - telephone number 800-292-4706. For releases that could threaten human health outside the individual site of generation and spills that have reached surface waters, the person shall also immediately notify the national response center at its 24-hour, toll-free number - 800-424-8802. The notifications shall include all of the following information:

(1) The name and telephone number of the person who is reporting the incident.

(2) The name, address, telephone number, and EPA identification number of the person accumulating the waste.

(3) The date, time, and type of incident.

(4) The name and quantity of the material or materials involved and released.

(5) The extent of injuries, if any.

(6) The estimated quantity and disposition of recovered materials that resulted from the incident, if any.

(7) An assessment of actual or potential hazards to human health or the environment.

(8) The immediate response action taken.

(x) Ensure that the area where the waste is accumulated is protected from weather, fire, physical damage, and vandals.

(xi) Ensure that waste accumulation is conducted so hazardous waste or hazardous waste constituents cannot escape by gravity into the soil, directly or indirectly, into surface or groundwaters, or into drains or sewers and so that fugitive emissions are not in violation of the provisions of part 55 of the act.

(xii) Ensure that waste is not accumulated on-site for a period of more than 180 days before the waste is recycled, treated, or disposed of in accordance with the provisions of subrule (2) of this rule. If the person exceeds the 180-day accumulation period, then the person and all of the accumulated waste are subject to the requirements for owners or operators of hazardous waste management facilities.

(xiii) Ensure that the volume of waste being accumulated on-site is not more than 6,000 kilograms before the waste is recycled, treated, or disposed of in accordance with the provisions of subrule (2) of this rule. If the person exceeds the 6,000-kilograms accumulation limit, then the person and all of the accumulated waste are subject to the requirements for owners or operators of hazardous waste management facilities.

(xiv) Within 15 days after accumulating 1,000 kilograms or more of waste, provide the department with a onetime written notification unless the person already has an EPA identification

number. The notification shall include all of the following information:

(A) The names, addresses, and telephone numbers of the owner and operator of the accumulation site.

(B) The name, address, and telephone number of the accumulation site.

(C) The type of waste accumulated at the site.

(D) The quantity of each waste accumulated at the site.

(b) If the quantity of acute or severely toxic hazardous wastes accumulated on-site is more than the limits specified in subrule (1)(b) or (c) of this rule, the following requirements:

(i) Place the waste in containers and comply with the provisions of 40 C.F.R. part 265, subpart I, except for the provisions of §265.176, and the containment requirements of 40 C.F.R. §264.175.

(ii) Place the waste in tanks and comply with the provisions of 40 C.F.R. §265.201 and the containment requirements of 40 C.F.R. §§265.191, 265.192, 265.193, and 265.196.

(iii) The requirements specified in R 299.9205(4)(a)(iii) to (xi).

(iv) Ensure that waste is not accumulated on-site for a period of more than 90 days before being recycled, treated, or disposed of in accordance with the provisions of subrule (2) of this rule. If the person exceeds the 90-day accumulation period, then the person and all of the accumulated waste are subject to the requirements for owners or operators of hazardous waste management facilities.

(v) Ensure that the volume of waste being accumulated on-site is not more than the limits specified in subrule (1)(b) or (c) of this rule before the waste is recycled, treated, or disposed of in accordance with the provisions of subrule (2) of this rule. If the person exceeds the accumulation limits specified subrule (1)(b) or (c) of this rule, then the person and all of the accumulated waste are subject to the requirements for owners or operators of hazardous waste management facilities.

(vi) Notify the department, in writing, within 15 days after accumulating quantities of waste that exceed the limits specified in subrule (1)(b) or (c) of this rule. The notification shall include all of the following information:

(A) The names, addresses, and telephone numbers of the owner and operator of the accumulation site.

(B) The name, address, and telephone number of the accumulation site.

(C) The type of waste accumulated at the site.

(D) The quantity of each waste accumulated at the site.

(5) When making the quantity determinations of this rule and part 3 of these rules, the generator shall include all hazardous waste that he or she generates, except the hazardous waste that meets any of the following criteria:

(a) Is exempt from regulation pursuant to the provisions of R 299.9204(3) to (11), R 299.9206(3), or R 299.9207(1).

(b) Is managed immediately upon generation only in on-site elementary neutralization units, wastewater treatment units, or totally enclosed treatment units as defined in part 1 of these rules.

(c) Is removed from on-site storage.

(d) Is hazardous waste produced by on-site treatment, including reclamation, of his or her hazardous waste if the hazardous waste that is treated was counted once.

(e) Is recycled, without prior storage or accumulation, only in an on-site process that is subject to regulation pursuant to the provisions of R 299.9206(1)(c).

(f) Are spent materials that are generated, reclaimed, and subsequently reused on-site, if the spent materials have been counted once.

(g) Is used oil and managed pursuant to the provisions of R 299.9206(4) and R 299.9809 to R 299.9816.

(h) Are spent lead-acid batteries managed pursuant to the provisions of R 299.9804.

(i) Is universal waste managed pursuant to the provisions of R 299.9228.

(6) Hazardous waste subject to the reduced requirements of this rule may be mixed with

nonhazardous waste and remain subject to these reduced requirements even though the resultant mixture exceeds the quantity limitations identified in this rule, unless the mixture meets any of the characteristics of hazardous wastes identified in R 299.9212.

(7) If a person mixes a waste with a hazardous waste that exceeds a quantity exclusion level of this rule, then the mixture is subject to full regulation.

(8) If a conditionally exempt small quantity generator's wastes are mixed with used oil, then the mixture is subject to the applicable requirements of R 299.9809 to R 299.9816 if it is to be burned for energy recovery. Any material produced from the mixture by processing, blending, or other treatment is also subject to the applicable requirements of R 299.9809 to R 299.9816 if it is to be burned for energy recovery.

R 299.9206 Requirements for recyclable materials.

Rule 206. (1) Except as provided in subrules (2) to (5) of this rule, recyclable materials are subject to all of the following requirements:

(a) Generators and transporters of recyclable materials are subject to the applicable requirements of parts 3 and 4 of these rules.

(b) Owners or operators of facilities that store recyclable materials before they are recycled are regulated pursuant to all applicable provisions of parts 5, 6, 7, and 8 of these rules. The recycling process itself is exempt from regulation, except as provided in subdivision (d) of this subrule.

(c) Owners or operators of facilities that recycle recyclable materials without storing them before they are recycled are subject to the identification number requirements of 40 C.F.R. §264.11 and the manifest requirements of R 299.9608. The recycling process itself is exempt from regulation, except as provided in subdivision (d) of this subrule.

(d) A hazardous waste management unit in which recyclable materials are recycled is subject to the requirements of 40 C.F.R. part 265, subparts AA and BB if the unit is located at a facility that is described in R 299.9601(3)(a) or (b), or the requirements of R 299.9630 and R 299.9631 if the unit is located at a facility subject to the permitting or licensing requirements specified in part 111 of the act and part 5 of these rules.

(2) The following recyclable materials are not subject to the requirements of this rule, but are regulated under the applicable provisions of parts 5 and 8 of these rules:

(a) Recyclable materials used in a manner that constitutes disposal.

(b) Hazardous wastes burned for energy recovery in boilers and industrial furnaces that are not regulated as incinerators pursuant to the provisions of part 6 of these rules.

(c) Recyclable materials from which precious metals are reclaimed.

(d) Spent lead-acid batteries that are being reclaimed.

(3) The following recyclable materials are not subject to regulation pursuant to part 111 of the act or these rules, except for the environmental and human health standards of R 299.9602 and the provisions of R 299.9809 to R 299.9816, as applicable:

(a) Industrial ethyl alcohol that is reclaimed, except that, unless otherwise provided in an international agreement as specified in the provisions of 40 C.F.R. §262.58, the following requirements apply:

(i) A person who initiates a shipment for reclamation in a foreign country, and any intermediary who arranges for the shipment, shall comply with the requirements applicable to a primary exporter in the provisions of 40 C.F.R. §§262.53, 262.56(a)(1) to (4), (6), and (b), and 262.57, export such materials only with the consent of the receiving country and in conformance with the EPA acknowledgment of consent as defined in subpart E of 40 C.F.R. part 262, and provide a copy of the EPA acknowledgment of consent to the shipment to the transporter that transports the shipment for export.

(ii) A transporter that transports a shipment for export shall not accept a shipment if he or she knows that the shipment does not conform to the EPA acknowledgment of consent, shall ensure that a copy of the EPA acknowledgment of consent accompanies the shipment, and shall ensure that it is

delivered to the facility that is designated by the person who initiates the shipment.

(b) Scrap metal that is not excluded under R 299.9204(1)(p).

(c) Fuels produced from the refining of oil-bearing hazardous wastes together with normal process streams at a petroleum refining facility if such wastes result from normal petroleum refining, production, and transportation practices. This exemption does not apply to fuels produced from oil recovered from oil-bearing hazardous waste, if the recovered oil is already excluded under R 299.9204(1)(l).

(d) Hazardous waste fuel which is produced from oil-bearing hazardous wastes from petroleum refining, production, or transportation practices or which is produced from oil that is reclaimed from the hazardous wastes, where the hazardous wastes are reintroduced into a process that does not use distillation or does not produce products from crude oil if the resulting fuel is in compliance with the used oil specification set forth in R 299.9809(1)(f) and if other hazardous wastes are not used to produce the hazardous waste fuel.

(e) Hazardous waste fuel that is produced from oil-bearing hazardous waste which results from petroleum refining production and transportation practices if the hazardous wastes are reintroduced into a refining process after a point at which contaminants are removed and if the fuel is in compliance with the used oil fuel specification set forth in R 299.9809(1)(f).

(f) Oil which is reclaimed from oil-bearing hazardous wastes that result from petroleum refining, production, and transportation practices, which reclaimed oil is burned as a fuel without reintroduction to a refining process, if the reclaimed oil is in compliance with the used oil fuel specification set forth in R 299.9809(1)(f).

(g) Textiles, including shop towels, rags, gloves, uniforms, linens, mops, and wipers, that are being recycled in a manner other than being burned for energy recovery or used in a manner constituting disposal if both of the following conditions are met:

(i) After the textile's original use, hazardous waste is not mixed with the textile.

(ii) The textiles and the containers used to transport the textiles do not contain any free liquids.

(4) Used oil that is recycled and is also a hazardous waste solely because it exhibits a hazardous characteristic is not subject to regulation pursuant to part 111 of the act or these rules, except for the environmental and human health standards outlined in the provisions of R 299.9602 and the provisions of R 299.9809 to R 299.9816. Used oil that is recycled includes any used oil that is reused, after its original use, for any purpose. Used oil includes, but is not limited to, oil that is re-refined, reclaimed, burned for energy recovery, or reprocessed.

(5) An owner or operator of a facility that stores electric lamps which meet the definition of a hazardous waste before recycling the lamps at the facility shall comply with all of the following requirements:

(a) Submit a written notification of hazardous waste electric lamp storage activity to the director. The notification shall include all of the following information:

(i) The name, mailing address, and telephone number of the owner.

(ii) The name, mailing address, and telephone number of the operator.

(iii) The name, mailing address, location, and telephone number of the recycle facility.

(iv) A description of the unit or units in which the electric lamps are managed on-site before recycling and a map that shows the location of the unit or units.

(b) Obtain an identification number for the facility from the director.

(c) The environmental and human health standards pursuant to the provisions of R 299.9602.

(d) The location standards pursuant to the provisions of R 299.9603.

(e) The facility design and operating standards pursuant to the provisions of R 299.9604.

(f) The handling requirements of R 299.9228(4)(c).

(g) Ensure that facility personnel are trained with respect to proper hazardous waste handling and preparedness and prevention procedures and are familiar with the facility emergency procedures.

(h) If there is a fire, explosion, or other release of hazardous waste or hazardous waste

constituents that could threaten human health or the environment, or if the owner or operator has knowledge that a spill has reached surface water or groundwater, then the owner or operator shall immediately notify the department's pollution emergency alerting system telephone number 800-292-4706, or the department's district office for which the facility is located. The notification shall include all of the following information:

(i) The name and telephone number of the person who is reporting the incident.

(ii) The name, address, telephone number, and identification number of the facility.

(iii) The date, time, and type of incident.

(iv) The name and quantity of the material or materials involved and released.

(v) The extent of injuries, if any.

(vi) The estimated quantity and disposition of recovered materials that resulted from the incident, if any.

(vii) An assessment of actual or potential hazards to human health or the environment.

(viii) The immediate response action taken.

(i) The area where the electric lamps are accumulated shall be protected, as appropriate for the type of waste being stored, from weather, fire, physical damage, and vandals.

(j) Electric lamp accumulation shall be conducted so that fugitive emissions are not in violation of the provisions of part 55 of the act.

(k) A written operating record shall be maintained on-site by the owner or operator and shall contain all of the following information:

(i) The quantity of electric lamps received on-site during the calendar year.

(ii) The quantity of electric lamps recycled at the facility during the calendar year.

(iii) The documentation necessary to demonstrate that the electric lamps are not being stored on-site for more than 1 year.

(l) The closure standards of 40 C.F.R. §§264.111 and 264.114.

(m) The provisions of R 299.9614 if the electric lamps are being stored in containers and the provisions of R 299.9615 if the electric lamps are being stored in tanks.

(n) The electric lamps shall not be stored on-site for more than 1 year from the date that the owner or operator receives the electric lamps.

(o) Any hazardous waste that is generated from the electric lamp recycle operation is subject to the provisions of parts 2 to 7 of these rules.

(6) Hazardous waste that is exported to or imported from designated member countries of the organization for economic cooperation and development, as defined in 40 C.F.R. §262.58(a)(1), for the purpose of recovery is subject to the requirements of R 299.9312 if the hazardous waste is either a federal hazardous waste subject to the manifesting requirements of part 3 of these rules or is a universal waste subject to the provisions R 299.9228.

(7) The provisions of 40 C.F.R. §§264.11, 264.111, and 264.114, and part 265, subparts AA and BB, are adopted by reference in R 299.11003.

R 299.9207 Residues of hazardous waste in empty containers.

Rule 207. (1) Any hazardous waste that remains in either an empty container or an inner liner which is removed from an empty container, as explained in subrules (3), (4), and (5) of this rule, is not subject to regulation pursuant to the provisions of parts 3 to 10 of these rules.

(2) Any hazardous waste in either a container that is not empty or an inner liner which is removed from a container that is not empty, as explained in subrule (3), (4), or (5) of this rule, is subject to regulation pursuant to these rules.

(3) A container or an inner liner which is removed from a container that has held any hazardous waste, except for a waste which is a compressed gas, which is identified as an acute hazardous waste listed in table 203a, 204a, 204b, or 205a of this part, or which is a severely toxic hazardous waste, is empty if both of the following conditions are met:

(a) All wastes have been removed that can be removed using the practices commonly

employed to remove materials from that type of container, such as pouring, pumping, and aspirating.

(b) Not more than 2.5 centimeters (1 inch) of residue remain on the bottom of the container or inner liner or either of the following conditions is met:

(i) Not more than 3% by weight of the total capacity of the container remains in the container or inner liner if the container is less than or equal to 110 gallons in size.

(ii) Not more than 0.3% by weight of the total capacity of the container remains in the container or inner liner if the container is more than 110 gallons in size.

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

(5) A container or an inner liner that is removed from a container which has held an acute hazardous waste that is listed in table 203a, 204a, 204b, or 205a of this part or that is a severely toxic hazardous waste is empty if any of the following criteria are met:

(a) The container or inner liner has been triple rinsed using a solvent that is 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 scientific literature or by tests conducted by the generator, to achieve equivalent removal.

(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.

R 299.9208 Criteria for identifying characteristics of hazardous waste.

Rule 208. (1) The director shall identify and define a characteristic of hazardous waste in this part upon finding that the administrator has identified the characteristic based on the criteria contained in the provisions of 40 C.F.R. §261.10.

(2) The director shall identify and define a characteristic of hazardous waste in this part in addition to those identified by the administrator in the provisions of 40 C.F.R. part 261, subpart C, upon determining that the waste that exhibits the characteristic does either of the following:

(a) Exhibits extreme toxicity to aquatic life.

(b) Contains a substance which can statistically be shown to cause acutely toxic; carcinogenic; teratogenic; hereditary mutagenic; or severe, debilitating, irreversible, adverse effects to mammals when exposed, by oral, dermal, or inhalation route, once or repeatedly to levels of 100 parts per billion or less.

(3) The provisions of 40 C.F.R. §261.10 are adopted by reference in R 299.11003.

R 299.9209 Criteria and procedure for listing hazardous wastes.

Rule 209. (1) The director shall list a waste as a hazardous waste in this part upon finding that the administrator has listed the waste as hazardous based on the criteria contained in the provisions of 40 C.F.R. "261.11.

(2) The director shall evaluate a waste for listing as a hazardous waste in this part, in addition to the wastes listed by the administrator in the provisions of 40 C.F.R. part 261, subpart D, upon determining that the waste meets any of the following criteria:

(a) The waste meets a characteristic identified in R 299.9208.

(b) The waste, or a material that could be a constituent of the waste, is hazardous pursuant to the provisions of section 3 of part 111 of the act, but is not currently listed in this part.

(3) If information becomes available that indicates that a waste, or a material that may be a component of wastes, might meet any of the criteria of subrule (2) of this rule, then the director shall do the following:

(a) Evaluate the characteristics of the waste or material to verify its hazards.

(b) If the waste is determined to have hazardous characteristics, initiate rule change procedures as outlined in act 306 that will lead to the listing of the waste as hazardous. In addition, the director shall request the governor to petition the administrator to add the waste to the listings in the provisions of 40 C.F.R. part 261 pursuant to the authority of section 3001(c) of RCRA.

(4) As additional wastes are determined to be hazardous by the administrator and listed in the provisions of 40 C.F.R. part 261, the director shall initiate rule change procedures as outlined in act 306 to incorporate the wastes into these rules.

(5) The basis for listing the classes or types of waste specified in this part shall be designated by 1 or more of the following hazard codes:

(a) For ignitable waste, (I).

(b) For corrosive waste, (C).

(c) For reactive waste, (R).

(d) For toxicity characteristic waste, (E).

(e) For acute hazardous waste, (H).

(f) For toxic waste, (T).

(6) The constituents that were the basis for listing the waste as toxicity characteristic waste (E) or toxic waste (T) in R 299.9220 and R 299.9222 are identified in the provisions of 40 C.F.R. part 261, appendix VII.

(7) The provisions of 40 C.F.R. "261.11 and 40 C.F.R. part 261, appendix VII, are adopted by reference in R 299.11003.

R 299.9210 Removal from hazardous waste listings.

Rule 210. (1) A petition may be made to the director for removal from listing in this part any listed waste or hazardous waste constituent, except those determined by the administrator to be hazardous in the provisions of 40 C.F.R. part 261. The petition shall be accompanied by substantiating data and references taken from scientific literature which challenges the validity of the data which led to the waste or waste constituent listing. Data supplied shall be reviewed and evaluated by the director. If the petition is granted, rule change procedures, as outlined in act 306, shall be initiated for delisting of the waste or constituent. If the petition is not granted, the director shall inform the generator of the reasons why within 180 days of receipt of such a petition.

(2) Pursuant to the provisions of 40 C.F.R. ""260.20 and 260.22, a petition may be made to the EPA to remove from listing those wastes or constituents listed in the provisions of 40 C.F.R. part 261. When wastes are removed from the listing in the provisions of 40 C.F.R. part 261 by the EPA, the director shall initiate rule change procedures, as outlined in section 28 of part 111 of the act, to remove those wastes from the listing in R 299.9203.

R 299.9211 Petitions to exclude waste produced at a particular facility.

Rule 211. (1) Any person seeking to exclude a waste at a particular generating facility from the lists in this part shall do the following:

(a) If the waste is listed in the provisions of 40 C.F.R. part 261, subpart D, contains a waste listed in subpart D, or is derived from a waste listed in subpart D and does not meet the criteria of paragraph (c) of this subrule, petition the administrator, under the provisions of 40 C.F.R. §§260.20 and 260.22, to exclude the waste at the particular generating facility from the lists. If the petition is granted by the administrator, the director shall do both of the following:

(i) Within 60 days of the redesignation by the administrator, request any information necessary to evaluate the petition.

(ii) Within 180 days of receiving all information necessary to evaluate the petition, redesignate the waste and impose any conditions on the redesignation necessary to protect human health and the environment.

(b) If the waste is listed in this part, but not listed in the provisions of 40 C.F.R. part 261, subpart D, petition the director to exclude the waste at the particular generating facility from the lists in the part. The petition shall include that information specified by the provisions of 40 C.F.R. §260.22(i) and shall demonstrate that either the waste does not contain hazardous constituents or that the waste does contain hazardous constituents, but is not capable of posing a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of,

or otherwise managed, considering the factors listed in the provisions of 40 C.F.R. §261.11(a)(3). After receiving a petition for an exclusion, the director shall do both of the following:

(i) Within 60 days of receiving a petition for an exclusion, request any information necessary to evaluate the petition.

(ii) Within 180 days of receiving all information necessary to evaluate the petition, either approve the petition with any conditions necessary to protect human health and the environment or deny the petition.

(c) If the waste is treated, stored, or disposed of as part of closure or partial closure of a treatment, storage, or disposal facility or if the waste is contaminated soil deemed hazardous under R 299.9203(1) or R 299.9214 due to its mixture with a hazardous waste, petition the director to exclude the waste at the particular facility from regulation under these rules. The petition shall contain that information specified in 40 C.F.R. §§260.20(b) and 260.22. After receiving a complete petition under subrule (3) of this rule, the director shall do all of the following:

(i) Make a tentative decision to grant or deny the petition based on the criteria specified in 40 C.F.R. §260.22.

(ii) Public notice the tentative decision and provide 30 days for public comment.

(iii) After evaluating all public comments, make a final decision on the petition. The director shall grant the petition if the criteria specified in 40 C.F.R. §260.22 are met.

(2) Noncompliance with any conditions imposed under subrule (1) of this rule or any change of constituents, physical state, conditions of the generating process, or other variation which would increase the hazardous characteristics of the waste is a basis for the director to amend or revoke the delisting under act 306.

(3) Wastes for which petitions are under consideration shall be managed as required by these rules until such time that a redesignation is granted.

(4) The provisions of 40 C.F.R. §§260.20, 260.22, 260.31, and 261.11(a)(3) are adopted by reference in R 299.11003, with the exception that the word "director" shall replace the word "administrator."

R 299.9212 Characteristics of hazardous waste.

Rule 212. (1) A waste exhibits the characteristic of ignitability and is identified by the hazardous waste number D001 if a representative sample of the waste has any of the following properties:

(a) It is a liquid, other than an aqueous solution produced by a kraft pulp or paper mill that contains less than 24% alcohol by volume or an aqueous solution that contains less than 24% alcohol, by volume, as defined by section 211.117(a)(5) to (7) of the Internal Revenue Code, 27 U.S.C. §211.117(a)(5) to (7), including distilled spirits, wine, and malt beverages, and has a flash point less than 60 degrees Centigrade (140 degrees Fahrenheit), as determined by any of the following test methods:

(i) A Pensky-Martens closed cup tester using the test method specified in ASTM standard D-93-79 or D-93-80, both of which are adopted by reference in R 299.11001.

(ii) A setaflash closed cup tester using the test method specified in ASTM standard D-3278-78, which is adopted by reference in R 299.11001.

(iii) An equivalent test method approved by the director, or his or her designee, pursuant to procedures set forth in the provisions of 40 C.F.R. §§260.20 and 260.21, which are adopted by reference in R 299.11003.

(b) It is not a liquid and is capable, under standard temperature and pressure, of causing fire through friction, absorption of moisture, or spontaneous chemical changes and, when ignited, burns so vigorously and persistently that it creates a hazard.

(c) It is an ignitable compressed gas as defined in the provisions of 49 C.F.R. §173.115, which is adopted by reference in R 299.11004, and as determined by the test methods described in the provisions of 49 C.F.R. §173.115 or equivalent test methods approved by the director pursuant to

the provisions of 40 C.F.R. §§260.20 and 260.21.

(d) It is an oxidizer as defined in the provisions of 49 C.F.R. §173.127, which is adopted by reference in R 299.11004.

(2) A waste exhibits the characteristic of corrosivity and is identified by the hazardous waste number D002 if a representative sample of the waste has either of the following properties:

(a) It is aqueous and has a pH less than or equal to 2 or greater than or equal to 12.5, as determined by a pH meter using method 9040 in the publication entitled "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," which is adopted by reference in R 299.11005.

(b) It is a liquid and corrodes steel (SAE 1020) at a rate of more than 6.35 mm (0.250 inch) per year at a test temperature of 55 degrees Centigrade (130 degrees Fahrenheit) as determined by the test method specified in the national association of corrosion engineers (NACE) standard TM-01-69, as standardized in method 5.3 of the publication entitled "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," which is adopted by reference in R 299.11005.

(3) A waste exhibits the characteristic of reactivity and is identified by the hazardous waste number D003 if a representative sample of the waste has any of the following properties:

(a) It is normally unstable and readily undergoes violent change without detonating.

(b) It reacts violently with water.

(c) It forms potentially explosive mixtures with water.

(d) When mixed with water, it generates toxic gases, vapors, or fumes in a quantity sufficient to present a danger to human health or the environment.

(e) It is a cyanide or sulfide-bearing waste that, when exposed to pH conditions between 2 and 12.5, can generate toxic gases, vapors, or fumes in a quantity sufficient to present a danger to human health or the environment.

(f) It is capable of detonation or explosive reaction if it is subjected to a strong initiating source or if heated under confinement.

(g) It is readily capable of detonation or explosive decomposition or reaction at standard temperature and pressure.

(h) It is a forbidden explosive as defined in the provisions of 49 C.F.R. §173.54, or it meets the definition of a class 1/division 1.1, 1.2, or 1.3 explosive as defined in the provisions of 49 C.F.R. §173.50, which are adopted by reference in R 299.11004.

(4) A waste exhibits the toxicity characteristic if, using the toxicity characteristic leaching procedure, test Method 1311 in the publication entitled "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," which is adopted by reference in R 299.11005, the extract from a representative sample of the waste contains any of the contaminants listed by the administrator or the director and identified in table 201a of these rules at a concentration equal to or greater than the respective values given in the tables. If the waste contains less than 0.5% filterable solids, then the waste itself, after filtering using the methodology outlined in method 1311, is considered to be the extract for the purposes of this rule.

(5) A waste exhibits the characteristic of severe toxicity if the waste contains I part per million or more of a severely toxic substance listed in table 202.

(6) A hazardous waste that is identified by a characteristic in this rule shall be assigned every hazardous waste number that is applicable. The hazardous waste number or numbers shall be used in complying with the notification, recordkeeping, and reporting requirements of these rules. The hazardous waste numbers are as follows:

(a) For wastes determined to be hazardous pursuant to the provisions of subrules (4) and (5) of this rule, the hazardous waste number listed in table 201a or table 202 of these rules.

(b) For a waste that exhibits the characteristic of ignitability, the hazardous waste number D00l.

(c) For a waste that exhibits the characteristic of corrosivity, the hazardous waste number D002.

(d) For a waste that exhibits the characteristic of reactivity, the hazardous waste

number D003.

(7) For the purposes of this rule, the director, or his or her designee, will consider a sample that is obtained using any of the applicable sampling methods specified in the provisions of 40 C.F.R. part 261, appendix I, which is adopted by reference in R 299.11003, to be a representative sample.

(8) The following test methods shall be used:

(a) For aflatoxin, the test methods set forth in subsection 26, natural poisons, of the publication entitled "Official Methods of Analysis of the Association of Official Analytical Chemists," 13th edition, 1980, which is adopted by reference in R 299.11006.

(b) For chlorinated dibenzo-p-dioxins and chlorinated dibenzofurans in chemical wastes, including still bottoms, filter aids, sludges, spent carbon, and reactor residues, and in soil, EPA method 8280, which is contained in the provisions of 40 C.F.R. part 261, appendix X, and which is adopted by reference in R 299.11003.

(c) Alternate procedures as approved by the director or his or her designee.

(9) The provisions of 40 C.F.R. §§260.20 and 260.21 are adopted by reference in R 299.11003.

R 299.9213 Lists of hazardous wastes from nonspecific and specific sources.

Rule 213. (1) The following wastes are hazardous wastes unless excluded pursuant to the provisions R 299.9211:

(a) Wastes from nonspecific sources listed by the administrator and identified in table 203a of these rules.

(b) Wastes from nonspecific sources listed by the director and identified in table 203b of these rules.

(c) Wastes from specific sources listed by the administrator and identified in table 204a of these rules.

(d) Wastes from specific sources listed by the director and identified in table 204b of these rules.

(2) Each hazardous waste that is listed in subrule (1) of this rule is assigned a hazardous waste number which precedes the name of the waste on the table in which it is listed. The number shall be used in complying with the notification requirements and the recordkeeping and reporting requirements of these rules.

(3) The EPA hazardous waste numbers F020, F021, F022, F023, F026, and F027 are subject to the exclusion limits for acutely hazardous wastes established in R 299.9205.

(4) For the purposes of the EPA hazardous waste numbers F037 and F038 listings, aggressive biological treatment units are defined as those units that employ 1 of the following 4 treatment methods:

(a) Activated sludge.

(b) Trickling filter.

(c) Rotating biological contactor for the continuous accelerated biological oxidation of wastewaters.

(d) High-rate aeration. High-rate aeration is a system of surface impoundments or tanks in which intense mechanical aeration is used to completely mix the wastes and enhance biological activity. High-rate aeration systems shall be composed of units that employ a minimum of 6 horsepower per million gallons of treatment volume and either the hydraulic retention time of the unit is no longer than 5 days, or the hydraulic retention time is no longer than 30 days and the unit does not generate a sludge that is hazardous waste by the toxicity characteristic.

(5) Generators and facility owners and operators shall demonstrate that their sludges are not subject to being listed as F037 or F038, or both, wastes pursuant to the provisions of subrule (4) of this rule. Generators and facility owners and operators shall maintain, in their operating or other on-site records, documents and data sufficient to demonstrate that the unit is an aggressive biological

treatment unit as defined in subrule (4) of this rule and that the sludges sought to be exempted from the definitions of F037 or F038, or both, wastes were actually generated in the aggressive biological treatment unit.

(6) For the purposes of the EPA hazardous waste number F037 listing, sludges are considered to be generated at the moment of deposition in the unit, where deposition is defined as at least a temporary cessation of lateral particle movement.

(7) For the purposes of the EPA hazardous waste number F038 listing, sludges are considered to be generated at the moment of deposition in the unit, where deposition is defined as at least a temporary cessation of lateral particle movement, and floats are considered to be generated at the moment they are formed in the top of the unit.

R 299.9214 Discarded commercial chemical products, off-specification species, containers, container residues, and spill residues as hazardous wastes.

Rule 214. (1) The following materials or items are hazardous wastes when they are discarded or intended to be discarded as described in R 299.9202(1)(a), when they are burned for energy recovery instead of their original intended use, when they are used to produce fuels instead of their intended use, when they are applied to the land instead of their intended use, or when they are contained in products that are applied to the land instead of their original intended use:

(a) Any commercial chemical product or manufacturing chemical intermediate having the generic name in tables 205a, 205b, and 205c of these rules.

(b) Any off-specification commercial chemical product or manufacturing intermediate which, if it met specifications, would have the generic name listed in tables 205a, 205b, and 205c of these rules.

(c) Any residue that remains in a container or in an inner liner which is removed from a container that has held any commercial chemical product or manufacturing chemical intermediate having the generic names listed in tables 205a, 205b, and 205c of these rules, unless the container is empty as defined in R 299.9207.

(d) Any residue or contaminated soil, water, or other debris resulting from the cleanup of a spill into any water or on any land of any commercial chemical product, a manufacturing chemical intermediate having the generic name listed in tables 205a, 205b, and 205c of these rules, any residue or contaminated soil, water, or other debris resulting from the cleanup of a spill into any water or on any land of any off-specification chemical product, and manufacturing chemical intermediate which, if it met specifications, would have the generic name listed in tables 205a, 205b, and 205c of these rules.

(2) The commercial chemical products, manufacturing chemical intermediates, or off-specification commercial chemical products listed by the administrator and identified in table 205a are acutely hazardous wastes (H) and are subject to the small quantity exclusion defined in R 299.9205.

(3) The commercial chemical products, manufacturing chemical intermediates, or off-specification commercial chemical products listed by the administrator and identified in table 205b are toxic wastes (T) and are subject to the small quantity exclusion defined in R 299.9205.

(4) The commercial chemical products, manufacturing chemical intermediates, or off-specification commercial chemical products listed in table 205c of these rules have been determined to be hazardous by the director, are identified as toxic wastes (T), and are subject to the small quantity exclusion defined in R 299.9205(1).

(5) As used in subrule (1) of this rule, the phrases "commercial chemical product," "manufacturing chemical intermediate," "off-specification commercial chemical product," and "manufacturing chemical intermediate" refer to materials that are manufactured or formulated for commercial or manufacturing use. The phrases do not refer to materials, such as manufacturing process wastes, that contain any of the substances listed in tables 205a, 205b, or 205c of these rules.

(6) Each hazardous waste listed in subrule (1) of this rule is assigned the hazardous waste

number in tables 205a, 205b, or 205c of these rules that corresponds to the constituent which caused the waste to be hazardous. With regard to a mixture of hazardous wastes, a number shall be assigned in the following priority order based upon the wastes or constituents present:

(a) Acutely hazardous, from table 205a.
(b) Toxic, from table 205b.
(c) Toxic, from table 205c of these rules.

If the constituents are listed in the same table, the number assigned shall correspond to the constituents present in the greatest amount on a weight basis.

R 299.9215 Petitions for equivalent testing or analytical methods.

Rule 215. (1) Any person seeking to add a testing or analytical method to these rules may petition the director for a rules change under this rule. To be successful, the person shall demonstrate, to the satisfaction of the director, that the proposed method is equal to or superior to the corresponding method prescribed in the provisions of 40 C.F.R. part 261, 264, or 265 of these rules in terms of its sensitivity, accuracy, and precision.

(2) Each petition under this rule shall contain that information required by the provisions of 40 C.F.R. §§260.20(b) and 260.21(b).

(3) After receiving a petition for an equivalent method, the director, or his or her designee, shall, within 120 days of receiving the petition, request any additional information on the proposed method which he or she may reasonably require to evaluate the method. If the petition is granted, the director shall initiate rule change procedures under act 306.

(4) The provisions of 40 C.F.R. §§260.20(b) and 260.21(b) are adopted by reference in R 299.11003.

R 299.9216 Method of analysis.

Rule 216. (1) The method of analysis specified in the provisions of appendix III of 40 C.F.R. part 261 shall be used to identify the hazardous constituents listed in appendices VII and VIII of 40 C.F.R. part 261. Alternate methods of analysis may be used if approved by the director.

(2) The provisions of 40 C.F.R. part 261, appendices III, VII, and VIII are adopted by reference in R 299.11003.

R 299.9217 Table 201a.

Rule 217. Table 201a reads as follows:

Table 201a			
EPA Hazardous Waste Number	Chemical Abstract Services Number	Material	Extract Concentration milligrams per liter
D004	7440-38-2	Arsenic	5.0
D005	7440-39-3	Barium	100.0
D018	71-43-2	Benzene	0.5
D006	7440-43-9	Cadmium	1.0
D019	56-23-5	Carbon tetrachloride	0.5
D020	57-74-9	Chlordane	0.03
D021	108-90-7	Chlorobenzene	100.0
D022	67-66-3	Chloroform	6.0
D007	7440-47-3	Chromium	5.0
D023	95-48-7	o-Cresol	200.0**
D024	108-39-4	m-Cresol	200.0**
D025	106-44-5	p-Cresol	200.0**
D026	--------	Cresol	200.0**
D016	94-75-7	2,4-D (2,4-Dichlorophenoxyacetic Acid)	10.0
D027	106-46-7	1,4-Dichlorobenzene	7.5
D028	107-06-2	1,2-Dichloroethane	0.5
D029	75-35-4	1,1-Dichloroethylene	0.7
D030	121-14-2	2,4-Dinitrotoluene	0.13*
D012	72-20-8	Endrin (1,2,3,4,10,10-hexachloro-1,7-Epoxy-1,4,4a,5,6,7,8,8a octahydro-1,4-endo, endo-5,8-dimenthano naphthalene)	0.02
D031	76-44-8	Heptachlor (and its Epoxide)	0.008

D032	118-74-1	Hexachlorobenzene	0.13*
D033	87-68-3	Hexachlorobutadiene	0.5
D034	67-72-1	Hexachloroethane	3.0
D008	7439-92-1	Lead	5.0
D013	58-89-9	Lindane (1,2,3,4,5,6-hexa-chlorocyclo-hexane, gamma isomer)	0.4
D009	7439-97-6	Mercury	0.2
D014	72-43-5	Methoxychlor (1,1,1-trichloro-2,2-bis(p-methoxyphenyl)ethane)	10.0
D035	78-93-3	Methyl ethyl ketone	200.0
D036	98-95-3	Nitrobenzene	2.0
D037	87-86-5	Pentachlorophenol	100.0
D038	110-86-1	Pyridine	5.0*
D010	7782-49-2	Selenium	1.0
D011	7440-22-4	Silver	5.0
D039	127-18-4	Tetrachloroethylene	0.7
D015	8001-35-2	Toxaphene ($C_{10}H_{10}C1_8$, Technical chlorinated camphene, 67-69 percent chlorine)	0.5
D040	79-01-6	Trichloroethylene	0.5
D041	95-95-4	2,4,5-Trichlorophenol	400.0
D042	88-06-2	2,4,6-Trichlorophenol	2.0
D017	93-72-1	2,4,5 TP Silvex (2,4,5-Tri-chlorophenoxypropionic acid)	1.0
D043	75-01-4	Vinyl chloride	0.2

* Quantitation limit is greater than the calculated regulatory level. The quantitation limit therefore becomes the regulatory level.

**IF o-, m-, and p-Cresol concentrations cannot be differentiated, the total cresol (D026) concentration is used. The regulatory level of total cresol is 200 mg/l.

R 299.9218 Rescinded.

R 299.9219 Table 202.

Rule 219. Table 202 reads as follows:

Table 202	
Michigan Hazardous Waste Number	Substance
001S	Aflatoxin
002S	2,3,7,8-Tetrachlorodibenzo-p-dioxin
003S	1,2,3,7,8-Pentachlorodibenzo-p-dioxin
004S	1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin
005S	1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin
006S	1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin
007S	2,3,7,8-Tetrachloridibenzo furan

R 299.9220 Table 203a; hazardous waste from nonspecific sources.

Rule 220. Table 203a reads as follows:

Table 203a		
EPA Hazardous Waste Number	Hazardous Waste From Nonspecific Sources	Hazard Code
F001	The following spent halogenated solvents used in degreasing: tetrachloroethylene, trichloroethylene, methylene chloride, 1,1,1-trichloroethane, carbon tetrachloride, and chlorinated fluorocarbons; all spent solvent mixtures and blends used in degreasing containing, before use, a total of 10% or more, by volume, of one or more of the above halogenated solvents or those solvents listed in F002, F004, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures	(T)
F002	The following spent halogenated solvents: tetrachloroethylene, methylene chloride, trichloroethylene, 1,1,1-trichloroethane, chlorobenzene, 1,1,2-trichloro-1,2,2-trifluoroethane, ortho-dichlorobenzene, trichlorofluoromethane and 1,1,2-trichloroethane; all spent solvent mixtures and blends containing, before use, a total of 10% or more, by volume, of one or more of the above halogenated solvents or those solvents listed in FOOl, F004, and F005; and still bottoms from the recovery of these	(T)

	spent solvents and spent solvent mixtures	
F003	The following spent nonhalogenated solvents: xylene, acetone, ethyl acetate, ethyl benzene, ethyl ether, methyl isobutyl ketone, n-butyl alcohol, cyclohexanone, and methanol; all spent solvent mixtures and blends containing, before use, only the above spent nonhalogenated solvents; and all spent solvent mixtures or blends, containing before use, one or more of the above nonhalogenated solvents, and a total of 10% or more, by volume, of one or more of those solvents listed in FOOI, F002, F004, and F005 and still bottoms from the recovery of these spent solvents and spent solvent mixtures	(I)
F004	The following spent nonhalogenated solvents: cresols and cresylic acid, and nitrobenzene; all spent solvent mixtures and blends containing, before use, a total of 10% or more, by volume, of one or more of the above non-halogenated solvents or those solvents listed in FOOI, F002, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures	(T)
F005	The following spent nonhalogenated solvents: toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, benzene, 2-ethoxyethanol, and 2-nitropropane; all spent solvent mixtures and blends containing, before use, a total of 10% or more, by volume, of one or more of the above nonhalogenated solvents or those solvents listed in FOOI, F002 and F004; and still bottoms from the recovery of these spent solvents and spent solvent mixtures	(I,T)
F006	Wastewater treatment sludges from electroplating operations except from the following processes: (1) sulfuric acid anodizing of aluminum; (2) tin plating on carbon steel; (3) zinc plating used on a segregated basis on carbon steel; (4) aluminum or zinc-aluminum plating on carbon steel (5) cleaning or stripping associated with tin, zinc, and aluminum plating on carbon steel; and (6) chemical etching and milling of aluminum	(T)
F007	Spent cyanide plating bath solutions from electroplating operations	(R,T)
F008	Plating sludges from the bottom of plating baths from electroplating operations where cyanides are used in the process	(R,T)
F009	Spent stripping and cleaning bath solutions from electroplating operations where cyanides are used in the process	(R,T)
F010	Quenching bath residues from oil baths from metal heat treating operations where cyanides are used in the process	(R,T)
F011	Spent cyanide solutions from salt bath pot cleaning from metal heat-treating operations	(R,T)
F012	Quenching wastewater treatment sludges from metal heat-treating	(T)

	operations where cyanides are used in the process	
F019	Wastewater treatment sludges from the chemical conversion coating of aluminum except from zirconium phosphating in aluminum can washing when such phosphating is an exclusive conversion coating process	(T)
F020	Wastes, except wastewater and spent carbon from hydrogen chloride purification, from the production or manufacturing use as a reactant, chemical intermediate, or component in a formulating process, of tri- or tetrachlorophenol or of intermediates used to produce their pesticide derivatives. This listing does not include wastes from the production of hexachlorophene from highly purified 2,4,5-trichlorophenol	(H)
F021	Wastes, except wastewater and spent carbon from hydrogen chloride purification, from the production or manufacturing use as a reactant, chemical intermediate, or component in a formulating process of pentachlorophenol or of intermediates used to produce its derivatives	(H)
F022	Wastes, except wastewater and spent carbon from hydrogen chloride purification, from the manufacturing use as a reactant, chemical intermediate, or component in a formulating process of tetra-, penta-, or hexachlorobenzenes under alkaline conditions	(H)
F023	Wastes, except wastewater and spent carbon from hydrogen chloride purification, from the production of materials on equipment previously used for the production or manufacturing use as a reactant, chemical intermediate, or component in a formulating process of tri- and tetrachlorophenols. This listing does not include wastes from equipment used only for the production or use of hexachlorophene from highly purified 2,4,5-trichlorophenol	(H)
F024	Process wastes, including, but not limited to, distillation residues, heavy ends, tars, and reactor clean-out wastes from the production of certain chlorinated aliphatic hydrocarbons by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from 1 to and including 5, with varying amounts and positions of chlorine substitutions. This listing does not include wastewater, wastewater treatment sludges, spent catalysts, and wastes listed in the provisions of R 299.9213(1)(a) or R 299.9214(1)(a)	(T)
F025	Condensed light ends, spent filters and filter acids, and spent desiccant wastes from the production of certain chlorinated aliphatic hydrocarbons, by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from 1 to and including 5, with varying amounts and positions of chlorine substitution	(T)
F026	Wastes, except wastewater and spent carbon from hydrogen	(H)

	chloride purification, from the production of materials on equipment previously used for the manufacturing use as a reactant, chemical intermediate, or component in a formulating process of tetra-, penta-, or hexachlorobenzene under alkaline conditions	
F027	Discarded unused formulations containing tri- tetra-, or pentachlorophenol or discarded unused formulation containing compounds derived from these chlorophenols. This listing does not include formulations containing hexachlorophene synthesized from prepurified 2,4,5-trichlorophenol as the sole component	(H)
F028	Residues resulting from the incineration or thermal treatment of soil contaminated with EPA hazardous waste numbers F020, F021, F022, F023, F026, and F027	(T)
F032	Wastewaters, except for those that have not come into contact with process contaminants; process residuals; preservative drippage; and spent formulations from wood preserving processes generated at plants that currently use or have previously used chlorophenolic formulations, except potentially cross-contaminated wastes that have had the F032 hazardous waste number deleted in accordance with 40 C.F.R. §261.35 or potentially cross-contaminated wastes that are otherwise currently regulated as F034 or F035, and where the generator does not resume or initiate the use of chlorophenolic formulations. This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote or pentachlorophenol, or both.	(T)
F034	Wastewaters, except for those that have not come into contact with process contaminants; process residuals; preservative drippage; and spent formulations from wood preserving processes generated at plants that use creosote formulations. This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote or pentachlorophenol, or both.	(T)
F035	Wastewaters, except for those that have not come into contact with process contaminants; process residuals; preservative drippage; and spent formulations from wood preserving processes generated at plants that use inorganic preservatives containing arsenic or chromium. This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote or pentachlorophenol, or both.	(T)
F037	Petroleum refinery primary oil/water/solids (oil and/or water and/or solids) separation sludge- any sludge generated from the gravitational separation of oil/water/solids during the storage or treatment of process wastewaters and oily cooling wastewaters from petroleum refineries. Such sludges include, but are not	(T)

	limited to, those generated in oil/water/solids separators; tanks and impoundments; ditches and other conveyances; sumps; and stormwater units receiving dry weather flow, sludges generated in stormwater units that do not receive dry weather flow, sludges generated from non-contact once-through cooling waters segregated for treatment from other process or oily cooling waters, sludges generated in aggressive biological treatment units as defined in R 299.9213(4), including sludges generated in 1 or more additional units after wastewaters have been treated in aggressive biological treatment units, and K051 wastes are not included in this listing. This listing does include residuals generated from processing or recycling oil-bearing hazardous secondary materials excluded under R 299.9204(1)(l) if those residuals are being disposed.	
F038	Petroleum refinery secondary (emulsified) oil/water/solids (oil and/or water and/or solids) separation sludge- any sludge or float generated from the physical or chemical separation of oil/water/solids in process wastewaters and oily cooling wastewaters from petroleum refineries. Such wastes include, but are not limited to, all sludges and floats generated in induced air flotation (IAF) units and tanks and impoundments, and all sludges generated in DAF units. Sludges generated in stormwater units that do not receive dry weather flow; sludges generated from non-contact once-through cooling waters segregated for treatment from other process or oily cooling waters; sludges and floats generated in aggressive biological treatment units as defined in R 299.9213(4), including sludges and floats generated in one or more additional units after wastewaters have been treated in aggressive biological treatment units; and F037, K048, and K051 wastes are not included in this listing.	(T)
F039	Leachate resulting from the treatment, storage, or disposal of wastes classified by more than 1 hazardous waste number pursuant to R 299.9213 and R 299.9214 or from a mixture of wastes classified pursuant to R 299.9213 and R 299.9214. Leachate resulting from the management of 1 or more of the following hazardous wastes, and no other hazardous wastes, retains its original hazardous waste number or numbers: F020, F021, F022, F023, F026, F027, or F028.	(T)

R 299.9221 Table 203b.

Rule 221. Table 203b reads as follows:

Table 203b	
Michigan Hazardous Waste Number	Hazardous Waste From Nonspecific Sources

	None

R 299.9222 Table 204a; hazardous wastes from specific sources.
Rule 222. Table 204a reads as follows:

Table 204a			
Industry	EPA Hazardous Waste Number	Hazardous Waste From Specific Sources	Hazard Code
Wood Preservation	K001	Bottom sediment sludge from the treatment of wastewaters from wood-preserving processes that use creosote or pentachlorophenol, or both of these compounds	(T)
Inorganic Pigments	K002	Wastewater treatment sludge from the production of chrome yellow and orange pigments	(T)
	K003	Wastewater treatment sludge from the production of molybdate orange pigments	(T)
	K004	Wastewater treatment sludge from the production of zinc yellow pigments	(T)
	K005	Wastewater treatment sludge from the production of chrome green pigments	(T)
	K006	Wastewater treatment sludge from the production of chrome oxide green pigments, anhydrous and hydrated forms	(T)
	K007	Wastewater treatment sludge from the production of iron blue pigments	(T)
	K008	Oven residue from the production of chrome oxide green pigments	(T)
Organic Chemicals	K009	Distillation bottoms from the production of chemicals acetaldehyde from ethylene	(T)
	K010	Distillation side cuts from the production of acetaldehyde from ethylene	(T)
	K011	Bottom stream from the wastewater stripper in the production of acrylonitrile	(R,T)
	K013	Bottom stream from the acetonitrile column in the production of acrylonitrile	(R,T)

K014	Bottoms from the acetonitrile purification column in the production of acrylonitrile	(T)
K015	Still bottoms from the distillation of benzyl chloride	(T)
K016	Heavy ends or distillation residues from the production of carbon tetrachloride	(T)
K017	Heavy ends or still bottoms from the purification column in the production of epichlorohydrin	(T)
K018	Heavy ends from the fractionation column in ethyl chloride production	(T)
K019	Heavy ends from the distillation of ethylene dichloride in ethylene dichloride production	(T)
K020	Heavy ends from the distillation of vinyl chloride in vinyl chloride monomer production	(T)
K021	Aqueous spent antimony catalyst waste from fluoromethanes production	(T)
K022	Distillation bottom tars from the production of phenol or acetone from cumene	(T)
K023	Distillation light ends from the production of phthalic anhydride from naphthalene	(T)
K024	Distillation bottoms from the production of phthalic anhydride from naphthalene	(T)
K093	Distillation light ends from the production of phthalic anhydride from ortho-xylene	(T)
K094	Distillation bottoms from the production of phthalic anhydride from ortho-xylene	(T)
K025	Distillation bottoms from the production of nitrobenzene by the nitration of benzene	(T)
K026	Stripping still tails from the production of methyl ethyl pyridines	(T)
K027	Centrifuge and distillation residues from toluene diisocyanate production	(R,T)
K028	Spent catalyst from the hydrochlorinator reactor in the production of 1,1,1-trichloroethane	(T)
K029	Waste from the product steam stripper in the production of 1,1,1-trichloroethane	(T)

K095	Distillation bottoms from the production of 1,1,1-trichloroethane	(T)
K096	Heavy ends from the heavy ends column from the production of 1,1,1-trichloroethane	(T)
K030	Column bottoms or heavy ends from the combined production of trichloroethylene and perchloroethylene	(T)
K083	Distillation bottoms from aniline production	(T)
K103	Process residues from aniline extraction from the production of aniline	(T)
K104	Combined wastewater streams generated from nitrobenzene or aniline production	(T)
K085	Distillation of fractionation column bottoms from the production of chlorobenzenes	(T)
K105	Separated aqueous stream from the reactor product washing step in the production of chlorobenzenes	(T)
K107	Column bottoms from product separation from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides	(C,T)
K108	Condensed column overheads from product separation and condensed reactor vent gases from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides	(I,T)
K109	Spent filter cartridges from product purification from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides	(T)
K110	Condensed column overheads from intermediate separation from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides	(T)
K111	Product washwaters from the production of dinitrotoluene via nitration of toluene	(C,T)
K112	Reaction by-product water from the drying column in the production of toluenediamine via hydrogenation of dinitrotoluene	(T)
K113	Condensed liquid light ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of	(T)

	dinitrotoluene	
K114	Vicinals from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene	(T)
K115	Heavy ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene	(T)
K116	Organic condensate from the solvent recovery column in the production of toluene diisocyanate via phosgenation of toluenediamine	(T)
K117	Wastewater from the reactor vent gas scrubber in the production of ethylene dibromide via bromination of ethene	(T)
K118	Spent adsorbent solids from purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene	(T)
K136	Still bottoms from the purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene	(T)
K149	Distillation bottoms from the production of alpha- (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups. This waste does not include still bottoms from the distillation of benzyl chloride.	(T)
K150	Organic residuals, excluding spent carbon adsorbent, from the spent chlorine gas and hydrochloric acid recovery processes associated with the production of alpha- (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups	(T)
K151	Wastewater treatment sludges, excluding *neutralization and biological sludges, generated during the treatment of wastewaters from the production of alpha- (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups	(T)
K156	Organic waste, including heavy ends, still	(T)

		bottoms, light ends, spent solvents, filtrates, and decantates, from the production of carbamates and carbamoyl oximes. This listing does not apply to wastes generated from the manufacture of 3-iodo-2-propynyl n-butylcarbamate.	
	K157	Wastewaters, including scrubber waters, condenser waters, washwaters, and separation waters, from the production of carbamates and carbamoyl oximes. This listing does not apply to wastes generated from the manufacture of 3-iodo-2-propynyl n-butylcarbamate.	(T)
	K158	Baghouse dusts and filter/separation solids from the production of carbamates and carbamoyl oximes. This listing does not apply to wastes generated from the manufacture of 3-iodo-2-propynyl n-butylcarbamate.	(T)
	K159	Organics from the treatment of thiocarbamate wastes	(T)
	K161	Purification solids, including filtration, evaporation, and centrifugation solids, bag house dust, and floor sweepings from the production of dithiocarbamates acids and their salts. This listing does not include K125 or K126.	(R,T)
Inorganic Chemicals	K071	Brine purification muds from the mercury cell process in chlorine production, where separately prepurified brine is not used	(T)
	K073	Chlorinated hydrocarbon wastes from the purification step of the diaphragm cell process using graphite anodes in chlorine production	(T)
	K106	Wastewater treatment sludge from the mercury cell process in chlorine production	(T)
Pesticides	K031	By-product salts generated in the production of MSMA and cacodylic acid	(T)
	K032	Wastewater treatment sludge from the production of chlordane	(T)
	K033	Wastewater and scrub water from the chlorination of cyclopentadiene in the production of chlordane	(T)
	K034	Filter solids from the filtration of hexachlorocyclopentadiene in the production of	(T)

	chlordane	
K097	Vacuum stripper discharge from the chlordane chlorinator in the production of chlordane	(T)
K035	Wastewater treatment sludges generated in the production of creosote	(T)
K036	Still bottoms from toluene reclamation distillation in the production of disulfoton	(T)
K037	Wastewater treatment sludges from the production of disulfoton	(T)
K038	Wastewater from the washing and stripping of phorate production	(T)
K039	Filter cake from the filtration of diethylphosphorodithioic acid in the production of phorate	(T)
K040	Wastewater treatment sludge from the production of phorate	(T)
K041	Wastewater treatment sludge from the production of toxaphene	(T)
K098	Untreated process wastewater from the production of toxaphene	(T)
K042	Heavy ends of distillation residues from the distillation of tetrachlorobenzene in the production of 2,4,5-T	(T)
K043	2,6-Dichlorophenol waste from the production of 2,4-D	(T)
K099	Untreated wastewater from the production of 2,4-D	(T)
K123	Process wastewater, including supernates, filtrates, and washwaters, from the production of ethylenebisdithiocarbamic acid and its salt	(T)
K124	Reactor vent scrubber water from the production of ethylenebisdithiocarbamic acid and its salt	(C,T)
K125	Filtration, evaporation, and centrifugation solids from the production of ethylenebisdithiocarbamic acid and its salt	(T)
K126	Baghouse dust and floor sweepings in milling and packaging operations from the production or formulation of ethylenebisdithiocarbamic acid	(T)

		and its salts	
	K131	Wastewater from the reactor and spent sulfuric acid from the acid dryer from the production of methyl bromide	(C,T)
	K132	Spent absorbent and wastewater separator solids from the production of methyl bromide	(T)
Explosives	K044	Wastewater treatment sludges from the manufacturing and processing of explosives	(R)
	K045	Spent carbon from the treatment of wastewater containing explosives	(R)
	K046	Wastewater treatment sludges from the manufacturing, formulation, and loading of lead-based initiating compounds	(T)
	K047	Pink or red water from TNT operations	(R)
Petroleum Refining	K048	Dissolved air floatation, DAF, float from the petroleum refining industry	(T)
	K049	Slop oil emulsion solids from the petroleum refining industry	(T)
	K050	Heat exchanger bundle cleaning sludge from the petroleum refining industry	(T)
	K051	API separator sludge from the petroleum refining industry	(T)
	K052	Tank bottoms, leaded, from the petroleum refining industry	(T)
	K169	Crude oil storage tank sediment from petroleum refining operations	(T)
	K170	Clarified slurry oil tank sediment and/or in-line filter/separation solids from petroleum refining operations	(T)
	K171	Spent hydrotreating catalyst from petroleum refining operations, including guard beds used to desulfurize feeds to other catalytic reactors. This listing does not include inert support media.	(I, T)

	K172	Spent hydrorefining catalyst from petroleum refining operations, including guard beds used to desulfurize feeds to other catalytic reactors. This listing does not include inert support media.	(I, T)
Iron and Steel	K061	Emission control dust or sludge from the primary production of steel in electric furnaces	(T)
	K062	Spent pickle liquor generated by steel finishing operations of facilities within the iron and steel industry	(C,T)
Primary Aluminum	K088	Spent potliners from primary aluminum reduction	(T)
Secondary Lead	K069	Emission control dust or sludge from secondary lead smelting	(T)
	K100	Waste leaching solution from acid leaching of emission control dust sludge from secondary lead smelting	(T)
Veterinary Pharmaceuticals	K084	Wastewater treatment sludges generated during the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds	(T)
	K101	Distillation tar residues from the distillation of aniline-based compounds in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds	(T)
	K102	Residue from the use of activated carbon for decolorization in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds	(T)
Ink Formulation	K086	Solvent washes and sludges, caustic washes and sludges, or water washes and sludges from cleaning tubs and equipment used in the formulation of ink from pigments, driers, soaps, and stabilizers containing chromium and lead	(T)
Coking	K060	Ammonia still lime sludge from coking operations	(T)
	K087	Decanter tank tar sludge from coking operations	(T)
	K141	Process residues from the recovery of coal tar, including, but not limited to, collecting sump	(T)

	residues from the production of coke from coal or the recovery of coke by-products produced from coal. This listing does not include K087.	
K142	Tar storage tank residues from the production of coke from coal or from the recovery of coke by-products produced from coal	(T)
K143	Process residues from the recovery of light oil, including, but not limited to, those generated in stills, decanters, and wash oil recovery units from the recovery of coke by-products produced from coal	(T)
K144	Wastewater sump residues from light oil refining, including, but not limited to, intercepting or contamination sump sludges from the recovery of coke by-products produced from coal	(T)
K145	Residues from naphthalene collection and recovery operations from the recovery of coke by-products produced from coal	(T)
K147	Tar storage tank residues from coal tar refining	(T)
K148	Residues from coal tar distillation, including, but not limited to, still bottoms	(T)

R 299.9223 Table 204b.

Rule 223. Table 204b reads as follows:

Table 204b		
Michigan Hazardous Waste Number	Hazardous Waste From Specific Sources	Hazard Code
001K	Residues, including emission control sludges, from the production process and packaging of 4,4'-Methylenebis (2-chloroaniline)	(T)
002K	Wash acids generated after the effective date of these rules from the production of 3,3'-Dichlorobenzidine and still bottoms from the recovery of these acids, excluding wash acids that are recycled or any materials that are reclaimed from the wash acids and used beneficially	(T)

R 299.9224 Table 205a; discarded commercial chemical products; off-specification species; container residues; and spill residues thereof as acutely hazardous wastes.

Rule 224. Table 205a reads as follows:

Table 205a			
EPA Hazardous Waste Number	Chemical Abstract Services Number	Substance	Hazard Code
P023	107-20-0	Acetaldehyde, chloro-	
P002	591-08-2	Acetamide, N-(aminothioxomethyl)-	
P057	640-19-7	Acetamide, 2-fluoro-	
P058	62-74-8	Acetic acid, fluoro-, sodium salt	
P002	591-08-2	1-Acetyl-2-thiourea	
P003	107-02-8	Acrolein	
P070	116-06-3	Aldicarb	
P203	1646-88-4	Aldicarb sulfone	
P004	309-00-2	Aldrin	
P005	107-18-6	Allyl alcohol	
P006	20859-73-8	Aluminum phosphide	(R,T,)
P007	2763-96-4	5-(Aminomethyl)-3-isoxazolol	
P008	504-24-5	4-Aminopyridine	
P009	131-74-8	Ammonium picrate	(R)
P119	7803-55-6	Ammonium vanadate	
P099	506-61-6	Argentate (1-), bis(cyano-C)-, potassium	
P010	7778-39-4	Arsenic acid	
P012	1327-53-3	Arsenic (III) oxide	
P011	1303-28-2	Arsenic (V) oxide	
P011	1303-28-2	Arsenic pentoxide	
P012	1327-53-3	Arsenic trioxide	
P038	692-42-2	Arsine, diethyl-	
P036	696-28-6	Arsonous dichloride, phenyl-	

P054	151-56-4	Aziridine	
P067	75-55-8	Aziridine, 2-methyl-	
P013	542-62-1	Barium cyanide	
P024	106-47-8	Benzenamine, 4-chloro-	
P077	100-01-6	Benzenamine, 4-nitro-	
P028	100-44-7	Benzene, (chloromethyl)-	
P042	51-43-4	1,2-Benzenediol, 4-[1-hydroxy-2-(methylamino)ethyl]-	(R)
P046	122-09-2	Benzeneethanamine, alpha, alpha-dimethyl-	
P014	108-98-5	Benzenethiol	
P127	1563-66-2	7-benzofuranol, 2,3-dihydro-2,2-dimethyl-, methoycarbamate	
P188	57-64-7	Benzoic acid, 2-hydroxy-, compd. with (3aS-cis) - 1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethylpyrrolo [2,3-b] indol-5-yl methylcarbamate ester (1:1)	
P001	81-81-2	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenylbutyl)-, and salts, when present at concentrations greater than 0.3%	
P028	100-44-7	Benzyl chloride	
P015	7440-41-7	Beryllium powder	
P017	598-31-2	Bromoacetone	
P018	357-57-3	Brucine	
P045	39196-18-4	2-Butanone, 3,3-dimethyl-1-(methylthio)-, O-[(methylamino) carbonyl] oxime	
P021	592-01-8	Calcium cyanide	
P021	592-01-8	Calcium cyanide Ca(CN)2	
P189	55285-14-8	Carbamic acid, [(dibutylamino)-thio]methyl-, 2,3-dihydro-2,2-dimethyl-7-benzofuranyl ester	
P191	644-64-4	Carbamic acid, dimethyl-, 1-[(dimethyl-	

		amino)carbonyl]-5-methyl-1H-pyrazol-3-yl ester	
P192	119-38-0	Carbamic acid, dimethyl-, 3-methyl-1- (1-methylethyl)-1H-pyrazol-5-yl ester	
P190	1129-41-5	Carbamic acid, methyl-, 3-methylphenyl ester	
P127	1563-66-2	Carbofuran	
P022	75-15-0	Carbon disulfide	
P095	75-44-5	Carbonyl chloride	
P189	55285-14-8	Carbosulfan	
P023	107-20-0	Chloroacetaldehyde	
P024	106-47-8	p-Chloroaniline	
P026	5344-82-1	1-(o-Chlorophenyl)thiourea	
P027	542-76-7	3-Chloropropionitrile	
P029	544-92-3	Copper cyanide	
P029	544-92-3	Copper cyanide Cu(CN)	
P202	64-00-6	m-Cumenyl methylcarbamate	
P030	--------	Cyanides (soluble cyanide salts), not elsewhere specified	
P031	460-19-5	Cyanogen	
P033	506-77-4	Cyanogen chloride	
P033	506-77-4	Cyanogen chloride (CN)C1	
P034	131-89-5	2-Cyclohexyl-4,6-dinitrophenol	
P016	542-88-1	Dichloromethyl ether	
P036	696-28-6	Dichlorophenylarsine	
P037	60-57-1	Dieldrin	
P038	692-42-2	Diethylarsine	
P041	311-45-5	Diethyl-p-nitrophenyl phosphate	
P040	297-97-2	0,0-Diethyl 0-pyrazinyl phosphorothioate	
P043	55-91-4	Diisopropyl fluorophosphate	
P004	309-00-2	1,4,5,8-Dimethanonaphthalene,	

		1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro-, (1alpha,4alpha,4abeta, 5alpha,8alpha,8abeta)-	
P060	465-73-6	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro-, (1alpha,4alpha,4abeta, 5beta,8beta,8abeta)-	
P037	60-57-1	2,7:3,6-Dimethanonaphth[2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2aalpha, 3beta,6beta,6aalpha,7beta,7aalpha)-	
P051	72-20-8	2,7:3,6-Dimethanonaphth[2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha, 2beta,2abeta,3alpha, 6alpha,6abeta,7beta, 7aalpha)-, & metabolites	
P044	60-51-5	Dimethoate	
P046	122-09-8	alpha,alpha-Dimethylphenethylamine	
P191	644-64-4	Dimetilan	
P047	534-52-1	4,6-Dinitro-o-cresol and salts	
P048	51-28-5	2,4-Dinitrophenol	
P020	88-85-7	Dinoseb	
P085	152-18-9	Diphosphoramide, octamethyl-	
P111	107-49-3	Diphosphoric acid, tetraethyl ester	
P039	298-04-4	Disulfoton	
P049	541-53-7	2,4-Dithiobiuret	
P185	26419-73-8	1,3-Dithiolane-2-carboxaldehyde, 2-4-dimethyl-, O-[(methylamino)-carbonyl]oxime	
P050	115-29-7	Endosulfan	
P088	145-73-7	Endothall	
P051	72-20-8	Endrin	
P051	72-20-8	Endrin, and metabolites	
P042	51-43-4	Epinephrine	

P031	460-19-5	Ethanedinitrile	
P194	23135-22-0	Ethanimidothioc acid, 2-(dimethylamino)-N-[[(methylamino) carbonyl]oxy]-2-oxo-, methyl ester	
P066	16752-77-5	Ethanimidothioic acid, N-[[(methylamine)carbonyl] oxyl]-, methyl ester	
P101	107-12-0	Ethyl cyanide	
P054	151-58-4	Ethyleneimine	
P097	52-85-7	Famphur	
P056	7782-41-4	Fluorine	
P057	640-19-7	Fluoroacetamide	
P058	62-74-8	Fluoroacetic acid, sodium salt	
P198	23422-53-9	Formetanate hydrochloride	
P197	17702-57-7	Formparanate	
P065	628-86-4	Fulminic acid, mercury (II) salt	(R,T)
P059	76-44-8	Heptachlor	
P062	757-58-4	Hexaethyl tetraphosphate	
P116	79-19-6	Hydrazinecarbothioamide	
P068	60-34-4	Hydrazine, methyl-	
P063	74-90-8	Hydrocyanic acid	
P063	74-90-8	Hydrogen cyanide	
P096	7803-51-2	Hydrogen phosphide	
P060	465-73-6	Isodrin	
P192	119-38-0	Isolan	
P202	64-00-6	3-Isopropylphenyl N-methylcarbamate	
P007	2763-96-4	3(2H)-Isoxazolone, 5-(aminomethyl)-	
P196	15339-36-3	Manganese, bis(dimethylcarbamodithioato-S,S')-,	
P196	15339-36-3	Manganese, dimethyldithiocarbamate	
P092	62-38-4	Mercury, (acetato-O)phenyl-	

P065	628-86-4	Mercury fulminate	(R,T)
P082	62-75-9	Methanamine, N-methyl-N-nitroso-	
P064	624-83-9	Methane, isocyanato-	
P016	542-88-1	Methane, oxybis(chloro-	
P112	509-14-8	Methane, tetranitro-	(R)
P118	75-70-7	Methanethiol, trichloro-	
P198	23422-53-9	Methanimidamide, N,N-dimethyl-N'-[3-[[(methylamino)carbonyl]oxy]phenyl]-, monohydrochloride	
P197	17702-57-7	Methanimidamide, N,N-dimethyl-N'-[2-methyl-4-[[(methylamino)carbonyl]oxy]phenyl]-	
P050	115-20-7	6,9-Methano-2,4,3-benzodioxathiepin, 6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-, 3-oxide	
P059	76-44-8	4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro- 3a,4,7,7a-tetrahydro-	
P199	2032-65-7	Methiocarb	
P066	16752-77-5	Methomyl	
P068	60-34-4	Methyl hydrazine	
P064	624-83-9	Methyl isocyanate	
P069	75-86-5	2-Methyllactonitrile	
P071	298-00-0	Methyl parathion	
P190	1129-41-5	Metolcarb	
P128	315-18-4	Mexacarbate	
P072	86-88-4	alpha-Naphthylthiourea	
P073	13463-39-3	Nickel carbonyl	
P073	13463-39-3	Nickel carbonyl $Ni(CO)_4$, (T-4)-	
P074	557-19-7	Nickel cyanide	
P074	557-19-7	Nickel (II) cyanide	
P075	54-11-5	Nicotine and salts	
P076	10102-43-9	Nitric oxide	

P077	100-01-6	p-Nitroaniline	
P078	10102-44-0	Nitrogen dioxide *	
P076	10102-43-9	Nitrogen (II) oxide	
P078	10102-44-0	Nitrogen (IV) oxide	
P081	55-63-0	Nitroglycerine	(R)
P082	62-75-9	N-Nitrosodimethylamine	
P084	4549-40-0	N-Nitrosomethylvinylamine	
P085	152-16-9	Octamethylpyrophosphor-amide	
P087	20816-12-0	Osmium oxide	
P087	20816-12-0	Osmium tetroxide	
P088	145-73-3	7-Oxabicyclo [2.2.1] heptane-2,3-dicarboxylic acid	
P194	23135-22-0	Oxamyl	
P089	56-38-2	Parathion	
P034	131-89-5	Phenol, 2-cyclohexyl-4,6-dinitro-	
P128	315-18-4	Phenol, 4-(dimethylamino)-3,5-dimethyl-, methylcarbamate (ester)	
P199	2032-65-7	Phenol, (3,5-dimethyl-4-(methylthio)-, methylcarbamate	
P048	51-28-5	Phenol, 2,4-dinitro-	
P047	534-52-1	Phenol, 2-methyl-4,6-dinitro- and salts	
P202	64-00-6	Phenol, 3-(1-methylethyl)-, methyl carbamate	
P201	2631-37-0	Phenol, 3-methyl-5-(1-methylethyl)-, methyl carbamate	
P020	88-85-7	Phenol, 2,4-dinitro-6-(1-methylpropyl)-	
P009	131-74-8	Phenol, 2,4,6-trinitro-, ammonium salt	(R)
P092	62-38-4	Phenylmercuric acetate	
P093	103-85-5	N-Phenylthiourea	
P094	298-02-2	Phorate	
P095	75-44-5	Phosgene	

P096	783-51-2	Phosphine	
P041	311-45-5	Phosphoric acid, diethyl p-nitrophenyl ester	
P039	298-04-4	Phosphorodithioic acid, O,O-diethyl S-[2-(ethylthio)ethyl] ester	
P094	298-02-2	Phosphorodithioic acid, O,O-diethyl S-[(ethylthio) methyl] ester	
P044	60-51-5	Phosphorodithioic acid, O,O-dimethyl S-O[2-(methylamino)-2-oxoethyl] ester	
P043	55-91-4	Phosphorofluoridic acid, bis(1-methylethyl)ester	
P089	56-38-2	Phosphorothioic acid, O,O-diethyl O-(4-nitrophenyl) ester	
P040	297-97-2	Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester	
P097	52-85-7	Phosphorothioic acid, O,O-dimethyl O-[p-((dimethylamino) sulfonyl)phenyl] ester	
P071	298-00-0	Phosphorothioic acid, O,O-dimethyl O-(4-nitrophenyl) ester	
P204	57-47-6	Physostigmine	
P188	57-64-7	Physostigmine salicylate	
P110	78-00-2	Plumbane, tetraethyl-	
P098	151-50-8	Potassium cyanide	
P098	151-50-8	Potassium cyanide K(CN)	
P099	506-61-6	Potassium silver cyanide	
P201	2631-37-0	Promecarb	
P203	1646-88-4	Propanal, 2-methyl-2-(methyl-sulfonyl)-,O-[(methylamino)carbonyl] oxime	
P070	116-06-3	Propanal, 2-methyl-2-(methylthio)-, O-[(methylamino)carbonyl] oxime	
P101	107-12-0	Propanenitrile	
P027	542-76-7	Propanenitrile, 3-chloro-	
P069	75-86-5	Propanenitrile, 2-hydroxy-2-methyl-	
P081	55-63-0	1,2,3-Propanetriol, trinitrate-	(R)

P017	596-31-2	2-Propanone, 1-bromo-	
P102	107-19-7	Propargyl alcohol	
P003	107-02-8	2-Propenal	
P005	107-18-6	2-Propen-1-o1	
P067	75-55-8	1,2-Propylenimine	
P102	107-19-7	2-Propyn-1-o1	
P008	504-24-5	4-Pyridinamine	
P075	54-11-5	Pyridine, (S)-3-(1-methyl-2-pyrrolidinyl)-, and salts	
P204	57-47-6	Pyrrolo[2,3-b]indol-5-ol, 1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethyl-, methylcarbamate (ester), (3aS-cis)-	
P114	12039-52-0	Selenious acid, dithallium(1+) salt	
P103	630-10-4	Selenourea	
P104	506-64-9	Silver cyanide	
P104	506-64-9	Silver cyanide Ag(CN)	
P105	26628-22-8	Sodium azide	
P106	143-33-9	Sodium cyanide	
P106	143-33-9	Sodium cyanide Na(CN)	
P108	57-24-9	Strychnidin-10-one, and salts	
P018	357-57-3	Strychnidin-10-one, 2,3-dimethoxy-	
P108	57-24-9	Strychnine and salts	
P115	7446-18-6	Sulfuric acid, thallium (I) salt	
P109	3689-24-5	Tetraethyldithiopyrophosphate	
P110	78-00-2	Tetraethyl lead	
P111	107-49-3	Tetraethylpyrophosphate	
P112	509-14-8	Tetranitromethane	(R)
P062	757-58-4	Tetraphosphoric acid, hexaethyl ester	
P113	1314-32-5	Thallic oxide	
P113	1314-32-5	Thallium (III) oxide	

P114	12039-52-0	Thallium (I) selenide	
P115	7446-18-6	Thallium (I) sulfate	
P109	3689-24-5	Thiodiphosphoric acid, tetraethyl ester	
P045	39196-18-4	Thiofanox	
P049	541-53-7	Thioimidodicarbonic diamide	
P014	108-98-5	Thiophenol	
P116	79-19-6	Thiosemicarbazide	
P026	5344-82-1	Thiourea, (2-chlorophenyl)-	
P072	86-88-4	Thiourea, 1-naphthalenyl-	
P093	103-85-5	Thiourea, phenyl-	
P185	26419-73-8	Tirpate	
P123	8001-35-2	Toxaphene	
P118	75-70-7	Trichloromethanethiol	
P119	7803-55-6	Vanadic acid, ammonium salt	
P120	1314-62-1	Vanadium (V) oxide	
P120	1314-62-1	Vanadium pentoxide	
P084	4549-40-0	Vinylamine, N-methyl-N-nitroso-	
P001	81-81-2	Warfarin, when present at concentrations greater than 0.3%	
P205	137-30-4	Zinc, bis(dismethylcarbamodithioato-S,S')-	
P121	557-21-1	Zinc cyanide	
P121	557-21-1	Zinc cyanide $Zn(CN)_2$	
P122	1314-84-7	Zinc phosphide, when present at concentrations greater than 10%	(R,T)
P205	137-30-4	Ziram	

R 299.9225 Table 205b; discarded commercial chemical products; off-specification species; container residues; and spill residues thereof as toxic hazardous wastes.

Rule 225. Table 205b reads as follows:

Table 205b			
EPA Hazardous Waste Number	Chemical Abstract Services Number	Substance	Hazard Code
U394	30558-43-1	A2213	
U001	75-07-0	Acetaldehyde	(I)
U034	75-87-6	Acetaldehyde, trichloro-	
U187	62-44-2	Acetamide, N-(4-ethoxyphenyl)-	
U005	53-96-3	Acetamide, N-9H-fluoren-2-y1-	
U240	94-75-7	Acetic acid, (2,4-dichlorophenoxy)-, salts and esters	
U112	141-78-6	Acetic acid, ethyl ester	(I)
U144	301-04-2	Acetic acid, lead(2+) salt	
U214	563-68-8	Acetic acid, thallium(1+) salt	
See F027	93-76-5	Acetic acid, (2,4,5-trichlorophenoxy)-	
U002	67-64-1	Acetone	(I)
U003	75-05-8	Acetonitrile	(I,T)
U004	98-86-2	Acetophenone	
U005	53-96-3	2-Acetylaminofluorene	
U006	75-36-5	Acetyl chloride	(C,R,T)
U007	79-06-1	Acrylamide	
U008	79-10-7	Acrylic acid	(I)
U009	107-13-1	Acrylonitrile	
U011	61-82-5	Amitrole	
U012	62-53-3	Aniline	(I,T)
U136	75-60-5	Arsinic acid, dimethyl-	

Table 205b

EPA Hazardous Waste Number	Chemical Abstract Services Number	Substance	Hazard Code
U014	492-80-8	Auramine	
U015	115-02-6	Azaserine	
U010	50-07-7	Azirino(2',3':3,4)pyrrolo (1,2-a)indole-4,7-dione,6-amino-8-[((aminocarbonyl)oxy) methyl]-1,1a,2,8,8a,8b hexahydro-8a-methoxy-5-methyl-,	
U280	101-27-9	Barban	
U278	22781-23-3	Bendiocarb	
U364	22961-82-6	Bendiocarb phenol	
U271	17804-35-2	Benomyl	
U157	56-49-5	Benz[j]aceanthrylene, 1,2-dihydro-3-methyl-	
U016	225-51-4	Benz[c]acridine	
U017	98-87-3	Benzal chloride	
U192	23950-58-5	Benzamide, 3,5-dichloro-N-(1,1-dimethyl-2-propynyl)-	
U018	56-55-3	Benz[a]anthracene	
U094	57-97-6	1,2-Benzanthracene, 7,12-dimethyl-	
U012	62-53-3	Benzenamine	(I,T)
U014	492-80-8	Benzenamine, 4,4'-carbonimidoylbis(N,N-dimethyl-	
U049	3165-93-3	Benzenamine, 4-chloro-2-methyl-	
U093	60-11-7	Benzenamine, N,N-dimethyl-4-(phenylazo)-	
U328	95-53-4	Benzenamine, 2-methyl-	
U353	106-49-0	Benzenamine, 4-methyl-	
U158	101-14-4	Benzenamine, 4,4'-methylenebis(2-chloro-	

Table 205b

EPA Hazardous Waste Number	Chemical Abstract Services Number	Substance	Hazard Code
U222	636-21-5	Benzenamine, 2-methyl-, hydrochloride	
U181	99-55-8	Benzenamine, 2-methyl-5-nitro	
U019	71-43-2	Benzene	(I,T)
U038	510-15-8	Benzeneacetic acid, 4-chloro-alpha-(4-chlorophenyl)- alpha-hydroxy, ethyl ester	
U030	101-55-3	Benzene, 1-bromo-4-phenoxy-	
U035	305-03-03	Benzenebutanoic acid, 4-[bis(2-chloroethyl)amino]-	
U037	106-90-7	Benzene, chloro-	
U221	25376-45-8	Benzenediamine, ar-methyl-	
U028	117-81-7	1,2-Benzenedicarboxylic acid, [bis(2-ethyl-hexyl)] ester	
U069	84-74-2	1,2-Benzenedicarboxylic acid, dibutyl ester	
U088	84-66-2	1,2-Benzenedicarboxylic acid, diethyl ester	
U102	131-11-3	1,2-Benzenedicarboxylic acid, dimethyl ester	
U107	117-84-0	1,2-Benzenedicarboxylic acid, di-n-octyl ester	
U070	95-50-1	Benzene, 1,2-dichloro-	
U071	541-73-1	Benzene, 1,3-dichloro-	
U072	106-46-7	Benzene, 1,4-dichloro-	
U060	72-54-8	Benzene, 1,1'-(2,2-dichloroethylidene)bis=[4-chloro-	
U017	98-87-3	Benzene (dichloromethyl)-	
U223	26471-62-5	Benzene, 1,3-diisocyanatomethyl-	(R,T)
U239	1330-20-7	Benzene, dimethyl-	(I,T)
U201	108-46-3	1,3-Benzenediol	

Table 205b

EPA Hazardous Waste Number	Chemical Abstract Services Number	Substance	Hazard Code
U127	118-74-1	Benzene, hexachloro-	
U056	110-82-7	Benzene, hexahydro-	(I)
U220	108-88-3	Benzene, methyl-	
U105	121-14-2	Benzene, 1-methyl-2,4-dinitro-	
U106	606-20-2	Benzene, 1-methyl-2,6-dinitro-	
U055	98-82-8	Benzene, (1-methylethyl)-	(I)
U169	98-95-3	Benzene, nitro-	(I,T)
U183	608-93-5	Benzene, pentachloro-	
U185	82-68-8	Benzene, pentachloronitro-	
U020	98-09-9	Benzenesulfonic acid chloride	(C,R)
U020	98-09-9	Benzenesulfonyl chloride	(C,R)
U207	95-94-3	Benzene, 1,2,4,5-tetrachloro-	
U061	50-29-3	Benzene, 1,1'-(2,2,2-trichloroethylidene)=bis [4-chloro-	
U247	72-43-5	Benzene, 1,1'-(2,2,2-trichloroethylidene)=bis [4-methoxy-	
U023	98-07-7	Benzene, (trichloromethyl)-	(C,R,T)
U234	99-35-4	Benzene, 1,3,5-trinitro-	(R,T)
U021	92-87-5	Benzidine	
U202	81-07-2	1,2-Benzisothiazol-3-(2H)-one, 1,1-dioxide and salts	
U278	22781-23-3	1,3-Benzodioxol-4-ol, 2,2-dimethyl-, methyl carbamate	
U364	22961-82-6	1,3-Benzodioxol-4-ol, 2,2-dimethyl-,	
U203	94-59-7	1,3-Benzodioxole, 5-(2-propenyl)-	
U141	120-58-1	1,3-Benzodioxole, 5-(1-propenyl)-	

Table 205b			
EPA Hazardous Waste Number	Chemical Abstract Services Number	Substance	Hazard Code
U090	94-58-6	1,3-Benzodioxole, 5-propyl-	
U367	1563-38-8	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-	
U064	189-55-9	Benzo[rst]pentaphene	
U248	81-81-2	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenylbutyl)-, and salts, when present at concentrations of 0.3% or less	
U022	50-32-8	Benzo[a]pyrene	
U197	106-51-4	p-Benzoquinone	
U023	98-07-7	Benzotrichloride	(C,R,T)
U085	1464-53-5	2,2'-Bioxirane	(I,T)
U021	92-87-5	(1,1'-Biphenyl)-4,4'-diamine	
U073	91-94-1	(1,1'-Biphenyl)-4,4'-diamine, 3,3'-dichloro-	
U091	119-90-4	(1,1'-Biphenyl)-4,4'-diamine, 3,3'-dimethoxy-	
U095	119-93-7	(1,1'-Biphenyl)-4,4'-diamine, 3,3'-dimethyl-	
U225	75-25-2	Bromoform	
U030	101-55-3	4-Bromophenyl phenyl ether	
U128	87-68-3	1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	
U172	924-16-3	1-Butanamine, N-butyl-N-nitroso-	
U031	71-36-3	1-Butanol	(I)
U159	78-93-3	2-Butanone	(I,T)
U160	1338-23-4	2-Butanone peroxide	(R,T)
U053	4170-30-3	2-Butenal	
U074	764-41-0	2-Butene, 1,4-dichloro-	(I,T)
U143	303-34-4	2-Butenoic acid, 2-methyl-, 7-[[2,3-dihydroxy-2-(1-methoxyethyl)-3-methyl-1-oxybutoyx]methyl]-2,3,5,7a-tetrahydro-1H-	

Table 205b

EPA Hazardous Waste Number	Chemical Abstract Services Number	Substance	Hazard Code
		pyrrolizin-1-y1 ester, [1S-[1alpha(Z),7(2S*,3R*), 7aalpha]]-	
U031	71-36-3	n-Butyl alcohol	(I)
U136	75-60-5	Cacodylic acid	
U032	13765-19-0	Calcium chromate	
U372	10605-21-7	Carbamic acid, 1H-benzimidazol-2-yl, methyl ester	
U271	17804-35-2	Carbamic acid, [1-[(butylamino)carbonyl]-1H-benzimidazol-2-yl]-, methyl ester	
U280	101-27-9	Carbamic acid, (3-chlorophenyl)-, 4-chloro-2-butynyl ester	
U238	51-79-6	Carbamic acid, ethyl ester	
U178	815-53-2	Carbamic acid, methylnitroso-, ethyl ester	
U373	122-42-9	Carbamic acid, phenyl-, 1-methylethyl ester	
U409	23564-05-8	Carbamic acid, [1,2-phenylenebis(iminocarbonothioyl)]bis-, dimethyl ester .	
U097	79-44-7	Carbamic chloride, dimethyl	
U114	111-54-6	Carbamodithioic acid, 1,2-ethanediylbis-, salts and esters	
U062	2303-16-4	Carbamodithioic acid, bis(1-methylethyl)-, S-(2,3-dichloro-2-propenyl) ester	
U389	2303-17-5	Carbamothioic acid, bis(1-methylethyl)-, S-(2,3,3-trichloro-2-propenyl) ester	
U387	52888-80-9	Carbamothioic acid, dipropyl-, S-(phenylmethyl) ester	
U279	63-25-2	Carbaryl	
U372	10605-21-7	Carbendazim	

Table 205b

EPA Hazardous Waste Number	Chemical Abstract Services Number	Substance	Hazard Code
U367	1563-38-8	Carbofuran phenol	
U215	6533-73-9	Carbonic acid, dithallium(1+) salt	
U156	79-22-1	Carbonochloridic acid, methyl ester	(I,T)
U033	353-50-4	Carbon oxyfluoride	(R,T)
U211	56-23-5	Carbon tetrachloride	
U034	75-87-6	Chloral	
U035	305-03-3	Chlorambucil	
U036	57-74-9	Chlordane, technical	
U026	494-03-1	Chlornaphazine	
U037	108-90-7	Chlorobenzene	
U038	510-15-6	Chlorobenzilate	
U039	59-50-7	4-Chloro-m-cresol	
U042	110-75-8	2-Chloroethyl vinyl ether	
U044	67-66-3	Chloroform	
U046	107-30-2	Chloromethyl methyl ether	
U047	91-58-7	beta-Chloronaphthalene	
U048	95-57-8	o-Chlorophenol	
U049	3165-93-3	4-Chloro-o-toluidine, hydrochloride	
U032	13765-19-0	Chromic acid, calcium salt	
U050	218-01-9	Chrysene	
U051	------	Creosote	
U052	1319-77-3	Cresylic acid	
U053	4170-30-3	Crotonaldehyde	
U055	98-82-8	Cumene	(I)

Table 205b			
EPA Hazardous Waste Number	Chemical Abstract Services Number	Substance	Hazard Code
U246	506-68-3	Cyanogen bromide	
U197	106-51-4	1,4-Cyclohexadienedione	
U056	110-82-7	Cyclohexane	(I)
U129	58-89-9	Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha, 2alpha,3beta,4alpha, 5alpha,6beta)-	
U057	108-94-1	Cyclohexanone	(I)
U130	77-47-4	1,3-Cyclopentadiene, 1,2,3,4,5,5-hexa-chloro-	
U058	50-18-0	Cyclophosphamide	
U240	94-75-7	2,4-D, salts and esters	
U059	20830-81-3	Daunomycin	
U060	72-54-8	DDD	
U061	50-29-3	DDT	
U062	2303-16-4	Diallate	
U063	53-70-3	Dibenz[a,h]anthracene	
U064	189-55-9	Dibenz[a,i]pyrene	
U066	96-12-8	1,2-Dibromo-3-chloropropane	
U069	84-74-2	Dibutyl phthalate	
U070	95-50-1	o-Dichlorobenzene	
U071	541-73-1	m-Dichlorobenzene	
U072	106-46-7	p-Dichlorobenzene	
U073	91-94-1	3,3'-Dichlorobenzidine	
U074	764-41-0	1,4-Dichloro-2-butene	(I,T)
U075	75-71-8	Dichlorodifluoromethane	

Table 205b

EPA Hazardous Waste Number	Chemical Abstract Services Number	Substance	Hazard Code
U078	75-35-4	1,1-Dichloroethylene	
U079	156-60-5	1,2-Dichloroethylene	
U025	111-44-4	Dichloroethyl ether	
U027	108-60-1	Dichloroisopropyl ether	
U024	111-91-7	Dichloromethoxy ethane	
U081	120-83-2	2,4-Dichlorophenol	
U082	87-65-0	2,6-Dichlorophenol	
U084	542-75-6	1,3-Dichloropropene	
U085	1464-53-5	1,2:3,4-Diepoxybutane	(I,T)
U108	123-91-1	1,4-Diethylene dioxide	
U395	5952-26-1	Diethylene glycol, dicarbamate	
U028	117-81-7	Diethylhexyl phthalate	
U086	1615-80-1	N,N-Diethylhydrazine	
U087	3288-58-2	O,O-Diethyl-S-methyl-dithiophosphate	
U088	84-66-2	Diethyl phthalate	
U089	56-53-1	Diethylstilbestrol	
U090	94-58-6	Dihydrosafrole	
U091	119-90-4	3,3'-dimethoxybenzidine	
U092	124-40-3	Dimethylamine	(I)
U093	60-11-7	Dimethylaminoazobenzene	
U094	57-97-6	7,12-Dimethylbenz[a]anthracene	
U095	119-93-7	3,3'-Dimethylbenzidine	
U096	80-15-9	Alpha,alpha-Dimethyl-benzylhydroperoxide	(R)
U097	79-44-7	Dimethylcarbamoyl chloride	

Table 205b

EPA Hazardous Waste Number	Chemical Abstract Services Number	Substance	Hazard Code
U098	57-14-7	1,1-Dimethylhydrazine	
U099	540-73-8	1,2-Dimethylhydrazine	
U101	105-67-9	2,4-Dimethylphenol	
U102	131-11-3	Dimethyl phthalate	
U103	77-78-1	Dimethyl sulfate	
U105	121-14-2	2,4-Dinitrotoluene	
U106	606-20-2	2,6-Dinitrotoluene	
U107	117-84-0	Di-n-octyl phthalate	
U108	123-91-1	1,4-Dioxane	
U109	122-66-7	1,2-Diphenylhydrazine	
U110	142-84-7	Dipropylamine	(I)
U111	621-64-7	Di-n-propylnitrosamine	
U041	106-89-8	Epichlorhydrin	
U001	75-07-0	Ethanal	(I)
U174	55-18-5	Ethanamine, N-ethyl-N-nitroso-	
U404	121-44-8	Ethanamine, N,N-diethyl-	
U155	91-80-5	1,2-Ethanediamine, N,N-dimethyl-N'-2-pyridinyl-N'-(2-thienylmethyl)-	
U067	106-93-4	Ethane, 1,2-dibromo-	
U076	75-34-3	Ethane, 1,1-dichloro-	
U077	107-06-2	Ethane, 1,2-dichloro-	
U131	67-72-1	Ethane, 1,1,1,2,2,2-hexachloro-	
U024	111-91-1	Ethane, 1,1'-[methylenebis(oxy)]bis[2-chloro-	
U117	60-29-7	Ethane, 1,1'-oxybis-	(I)

Table 205b

EPA Hazardous Waste Number	Chemical Abstract Services Number	Substance	Hazard Code
U025	111-44-4	Ethane, 1,1'-oxybis[2-chloro-	
U184	76-01-7	Ethane, pentachloro-	
U208	630-20-6	Ethane, 1,1,1,2-tetrachloro-	
U209	79-34-5	Ethane, 1,1,2,2-tetrachloro-	
U218	62-55-5	Ethanethioamide	
U226	71-55-6	Ethane, 1,1,1-trichloro-	
U227	79-00-5	Ethane, 1,1,2-trichloro-	
U410	59669-26-0	Ethanimidothioic acid, N,N'-[thiobis[(methylimino)carbonyloxy]]bis-, dimethyl ester	
U394	30558-43-1	Ethanimidothioic acid, 2-(dimethylamino)-n-hydroxy-2-oxo- methyl ester	
U359	110-80-5	Ethanol, 2-ethoxy-	
U173	1116-54-7	Ethanol, 2,2'-(nitrosoimino)bis-	
U395	5952-26-1	Ethanol, 2,2'-oxybis-, dicarbamate	
U004	98-86-2	Ethanone, 1-phenyl	
U043	75-01-4	Ethene, chloro-	
U042	110-75-8	Ethene, 2-chloroethoxy-	
U078	75-35-4	Ethene, 1,1-dichloro-	
U079	156-60-5	Ethene, trans-1,2-dichloro-	
U210	127-18-4	Ethene, 1,1,2,2-tetrachloro-	
U228	79-01-6	Ethene, trichloro-	
U112	141-78-8	Ethyl acetate	(I)
U113	140-88-5	Ethyl acrylate	(I)
U238	51-79-6	Ethyl carbamate (urethan)	
U117	60-29-7	Ethyl ether	(I)

Table 205b

EPA Hazardous Waste Number	Chemical Abstract Services Number	Substance	Hazard Code
U114	111-54-6	Ethylenebis(dithiocarbamic acid), salts and ester	
U067	106-93-4	Ethylene dibromide	
U077	107-06-2	Ethylene dichloride	
U359	110-80-5	Ethylene glycol monoethyl ether	
U115	75-21-8	Ethylene oxide	(I,T)
U116	96-45-7	Ethylene thiourea	
U076	75-34-3	Ethylidene dichloride	
U118	97-63-2	Ethyl methacrylate	
U119	62-50-0	Ethyl methanesulfonate	
U120	206-44-0	Fluoranthene	
U122	50-00-0	Formaldehyde	
U123	64-18-6	Formic acid	(C,T)
U124	110-00-9	Furan	(I)
U125	98-01-1	2-Furancarboxaldehyde	(I)
U147	108-31-6	2,5-Furandione	
U213	109-99-9	Furan, tetrahydro-	(I)
U125	98-01-1	Furfural	(I)
U124	110-00-9	Furfuran	(I)
U206	18883-66-4	Glucopyranose, 2-deoxy-2-(3-methyl-3-nitrosoureido)-, D-	
U206	18883-66-4	D-Glucose, 2-deoxy-2-[[(methylnitrosoamino) carbonyl]amino]-	
U126	765-34-4	Glycidylaldehyde	
U163	70-25-7	Guanidine, N-methyl-N'-nitro-N-nitroso-	

Table 205b

EPA Hazardous Waste Number	Chemical Abstract Services Number	Substance	Hazard Code
U127	118-74-1	Hexachlorobenzene	
U128	87-68-3	Hexachlorobutadiene	
U130	77-47-4	Hexachlorocyclopentadiene	
U131	67-72-1	Hexachloroethane	
U132	70-30-4	Hexachlorphene	
U243	1888-71-7	Hexachloropropene	
U133	302-01-2	Hydrazine	(R,T)
U086	1615-80-1	Hydrazine, 1,2-diethyl-	
U098	57-14-7	Hydrazine, 1,1-dimethyl-	
U099	540-73-8	Hydrazine, 1,2-dimethyl-	
U109	122-66-7	Hydrazine, 1,2-diphenyl-	
U134	7664-39-3	Hydrofluoric acid	(C,T)
U134	7664-39-3	Hydrogen fluoride	(C,T)
U135	7783-06-4	Hydrogen sulfide	
U135	7783-06-4	Hydrogen sulfide H2S	
U096	80-15-9	Hydroperoxide, 1-methyl-1-phenylethyl-	(R)
U116	96-45-7	2-Imidazolidinethione	
U137	193-39-5	Indeno[1,2,3cd]pyrene	
U190	85-44-9	1,3-Isobenzofurandione	
U140	78-83-1	Isobutyl alcohol	(I,T)
U141	120-58-1	Isosafrole	
U142	143-50-0	Kepone	
U143	303-34-4	Lasiocarpine	
U144	301-04-2	Lead acetate	

Table 205b

EPA Hazardous Waste Number	Chemical Abstract Services Number	Substance	Hazard Code
U146	1335-32-6	Lead, bis(acetato-O) tetrahydroxytri-	
U145	7446-27-7	Lead phosphate	
U146	1335-32-6	Lead subacetate	
U129	58-89-9	Lindane	
U163	70-25-7	MNNG	
U147	108-31-6	Maleic anhydride	
U148	123-33-1	Maleic hydrazide	
U149	109-77-3	Malononitrile	
U150	148-82-3	Melphalan	
U151	7439-97-6	Mercury	
U152	126-98-7	Methacrylonitrile	(I,T)
U092	124-40-3	Methanamine, N-methyl-	(I)
U029	74-83-9	Methane, bromo-	
U045	74-87-3	Methane, chloro-	(I,T)
U046	107-30-2	Methane, chloromethoxy-	
U068	74-95-3	Methane, dibromo-	
U080	75-09-2	Methane, dichloro-	
U075	75-71-8	Methane, dichlorodifluoro-	
U138	74-88-4	Methane, iodo-	
U119	62-50-0	Methanesulfonic acid, ethyl ester	
U211	56-23-5	Methane, tetrachloro-	
U153	74-93-1	Methanethiol	(I,T)
U225	75-25-2	Methane, tribromo-	
U044	67-66-3	Methane, trichloro-	

Table 205b

EPA Hazardous Waste Number	Chemical Abstract Services Number	Substance	Hazard Code
U121	75-69-4	Methane, trichlorofluoro-	
U036	57-74-9	4,7-Methanoindan, 1,2,4,5,6,7,8,8-octachloro-3a,4,7,7a-tetrahydro	
U154	67-56-1	Methanol	(I)
U155	91-80-5	Methapyrilene	
U142	143-50-0	1,3,4-Metheneo-2H-cyclobuta[cd]pentalen-2-one,1,1a,3,3a,4,5,5,5a,5b,6-decachlorooctahydro-	
U247	72-43-5	Methoxychlor	
U154	67-56-1	Methyl alcohol	(I)
U029	74-83-9	Methyl bromide	
U186	504-60-9	1-Methylbutadiene	(I)
U045	74-87-3	Methyl chloride	(I,T)
U156	79-22-1	Methyl chlorocarbonate	(I,T)
U226	71-55-6	Methylchloroform	
U157	56-49-5	3-Methylcholanthrene	
U158	101-14-4	4,4'-Methylenebis(2-chloroaniline)	
U068	74-95-3	Methylene bromide	
U080	75-09-2	Methylene chloride	
U159	78-93-3	Methyl ethyl ketone	(I,T)
U160	1338-23-4	Methyl ethyl ketone peroxide	(R,T)
U138	74-88-4	Methyl iodide	
U161	108-10-1	Methyl isobutyl ketone	(I)
U162	80-62-6	Methyl methacrylate	(I,T)
U161	108-10-1	4-Methyl-2-pentanone	(I)
U164	56-04-2	Methylthiouracil	

Table 205b

EPA Hazardous Waste Number	Chemical Abstract Services Number	Substance	Hazard Code
U010	50-07-7	Mitomycin	(C)
U059	20830-81-3	5,12-Naphthacenedione, (8S-cis)-8-acetyl-10-[(3-amino-2,3,6-trideoxy-alpha-L-lyxohexopyranosyl)oxyl]- 7,8,9,10-tetrahydro-6,8,11-trihydroxy-1-methoxy-	
U167	134-32-7	1-Naphthalenamine	
U168	91-59-8	2-Naphthalenamine	
U026	494-03-1	Naphthalenamine, N,N'-bis(2-chloroethyl)-	
U165	91-20-3	Naphthalene	
U047	91-58-7	Naphthalene, 2-chloro-	
U166	130-15-4	1,4-Naphthalenedione	
U236	72-57-1	2,7-Naphthalenedisulfonic acid, 3,3'-[(3,3'-dimethyl-(1,1-biphenyl)-4,4'diyl)]-bis(azo)bis (5-amino-4-hydroxy)-, tetrasodium salt	
U279	63-25-2	1-Naphthalenol, methylcarbamate	
U166	130-15-4	1,4-Naphthoquinone	
U167	134-32-7	alpha-Naphthylamine	
U168	91-59-8	beta-Naphthylamine	
U217	10102-45-1	Nitric acid, thallium(1+) salt	
U169	98-95-3	Nitrobenzene	(I,T)
U170	100-02-7	p-Nitrophenol	
U171	79-46-9	2-Nitropropane	(I,T)
U172	924-16-3	N-Nitrosodi-n-butylamine	
U173	1116-54-7	N-Nitrosodiethanolamine	
U174	55-18-5	N-Nitrosodiethylamine	
U176	759-73-9	N-Nitroso-N-ethylurea	

Table 205b

EPA Hazardous Waste Number	Chemical Abstract Services Number	Substance	Hazard Code
U177	684-93-5	N-Nitroso-N-methylurea	
U178	615-53-2	N-Nitroso-N-methylurethane	
U179	100-75-4	N-Nitrosopiperidine	
U180	930-55-2	N-Nitrosopyrrolidine	
U181	99-55-8	5-Nitro-o-toluidine	
U193	1120-71-4	1,2-Oxathiolane, 2,2-dioxide	
U058	50-18-0	2H-1,3,2-Oxazaphosphorin, 2-amine, N,N-bis(2-chloroethyl) tetrahydro-, 2-oxide	
U115	75-21-8	Oxirane	(I,T)
U126	765-34-4	Oxiranecarboxyaldehyde	
U041	106-89-8	Oxirane, 2-(chloromethyl)-	
U182	123-63-7	Paraldehyde	
U183	608-93-5	Pentachlorobenzene	
U184	76-01-7	Pentachloroethane	
U185	82-68-8	Pentachloronitrobenzene	
See F027	87-86-5	Pentachlorophenol	
U161	108-10-1	Pentanonl, 4-methyl-	
U186	504-60-9	1,3-Pentadiene	(I)
U187	62-44-2	Phenacetin	
U188	108-95-2	Phenol	
U048	95-57-8	Phenol, 2-chloro-	
U039	59-50-7	Phenol, 4-chloro-3-methyl-	
U081	120-83-2	Phenol, 2,4-dichloro-	
U082	87-65-0	Phenol, 2,6-dichloro-	

Table 205b

EPA Hazardous Waste Number	Chemical Abstract Services Number	Substance	Hazard Code
U089	56-53-1	Phenol, 4,4'-(1,2-diethyl-1,2-ethenediyl)bis-, (E)-	
U101	105-67-9	Phenol, 2,4-dimethyl-	
U052	1319-77-3	Phenol, methyl-	
U132	70-30-4	Phenol, 2,2'-methylenebis[3,4,6-trichloro-	
U411	114-26-1	Phenol, 2-(1-methylethoxy)-, methylcarbamate	
U170	100-02-7	Phenol, 4-nitro-	
See F027	87-86-5	Phenol, pentachloro-	
See F027	58-90-2	Phenol, 2,3,4,6-tetrachloro-	
See F027	95-95-4	Phenol, 2,4,5-trichloro-	
See F027	88-06-2	Phenol, 2,4,6-trichloro-	
U150	148-82-3	L-Phenylalanine, 4-[bis(2-chloroethyl)amino]-	
U145	7446-27-7	Phosphoric acid, lead salt	
U087	3288-58-2	Phosphorodithioic acid, 0,0-diethyl-S-methyl ester	
U189	1314-80-3	Phosphorus sulfide	(R)
U190	85-44-9	Phthalic anhydride	
U191	109-06-8	2-Picoline	
U179	100-75-4	Piperidine, 1-nitroso-	
U192	23950-58-5	Pronamide	
U194	107-10-8	1-Propanamine	(I,T)
U111	621-64-7	1,Propanamine, N-nitroso-N-propyl-	
U110	142-84-7	1-Propanamine, N-propyl-	(I)
U066	96-12-8	Propane, 1,2-dibromo-3-chloro-	

Table 205b

EPA Hazardous Waste Number	Chemical Abstract Services Number	Substance	Hazard Code
U083	78-87-5	Propane, 1,2-dichloro-	
U149	109-77-3	Propanedinitrile	
U171	79-46-9	Propane, 2-nitro-	(I,T)
U027	108-60-1	Propane, 2,2'oxybis[2-chloro-	
U193	1120-71-4	1,3-Propane sultone	
See F027	93-72-1	Propionic acid, 2-(2,4,5-trichlorphenoxy)-	
U235	126-72-7	1-Propanol, 2,3-dibromo-, phosphate (3:1)	
U140	78-83-1	1-Propanol, 2-methyl-	(I,T)
U002	67-64-1	2-Propanone	(I)
U007	79-06-1	2-Propenamide	
U084	542-75-6	Propene, 1,3-dichloro-	
U243	1888-71-7	1-Propene, 1,1,2,3,3,3-hexachloro-	
U009	107-13-1	2-Propenenitrile	
U152	126-98-7	2-Propenenitrile, 2-methyl-	(I,T)
U008	79-10-7	2-Propenoic acid	(I)
U113	140-88-5	2-Propenoic acid, ethyl ester	(I)
U118	97-63-2	2-Propenoic acid, 2-methyl-, ethyl ester	
U162	80-62-6	2-Propenoic acid, 2-methyl-, methyl ester	(I,T)
U373	122-42-9	Propham	
U411	114-26-1	Propoxur	
U194	107-10-8	n-Propylamine	(I,T)
U083	78-87-5	Propylene dichloride	
U387	52888-80-9	Prosulfocarb	
U148	123-33-1	3,6-Pyridazinedione, 1,2-dihydro-	

Table 205b

EPA Hazardous Waste Number	Chemical Abstract Services Number	Substance	Hazard Code
U196	110-86-1	Pyridine	
U191	109-06-8	Pyridine, 2-methyl-	
U237	66-75-1	2,4-(1H,3H)-Pyrimidinedione, 5-[bis(2-chloroethyl)amino]-	
U164	56-04-2	4(1H)-Pyrimidinone, 2,3-dihydro-6-methyl-2-thioxo-	
U180	930-55-2	Pyrrole, tetrahydro-N-nitroso-	
U200	50-55-5	Reserpine	
U201	108-46-3	Resorcinol	
U202	81-07-2	Saccharin and salts	
U203	94-59-7	Safrole	
U204	7783-00-8	Selenious acid	
U204	7783-00-8	Selenium dioxide	
U205	7488-56-4	Selenium sulfide	
U205	7488-56-4	Selenium sulfide SeS_2	(R,T)
U015	115-02-6	L-Serine, diazoacetate (ester)	
See F027	93-72-1	Silvex	
U206	18883-66-4	Streptozotocin	
U103	77-78-1	Sulfuric acid, dimethyl ester	
U189	1314-80-3	Sulfur phosphide	(R)
See F027	93-76-5	2,4,5-T	
U207	95-94-3	1,2,4,5-Tetrachlorobenzene	
U208	630-20-6	1,1,1,2-Terachloroethane	
U209	79-34-5	1,1,2,2-Tetrachloroethane	
U210	127-18-4	Tetrachloroethylene	

Table 205b

EPA Hazardous Waste Number	Chemical Abstract Services Number	Substance	Hazard Code
See F027	58-90-2	2,3,4,6-Tetrachlorophenol	
U213	109-99-9	Tetrahydrofuran	(I)
U214	563-68-8	Thallium (I) acetate	
U215	6533-73-9	Thallium (I) carbonate	
U216	7791-12-0	Thallium (I) chloride	
U216	7791-12-0	Thallium chloride T1C1	
U217	10102-45-1	Thallium (I) nitrate	
U218	62-55-5	Thioacetamide	
U410	59669-26-0	Thiodicarb	
U153	74-93-1	Thiomethanol	(I,T)
U244	137-26-8	Thioperoxydicarbonic diamide $[(H_2N)C(S)]_2S_2$, tetramethyl-	
U409	23564-05-8	Thiophanate-methyl	
U219	62-56-6	Thiourea	
U244	137-26-8	Thiram	
U220	108-88-3	Toluene	
U221	25376-45-8	Toluenediamine	
U223	26471-62-5	Toluene diisocyanate	(R,T)
U328	95-53-4	o-Toluidine	
U353	106-49-0	p-Toluidine	
U222	636-21-5	o-Toluidine hydrochloride	
U389	2303-17-5	Triallate	
U011	61-82-5	1H-1,2,4-Triazol-3-amine	
U227	79-00-5	1,1,2-Trichloroethane	

Table 205b			
EPA Hazardous Waste Number	Chemical Abstract Services Number	Substance	Hazard Code
U228	79-01-6	Trichloroethylene	
U121	75-69-4	Trichloromonofluoromethane	
See F027	95-95-4	2,4,5-Trichlorophenol	
See F027	88-06-2	2,4,6-Trichlorophenol	
U404	121-44-8	Triethylamine	
U234	99-35-4	1,3,5-Trinitrobenzene	(R,T)
U182	123-63-7	1,3,5-Trioxane, 2,4,6-trimethyl-	
U235	126-72-7	Tris(2,3-Dibromopropyl) phosphate	
U236	72-57-1	Trypan blue	
U237	66-75-1	Uracil mustard	
U176	759-73-9	Urea, N-ethyl-N-nitroso-	
U177	684-93-5	Urea, N-methyl-N-nitroso-	
U043	75-01-4	Vinyl chloride	
U248	81-81-2	Warfarin, and salts, when present at a concentration of 0.3% or less	
U239	1330-20-7	Xylene	(I)
U200	50-55-5	Yohimban-16-carboxylic acid, 11,17-dimethoxy-18-[(3,4,5-trimethoxy-benzoyl)oxy]-, methyl ester	
U249	1314-84-7	Zinc phosphide, when present at concentration 10% or less	

R 299.9226 Table 205c; discarded commercial chemical products; off-specification species; container residues; and spill residues thereof as toxic hazardous wastes.

Rule 226. Table 205c reads as follows:

Table 205c			
	Chemical		

Michigan Hazardous Waste Number	Abstract Services Number	Substance	Hazard Code
001U	50-76-0	Actinomycin D	
002U	107-05-1	Allyl chloride	
003U	117-79-3	2-aminoanthraquinone	
004U	60-09-3	Aminoazobenzene	
005U	97-56-3	0-aminoazotoluene	
006U	92-67-1	4-aminobiphenyl	
007U	132-32-1	3-amino-9-ethyl carbazole	
157U	57360-17-5	3-amino-9-ethyl carbazole hydrochloride	
008U	82-28-0	1-amino-2-methyl anthraquinone	
009U	101-05-3	Anilazine	
158U	142-04-1	Aniline hydrochloride	
011U	90-04-0	o-Anisidine	
012U	134-29-2	o-Anisidine hydrochloride	
013U	Class-01-0	Antimony (when in the form of particles 100 microns or less)	
014U	1397-94-0	Antimycin A	
147U	2642-71-9	Azinphos-ethyl	
148U	86-50-0	Azinphos-methyl	
159U	103-33-3	Azobenzene	
015U	101-27-9	Barban	
016U	22781-23-3	Bendiocarb	
017U	17804-35-2	Benomyl	
020U	1689-84-5	Bromoxynil	
160U	106-99-0	1,3-Butadiene	
161U	85-68-7	Butyl benzl phthalate	
021U	140-57-8	2(p-tert-Butylphenoxy)-isopropyl-2-chloroethyl sulfite	

022U	2425-06-1	Captafol	
023U	133-06-2	Captan	
024U	63-25-3	Carbaryl	
025U	1563-66-2	Carbofuran	
027U	786-19-6	Carbophenothion	
028U	Class-08-6	Chloramines	
152U	470-90-6	Chlorfenuinphos	
029U	2921-88-2	Chloropyrifos	
030U	Class-05-3	Chlorinated dibenzofurans (other than those listed in Table 202)	
031U	Class-05-4	Chlorinated dioxins (other than those listed in Table 202)	
032U	7782-50-5	Chlorine gas	
033U	107-07-3	2-Chloroethanol	
034U	6959-48-4	3-(Chloromethyl) pyridine hydrochloride	
150U	106-48-9	p-chlorophenol	
162U	7005-72-3	1-chloro-4-phenoxybenzene	
036U	5131-60-2	4-chloro-m-phenylenediamine	
037U	95-83-0	4-chloro-o-phenylenediamine	
038U	126-99-8	Chloroprene	
163U	590-21-6	1-chloropropene	
151U	96-79-4	5-chloro-o-toluidene	
040U	1420-04-8	Clonitralid	
041U	Class-01-6	Cobalt (when in the form of particles 100 microns or less)	
042U	56-72-4	Coumasphos	
043U	120-71-8	p-Cresidine	
044U	7700-17-6	Crotoxyphos	
046U	66-81-9	Cycloheximide	
164U	72-55-9	P,P' DDE	

047U	8065-48-3	Demeton	
048U	39156-41-7	2,4-Diaminoanisole sulfate	
049U	101-80-4	4,4'-Diaminodiphenyl ether	
050U	95-80-7	2,4-Diaminotoluene	
051U	333-41-5	Diazinon	
052U	117-80-6	Dichlone	
054U	62-73-7	Dichlorvos	
055U	141-66-2	Dichrotophos	
056U	64-67-5	Diethyl sulfate	
165U	105-55-5	N,N'-Diethylthiourea	
057U	39300-45-3	Dinocap	
058U	78-34-2	Dioxathion	
059U	2104-64-5	EPN	
166U	106-88-7	1,2-Epoxybutane	
061U	563-12-2	Ethion	
063U	115-90-2	Fensulfothion	
064U	55-38-9	Fenthion	
065U	33245-39-5	Fluchloralin	
068U	680-31-9	Hexamethyl phosphoramide	
070U	123-31-9	Hydroquinone	
071U	1072-52-2	N-(2-Hydroxyethyl) ethyleneimine	
072U	7778-54-3	Hypochlorite	
073U	54-85-3	Isonicotinic acid hydrazine	
167U	59299-51-3	Kanechlor C	
074U	463-51-4	Ketene	
075U	78-97-7	Lactonitril	
076U	21609-90-5	Leptophos	
077U	Class-02-0	Lithium and compounds	
078U	569-64-2	Malachite green	

079U	121-75-5	Malathion	
080U	72-33-3	Mestranol	
082U	838-88-0	4,4'-Methylenebis(2-methylaniline)	
083U	101-61-1	4,4'-Methylenebis(N,N-dimethylaniline)	
086U	90-12-0	1-Methylnaphthalene	
088U	7786-34-7	Mevinphos	
089U	315-18-4	Mexacarbate	
090U	2385-85-5	Mirex	
092U	6923-22-4	Monocrotophos	
093U	505-60-2	Mustard gas	
094U	300-76-5	Naled	
095U	2243-62-1	1,5-Napthalenediamine	
096U	Class-02-2	Nickel (when in the form of particles 100 microns or less)	
097U	61-57-4	Niridazole	
098U	139-94-6	Nithiazide	
099U	602-87-9	5-Nitroacenaphthene	
100U	99-59-2	Nitro-o-anisidine	
101U	92-93-3	Nitrobiphenyl	
102U	1836-75-5	Nitrofen	
103U	531-82-8	N-(4-(5-nitro-2-furanyl)-2-thiazolyl)-acetamide	
104U	51-75-2	Nitrogen mustard	
106U	156-10-5	p-Nitrosodiphenylamine	
168U	4549-40-0	N-Nitrosomethylvinylamine	
108U	135-20-6	N-nitroso-N-phenylhydroxylamine, ammonium salt	
169U	29082-74-4	Octachlorostyrene	
110U	301-12-2	Oxydemeton-methyl	
111U	1910-42-5	Paraquat	

112U	79-21-0	Peroxyacetic acid	
113U	136-40-3	Phenazopyridine hydrochloride	
114U	3546-10-9	Phenesterin	
115U	50-06-6	Phenobarbitol	
116U	57-41-0	Phenytoin	
117U	630-93-3	Phenytoin sodium	
118U	4104-14-7	Phosazetim	
119U	732-11-6	Phosmet	
120U	13171-21-6	Phosphamidon	
121U	120-62-7	Piperonyl sulfoxide	
122U	Class-07-8	Polybrominated biphenyls (PBB)	
124U	57-57-8	Propiolactone	
127U	51-52-5	Propylthiouracil	
128U	83-74-4	Rotenone	
129U	57-56-7	Semicarbazide	
170U	563-41-7	Semicarbazide hydrochloride	
153U	62-74-8	Sodium fluoroacetate	
131U	100-42-5	Styrene	
132U	95-06-7	Sulfallate	
134U	72-54-8	TDE	
135U	107-49-3	TEPP	
136U	13071-79-9	Terbufos	
137U	961-11-5	Tetrachlorvinphos	
138U	139-65-1	4,4'-Thiodianiline	
139U	95-53-4	o-Toluidine	
140U	Class-08-4	Triaryl phosphate esters	
154U	56-35-9	Bis(tri-n-butyl tin) oxide	
171U	688-73-3	Tributyltin (and other salts and esters)	

172U	87-61-6	1,2,3-Trichlorobenzene	
173U	120-82-1	1,2,4-Trichlorobenzene	
141U	52-68-6	Trichlorfon	
142U	1582-09-8	Trifluralin	
143U	137-17-7	2,4,5-Trimethylaniline	
144U	512-56-1	Triamethylphosphate	
174U	51-79-6	Urethane	
175U	593-60-2	Vinyl bromide	
155U	75-35-4	Vinylidene chloride	
146U	137-30-4	Ziram	

R 299.9227 Deletion of certain hazardous waste numbers after equipment cleaning and replacement.

Rule 227. (1) Wastes from wood preserving processes at plants that do not resume or initiate the use of chlorophenolic preservatives will not meet the listing description of F032 once the generator has met all of the requirements of subrules (2) to (5) of this rule. These wastes may, however, continue to meet another hazardous waste listing description or may exhibit 1 or more of the hazardous waste characteristics.

(2) Generators shall either clean or replace all process equipment that may have come into contact with chlorophenolic formulations or constituents thereof, including, but not limited to, treatment cylinders, sumps, tanks, piping systems, drip pads, fork lifts, and trams, in a manner that minimizes or eliminates the escape of hazardous waste or constituents, leachate, contaminated drippage, or hazardous waste decomposition products to the environment. In cleaning or replacing the process equipment, the generator shall do 1 of the following:

(a) Prepare and follow a process equipment cleaning plan and clean process equipment in accordance with the provisions of subrule (3) of this rule.

(b) Prepare and follow a process equipment replacement plan and replace process equipment in accordance with the provisions of subrule (4) of this rule.

(c) Document that previous process equipment cleaning or replacement, or both, was performed in accordance with the provisions of subrules (3) or (4), or both, of this rule and occurred after cessation of the use of chlorophenolic preservatives.

(3) In cleaning the process equipment that may have come into contact with chlorophenolic formulations, the generator shall do all of the following:

(a) Prepare and sign a written process equipment cleaning plan that describes all of the following:

(i) The process equipment to be cleaned.

(ii) The process equipment cleaning method or methods.

(iii) The solvent to be used in cleaning the process equipment.

(iv) How the solvent rinses will be tested.

(v) How the cleaning residues will be managed and disposed of.

(b) Clean the process equipment as follows:

(i) Remove all visible residues from the process equipment.

(ii) Rinse process equipment with an appropriate solvent until dioxins and dibenzofurans are not detected in the final solvent rinse.

(c) Test the rinses in accordance with the provisions of SW-846, method 8290. For the purposes of this rule, "not detected" means at or below the lower method calibration limit that is specified in method 8290, table 1.

(d) Manage all residues from the cleaning process as F032 waste.

(4) In replacing the process equipment that may have come into contact with chlorophenolic formulations, the generator shall do all of the following:

(a) Prepare and sign a written process equipment replacement plan that describes all of the following:

(i) The process equipment to be replaced.

(ii) The process equipment replacement method or methods.

(iii) How the process equipment will be managed and disposed of.

(b) Manage the discarded process equipment as F032 waste.

(5) The generator shall maintain all of the following information that documents the cleaning and replacement activities as part of the operating record:

(a) The name and address of the plant.

(b) Formulations previously used and the date on which their use ceased in each process at the plant.

(c) Formulations currently used in each process at the plant.

(d) The equipment cleaning or replacement plan.

(e) The name and address of any persons who conducted the cleaning and replacement.

(f) The dates on which the cleaning and replacement were accomplished.

(g) The dates of sampling and testing.

(h) A description of the sampling handling and preparation techniques, including the techniques that are used for all of the following:

(i) Extraction.

(ii) Containerization.

(iii) Preservation.

(iv) Chain-of-custody of the samples.

(i) A description of the tests performed, the date the tests were performed, and the results of the tests.

(j) The names and model numbers of the instruments used in performing the tests.

(k) Quality assurance/quality control documentation.

(l) A statement which is signed by the generator or the generator's authorized representative and which contains the following language: "I certify under penalty of law that all process equipment required to be cleaned or replaced under MAC R 299.9227 was cleaned or replaced as represented in the equipment cleaning and/or replacement plan and accompanying documentation. I am aware that there are significant penalties for providing false information, including the possibility of fine or imprisonment."

R 299.9228 Universal wastes.

Rule 228. (1) This rule provides an alternate set of standards under which universal wastes may be managed instead of full regulation as hazardous waste under these rules. The requirements of this rule apply to the universal wastes identified in this subrule and to persons managing the universal wastes. Universal wastes that are not managed in accordance with this rule are subject to full regulation as hazardous waste under these rules. Except as provided in subrule (2) of this rule, all of the following universal wastes are exempt from full regulation as hazardous waste under these rules if they are managed in accordance with the requirements of this rule:

(a) A battery, including a spent lead-acid battery that is not managed pursuant to the provisions of R 299.9804.

(b) A pesticide, including both of the following:

(i) A recalled pesticide, including the following:

(A) A stock of a suspended and cancelled pesticide that is part of a voluntary or mandatory recall under section 19(b) of the federal insecticide, fungicide, and rodenticide act, including, but not limited to, a stock owned by the registrant responsible for conducting the recall.

(B) A stock of a suspended or cancelled pesticide, or of a pesticide that is not in compliance with the federal insecticide, fungicide, and rodenticide act, that is part of a voluntary recall by the registrant.

(ii) A stock of an unused pesticide product other than a product specified in subrule (1)(b)(i) of this rule that is collected and managed as part of a waste pesticide collection program.

(c) A thermostat.

(d) A mercury switch.

(e) A mercury thermometer.

(f) A waste device which contains only elemental mercury as the hazardous waste constituent.

(g) An electric lamp.

(2) The requirements of this rule do not apply to the following wastes:

(a) A spent lead-acid battery that is managed pursuant to the provisions of R 299.9804.

(b) A battery that is not a waste under part 2 of these rules. A used battery becomes a waste when it is discarded. An unused battery becomes a waste on the date the universal waste handler decides to discard it.

(c) A battery that is not hazardous waste. A battery is a hazardous waste if it exhibits 1 or more of the hazardous characteristics identified in R 299.9212.

(d) A pesticide identified in subrule (1) of this rule that is managed by farmers in compliance with the provisions of R 299.9204(3)(b).

(e) A pesticide that does not meet the requirements in subrule (1) of this rule. The pesticide shall be managed in accordance with parts 2 to 8 of these rules.

(f) A pesticide that is not a waste under part 2 of these rules. A recalled pesticide becomes a waste on the first date on which the generator of the pesticide agrees to participate in the recall and the person conducting the recall decides to discard the pesticide. An unused pesticide becomes a waste on the date that the generator decides to discard it. The following pesticides are not wastes:

(i) A recalled pesticide if the person conducting the recall is in compliance with either of the following provisions:

(A) The person has not made a decision to discard the pesticide. Until a decision is made, the pesticide does not meet the definition of a waste pursuant to the provisions of R 299.9202 and, therefore, is not considered a hazardous waste subject to regulations under these rules. The pesticide remains subject to the requirements of the federal insecticide, fungicide, and rodenticide act.

(B) The person has made a decision to use a management option that does not result in the pesticide meeting the definition of a waste pursuant to the provisions of R 299.9202. The pesticide, including a recalled pesticide that is exported to a foreign destinations for use or reuse, remains subject to the requirements of the federal insecticide, fungicide, and rodenticide act.

(ii) An unused pesticide product if the generator of the unused pesticide product has not decided to discard the product. The pesticide product remains subject to the requirements of the federal insecticide, fungicide, and rodenticide act.

(g) A pesticide that is not hazardous waste. A pesticide is a hazardous waste if it is listed pursuant to the provisions of R 299.9213 or R 299.9214 or if it exhibits 1 or more of the hazardous characteristics identified in R 299.9212.

(h) A thermostat, mercury switch, mercury thermometer, or a waste device which contains only elemental mercury as the hazardous waste constituent that is not a waste under part 2 of these rules. A used thermostat, mercury switch, mercury thermometer, or a used waste device which contains only elemental mercury as the hazardous waste constituent becomes a waste on the date it is discarded. An unused thermostat, mercury switch, mercury thermometer, and an unused waste

device which contains only elemental mercury as the hazardous waste constituent becomes a waste on the date that the universal waste handler decides to discard it.

(i) A thermostat, mercury switch, mercury thermometer, and a waste device which contains only elemental mercury as the hazardous waste constituent that is not hazardous waste. A thermostat, mercury switch, mercury thermometer, and a waste device which contains only elemental mercury as the hazardous waste constituent is a hazardous waste if it exhibits 1 or more of the hazardous characteristics identified in R 299.9212.

(j) An electric lamp that is not a waste under part 2 of these rules. A used electric lamp becomes a waste on the date that the universal waste handler permanently removes it from its fixture. An unused electric lamp becomes a waste on the date that the universal waste handler decides to discard it.

(k) An electric lamp that is not a hazardous waste. An electric lamp is a hazardous waste if it exhibits 1 or more of the hazardous characteristics identified in R 299.9212.

(3) A person that manages household wastes that are exempt from regulation pursuant to the provisions of R 299.9204(2)(a) and are also of the same type as the universal wastes identified in subrule (1) of this rule or conditionally exempt small quantity generator wastes that are exempt from regulation pursuant to the provisions of R 299.9205 and are also of the same type as the universal wastes identified in subrule (1) of this rule may, at the person's option, manage the wastes pursuant to the provisions of this rule. A person who commingles household wastes or conditionally exempt small quantity generator wastes with universal waste regulated pursuant to this rule shall manage the commingled waste under the requirements of this rule.

(4) A universal waste small quantity handler shall comply with all of the following requirements:

(a) The requirements of 40 C.F.R. part 273, subpart B, except §§273.10 and 273.18(b).

(b) If the universal waste small quantity handler is self-transporting universal waste off-site, then the handler becomes the universal waste transporter for the self-transportation activities and shall comply with the requirements of subrule (6) of this rule while transporting the universal wastes.

(c) If the universal waste small quantity handler handles electric lamps, then all of the following additional requirements apply:

(i) The lamps shall not be crushed or broken.

(ii) The lamps shall be managed in a manner that prevents breakage or the release of any universal waste or components of universal waste by containing unbroken lamps in structually sound packaging that is compatible with the contents of the lamps and will prevent breakage during normal handling conditions. The packaging shall remain closed and lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions.

(iii) All of the following shall be done with respect to a release of universal waste or components of a universal waste, including lamp fragments or residues, and all lamps that show evidence of breakage, leakage, or damage that could cause the release of mercury or other hazardous constituents to the environment:

(A) The release of universal waste or components of a universal waste, including lamp fragments or residues, and all lamps that show evidence of breakage, leakage, or damage that could cause the release of mercury or other hazardous constituents to the environment shall be immediately contained in packaging that is structurally sound and compatible with the contents of the lamps. The packaging shall remain closed once the material has been contained and shall lack evidence of leakage, spillage, or damage that could cause leakage or releases of mercury or other hazardous constituents to the environment under reasonably foreseeable conditions.

(B) A determination shall be made whether any of the materials resulting from the release or the lamps that show evidence of breakage, leakage, or damage that could cause the release of mercury or other hazardous constituents to the environment are hazardous waste, and if the released materials or lamps are hazardous waste, the released materials shall be managed in accordance with the applicable requirements of the act and these rules.

(iv) The lamps or packaging in which the lamps are contained shall be labelled with the words "universal waste electric lamps," "waste electric lamps," or "used electric lamps."

(d) If the universal waste small quantity handler handles mercury switches, mercury thermometers, or waste devices which contain only elemental mercury as the hazardous waste constituent, then the provisions of 40 C.F.R. §273.13(c) shall be applicable to the mercury switches, mercury thermometers, and waste devices which contain only elemental mercury as the hazardous waste constituent.

(5) A universal waste large quantity handler shall comply with all of the following requirements:

(a) Maintain the universal waste large quantity handler designation through the end of the calendar year in which a total of 5,000 kilograms or more of universal waste is accumulated.

(b) The requirements of 40 C.F.R. part 273, subpart C, except §§273.30 and 273.38(b).

(c) If the universal waste large quantity handler is self-transporting universal waste off-site, then the handler becomes the universal waste transporter for the self-transportation activities and shall comply with the requirements of subrule (6) of this rule while transporting the universal wastes.

(d) If the universal waste large quantity handler handles electric lamps, then all of the additional requirements of (4)(c) of this rule shall be complied with.

(e) If the universal waste large quantity handler handles mercury switches, mercury thermometers, or waste devices which contain only elemental mercury as the hazardous waste constituent, then the provisions of 40 C.F.R. §273.33(c) shall be applicable to the mercury switches, mercury thermometers, and waste devices which contain only elemental mercury as the hazardous waste constituent.

(6) A universal waste transporter shall comply with both of the following requirements:

(a) The requirements of 40 C.F.R. part 273, subpart D, except §§273.50 and 273.53.

(b) Store universal wastes at a universal waste transfer facility for 10 days or less. If the transporter stores universal wastes for more than 10 days, then the transporter becomes a universal waste handler and shall comply with the applicable requirements of subrules (4) and (5) of this rule while storing the universal wastes.

(7) Except as provided for in subrules (8) and (9) of this rule, an owner or operator of a destination facility shall comply with all of the following requirements:

(a) The requirements of parts 5 to 8 of these rules and the notification requirements under section 3010 of RCRA.

(b) The requirements of 40 C.F.R. §§273.61 and 273.62.

(c) The requirements of the act and these rules if the owner or operator generates waste as a result of recycling universal waste.

(8) An owner or operator of a destination facility that recycles a particular universal waste without storing the universal waste before recycling shall comply with the requirements of R 299.9206(1)(c).

(9) An owner or operator of a destination facility that stores electric lamps before recycling the electric lamps at the facility shall comply with the requirements of R299.9206(5).

(10) A person who manages universal waste that is imported from a foreign country into United States shall comply with the following applicable requirements immediately after the universal waste enters the United States:

(a) The requirements of subrule (4) of this rule if a small quantity handler of universal waste.

(b) The requirements of subrule (5) of this rule if a large quantity handler of universal waste.

(c) The requirements of subrule (6) of this rule if a transporter of universal waste.

(d) The requirements of subrules (7) to (9) of this rule if a universal waste destination facility.

(e) The requirements of this rule and R 299.9312 if managing universal waste that is imported from an organization for economic cooperation and development country specified in 40 C.F.R. §262.58(a)(1).

(11) The provisions of 40 C.F.R. part 273, subparts B to E, except §§273.10, 273.18(b),

273.30, 273.38(b), 273.50, 273.53, and 273.60, are adopted by reference in R 299.11003. For the purposes of the adoption of these provisions, the term "department" shall replace the term "EPA," except in 40 C.F.R. §§273.20(b) and (c), 273.32(a)(3), 273.40 (b) and (c), and 273.56, the term "director" shall replace the term "regional administrator," the term "R 299.9212" shall replace the term "40 CFR part 261, subpart C," the term "R 299.9306" shall replace the term "40 CFR 262.34," the term "part 3 of these rules" shall replace the term "40 CFR part 262," and the term "parts 2 to 8 of these rules" shall replace the term "40 CFR parts 260 through 272."

R 299.9229 Petitions to amend list of universal wastes.

Rule 229. (1) A person who seeks to add a hazardous waste or a category of hazardous waste to the list of universal wastes in R 299.9228 may petition the department for a regulatory amendment under this rule and 40 C.F.R. §260.20.

(2) A petition filed pursuant this rule shall include all of the following:

(a) A demonstration that regulation under the provisions of R 299.9228 is appropriate for the waste or category of waste.

(b) A demonstration that regulation under the provisions of R 299.9228 will improve the management practices for the waste or category of waste.

(c) A demonstration that regulation under the provisions of R 299.9228 will improve implementation of the hazardous waste management program.

(d) The information listed in 40 C.F.R. §260.20(b).

(e) Information addressing the following factors as appropriate for the waste or category of waste:

(i) Whether the waste or category of waste, as generated by a wide variety of generators, is listed pursuant to the provisions of R 299.9213 or R 299.9214 or, if not listed, what proportion of the hazardous waste stream exhibits 1 or more of the hazardous characteristics identified in R 299.9212. If a characteristic hazardous waste is added to the list of universal wastes in R 299.9228 using a generic name to identify the waste category, then the definition of the universal waste shall include only the hazardous waste portion of the waste category. Only the portion of the waste stream that exhibits 1 or more hazardous characteristics is subject to the universal waste requirements of R 299.9228.

(ii) Whether the waste or category of waste is commonly generated by a wide variety of establishments or whether it is exclusive to a specific industry or group of industries.

(iii) Whether the waste or category of waste is generated by a large number of generators and is frequently generated in relatively small quantities by each generator.

(iv) Whether systems to be used for collecting the waste or category of waste would ensure close stewardship of the waste.

(v) Whether the risk posed by the waste or category of waste during accumulation and transport is relatively low compared to other hazardous wastes and whether specific management standards proposed or referenced by the petitioner would be protective of human health and the environment during the accumulation and transport.

(vi) Whether regulation of the waste or category of waste under R 299.9228 will increase the likelihood that the waste will be diverted from nonhazardous waste management systems to recycling, treatment, or disposal in compliance with subtitle C of RCRA.

(vii) Whether regulation of the waste or category of waste under R 299.9228 will improve implementation of, and compliance with, the hazardous waste management program.

(viii) Other factors as may be appropriate.

(3) The department will evaluate and grant or deny a petition filed pursuant to this rule using the factors listed in subrule (2) of this rule. The department may require additional information as necessary to evaluate the merits of the petition. The decision to grant or deny a petition will be based on the weight of evidence showing that regulation under R 299.9228 is appropriate for the waste or category of waste, will improve management practices for the waste or category of waste, and will

improve implementation of the hazardous waste management program.

(4) The provisions of 40 C.F.R. §260.20 are adopted by reference in R 299.11003.

R 299.9230 Comparable and syngas fuels exclusion.

Rule 230. (1) Wastes that meet the following comparable or syngas fuel requirements are not considered wastes for the purposes of the act and these rules:

(a) For comparable fuels, all of the following comparable fuel specifications:

(i) The waste has a heating value of at least 5,000 BTU per pound.

(ii) The waste has a maximum viscosity of 50 CS, as fired.

(iii) For compounds listed in table 1 of 40 C.F.R. §261.38, the specification levels and minimum required detection limits specified in 40 C.F.R. §261.38.

(b) For synthesis gas fuel that is generated from a hazardous waste, all of the following syngas fuel specifications:

(i) The waste has a minimum BTU value of 100 BTU per standard cubic foot.

(ii) The waste contains less than 1 part per million by volume of total halogens.

(iii) The waste contains less than 300 parts per million by volume of total nitrogen other than diatomic nitrogen (N_2).

(iv) The waste contains less than 200 parts per million by volume of hydrogen sulfide.

(v) The waste contains less than 1 part per million by volume of each hazardous constituent in the target list 40 C.F.R. part 261, appendix VIII.

(2) Wastes that meet comparable fuel or syngas fuel specifications provided in subrule (1) of this rule are excluded from the definition of waste provided that all of the requirements of 40 C.F.R. §261.38(c) are met.

(3) The provisions of 40 C.F.R. §261.38, except for 40 C.F.R.§261.38(a) and (b), are adopted by reference in R 299.11003. For the purposes of this adoption, the word "waste" shall replace the words "solid waste," the word "director" shall replace the words "state RCRA director," "state CAA director," and "regional director," the words "part 6 of these rules" shall replace the words "subpart O of parts 264 or 265 of this chapter," the reference "R 299.9306" shall replace the reference "§262.34," and the reference "R 299.9206(1)" shall replace the reference "§261.6(c)."

PART 3. GENERATORS OF HAZARDOUS WASTE

R 299.9301 Applicability.

Rule 301. (1) This part establishes requirements for generators of hazardous waste.

(2) The provisions of R 299.9205(5) shall be used to determine the applicability of the requirements of this part that are dependent on calculations of the quantity of hazardous waste generated each calendar month.

(3) A generator who treats, stores, or disposes of hazardous waste on-site shall comply with all of the following requirements with respect to that waste:

(a) The provisions of R 299.9302, R 299.9303, R 299.9306, R 299.9307(1) and (5), and R 299.9308(4).

(b) The applicable requirements of parts 5, 6, 7, and 8 of these rules for the treatment, storage, and disposal.

(c) The provisions of R 299.9204(3)(b), if applicable.

(4) Any person who imports hazardous waste into the United States shall comply with the standards in this part that are applicable to generators.

(5) An owner or operator who initiates a shipment of hazardous waste from a treatment, storage, or disposal facility shall comply with the generator standards established in this part.

(6) In addition to complying with the provisions of this part, a generator who uses his or her own vehicle to transport hazardous waste shall comply with the applicable requirements of part 4 of these rules.

(7) Any person who exports or imports federal hazardous waste subject to the manifesting requirements of part 3 of these rules or subject to the universal waste provisions of R 299.9228, to or from the countries listed in 40 C.F.R. §262.58(a)(1) for the purpose of recovery shall comply with the provisions of R 299.9312.

(8) Persons responding to an explosives or munitions emergency in accordance with R 299.9503(2) are not required to comply with the standards in this part.

R 299.9302 Hazardous waste determination and level of management.

Rule 302. (1) A person who generates a waste as defined in R 299.9202 shall determine if that waste is a hazardous waste using the following method:

(a) Determine if the waste is excluded from regulation pursuant to the provisions of R 299.9204(1) or (2). If the waste is not excluded, the generator shall determine if the waste is listed as hazardous pursuant to the provisions of R 299.9213 and R 299.9214.

(b) For the purposes of complying with the provisions of 40 C.F.R. part 268, or if the waste is not listed as a hazardous waste, the generator shall determine if the waste meets 1 of the characteristics of hazardous waste pursuant to the provisions of R 299.9212 by doing either of the following:

(i) Testing the waste according to the methods set forth in the provisions of R 299.9212 or according to an equivalent method approved by the director pursuant to the provisions of R 299.9215.

(ii) Applying knowledge of the hazardous characteristics of the waste in light of the materials or processes used.

(2) If the waste is determined to be hazardous, the generator shall refer to parts 2 to 6 and 8 of these rules for possible exclusions or restrictions that pertain to the management of his or her specific waste.

(3) In cases where the general character of a waste changes due to changes in the materials or processes involved in its generation, the evaluation pursuant to the provisions of subrule (1) of this rule shall be repeated immediately by the generator.

R 299.9303 United States EPA identification numbers.

Rule 303. (1) A generator shall not treat or store, dispose of, or transport or offer for

transportation, hazardous waste without having received an EPA identification number from the regional administrator or the regional administrator's designee.

(2) A generator who has not received an EPA identification number may obtain one by applying to the regional administrator or the regional administrator's designee. Upon receiving the request, the administrator shall assign an EPA identification number to the generator.

(3) A generator shall not offer his or her hazardous waste to transporters or to treatment, storage, or disposal facilities that have not received an EPA identification number.

(4) Applications for EPA identification numbers shall be made on state form EQP5150 and signed in accordance with the provisions of 40 C.F.R. §270.11(a)(1)-(3).

R 299.9304 Manifest requirements.

Rule 304. (1) A hazardous waste generator who transports, or offers for transportation, a hazardous waste for off-site treatment, storage, or disposal shall do all of the following:

(a) Prepare a manifest before transporting the waste off-site.

(b) Designate on the manifest 1 facility that is licensed to handle the waste described on the manifest. A generator may also designate on the manifest 1 alternate facility that is licensed to handle his or her waste if an emergency prevents delivery of the waste to the primary designated facility.

(c) Use a transporter or be a transporter, if a generator transports his or her own hazardous waste, who is registered and permitted in accordance with act 138 pursuant to the requirements of part 4 of these rules.

(d) If the transporter is unable to deliver the hazardous waste to the designated facility, the generator shall either designate another facility or instruct the transporter to return the waste. For a total or partial rejected shipment, the generator shall comply with the subrule (7) of this rule.

(2) Except as otherwise provided by subrule (3) of this rule, the generator shall use a manifest form which is approved by the director and which contains all of the following information:

(a) A manifest document number.

(b) The generator's name, mailing address, telephone number, and EPA identification number.

(c) The name and EPA identification number of each transporter.

(d) The name, address, and EPA identification number of the designated facility and an alternate facility, if any.

(e) The description of the waste required by regulations of the DOT in the provisions of 49 C.F.R. §§172.101, 172.202, and 172.203, which are adopted by reference in R 299.11004.

(f) The total quantity of each hazardous waste by units of weight or volume, and the type and number of containers as loaded into or onto the transport vehicle.

(g) The hazardous waste number describing the waste.

(h) The following certification: "I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations."

(i) Other certification statements required by the director based on requirements under title II of the solid waste disposal act.

(3) If a generator manifests a shipment of hazardous waste out-of-state, and if the state to which the shipment is manifested requires the use of another manifest, then the generator shall use that manifest.

(4) The generator shall do all of the following with respect to the manifest:

(a) Sign the manifest certification by hand.

(b) Obtain the handwritten signature of the initial transporter and the date of acceptance on the manifest.

(c) Retain 1 copy in accordance with R 299.9307(3).

(d) Submit 1 copy to the director or his or her designee, which shall be postmarked not later

than 10 days after the month in which shipment was made.

(e) Give the remaining copies to the transporter.

(f) For all out-of-state shipments, submit 1 copy of the second generator copy of the manifest which is returned to the generator by the facility, to the director or his or her designee. The second generator copy of the manifest shall be submitted to the dirctor or his or her designee within 10 days after the month in which the copy was received by the generator as specified in R 299.9308.

(g) For shipments of hazardous waste within the United States solely by water (bulk shipments only), send 3 copies of the manifest that are dated and signed in accordance with the provisions of this rule to the owner or operator of the designated facility or the last water (bulk shipment) transporter to handle the waste in the United States, if exported by water.

(h) For rail shipments of hazardous waste within the United States that originate at the site of generation, the generator shall send not less than 3 copies of the manifest, dated and signed in accordance with the provisions of this rule, to 1 of the following, as appropriate:

(i) The next nonrail transporter, if any.

(ii) The designated facility, if transported solely by rail.

(iii) The last rail transporter to handle the waste in the United States, if exported by rail.

(i) For shipments of hazardous waste that is regulated pursuant to the provisions of 40 C.F.R. part 261, subpart C or D, to a designated facility in an authorized state that has not yet obtained authorization from the EPA to regulate that particular waste as hazardous, assure that the owner or operator of the designated facility agrees to sign and return the manifest to the generator, and that any out-of-state transporter signs and forwards the manifest to the designated facility.

(5) The requirements of this rule do not apply to hazardous waste that is produced by a generator of more than 100 kilograms, but less than 1,000 kilograms, in a calendar month if both of the following requirements are met:

(a) The waste is reclaimed under a contractual agreement pursuant to which the type of waste and frequency of shipments are specified in the agreement and the vehicle used to transport the waste to the recycling facility and to deliver the regenerated material back to the generator is owned and operated by the reclaimer of the waste.

(b) The generator maintains a copy of the reclamation agreement in his or her files for a period of not less than 3 years after termination or expiration of the agreement.

(6) A hazardous waste generator who authorizes a transporter to commingle his or her hazardous waste in accordance with the requirements of R 299.9405(2) or (3) shall add the term "com-same," as specified in R 299.9405(2)(f), or "com-diff," as specified in R 299.9405(3)(f), to the manifest.

(7) A generator whose manifested shipment results in a significant manifest discrepancy, as specified in R 299.9608, and a total or partial rejected shipment, shall do all of the following:

(a) For a total rejected shipment which is returned to the generator:

(i) Indicate on the original manifest, acknowledgement of receipt, by signing and dating the returned portion of the original manifest.

(ii) Return the transporter copy of the original manifest to the transporter.

(iii) Submit 1 copy of the original manifest to the department.

(iv) Indicate on the new manifest, the original manifest number and the date the subject shipment was rejected.

(b) For a total rejected shipment which is to be sent to an alternative designated facility, grant permission to the transporter to alter the manifest to designate the new facility.

(c) For a partial rejected shipment, grant permission to the facility to receive the portion of the original shipment which is not being rejected.

(d) For a partial rejected shipment which is returned to the generator:

(i) Indicate on the original manifest, acknowledgement of receipt, by signing and dating the returned portion of the transporter copy of the orginal manifest.

(ii) Retain a copy of the signed original manifest as a record of the wastes returned.

(iii) Return the transporter copy of the original manifest to the transporter.
(iv) Before shipping the rejected portion of the original shipment to an alternate facility:
(A) Prepare a new manifest and comply with the requirements of this rule.
(B) Indicate on the new manifest, the original manifest number and the date of rejection.
(8) The requirements of this rule and R 299.9305(d) do not apply to the transport of hazardous waste shipments on a public or private right-of-way within or along the border of contiguous property under the control of the same person, even if such property is contiguous property divided by a public or private right-of-way. Notwithstanding R 299.9401, the generator or transporter shall comply with the requirements for transporters set forth in R 299.9410 in the event of a discharge of hazardous waste on a public or private right-of-way.

R 299.9305 Pre-transport requirements.

Rule 305. (1) Before transporting hazardous waste or offering hazardous waste for transportation off-site, a generator shall do all of the following:
(a) Package the waste in accordance with the applicable DOT regulations on packaging under the provisions of 49 C.F.R. parts 173, 178, and 179.
(b) Label each package in accordance with the applicable DOT regulations on hazardous materials under the provisions of 49 C.F.R. part 172.
(c) Mark each package of hazardous waste in accordance with the applicable DOT regulations under the provisions of 49 C.F.R. part 172.
(d) Mark each container of 110 gallons or less used in such transportation with the following:
(i) The following words and information displayed in accordance with the provisions of 49 C.F.R. §172.304:
HAZARDOUS WASTE - Federal Law Prohibits Improper Disposal. If found, contact the nearest police or public safety authority or the U.S. Environmental Protection Agency.
Generator's Name and Address _____
Manifest Document Number _____
(ii) The hazardous waste number identifying the waste.
(e) Placard or offer the initial transporter the appropriate placards according to DOT regulations for hazardous materials under the provisions of 49 C.F.R. part 172, subpart F.
(2) The provisions of 49 C.F.R. parts 172, 173, 178 and 179 are adopted by reference in R 299.11004.

R 299.9306 Accumulation time.

Rule 306. (1) Except as provided in subrules (4), (5), and (6) of this rule, a generator may accumulate hazardous waste on-site for 90 days or less without an operating license if he or she complies with all of the following requirements:
(a) The waste is managed in accordance with 1 or more of the following methods:
(i) The waste is placed in containers, the generator complies with the provisions of 40 C.F.R. part 265, subparts I, AA, BB, and CC, the generator complies with the containment requirements of 40 C.F.R. §264.175, and the generator documents the inspections required pursuant to the provisions of 40 C.F.R. §265.174. The generator shall maintain the inspection records on-site for a period of not less than 3 years from the date of the inspection. The period of retention shall be extended automatically during the course of any unresolved enforcement action regarding the regulated activity or as requested by the director.
(ii) The waste is placed in tanks, the generator complies with the provisions of 40 C.F.R. part 265, subparts J, AA, BB, and CC, except for the provisions of §§265.197(c) and 265.200, and the generator complies with the provisions of R 299.9615, except for R 299.9615(1). For the purposes of this rule, the references in R 299.9615 to 40 C.F.R. part 264 shall be replaced by references to 40 C.F.R. part 265.
(iii) The waste is placed on drip pads, the generator complies with the provisions of

40 C.F.R. part 265, subpart W, and the generator maintains the following records at the facility:

(A) A description of the procedures that shall be followed to ensure that all wastes are removed from the drip pad and associated collection system at least once every 90 days.

(B) Documentation of each waste removal, including the quantity of waste that is removed from the drip pad and the sump or collection system and the date and time of removal.

(b) The date upon which each period of accumulation begins and the hazardous waste number of the waste are clearly marked and visible for inspection on each container.

(c) While being accumulated on-site, each container and tank is labeled with the words "Hazardous Waste."

(d) The generator complies with the requirements for owners or operators in the provisions of 40 C.F.R. part 265, subparts C and D, and 40 C.F.R. §265.16 and 40 C.F.R. §268.7(a)(5). If there is a fire, explosion, or other release of hazardous waste or hazardous waste constituents that could threaten human health or the environment, or if the generator has knowledge that a spill has reached surface water or groundwater, then the generator shall immediately notify the department's pollution emergency alerting system - telephone number 800-292-4706. The notification shall include all of the following information:

(i) The name and telephone number of the person who is reporting the incident.

(ii) The name, address, telephone number, and EPA identification number of the generator.

(iii) The date, time, and type of incident.

(iv) The name and quantity of the material or materials involved and released.

(v) The extent of injuries, if any.

(vi) The estimated quantity and disposition of recovered materials that resulted from the incident, if any.

(vii) An assessment of actual or potential hazards to human health or the environment.

(viii) The immediate response action taken.

(e) The area where waste is accumulated is protected, as appropriate for the type of waste being stored, from weather, fire, physical damage, and vandals.

(f) Hazardous waste accumulation is conducted so that hazardous waste or hazardous waste constituents cannot escape by gravity into the soil, directly or indirectly, into surface or groundwaters, or into drains or sewers and so that fugitive emissions are not in violation of the provisions of part 55 of the act.

(g) The closure standards of 40 C.F.R. §§265.111 and 265.114.

(2) A generator may, without a license issued pursuant to part 111 of the act and without complying with the provisions of subrule (1) of this rule, accumulate as much as 55 gallons of hazardous waste or 1 quart of an acute hazardous waste that is identified in table 203a, 204a, 204b, or 205a, or a severely toxic hazardous waste that is identified in table 202 in containers at or near any point of generation where wastes initially accumulate and which is under the control of the operator of the process that generates the waste if he or she complies with the provisions of 40 C.F.R. §§265.171, 265.172, and 265.173 and marks his or her containers with the hazardous waste number of the waste and the words "Hazardous Waste." A generator may substitute the chemical name for the hazardous waste number of the waste on his or her containers at or near the point of generation to comply with this subrule. A generator who accumulates hazardous waste, an acute hazardous waste that is listed in table 203a, 204a, 204b, or 205a, or a severely toxic hazardous waste that is listed in table 202 in excess of the amounts listed in this subrule at or near any point of generation shall, with respect to that amount of excess waste, comply, within 3 days, with the requirements of this subrule or other applicable provisions of this part. During the 3-day period, the generator shall continue to comply with the requirements of this rule. The generator shall mark the container that holds the excess accumulation of hazardous waste with the date that the excess amount began accumulating and the hazardous waste number of the waste.

(3) A generator who accumulates hazardous waste for more than 90 days is an operator of a storage facility and is subject to the requirements of parts 5, 6, and 7 of these rules, unless the

generator has been granted an extension of the time period or except as provided in subrules (4), (5), and (6) of this rule. An extension of up to 30 days may be granted by the director, or his or her designee, if hazardous wastes must remain on-site for more than 90 days due to unforeseen, temporary, and uncontrollable circumstances.

(4) A generator who generates more than 100 kilograms, but less than 1,000 kilograms, of hazardous waste in a calendar month and who does not generate or accumulate acute hazardous waste or severely toxic hazardous waste that exceeds the volumes specified in the provisions of R 299.9205(1)(b) or (c) may accumulate hazardous waste on-site for 180 days or less without an operating license or without being an existing facility pursuant to the provisions of R 299.9502 if all of the following provisions are complied with:

(a) The quantity of waste accumulated on-site does not exceed 6,000 kilograms.

(b) The generator does either of the following:

(i) Places the waste in containers and complies with the provisions of 40 C.F.R. part 265, subpart I, except for the provisions of §§265.176 and 265.178, and, if the quantity of waste accumulated on-site exceeds 1,000 kilograms, complies with the containment requirements of 40 C.F.R. §264.175.

(ii) Places the waste in tanks and complies with the provisions of 40 C.F.R. §265.201 and, if the quantity of waste accumulated on-site exceeds 1,000 kilograms, complies with the containment requirements of 40 C.F.R. §§265.191, 265.192, 265.193, and 265.196.

(iii) Places the waste on a drip pad and complies with the provisions of 40 C.F.R. part 265, subpart W, and maintains the following records on-site:

(A) A description of the procedures that will be followed to ensure that all of the wastes are removed from the drip pad and associated collection system at least once every 90 days.

(B) Documentation of each waste removal, including the quantity of waste that is removed from the drip pad and the sump or collection system and the date and time of removal.

(c) The generator ensures that the date upon which each period of accumulation begins and the hazardous waste number of the waste are clearly marked and visible for inspection on each container.

(d) The generator on each container ensures that while being accumulated on-site, each container and tank is marked clearly with the words "Hazardous Waste."

(e) The generator complies with the provisions of 40 C.F.R. part 265, subpart C, and the requirements of 40 C.F.R. §268.7(a)(5).

(f) The generator ensures that, at all times, there is at least one employee either on the premises or on call who is responsible for coordinating all emergency response measures specified in subdivision (i) of this subrule. The employee is the emergency coordinator and, if on call, shall be available to respond to an emergency by reaching the facility within a short period of time.

(g) The generator posts, next to the telephone, the name and telephone number of the emergency coordinator; the location of fire extinguishers and spill control material and, if present, fire alarm; and the telephone number of the fire department, unless the facility has a direct alarm.

(h) The generator ensures that all employees are thoroughly familiar with proper waste handling and emergency procedures relevant to their responsibilities during normal facility operations and emergencies.

(i) The emergency coordinator or his or her designee responds to any emergencies that arise. An emergency coordinator shall respond as follows:

(i) If there is a fire, call the fire department or attempt to extinguish the fire using a fire extinguisher.

(ii) If there is a spill, contain the flow of hazardous waste to the extent possible and, as soon as is practicable, clean up the hazardous waste and any contaminated materials or soils.

(iii) If there is a fire, explosion, or other release of hazardous waste or hazardous waste constituents that could threaten human health or the environment or if the generator has knowledge that a spill has reached surface water or groundwater, then the generator shall immediately notify the

department's pollution emergency alerting system - telephone number 800-292-4706. For releases that could threaten human health outside the individual site of generation and spills that have reached surface waters, the generator shall also immediately notify the national response center at its 24-hour, toll-free number - 800-424-8802. The notifications shall include all of the following information:

(A) The name and telephone number of the person who is reporting the incident.

(B) The name, address, telephone number, and EPA identification number of the generator.

(C) The date, time, and type of incident.

(D) The name and quantity of the material or materials involved and released.

(E) The extent of injuries, if any.

(F) The estimated quantity and disposition of recovered materials that resulted from the incident, if any.

(G) An assessment of actual or potential hazards to human health or the environment.

(H) The immediate response action taken.

(j) The generator ensures that the area where the waste is accumulated is protected from weather, fire, physical damage, and vandals.

(k) The generator ensures that hazardous waste accumulation is conducted so hazardous waste or hazardous waste constituents cannot escape by gravity into the soil, directly or indirectly, into surface or groundwaters, or into drains or sewers and so that fugitive emissions are not in violation of the provisions of part 55 of the act.

(5) A generator who generates more than 100 kilograms, but less than 1,000 kilograms, of hazardous waste in a calendar month and who must transport his or her waste, or offer his or her waste for transportation, over a distance of 200 miles or more for off-site treatment, storage, or disposal may accumulate hazardous waste on-site for 270 days or less without an operating license or without being an existing facility pursuant to the provisions of R 299.9502, if he or she complies with the requirements of subrule (4) of this rule.

(6) A generator who generates more than 100 kilograms, but less than 1,000 kilograms, of hazardous waste in a calendar month and who accumulates hazardous waste in quantities of more than 6,000 kilograms or accumulates hazardous waste for more than 180 days, or for more than 270 days if he or she must transport the waste, or offer the waste for transportation, over a distance of 200 miles or more, is an operator of a storage facility and is subject to the requirements of parts 5 and 6 of these rules, unless he or she has been granted an extension to the 180 day or, if applicable, 270-day period. The director or his or her designee may grant an extension if hazardous waste must remain on-site for more than 180 days or 270 days, if applicable, due to unforeseen, temporary, and uncontrollable circumstances. The director or his or her designee may grant an extension of up to 30 days on a case-by-case basis.

(7) The provisions of 40 C.F.R. §§264.175 and 265.16 and part 265, subparts C, D, I, and J, are adopted by reference in R 299.11003. For purposes of the adoption of 40 C.F.R. §265.56(j), the word "director" shall replace the words "regional administrator."

R 299.9307 Generator recordkeeping.

Rule 307. (1) A generator shall keep records of any test results, waste analyses, or other determinations made in accordance with R 299.9302 for not less than 3 years from the date that the waste was last sent to on-site or off-site treatment, storage, or disposal.

(2) A generator who is requested by the director to submit evaluation results shall provide the required information within 30 days after receipt of the request. The records shall include all of the following information:

(a) The type of waste and the source or process from which it was produced.

(b) The chemical composition of the waste and the anticipated fluctuations in its chemical composition.

(c) If tests were conducted in the evaluation, all of the following information shall be included:

(i) The sampling procedure and the reasons for determining that the sample is representative

of the waste.

(ii) The results of all tests conducted.

(iii) The accuracy and precision of any tests conducted.

(3) A generator shall keep a copy of each manifest signed in accordance with R 299.9304(4) for 3 years or until he or she receives a signed copy from the designated facility which received the waste. This signed copy shall be retained as a record for not less than 3 years from the date the waste was accepted by the initial transporter.

(4) A generator shall keep a copy of each biennial report, exception report, or other report required by the director, or his or her designee, for a period of not less than 3 years from the due date of the report.

(5) A generator shall keep the documentation required pursuant to the provisions of R 299.9503(1)(i)(ix) for not less than 3 years from the date that the waste was treated.

(6) The periods of retention referred to in this rule are extended automatically during the course of any unresolved enforcement action regarding the regulated activity or as requested by the director.

(7) A generator who generates more than 100 kilograms but less than 1,000 kilograms of hazardous waste in a calendar month is exempt from the recordkeeping requirements of subrules (2) and (4) of this rule.

R 299.9308 Generator reporting.

Rule 308. (1) A generator of more than 1,000 kilograms who ships any hazardous waste off-site to a treatment, storage, or disposal facility within the United States shall prepare and submit a single copy of a biennial report to the director or the director's designee by March 1 of each even numbered year. The biennial report shall be submitted on a form and in a format specified by the director or the director's designee. The report shall cover generator activities during the previous calendar year and shall include all of the information specified in 40 C.F.R. §262.41(a)(1) to (8).

(2) Any generator of more than 1,000 kilograms who treats, stores, or disposes of hazardous waste on-site shall submit a biennial report covering those wastes in accordance with parts 5 and 6 of these rules. Reporting for exports of hazardous waste is not required on the biennial report form. A separate annual report requirement is set forth in the provisions of 40 C.F.R. §262.56.

(3) A generator of more than 1,000 kilograms of hazardous waste in a calendar month who does not receive a copy of the manifest with the handwritten signature of the owner or operator of the designated facility within 35 days of the date the waste was accepted by the initial transporter shall do both of the following:

(a) Contact the transporter or the owner or operator of the designated facility to determine the status of the hazardous waste.

(b) If the generator has not received a copy of the manifest with the handwritten signature of the owner or operator of the designated facility within 45 days of the date the waste was accepted by the initial transporter, then the generator shall submit an exception report to the director, or his or her designee, and the EPA regional administrator for the region in which the generator is located. The exception report shall include both of the following:

(i) A legible copy of the manifest for which the generator does not have confirmation of delivery.

(ii) A cover letter signed by the generator, or the generator's authorized representative, explaining the efforts taken to locate the hazardous waste and the results of those efforts.

(4) A generator shall furnish periodic reports of hazardous waste generated, stored, transferred, treated, disposed of, or transported for treatment, storage, or disposal required by the director or his or her designee.

(5) A generator of more than 100 kilograms, but less than 1,000 kilograms, of hazardous waste in a calendar month who does not receive a copy of the manifest with the handwritten signature of the owner or operator of the designated facility within 60 days of the date the waste was accepted

by the initial transporter shall submit a legible copy of the manifest, with some indication that the generator has not received confirmation of delivery, to the director or his or her designee and the regional administrator for the region in which the generator is located.

(6) A generator of more than 100 kilograms, but less than 1,000 kilograms, of hazardous waste in a calendar month is subject to the following requirements:

(a) The provisions of 40 C.F.R. §262.40(a), (c), and (d).

(b) Additional reporting requirements pursuant to the provisions of 40 C.F.R. §262.43.

R 299.9309 Exports of hazardous waste.

Rule 309. (1) Any person who exports hazardous waste to a foreign country shall comply with the provisions of 40 C.F.R. part 262, subpart E, except 40 C.F.R. §§262.54 and 262.55.

(2) A primary exporter shall comply with the manifest requirements of R 299.9304, except as follows:

(a) In place of the name, site address, and EPA identification number of the designated permitted facility, the primary exporter shall enter the name and site address of the consignee.

(b) In place of the name, site address, and EPA identification number of the permitted alternate facility, the primary exporter may enter the name and site address of any alternative consignee.

(c) In the portion of the manifest reserved for special handling instructions and additional information, the primary exporter shall identify the point of departure from the United States.

(d) The following statement shall be added to the end of the first sentence of the certification set forth on the manifest form: "and conforms to the terms of the attached EPA acknowledgement of consent."

(e) In place of the requirements of R 299.9304(3), the primary exporter shall obtain a manifest form approved by the director.

(f) The primary exporter shall require the consignee to confirm, in writing the delivery of the hazardous waste to that facility and to describe any significant discrepancies, as defined in R 299.9608, between the manifest and the shipment. A copy of the manifest signed by such facility may be used to confirm delivery of the hazardous waste.

(g) In place of the requirements of R 299.9304(1)(d), where a shipment cannot be delivered for any reason to the designated or alternate consignee, the primary exporter shall do either of the following:

(i) Renotify EPA of a change in the conditions of the original notification to allow shipment to a new consignee in accordance with the provisions of 40 C.F.R. §262.53(c) and obtain an EPA acknowledgement of consent before delivery.

(ii) Instruct the transporter to return the waste to the primary exporter in the United States or designate another facility within the United States and instruct the transporter to revise the manifest in accordance with the primary exporter's instructions.

(h) The primary exporter shall attach a copy of the EPA acknowledgement of consent to the shipment to the manifest which shall accompany the hazardous waste shipment. For exports by rail or bulk water shipment, the primary exporter shall provide the transporter with an EPA acknowledgement of consent which shall accompany the hazardous waste, but which need not be attached to the manifest, except that for exports by bulk water shipment, the primary exporter shall attach the copy of the EPA acknowledgement of consent to the shipping paper.

(i) The primary exporter shall provide the transporter with an additional copy of the manifest for delivery to the United States customs official at the point the hazardous waste leaves the United States in accordance with the provisions of 40 C.F.R. §263.20(g)(4).

(3) In place of the requirements of R 299.9308(3), a primary exporter shall file an exception report with the administrator and director if any of the following occurs:

(a) The exporter has not received a copy of the manifest signed by the transporter stating the date and place of departure from the United States within 45 days from the date the manifest was

accepted by the initial transporter.

(b) Within 90 days from the date the waste was accepted by the initial transporter, the primary exporter has not received written confirmation from the consignee that the hazardous waste was received.

(c) The waste is returned to the United States.

(4) The provisions of 40 C.F.R. part 262, subpart E, except 40 C.F.R. §§262.54 and 262.55, are adopted by reference in R 299.11003.

R 299.9310 Hazardous waste imports.

Rule 310. (1) Any person who imports hazardous waste from a foreign country into the United States shall comply with the requirements of this rule.

(2) When importing hazardous waste, a person shall meet all of the requirements of R 299.9304 for the manifest, except as follows:

(a) In place of the generator's name, address, and EPA identification number, the name and address of the foreign generator and the United States importer's name, address, and EPA identification number shall be used.

(b) In place of the generator's signature on the certification statement, the United States importer, or his or her agent, shall sign and date the certification and obtain the signature of the initial transporter.

(3) A person who imports hazardous waste from a foreign country to an ultimate treatment, storage, or disposal facility in Michigan shall use a manifest form approved by the director.

R 299.9311 Land disposal restrictions.

Rule 311. (1) Generators of hazardous waste shall comply with the applicable requirements and restrictions of 40 C.F.R. part 268.

(2) The provisions of 40 C.F.R. part 268 are adopted by reference in R 299.11003. For purposes of this adoption, the word "director" shall replace the words "administrator" and "assistant administrator," except in the provisions of 40 C.F.R. §§268.5, 268.6, 268.40(b), 268.42(b), and 268.44(a) to (g) and (i) to (o).

R 299.9312 Transfrontier shipments of hazardous waste for recovery within the Organization for Economic Cooperation and Development.

Rule 312. (1) Persons who import or export wastes that are considered hazardous under the U.S. national procedures and that are destined for recovery operations in a country listed pursuant to the provisions of 40 C.F.R. §262.58(a)(1) shall comply with the provisions of 40 C.F.R. part 262, subpart H, except §262.80. A waste shall be considered hazardous under the U.S. national procedures if it meets the federal definition of hazardous waste in 40 C.F.R. §261.3 and it is subject to either the manifesting requirements of part 3 of these rules or the universal waste provisions of R 299.9228.

(2) Any person subject to this rule, including a notifier, consignee, or recovery facility operator, who mixes 2 or more hazardous or solid wastes or otherwise subjects 2 or more hazardous or solid wastes to physical or chemical transformation operations, and thereby creates a new hazardous waste, shall comply with the following requirements:

(a) The person shall be considered the generator of the waste and comply with the requirements of part 3 of these rules.

(b) The applicable notifier requirements of 40 C.F.R. part 262, subpart H.

(3) The provisions of 40 C.F.R. part 262, subpart H, except §262.80, are adopted by reference in R 299.11003.

PART 4. TRANSPORTERS OF HAZARDOUS WASTE

R 299.9401 Scope.

Rule 401. (1) This part applies to transporters of hazardous waste if the transportation requires a manifest under part 3 of these rules, and transporters operating under the provisions of R 299.9304(5).

(2) This part does not apply to on-site transportation of hazardous waste either by generators or by owners or operators of licensed hazardous waste treatment, storage, or disposal facilities.

(3) A transporter of hazardous waste shall also comply with part 3 of these rules relating to hazardous wastes, except for R 299.9307(4) and R 299.9308(1) and (2), and the accumulation time limits specified in R 299.9404(1)(b), if either of the following provisions apply to the transporter:

(a) The transporter is the U.S. importer of hazardous waste into the state from abroad.

(b) The transporter commingles, by placing the waste in the same container, compatible hazardous waste of different DOT shipping descriptions where the DOT hazard class or the DOT packing group differs in a manner that alters the components of the waste description on the generator's original manifest.

(4) A person who commingles hazardous waste from lab packs shall comply with the requirements of parts 5, 6, and 7 of these rules if the wastes from the lab packs are mixed.

(5) A transporter shall not transport hazardous waste without having received an EPA identification number from the regional administrator or the regional administrator's designee.

(6) A transporter of federal hazardous waste subject to the manifesting requirements of part 3 of these rules or subject to the universal waste provisions of R 299.9228 that is being imported from or exported to any of the countries listed in 40 C.F.R. §262.58(a)(1) for the purpose of recovery shall comply with the provisions of R 299.9312.

(7) This part does not apply to transportation during an explosives or munitions emergency response which is conducted in accordance with R 299.9503(2).

R 299.9402 EPA identification number.

Rule 402. A transporter shall not transport hazardous wastes without having received an EPA identification number from the administrator.

R 299.9403 Transporter requirements.

Rule 403. (1) A person shall not engage in the transportation of hazardous wastes by highway within, into, or through this state without being registered and permitted in accordance with act 138.

R 299.9404 Transfer facility requirements.

Rule 404. (1) A transporter at a transfer facility shall comply with all of the following requirements:

(a) Manage vehicles and hazardous wastes so that hazardous waste and hazardous waste constituents cannot escape into the soil, directly or indirectly into surface or groundwaters, or uncontrolled into drains or sewers and so that fugitive emissions are controlled by closing, covering, or otherwise sealing containers, as required by 49 C.F.R. §173.24(b), at all times unless the container is being filled or emptied of waste or is being cleaned.

(b) Store hazardous wastes, subject to manifesting requirements, in containers meeting the applicable requirements of 49 C.F.R. parts 107 and 172 to 180 for a period of 10 days or less. Storage for a period of more than 10 days requires compliance with the treatment, storage, and disposal facility requirements of parts 5, 6, and 7 of these rules.

(c) Hazardous wastes shall not be routed to the same transfer facility more than once during the course of transportation, unless either of the following provisions applies:

(i) The load has been rejected by the treatment, storage, and disposal facility and the load is

either being returned to the generator or is being sent to an alternate treatment, storage, and disposal facility.

(ii) A transporter was temporarily unable to deliver the waste for reasons unrelated to the suitability of the treatment, storage, and disposal facility to manage the waste, such as treatment, storage, and disposal facility maintenance or overbooking or delivery of the load after normal business hours, and rerouting was necessary to ensure subsequent delivery at the designated facility.

(2) A transporter who off-loads hazardous wastes during the course of transportation for the purpose of storage off of the vehicle or conveyance of waste in accordance with the provisions of R 299.9503(1)(k) shall comply with all of the following requirements.

(a) The requirements of R 299.9404(1).

(b) For new activity, prior to the activity beginning, provide notification to the department. Within 30 days of changes to information included in the notification a subsequent notification is required. The notification shall include all of the following information:

(i) The transporter name and EPA identification number.

(ii) The transporter mailing address.

(iii) The transporter telephone number.

(iv) The owner of the transfer facility.

(v) The location and telephone number of all of the transfer facilities.

(vi) A description of the transfer activity performed at each transfer facility location.

(c) Obtain financial capability as specified in R 299.9711 for transfer facilities.

(d) The requirements of 49 C.F.R. parts 130 and 172 to 180, and 40 C.F.R. §263.31 concerning the use and management of containers.

(e) Secondary containment shall be sufficiently impervious to prevent any hazardous waste or hazardous waste constituent released into the containment system from migrating out of the system to the soil, groundwater, or surface water.

(f) The requirements of 49 C.F.R. §§172.602, 172.702, 172.704, and 177.848 and 29 C.F.R. part 1910, subpart L, and §§1910.120(q) and 1910.132 to 1910.138 concerning preparedness and prevention, contingency planning and emergency procedures, and training.

(g) Maintain an inventory log that tracks manifested hazardous waste which is managed at the transfer facility by date of receipt, date of shipment off-site, and manifest number. The inventory log, or similar documentation, shall also include the date of the weekly inspection of the areas where containers are stored and the results of the inspection, including, at a minimum, any evidence of container failure, the condition of secondary containment, and remediation correcting any problems noted.

Except as required in subdivision (a) of this subrule, the requirements of this subrule do not apply when, during the course of transportation, there is a continuous physical link between vehicles or vehicles and pipelines for waste being off-loaded or, in the case of bulk-packagings authorized by 49 C.F.R. §173.240, the break in the link between the transport vehicles is no longer than is necessary to accomplish the immediate transfer of the bulk packagings from one vehicle to another vehicle.

(3) Transfer facility operations shall not occur at treatment, storage, and disposal facilities designated to receive the manifested hazardous wastes.

(4) The provisions of 49 C.F.R. parts 107, 130, and 171 to 180, and 29 C.F.R. part 1910, subpart L, and §§1910.120(q) and "1910.132 to 1910.138 are adopted by reference in R 299.11004.

R 299.9405 Consolidation and commingling of hazardous waste.

Rule 405. (1) A transporter consolidating containers of hazardous waste shall ensure that the original manifest for each hazardous waste container in the consolidated shipment accompanies the shipment.

(2) A transporter commingling hazardous wastes of the same DOT shipping description where the DOT hazard class and DOT packing group remain the same shall comply with all of the

following requirements:

(a) The provisions of 49 C.F.R. part 173, as applicable.

(b) Conduct commingling, unless performed at the generator location at the time when the load is first received by the transporter, in a secondarily contained area that is sufficiently impervious to prevent any hazardous waste or hazardous waste constituent released into the containment system from migrating out of the system to the soil, groundwater, or surface water.

(c) Ensure that commingled wastes are destined for a single disposal facility.

(d) Ensure that incompatible wastes are not commingled.

(e) Ensure that commingled wastes do not undergo chemical or thermal change or treatment, and ensure that the resultant waste retains both the physical and chemical characteristics similar to the individual wastes before they were commingled.

(f) Ensure that the generator authorizes the commingling in accordance with R 299.9304(6) and enters the term "com-same" in the special handling instructions and additional information section of the manifest, denoting the commingling activity.

(g) For bulk rail or bulk water shipments, ensure that where the commingling of wastes results in the original shipment being transported to the designated facility by more than 1 vehicle the extra copies of the manifest as provided by the generator in accordance with the provisions of R 299.9304(4)(f) and (g) accompany each of the vehicles and that the transporter prepares a DOT-approved shipping paper and attaches the shipping paper to the top of the manifest or manifests. The shipping paper shall reflect the differences from the original shipment in terms of quantity, count, and DOT-approved packaging.

(h) Ensure that where the commingling of wastes results in changes to the quantity, count, or DOT-approved packaging on the generator manifest or manifests, the transporter prepares a DOT-approved shipping paper and attaches the shipping paper to the top of the manifest or manifests. The shipping paper shall reflect the differences from the original shipment in terms of quantity, count, and DOT-approved packaging.

(i) Ensure that, where a commingled load is rejected by the designated facility, all generators contributing to the commingled load are contacted to designate an alternate facility and that the rejected commingled wastes are not returned to any single generator.

(3) A transporter commingling compatible hazardous wastes of different DOT shipping descriptions where the DOT hazard class or DOT packing group differs in a manner that alters the components of the waste description on the generator's original manifest shall comply with all of the following requirements:

(a) Comply with the requirements of subrule (2)(a) to (e) of this rule.

(b) For new activity, prior to the activity beginning, provide notification to the department. Within 30 days of changes in information included in the original notification a subsequent notification is required. The notification shall include all of the following information:

(i) The transporter name and EPA identification number.

(ii) The transporter mailing address.

(iii) The transporter telephone number.

(iv) The owner of the facility.

(v) If other than the generator site, the location of the facility and the telephone number where commingling activity is performed.

(vi) The description of the commingling activity performed at each facility location.

(c) Prepare a new manifest as a generator in accordance with part 3 of these rules.

(d) On the new manifest, describe the commingled load in the special handling instructions and additional information section of the manifest by entering the term "com-dif" and noting the original generator manifest number or numbers.

(e) Ensure that the transporter-initiated manifest and the generator manifests accompany the shipment to the designated facility. The transporter-initiated manifest shall satisfy DOT shipping paper requirements and be segregated from the generator manifests. All generator and transporter

manifests shall be signed by an authorized representative of the designated facility upon receipt of the waste.

(f) Ensure that the generator enters the term "com-dif" and the new manifest document number from the manifest, prepared as required in subrule (c) of this subrule, in the special handling instructions and additional information section of the manifests.

(g) Comply with part 3 of these rules relating to the wastes, except for R 299.9307(4) and R 299.9308(1) and (2) and the accumulation time limits specified in R 299.9404(1)(b).

(h) Ensure that, where a commingled load is rejected by the designated facility, all other generators contributing to the load are contacted to jointly, with the transporter, designate an alternate facility and that the rejected commingled wastes are not returned to any single generator. The transporter, under this part, shares generator responsibility.

R 299.9406 Transporter vehicle requirements.

Rule 406. (1) A transporter shall carry a copy of the registration and permit, issued in accordance with act 138, and make it available for inspection upon request by the director or the director's designee.

(2) A transporter shall close or cover all vehicles or containers used to transport hazardous waste to prevent the escape of hazardous waste or hazardous waste constituents. A transporter shall keep the outside of all vehicles and accessory equipment free of hazardous waste or hazardous waste constituents.

(3) A transporter shall ensure that all portions of vehicles which have been in contact with hazardous waste shall be cleaned of any hazardous waste or hazardous waste constituents and purged of vapor before the transport of any products, incompatible waste, or non-waste material.

(4) A transporter shall protect hazardous waste in the transporter's possession from exposure to weather, fire, physical damage, and vandals.

R 299.9407 Transporter facility inspections.

Rule 407. (1) The department may inspect all in-state stationary facilities in which the transporter owns or holds an interest and at which routine operations associated with the transport of hazardous wastes are performed. Routine operations may include any of the following:

(a) Vehicle storage.
(b) Vehicle cleaning.
(c) Routine mechanical maintenance.
(d) Transfer operations.
(e) Dispatching.
(f) Recordkeeping.

(2) The department shall determine, at the time of an inspection, all of the following:

(a) Based on a visual inspection, whether there is evidence that hazardous wastes or hazardous waste constituents have escaped to the air, soil, surface water, groundwater, drains, or sewers.

(b) If vehicles are cleaned on-site, whether proper procedures exist for wash water disposal.

(c) Whether facilities are constructed or situated so as to minimize the possibility of the release or escape of hazardous waste or hazardous waste constituents to the soil, surface water, or groundwater.

(d) Whether the transporter is in compliance with other requirements of this part.

R 299.9408 Transporter vehicle inspections.

Rule 408. (1) The department may inspect a vehicle to determine compliance with this part of these rules.

R 299.9409 Transporter manifest and recordkeeping requirements.

Rule 409. (1) Hazardous waste transporters transporting hazardous wastes manifested to a facility in Michigan, or generated in Michigan, shall transport using a manifest form approved by the department unless the hazardous waste is generated in Michigan, but manifested to a facility in another state and that state requires use of its own manifest. Hazardous waste transporters transporting hazardous waste neither generated in the state, nor manifested to a facility in the state, shall transport using a manifest form equivalent to EPA form 8700-22. A hazardous waste transporter who removes a hazardous waste from the site of a generator or who transports hazardous wastes into the state shall comply with the provisions of 40 C.F.R. part 263, subpart B, regarding the manifest system, compliance with the manifest, and recordkeeping.

(2) If the hazardous waste cannot be delivered in accordance with the manifest and the provisions of 40 C.F.R. §263.21(a), and if the transporter revises the manifest in accordance with the provisions of 40 C.F.R. §263.21(b), the transporter shall legibly print in the comments section of the manifest the name and phone number of the person representing the generator from whom instructions have been obtained.

(3) A transporter whose manifested shipment results in a significant manifest discrepancy, as specified in R 299.9608, and a total or partial rejected shipment shall do all of the following:

(a) Indicate on the original manifest acknowledgement of receipt by signing and dating the manifest before leaving the designated facility.

(b) For a total rejected shipment which is returned to the generator, a transporter shall do both of the following:

(i) Obtain acknowledgement of receipt by having the generator sign and date the original manifest.

(ii) Retain the transporter copy of the original manifest.

(c) For a total rejected shipment to be sent to an alternate facility, obtain permission from the generator to alter the original manifest to designate the alternate facility and document as specified in subrule (2) of this rule.

(d) For a partial rejected shipment which is returned to the generator, a transport shall do both of the following:

(i) Obtain acknowledgement of receipt by having the generator sign and date the original manifest.

(ii) Retain the transporter copy of the original manifest.

(e) Before accepting for transportation the rejected portion of the original shipment, confirm that the generator has prepared a new manifest in accordance with part 3 of these rules.

(4) A transporter shall retain all records, logs, or documents required pursuant to this part for a period of 3 years. The retention period shall be extended during the course of any unresolved enforcement action regarding the regulated activity or as otherwise required by the department.

(5) The provisions of 40 C.F.R. part 263, subpart B, are adopted by reference in R 299.11003.

R 299.9410 Hazardous waste discharges.

Rule 410. (1) If a fire, explosion, or other discharge of hazardous waste or hazardous waste constituents occurs during transportation that could threaten human health or the environment, or if a transporter has knowledge that a spill has reached surface water or groundwater, then the transporter shall take appropriate immediate action to protect human health and the environment, including notification of local authorities and the department's pollution emergency alerting system - telephone number 800-292-4706. Each notification shall include all of the following information:

(a) Name of the reporter.

(b) Name and address of carrier represented by the reporter.

(c) Telephone number where the reporter can be contacted.

(d) Date, time, and location of the incident.

(e) The extent of injuries, if known.

(f) Classification, name, and quantity of the hazardous waste involved and if a continuing danger to life exists at the scene of the fire explosion, or other discharge.

(2) If a discharge of hazardous waste or hazardous waste constituents occurs during transportation and if a state, local government, or federal official acting within the scope of his or her official responsibilities determines that immediate removal of the waste is necessary to protect human health or the environment, then the official may authorize the removal of the waste, without the preparation of a manifest, by transporters who do not have EPA identification numbers and a registration and permit under act 138.

(3) A transporter who has discharged hazardous waste or hazardous waste constituents shall comply with all of the following requirements:

(a) Give notice, if required pursuant to the provisions of 49 C.F.R. §171.15, to the national response center at 800-424-8802 or 202-426-2675.

(b) Report, in writing, as required by the provisions of 49 C.F.R. §171.16, to the Director, Office of Hazardous Materials Regulations, Materials Transportation Bureau, Department of Transportation, Washington, DC 20590.

(c) Provide notice, if the discharge was from a bulk shipment transported by water, as required by the provisions of 33 C.F.R. §153.203 for oil and hazardous substances.

(d) Ensure cleanup of any hazardous waste or hazardous waste constituent discharge or take such action as may be required or approved by federal, state, or local officials so that the hazardous waste or hazardous waste constituent discharge no longer presents a hazard to human health or the environment.

(4) The provisions of 33 C.F.R. §153.203 and 49 C.F.R. §§171.15 and 171.16 are adopted by reference in R 299.11004

R 299.9411 Rescinded.

R 299.9412 Rescinded.

R 299.9413 Land disposal restrictions.

Rule 413. (1) Transporters of hazardous waste shall comply with the applicable requirements and restrictions of 40 C.F.R. part 268.

(2) The provisions of 40 C.F.R. part 268 are adopted by reference in R 299.11003. For purposes of this adoption, the word "director" shall replace the words "administrator" and "asssistant administrator," except in the provisions of 40 C.F.R. §§268.5, 268.6, 268.40(b), 268.42(b), and 268.44(a) to (g) and (i) to (o).

PART 5. CONSTRUCTION PERMITS AND OPERATING LICENSES

R 299.9501 Construction permits; applicability.

Rule 501. (1) Except as otherwise specified in R 299.9503, R 299.9524, and subrules (2), (3), and (4) of this rule, issuance of a construction permit by the director shall occur before any of the following begins:

(a) The physical construction of a new treatment, storage, or disposal facility.

(b) The expansion or enlargement beyond the previously authorized design capacity or area of a treatment, storage, or disposal facility.

(c) The alteration of the method of treatment or disposal previously authorized at a treatment or disposal facility to a different method of treatment or disposal. A change in only the types and quantity of waste treated, stored, or disposed of, without an expansion, enlargement, or alteration of the facility, shall not require a construction permit. Such a change may require modification of the operating license as set forth in this part or, for facilities operating without a license in accordance with the provisions of R 299.9502(3), (4), or (5), submittal by the owner or operator of a revised part A application before such a change.

(2) Each method of treatment or disposal requires a separate construction permit. Either or both of the following may be authorized under a construction permit for treatment or disposal:

(a) Storage associated with such treatment or disposal.

(b) Wastewater treatment facilities treating wastewater generated from the treatment or disposal of a hazardous waste.

(3) If the director finds an imminent and substantial endangerment to human health or the environment, the director may issue a temporary emergency operating license to a nonlicensed facility to allow treatment, storage, or disposal of hazardous waste or to a licensed facility to allow treatment, storage, or disposal of a hazardous waste not covered by an effective operating license. These activities shall not be subject to the construction permit requirements of part 111 of the act and these rules. An emergency operating license may be oral or written. If oral, it shall be followed in 5 days by a written emergency operating license. The emergency operating license may be terminated by the director at any time if he or she determines that termination is appropriate to protect human health and the environment. An emergency operating license shall comply with all of the following requirements:

(a) It shall not exceed 90 days in duration.

(b) It shall clearly specify the hazardous wastes to be received and the manner and location of their treatment, storage, or disposal.

(c) It shall be accompanied by a public notice published in accordance with R 299.9513, which includes all of the following information:

(i) Name and address of the office granting the emergency authorization.

(ii) Name and location of the licensed facility.

(iii) A brief description of the wastes involved.

(iv) A brief description of the action authorized and the reasons for authorizing it.

(v) Duration of the emergency operating license.

(d) It shall incorporate, to the extent possible and not inconsistent with the emergency situation, all applicable requirements of this part and part 6. An emergency operating license shall not be subject to the licensee fees specified by R 299.9510. The licensee shall pay for the cost of all public notices required by these rules for the emergency operating license.

(4) The director may issue a temporary operating license to any person who proposes to utilize, for research purposes, an innovative and experimental hazardous waste treatment technology or process for which standards have not been promulgated under these rules. Such licensed activities shall be exempt from the construction permit requirements of part 111 of the act and these rules, and, for the purpose of expediting the review and issuance of operating licenses under this subrule, the director may, consistent with the protection of human health and the environment, modify or waive the license application requirements of R 299.9508, except that the director shall not waive

rules regarding financial responsibility, including insurance, or waive the public participation process specified in R 299.9511. A temporary operating license issued by the director under this subrule shall be in compliance with all of the following provisions:

(a) Provide for the construction of facilities, as necessary, and for the operation of the facilities for not more than 1 year, unless renewed, except that any operating license issued under this subrule shall not be renewed more than 3 times and each renewal shall be for a period of not more than 1 year.

(b) Provide for the receipt and treatment by the facility of only those types and quantities of hazardous waste which the director determines necessary for purposes of determining the efficacy and performance capabilities of the technology or process and the effects of such technology or process on human health and the environment.

(c) Require compliance with the requirements of part 6 of these rules for any hazardous waste storage, and include such other requirements as the director deems necessary to protect human health and the environment, such as requirements regarding any of the following:

(i) Monitoring.

(ii) Operation.

(iii) Insurance or bonding.

(iv) Financial responsibility.

(v) Closure.

(vi) Remedial action.

(d) Include such requirements as the director deems necessary regarding testing and the providing of information to the director with respect to the operation of the facility.

(5) A temporary operating license issued under subrule (3) or (4) of this rule may be terminated by the director at any time if he or she determines that termination is necessary to protect human health or the environment.

R 299.9502 Operating licenses; applicability and general application requirements.

Rule 502. (1) Part 111 of the act requires an operating license for the treatment, storage, and disposal of any hazardous waste, except for those facilities identified in subrules (3), (4), and (5) of this rule and except for trial burns or operations as provided in R 299.9628, as identified or listed in parts 2 and 8 of these rules. Requirements for remedial action plans, special forms of operating licenses, are specified in R 299.9524. The terms "treatment," "storage," "disposal," and "hazardous waste" are defined in part 1 of these rules. Owners or operators of hazardous waste management units shall have an operating license during the active life of the unit, including the closure period. Owners or operators of surface impoundments, landfills, land treatment units, and waste pile units that received wastes after July 26, 1982, or that certified closure after January 26, 1983, shall have an operating license for the postclosure period, unless they demonstrate closure by removal pursuant to subrules (8) and (9) of this rule or they obtain an enforceable document in place of an operating license for the postclosure period, as provided for in subrule (12) of this rule. If an operating license for the postclosure period is required, then the license shall incorporate the applicable groundwater monitoring, corrective action, and postclosure care requirements of part 6 of these rules. The denial of an operating license for the continued operation of a hazardous waste management facility or unit does not affect the requirement of obtaining a postclosure operating license. Owners or operators of certain facilities require operating licenses that are issued pursuant to the provisions of part 111 of the act and, in addition, permits that are issued pursuant to other programs for certain aspects of the facility operation. Operating licenses that are issued pursuant to the provisions of part 111 of the act are required for all of the following:

(a) Injection wells that dispose of hazardous waste, except as provided by R 299.9503(3)(a).

(b) The treatment, storage, or disposal of hazardous waste at facilities that require a permit pursuant to the provisions of part 31 of the act, except as provided by R 299.9503(3)(b).

(c) Barges or vessels that dispose of hazardous waste by ocean disposal and onshore

hazardous waste treatment or storage facilities that are associated with an ocean disposal operation.

(2) An owner or operator of a facility that is licensed pursuant to the provisions of part 111 of the act on the effective date of these rules may continue to operate under the existing license if all of the following conditions are met:

(a) The facility is being operated in compliance with its existing operating license, the applicable statutory and regulatory requirements promulgated under part 111 of the act after license issuance, as required pursuant to the provisions of R 299.9516, and all other applicable environmental statutes.

(b) The facility is either of the following:

(i) A facility which qualifies for interim status pursuant to the provisions of 40 C.F.R. §270.70 and which is in compliance with all of the following provisions:

(A) Has filed a part A application in accordance with the provisions of 40 C.F.R. §270.10(e).

(B) Has amended the part A application, as necessary, in accordance with the provisions of 40 C.F.R. §270.10(g).

(C) Has not had interim status terminated pursuant to the provisions of 40 C.F.R. §270.73.

(D) Has complied with the applicable provisions of 40 C.F.R. part 265 and §270.71 and the applicable provisions of parts 6 and 8 of these rules.

(E) Has not made changes to the hazardous waste management facility during interim status that amount to reconstruction of the facility. Reconstruction occurs when the capital investment in the changes to the facility is more than 50% of the capital cost of a comparable entirely new hazardous waste management facility. Changes pursuant to this subparagraph do not include changes made solely for the purpose of complying with the requirements of R 299.9615 for tanks and ancillary equipment. Changes pursuant to this subparagraph do not include changes made solely for the purposes of managing wastes generated from releases that originate within the facility boundary, in accordance with the provisions of R 299.9503(4)(c).

(ii) A facility which is permitted pursuant to the provisions of 40 C.F.R. part 270 and which is in compliance with the permit or license issued.

(c) The owner or operator submits an application for a new license to the director not less than 180 days before license expiration.

(d) The owner or operator complies with all applicable requirements of parts 6, 7, and 8 of these rules.

(3) An owner or operator of a storage facility which is in existence on March 30, 1983, and which is subject to the licensing requirements of part 111 of the act solely due to the 1982 amendments to the part 111 of the act may continue to operate until such time as the director acts upon the facility's application for an operating license, if all of the following conditions are met:

(a) The facility is in compliance with the provisions of subrule (2)(b) of this rule.

(b) The owner or operator submits a complete operating license application within 180 days after being requested to do so by the director.

(c) The owner or operator complies with the applicable requirements of parts 6, 7, and 8 of these rules and all applicable environmental statutes.

(4) The owner or operator of a treatment, storage, or disposal facility that is in existence on the effective date of amendments to part 111 of the act or these rules that render the facility subject to the licensing requirements of part 111 of the act may continue to operate until such time as the director acts upon the owner or operator's application for an operating license, if the conditions of subrule (3)(a), (b), and (c) of this rule are met.

(5) An owner or operator of a facility which is in existence on January 1, 1980, and which is subject to the licensing requirements of part 111 of the act, but which has not yet obtained an operating license pursuant to the provisions of part 111 of the act, may continue to operate until such time as the director acts upon the facility's application for an operating license if the owner or operator meets the conditions of subrule (3)(a), (b), and (c) of this rule.

(6) Allowing continued operation pursuant to the provisions of subrules (2) to (5) of this rule

does not do any of the following:

(a) Reduce the owner or operator's responsibility to dispose of all hazardous waste in a manner that protects the environment and human health.

(b) Eliminate or reduce past, present, or future liability incurred during the operation.

(c) Restrict the ability of state or local governmental agencies to take action to enforce existing laws, statutes, rules, or regulations.

(7) A person who proposes to initiate the operation of any treatment, storage, or disposal facility shall submit, to the director, on forms provided by the director or his or her designee, an operating license application that sets forth the information required by R 299.9508.

(8) Owners or operators of surface impoundments, land treatment units, and waste piles closing by removal or decontamination pursuant to the provisions of 40 C.F.R. part 265 standards shall obtain an operating license for the postclosure period, unless the owners or operators can provide an equivalency demonstration to the director that the closure met the standards for closure by removal or decontamination specified in the provisions of 40 C.F.R. §§264.228, 264.280(e), or 264.258, respectively. The demonstration shall be made as follows:

(a) If the owner or operator has submitted an operating license application for the postclosure period, the owner or operator may request a determination, based on information contained in the application, that 40 C.F.R. part 264 closure-by-removal standards were met. If the director determines that 40 C.F.R. part 264 standards were met, then he or she shall notify the public of his or her proposed decision, allow for public comment, and reach a final determination according to the procedures in subrule (9) of this rule.

(b) If the owner or operator has not submitted an operating license for the postclosure period, then the owner or operator may petition the director for a determination that an operating license for the postclosure period is not required because the closure was in compliance with the applicable 40 C.F.R. part 264 closure standards. The petition shall include all data which demonstrates that closure by removal or decontamination standards were met or the petition shall demonstrate that the unit closed pursuant to state requirements that met or exceeded the applicable 40 C.F.R. part 264 closure by removal standard. The director shall approve or deny the petition according to the procedures outlined in subrule (9) of this rule.

(9) If a facility owner or operator seeks an equivalency demonstration pursuant to the provisions of subrule (8) of this rule, the director shall do all of the following:

(a) Provide the public, through a newspaper notice, the opportunity to submit written comments on the information submitted by the owner or operator within 30 days from the date of the notice.

(b) In response to a request, hold a public hearing concerning the equivalence of the 40 C.F.R. part 265 closure to a 40 C.F.R. part 264 closure and give public notice of the hearing not less than 30 days before it occurs.

(c) Determine whether the 40 C.F.R. part 265 closure met the 40 C.F.R. part 264 closure by removal or decontamination requirements within 90 days of receipt of the petition.

(d) If the director finds that the closure did not meet the applicable standards of 40 C.F.R. part 264, then provide the owner or operator with a written statement of the reasons why the closure failed to meet 40 C.F.R. part 264 standards.

(10) If the director determines, pursuant to the provisions of subrule (9) of this rule, that a closure was not in compliance with the applicable 40 C.F.R. part 264 standards, then the owner or operator may submit additional information in support of an equivalency demonstration within 30 days after receiving a written statement from the director. The director shall review any additional information submitted and make a final determination within 60 days. If the director determines that the facility did not close in accordance with 40 C.F.R. part 264 closure by removal standards, then the facility is subject to operating license requirements for the postclosure period.

(11) Owners or operators of waste military munitions treatment and disposal facilities are authorized to continue to accept waste munitions if all of the following conditions are met:

(a) The facility was in existence as a hazardous waste facility and already licensed to handle waste military munitions, on the effective date on which the waste munitions became subject to regulation under these rules.

(b) On or before the effective date on which the waste military munitions became subject to regulation under these rules, the licensee submits an operating license modification to remove or amend the license provisions which restrict the receipt of off-site waste munitions.

(c) The licensee submits a complete modification request within 180 days of the effective date on which the waste munitions became subject to regulations under these rules.

(12) At the discretion of the director, an owner or operator may obtain, in place of an operating license for the postclosure period, an enforceable document which imposes the requirements of 40 C.F.R. §265.121.

(13) The provisions of 40 C.F.R. §§264.96, 264.117, 265.111, 265.114, 265.121, 270.10(e) and (g), 270.70, 270.71, and 270.73 and part 265, except subparts E, H, and DD and 40 C.F.R. §§265.112(d)(1), 265.115, and 265.120, are adopted by reference in R 299.11003, with the exception that the word "director" shall replace the term "regional administrator."

R 299.9503 Construction permits and operating licenses; exemptions.

Rule 503. (1) The following persons do not require a construction permit or operating license pursuant to the provisions of part 111 of the act:

(a) Persons who own or operate a facility that treats, stores, or disposes of hazardous waste in compliance with the provisions of parts 31, 55, and 115 of the act, if the only hazardous wastes the facility treats, stores, or disposes of are conditionally exempt small quantities that are exempted from regulation pursuant to the provisions of R 299.9205.

(b) Generators who accumulate hazardous waste on site for less than the time periods provided in R 299.9306.

(c) Farmers who dispose of waste pesticides from their own use in compliance with the provisions of R 299.9204(3)(b).

(d) Owners or operators of totally enclosed treatment facilities.

(e) Owners or operators of elementary neutralization units.

(f) Owners or operators of wastewater treatment units, if the following conditions, as applicable, are complied with:

(i) The units are subject to regulation pursuant to the provisions of section 402 or 307(b) of the federal clean water act.

(ii) The units are located on the site of a generator and do not treat hazardous waste from any other generator unless the waste is shipped entirely by pipeline or the off-site generator has the same owner as the facility at which the unit is located.

(iii) If an owner or operator is diluting D001 waste, other than D001 high TOC subcategory waste as defined in 40 C.F.R. §268.40, or D003 waste, to remove the hazardous characteristic before land disposal, the owner or operator complies with the requirements of 40 C.F.R. §§264.17(b) and 265.17(b), as applicable.

(g) Transporters storing manifested shipments of hazardous waste in containers at a transfer facility for a period of 10 days or less, if the transfer facility requirements of R 299.9404 are met.

(h) Persons adding absorbent material to hazardous waste in a container, and persons adding hazardous waste to absorbent material in a container, if all of the following conditions are met:

(i) The actions occur at the site of generation at the time hazardous waste is first placed in the container.

(ii) Liquids are not absorbed in materials that biodegrade or that release liquids when compressed.

(iii) The provisions of 40 C.F.R. §§264.17(b), 264.171, and 264.172 are complied with.

(i) Generators who have on-site treatment facilities if a generator complies with all of the following requirements:

(i) All treatment is conducted in either containers or tanks.

(ii) If the treatment occurs in containers, then all of the following requirements are complied with:

(A) The requirements of 40 C.F.R. part 265, subpart I, except 40 C.F.R. §265.173.

(B) The containers holding hazardous waste are always closed, except when it is necessary to add, remove, or treat the waste.

(C) The containers holding hazardous waste are not opened or handled in a manner that may rupture the containers or cause them to leak.

(D) The containment requirements of 40 C.F.R. §264.175.

(E) The generator documents the inspections required pursuant to the provisions of 40 C.F.R. §265.174.

(iii) If the treatment occurs in tanks, the requirements of 40 C.F.R. part 265, subpart J, except for the provisions of 40 C.F.R. §§265.197(c) and 265.200.

(iv) The requirements of 40 C.F.R. part 265, subpart C.

(v) The area where the waste is treated is protected, as appropriate for the type of waste being treated, from weather, fire, physical damage, and vandals.

(vi) Hazardous waste treatment is conducted so that hazardous waste or hazardous waste constituents cannot escape by gravity into the soil, directly or indirectly, into surface or groundwaters, or into drains or sewers and so that fugitive emissions are not in violation of part 55 of the act.

(vii) The closure standards of 40 C.F.R. §§265.111 and 265.114.

(viii) All treatment is completed within 90 days from the date that accumulation of the waste began if the generator is a large quantity generator or within 180 days from the date that the accumulation of the waste began if the generator is a small quantity generator.

(ix) Documentation is maintained on-site which specifies the date that accumulation of the waste began, the date that treatment of the waste began, and the date that treatment of the waste was completed.

(x) The requirements of R 299.9602, R 299.9603(1) and (4), R 299.9604, R 299.9627, and R 299.9633.

(j) Universal waste handlers and universal waste transporters when handling the wastes identified in R 299.9228(1). Universal waste handlers and universal waste transporters are subject to the provisions of R 299.9228 when handling the universal wastes identified in R 299.9228(1).

(k) Owners or operators who use a pipeline for the sole purpose of transferring wastes to and from treatment or storage tanks at the facility and bulk railcars at an off-site transfer facility, if all of the following requirements are met:

(i) The pipeline is owned and operated by the owner or operator.

(ii) The pipeline meets the requirements for ancillary equipment pursuant to the provisions of 40 C.F.R. part 264, subpart J.

(iii) Wastes are not stored in the pipeline.

(iv) The owner or operator establishes as part of their waste analysis plan procedures for receipt of the wastes by the facility to and from the transport vehicle.

(v) The owner or operator uses the pipeline solely as a method of transferring wastes and not as an extension of the facility boundary beyond the area specified in their current operating license, construction permit, or authorization.

(l) Owners or operators of facilities which store military munitions that have been classified as a waste in accordance with part 2 of these rules unless otherwise specified in R 299.9817.

(2) A person who is engaged in treatment or containment activities during immediate response to a discharge of a hazardous waste, an imminent and substantial threat of a discharge of hazardous waste, a discharge of a material which, when discharged, becomes a hazardous waste, or an immediate threat to human health, public safety, property, or the environment, from the known or suspected presence of military munitions, other explosive material, or an explosive device, as determined by an explosive or munitions emergency response specialist shall not be subject to the

construction permit and operating license requirements of part 111 of the act and these rules. Any person who continues or initiates hazardous waste treatment or containment activities after the immediate response is over is subject to all applicable requirements of this part and part 6 of these rules, except as provided in subrule (4) of this rule. In the case of an explosives or munitions emergency response, if a federal, state, tribal or local official acting within the scope of his or her official responsibilities, or an explosives or munitions emergency response specialist, determines that immediate removal of the material or waste is necessary to protect human health or the environment, that official or specialist may authorize the removal of the material or waste by transporters who do not have EPA identification numbers. In the case of emergencies involving military munitions, the responding military emergency response specialist's organizational unit shall retain records for 3 years identifying the dates of the response, the responsible persons responding, the type and description of material addressed, and its disposition.

(3) The following shall be deemed to have an operating license and shall not be subject to the construction permit requirements of part 111 of the act and these rules, if the listed conditions are met:

(a) The owner or operator of an injection well disposing of hazardous waste, if the owner or operator meets all of the following requirements:

(i) Has a permit for underground injection that is issued pursuant to the provisions of 40 C.F.R. parts 124, 144, 145, 146, and 147, subpart X.

(ii) Complies with the conditions of the permit and the requirements of the provisions of 40 C.F.R. §144.14.

(iii) Has a permit for underground injection that is issued pursuant to the provisions of 40 C.F.R. parts 124, 144, 145, 146, and 147, subpart X, and that is issued after November 8, 1984, and complies with both of the following:

(A) The provisions of R 299.9629, Corrective action.

(B) Where the underground injection well is the only unit at a facility that requires a permit, complies with the provisions of 40 C.F.R. §270.14(d).

(b) The owner or operator of a publicly owned treatment works that accepts hazardous waste for treatment if the waste is in compliance with all federal, state, and local pretreatment requirements that would be applicable to the waste if it were being discharged into the publicly owned treatment works (POTW) through a sewer, pipe, or similar conveyance, if the owner or operator has a national pollutant discharge elimination system (NPDES) permit and the owner or operator complies with the conditions of the permit, and if the owner or operator complies with all of the following requirements:

(i) The provisions of 40 C.F.R. §264.11, identification number.

(ii) The provisions of R 299.9608, Use of manifest system.

(iii) The provisions of R 299.9609, Operating record; availability, retention and disposition of records.

(iv) The provisions of R 299.9610, Reporting.

(v) For NPDES permits issued after November 8, 1984, the provisions of R 299.9629, Corrective action.

(4) The director shall exempt persons who conduct the following activities from the construction permit and operating license requirements of part 111 of the act and these rules, but only if the exemption does not constitute a less stringent permitting requirement than is required pursuant to the provisions of RCRA:

(a) The treatment of hazardous waste during the closure of a treatment, storage, or disposal unit, if both of the following conditions apply:

(i) The treatment occurs at the site of generation.

(ii) The treatment is authorized in a closure plan approved by the director or his or her designee.

(b) Closure of an existing surface impoundment for hazardous waste that is closed as a landfill pursuant to the provisions of R 299.9616(3), if the closure is authorized in a closure plan

approved by the director or his or her designee and an operating license is obtained for the postclosure period.

(c) The treatment, storage, or disposal of hazardous waste at the individual site of generation if conducted solely in response to, or as corrective action under, and in full compliance with, a plan developed or approved by the director, or his or her designee, pursuant to the provisions of part 31, 111, 201, or 213 of the act, or an administrative or judicial consent order to which the director is a party and if the treatment, storage, or disposal is conducted in accordance with the technical standards of part 6 of these rules.

(d) Treatment, storage, or disposal of hazardous waste at the individual site of generation, if conducted solely in response to, or as a corrective action under, and in full compliance with CERCLA.

(5) The provisions of 40 C.F.R. parts 124, 144, 145, 146, 147, and 265, subparts I and J, except §§265.197(c) and 265.200, and §§264.11, 264.17(b), 264.171, 264.172, 264.175, 265.111, 265.114, and 268.7(a)(4) are adopted by reference in R 299.11003.

R 299.9504 Construction permit application; content.

Rule 504. (1) In addition to the information that may be required by subrule (18) of this rule, all applications for a construction permit shall include all of the following items:

(a) A construction permit application fee or deposit as calculated pursuant to R 299.9507.

(b) General information that is required by 40 C.F.R. §270.13.

(c) General information that is required by 40 C.F.R. §270.14(b) and (d).

(d) A hydrogeological report that contains the information required by the provisions of R 299.9506.

(e) An environmental assessment, including a failure mode assessment that provides an analysis of the potential major methods by which safe handling of hazardous wastes may fail at a treatment, storage, or disposal facility. The owner or operator of a facility that stores, treats, or disposes of hazardous waste in a surface impoundment or a landfill shall include, in the environmental assessment, information that is reasonably ascertainable by the owner or operator on the potential for the public to be exposed to hazardous wastes or hazardous constituents through releases related to the unit. At a minimum, the information shall address all of the following subjects:

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

(ii) The potential pathways of human exposure to hazardous waste or constituents resulting from the releases described in paragraph (i) of this subdivision.

(iii) The potential magnitude and nature of the human exposure resulting from the releases described in paragraph (i) of this subdivision.

(f) An environmental monitoring program that is in compliance with the requirements of R 299.9611.

(g) Engineering plans of all process equipment and containment structures at the facility. The plans shall be prepared and sealed by a registered professional engineer and shall include all of the following information:

(i) Plan views, elevations, sections, and supplementary views that, together with general layout drawings, provide working information for the review of the facility.

(ii) Specifications on all construction materials and installation methods.

(iii) The basis of design for all process equipment and containment structures.

(iv) A flow diagram of the entire treatment, storage, or disposal process.

(v) The design capacity of each process.

(2) Applicants proposing to store containers of hazardous waste shall submit the information required by the provisions of 40 C.F.R. §270.15(a) to (e) in a construction permit application.

(3) Applicants proposing to store or treat hazardous waste in tanks shall submit the information required by the provisions of 40 C.F.R. §270.16(a) to (k) in a construction permit application.

(4) Applicants proposing to incinerate or thermally treat hazardous waste shall submit either of the following in a construction permit application unless the owner or operator demonstrates compliance with the air emission standards and limitations in 40 C.F.R. part 63, subpart EEE by conducting a comprehensive performance test and submitting to the director a notification of compliance under 40 C.F.R.§§63.1207(j) and 63.1210(d) in which case the director may apply the provisions of this subrule, on a case-by-case basis, for the purposes of collecting information in accordance with subrule (18) of this rule and R 299.9521(3)(b):

(a) A trial burn plan containing the information listed in the provisions of 40 C.F.R. §270.62(b)(2) and a statement that suggests the conditions necessary to operate in compliance with the performance standards of 40 C.F.R. §264.343 during the trial burn. The statement shall include, at a minimum, restrictions on waste constituents, waste feed rates, and the operating parameters identified in the provisions of 40 C.F.R. §264.345.

(b) In place of a trial burn plan, the information specified in the provisions of 40 C.F.R. §270.19(c). The director shall approve an application without a trial burn plan if he or she determines both of the following:

(i) The wastes are sufficiently similar.

(ii) The incinerator units are sufficiently similar and the data from other trial burns are adequate to specify operating conditions that will ensure that the performance standards of R 299.9623 will be met by the incinerator.

(5) Applicants proposing to treat hazardous waste shall submit all of the following information in a construction permit application:

(a) A demonstration of how the method and process proposed for the treatment of each hazardous waste will do any of the following:

(i) Change the physical, chemical, or biological character or composition of the waste.

(ii) Neutralize the waste.

(iii) Recover energy or material resources from the waste.

(iv) Render the waste nonhazardous, safer for handling or transport, amenable to recovery, amenable to storage, or reduced in volume.

(v) Chemically bind or render the toxic constituents nonhazardous rather than only diluted.

(b) The proper treatment technique, the proper feed rates of treatment chemicals or reagents, and the proper operating conditions, such as temperature, pressure, and flow rate, for the types of hazardous wastes proposed for treatment, and the accuracy of the devices intended to measure these parameters.

(c) Whether the hazardous waste or treatment chemicals or reagents will have any detrimental effect on the materials used for construction, such as causing corrosion, dissolution, saltings, or sealings. If detrimental effects are possible, then the method of controlling them shall be specified.

(d) Whether the hazardous waste contains any constituents or contaminants that might interfere with the intended treatment process or decrease the effectiveness of the treatment and, if so, how the interferences will be controlled.

(e) Whether the hazardous waste contains constituents or contaminants that might cause the release of toxic gases or fumes during the intended treatment and, if so, how they will be controlled.

(f) Whether the hazardous waste contains constituents or contaminants that might form toxic constituents with the treatment chemicals or reagents during the intended treatment and, if so, how they will be controlled.

(g) Trial tests, including bench scale, pilot plant scale, or other appropriate tests, on each hazardous waste that is new or significantly different from hazardous waste previously treated to verify the information required in subdivision (b) of this subrule.

(6) Applicants proposing to treat or store hazardous wastes in surface impoundments shall submit the following information in a construction permit application:

(a) The information required for surface impoundments in the provisions of

40 C.F.R. §270.17(a) to (j).

(b) Information on the proposed liner, leachate collection, and leak detection, collection, and removal systems, as specified in R 299.9505.

(7) Applicants proposing to treat or store hazardous waste in waste piles shall submit the following information in a construction permit application:

(a) The information required for waste piles in the provisions of 40 C.F.R. §270.18.

(b) For new waste piles, information on the proposed liner, leachate collection, and leak detection, collection, and removal systems, as specified in R 299.9505.

(8) Applicants proposing to landfill hazardous waste shall submit all of the following information in a construction permit application:

(a) The information required for landfills in the provisions of 40 C.F.R. §270.21.

(b) Information on the proposed liner, leachate collection, and leak detection, collection, and removal systems, as specified in R 299.9505.

(c) Detailed engineering plans and an engineering report describing the final cover that will be applied to the landfill or each landfill cell in accordance with the provisions of R299.9619.

(9) Applicants proposing to dispose of hazardous wastes by land treatment shall submit the information required by the provisions of 40 C.F.R. §270.20 in a construction permit application.

(10) Applicants proposing facilities that treat, store, or dispose of hazardous waste in miscellaneous units shall submit the information required by the provisions of 40 C.F.R. §270.23 in a construction permit application.

(11) Applicants proposing facilities that store or dispose of hazardous waste in an underground mine or cave shall submit all of the following information in a construction permit application:

(a) A geologic report that contains the following information:

(i) For the receiving formation and other formations that are within 30 feet above and below the receiving formation, an applicant shall provide all of the following information:

(A) The depth from the surface.

(B) Thickness.

(C) Permeability.

(D) Solubility.

(E) Reactivity.

(F) Compatibility.

(G) Composition.

This information shall be obtained by performing not less than 5 borings for the first 5 acres of the entire mine or cave and 3 borings for each additional 5 acres. Each boring site shall consist of a ceiling boring and a floor boring.

(ii) For the formations that are overlying the receiving formation for a lateral extent of not less than 5 miles from the facility boundary, an applicant shall provide all of the following information:

(A) The depth from the surface.

(B) Thickness.

(C) Composition.

(D) The identification of water, oil, or gas-bearing formations.

This information shall be obtained from existing geological information and reports.

(b) An assessment of the potential for water intrusion into the mine or cave. This assessment shall be used in the evaluation pursuant to the provisions of R 299.9628(3)(a).

(c) Information on the means of transporting waste from any surface operation to the final disposal or storage area in the receiving formation and information on the means of preventing the release of hazardous constituents during transportation.

(d) An assessment of the structural stability of the mine or cave.

(e) Information on the proposed means of controlling the use, access, and penetration of the mine or cave.

(f) A demonstration that a sufficient buffer zone or other control exists to ensure that off-site activities will not adversely impact the integrity of the mine or cave.

(g) A proposed means of correlating waste placement locations to surface locations and a waste placement map.

(h) A proposed means of managing water in the mine or cave so as to maintain the integrity of the mine or cave and protect human health and the environment throughout the facility's active life and after closure of the facility.

(12) Applicants proposing hazardous waste treatment, storage, or disposal facilities that have process vents to which the provisions of R 299.9630 apply shall submit the information required by the provisions of 40 C.F.R. §270.24 in a construction permit application.

(13) Applicants proposing hazardous waste treatment, storage, or disposal facilities that have equipment to which the provisions of R 299.9631 apply shall submit the information required by the provisions of 40 C.F.R. §270.25 in a construction permit application.

(14) Applicants proposing treatment, storage, or disposal facilities that collect, store, or treat hazardous waste on drip pads shall submit the information required by the provisions of 40 C.F.R. §270.26 in a construction permit application.

(15) Applicants proposing to burn hazardous waste in a boiler or industrial furnace shall submit the information required by the provisions of 40 C.F.R. §270.22.

(16) Applicants proposing hazardous waste treatment, storage, or disposal facilities that have tanks, surface impoundments, or containers to which the provisions of R 299.9634 apply shall submit the information required by the provisions of 40 C.F.R. §270.27 in a construction permit application.

(17) Construction permit applications shall be signed and certified in accordance with the provisions of 40 C.F.R. §270.11. In addition, the application shall be signed by the titleholder of the land upon which the facility is proposed to be located.

(18) The director may require a licensee or applicant to submit additional information to establish license conditions pursuant to the provisions of R 299.9521.

(19) A licensee or applicant may demonstrate to the director, or his or her designee, that less information than that specified in this rule is necessary to determine conformance with the requirements of part 6 of these rules and establish permit or license conditions pursuant to the provisions of this part. If the licensee or applicant demonstrates that less information is required, the director, or his or her designee, shall waive the information requirement, except that the director, or his or her designee, shall not require less information than is required by RCRA.

(20) The provisions of 40 C.F.R. §§264.343, 264.345, 266.102(e), 266.104 to 266.107, 270.11, 270.13, 270.14(b) and (d), 270.15(a) to (e), 270.16(a) to (k), 270.17(a) to (j), 270.18, 270.19(c), 270.20, 270.21, 270.22, 270.23, 270.24, 270.25, 270.26, 270.27, 270.62(b)(2), and 270.66 are adopted by reference in R 299.11003, with the exception that the term "waste management unit" shall replace the term "solid waste management unit."

R 299.9505 Construction permit application; liner systems for landfills, surface impoundments, and waste piles.

Rule 505. (1) Applicants proposing a landfill, surface impoundment, or waste pile shall submit the following information in the engineering report for the liner, leachate collection system, and leak detection, collection, and removal system:

(a) Information concerning the vertical and horizontal isolation distance from groundwater and any dewatering system necessary to meet the isolation requirements of R 299.9603(5). All of the following information shall be submitted for dewatering systems:

(i) Design calculations for drain pipe diameter and spacing.

(ii) Design features that allow cleaning of drainage pipes to prevent clogging within the system.

(iii) Evaluation of corrosive resistance and structural suitability of underdrain pipe under both static and dynamic loadings.

(b) Information concerning soils to be used for any compacted soil liner, including, at a minimum, all of the following:

(i) Source of the soils.

(ii) Uniformity of the soil source.

(iii) Classification of the soil under the unified soil classification system, according to ASTM standard D2487-69, which is adopted by reference in R 299.11001.

(iv) Particle size distribution according to both sieve and hydrometer testing.

(v) The moisture-density relationship of the soil according to the modified proctor test, ASTM standard D1557-91, or the standard proctor test ASTM standard D698-91, which are adopted by reference in R 299.11001.

(vi) The compaction necessary to achieve a permeability with water not greater than 1.0 x 10^{-7} cm/sec., and the permeability of the soil under a compaction of 90% of the maximum dry density, as determined by the modified proctor test, ASTM standard D1557-91, OR 95% of the maximum dry density, as determined by the standard proctor test, ASTM standard D698-91.

(vii) The permeability of the soil under the conditions of paragraph (vi) of this subdivision utilizing liquid similar to the leachate that would be expected from the proposed facility.

(viii) Procedures for complying with the quality control requirements of R 299.9621.

(c) Information on any synthetic liner to be used, including all of the following:

(i) Methods of storage, handling, and installation, including any written instructions from the manufacturer and procedures for complying with the quality control requirements of R 299.9621.

(ii) Physical properties of the liner material, such as the following:

(A) Thickness.

(B) Resiliency.

(C) Elongation.

(D) Tensile strength.

(E) Breaking strength.

(F) Tear strength.

(G) Dimensional stability.

(H) Bonded seam strength.

(I) Hydrostatic resistance.

(J) Ply adhesion.

(K) Volatile loss.

(L) Water extraction.

(M) Water absorption.

(iii) Ability of liner material to maintain physical properties under all of the following prolonged and varying conditions expected at the proposed facility:

(A) Temperature.

(B) pH.

(C) Ultraviolet radiation.

(D) Biological attack.

(E) Leachate composition.

(d) Information on the characteristics of soils underlying any compacted or synthetic liner. This information shall include all of the following:

(i) Settlement analysis which estimates total and differential settlement, including immediate settlement, primary consolidation, and secondary consolidation based on maximum loading.

(ii) Strength analysis which determines the bearing capacity and stability of the underlying soils.

(iii) Slope stability analysis, including all of the following information:

(A) Side slope stability under excavation.

(B) Liner system stability under construction.

(C) Waste mass stability during filling sequence.

(D) Final cover stability.
(E) Long-term postclosure stability.
(iv) Performance under varying groundwater conditions.
(v) Potential for bottom heave or blowout.
(e) Information on the design of the leachate collection system and the leak detection, collection, and removal system. Such information shall include, at a minimum, all of the following:
(i) Calculations to determine the anticipated volume of leachate to be generated.
(ii) The granular material to be used to allow adequate flow and removal of liquid and to provide an aggregate envelope for collection pipe.
(iii) The design of collection pipe, including all of the following information:
(A) Diameter.
(B) Perforations.
(C) Slope.
(D) Spacing.
(E) Chemical resistance.
(F) Structural integrity under static and dynamic loadings.
(iv) Procedures to prevent clogging.
(v) The design of the leachate removal system, including all of the following information:
(A) Leachate inflow.
(B) Sump dimensions.
(C) Pump on and off levels.
(D) Effective storage volume of sump.
(E) Riser pipe.
(F) Total discharge head of pump.
(G) Pump selection.
(H) Pump cycle time.
(vi) Calculations which demonstrate that the leachate head will be 12 inches (30 centimeters) or less above the liner at any point, except the sump.
(f) Information on stormwater management. such information shall include, at a minimum, all of the following:
(i) Run-on volumes, systems, and management plans.
(ii) Runoff volumes, systems, and management plans.
(iii) Stormwater discharge system to collect and control at least the water volume resulting from a 24-hour, 25-year storm.
(2) Applicants proposing a landfill, surface impoundment, or waste pile shall submit a construction quality assurance plan which includes a description of all of the following:
(a) The responsibility and authority of all organizations and key personnel involved in permitting, designing, and constructing the hazardous waste land disposal facility.
(b) The qualifications of inspection personnel to demonstrate that they possess the training and experience necessary to fulfill their identified responsibilities.
(c) The observations, tests, and sampling that will be used to monitor the installation of the hazardous waste disposal facility in accordance with R 299.9621, including a description of all of the following:
(i) Sampling activities.
(ii) Sample size.
(iii) Frequency of testing.
(iv) Acceptance and rejection criteria.
(v) Plans for implementing corrective measures.
(d) A description of how construction quality assurance data will be recorded.

R 299.9506 Hydrogeological reports; content.

Rule 506. (1) A hydrogeological report shall include all of the following information:

(a) A summary of the groundwater monitoring data obtained during the interim status period pursuant to the provisions of 40 C.F.R. part 265, subpart F, where applicable, and a summary of any other groundwater monitoring data collected pursuant to state or federal law.

(b) Identification of the uppermost aquifer and aquifers hydraulically interconnected to the uppermost aquifer beneath the facility property, including groundwater flow direction and rate, and the basis for the identification.

(c) Identification of any aquifer utilized by public and private wells within 2,000 feet of the proposed site.

(d) Identification of all other aquifers evidenced by available well or boring logs.

(e) The delineation of all of the following on the topographic map required pursuant to the provisions of 40 C.F.R. "270.14(b)(19):

(i) The waste management area and any other treatment or storage areas.

(ii) The property boundary.

(iii) The proposed point of compliance, as defined pursuant to the provisions of 40 C.F.R. "264.95.

(iv) The proposed location of groundwater monitoring wells as required pursuant to the provisions of 40 C.F.R. "264.97.

(v) To the extent possible, the information required pursuant to the provisions of subdivision (b) of this subrule.

(f) On the topographic map required pursuant to the provisions of 40 C.F.R. "270.13(1), identification of all domestic, municipal, industrial, oil, and gas wells and soil borings within 1 mile of the site in all directions for which copies of logs are available.

(g) A description of any plume of contamination that has entered the groundwater from a hazardous waste management unit or other regulated activity at the site at the time that the application was submitted that does both of the following:

(i) Delineates the extent of the plume on the topographic map required pursuant to the provisions of 40 C.F.R. "270.14(b)(19).

(ii) For landfills, surface impoundments, land treatment units, and waste piles, identifies the concentration of each constituent listed in the provisions of 40 C.F.R. part 261, appendix VIII, throughout the plume or identifies the maximum concentrations of each constituent in the plume.

(2) A hydrogeological report shall include detailed plans and an engineering report describing the proposed groundwater monitoring program to be implemented to meet the requirements of R 299.9612 or a justification for a waiver pursuant to the provisions of subrule (7) of this rule. The engineering report shall include all of the following information for this purpose:

(a) Soil boring logs and the results of soil sampling from the borings that are sufficient to adequately define soil and groundwater conditions at the site. All of the following procedures shall be utilized in collecting the data:

(i) Not less than 5 soil borings shall be made for the first 5 acres of the site, and 3 borings shall be made for each additional 5 acres or portion thereof. A lesser number of borings may be made for nonactive portions of the site, such as buffer zones, and by supplementing boring information with geophysical testing, such as resistivity surveys. Soil borings shall be located in a grid pattern so that there is a minimum of 1 boring in each major geomorphic feature, such as ridges, lowlands, and drainage swales, and all borings shall extend not less than 30 feet below proposed grade or the anticipated bottom elevation of any installed or constructed liner.

(ii) At each boring, soil samples shall be collected from each soil layer or change in lithology. Two of the 5 soil borings that are required by the provisions of paragraph (i) of this subdivision shall be evaluated and logged using continuous sampling methods, such as continuous tube sampling, coring, or continuously driven split spoons. For sites that are larger than 5 acres, 1 of each of the 3 additional soil borings that are required by the provisions of paragraph (i) of this subdivision shall be evaluated and logged using continuous sampling methods. Samples that are collected from each soil

layer or change in lithology shall be tested for all of the following:

(A) Particle size distribution by both sieve and hydrometer.

(B) Atterburg limits according to ASTM standard D423-66 and ASTM standard D424-59, which are adopted by reference in R 299.11001.

(C) Classification pursuant to the unified soil classification system, according to ASTM standard D2487-69, which is adopted by reference in R 299.11001.

(iii) Each soil layer at a site shall be evaluated for both of the following:

(A) Moisture content, according to ASTM standard D422-63, which is adopted by reference in R 299.11001.

(B) Permeability with water by the triaxial cell method as described in the EPA document entitled "Soil Properties, Classification, and Hydraulic Conductivity Testing," which is adopted by reference in R 299.11008; constant head method, according to ASTM standard D2434-68, which is adopted by reference in R 299.11001; approved in-situ field method; or other method approved by the director. All soil samples collected for determination of permeability shall be collected by standard undisturbed soil sampling techniques, such as a 3-inch diameter Shelby tube or large diameter split spoon.

(iv) Boring logs shall include all of the following:

(A) Soil and rock descriptions.

(B) Method of sampling.

(C) Sample depth.

(D) Date of boring.

(E) Water level measurements.

(F) Soil test data.

(G) Boring location.

(H) Standard penetration number by ASTM standard D1586-67, which is adopted by reference in R 299.11001.

(v) All soil borings that are not converted to observation wells pursuant to the provisions of subdivision (b) of this subrule shall be carefully backfilled, plugged, and recorded in accordance with the provisions of the well installation and well decommissioning procedures in ASTM standards D092-90 and D5299-92, or a plan approved by the director.

(vi) All elevations shall be corrected to United States geological survey (USGS) datum.

(b) Static water level measurements from observation wells and, where appropriate, well clusters which are located at the sites of soil borings and which are constructed in accordance with the provisions of R 299.9612. Measurements shall be accurate to the nearest 0.01 foot, corrected to United States geological survey (USGS) datum, and shall be taken from not less than 3 observation wells and 1 well cluster for the first 5 acres of the facility or portion thereof and 1 observation well for each additional 10 acres or portion thereof. Landfills, surface impoundments, waste piles, and land treatment facilities shall have not less than 3 well clusters established as part of the monitor well system and at least 1 cluster well for each 20 acres of the proposed site. All observation wells shall be constructed and abandoned in accordance with the well installation and well decommissioning procedures in ASTM standards D5092-90 and D5299-92, or a plan approved by the director.

(c) A water level contour map based on stabilized water level readings and using values contoured on an interval of not more than 1 foot.

(d) If more than 2 well clusters have been constructed, then groundwater flow net diagrams illustrating horizontal and vertical flow directions of groundwater.

(e) The location and depth of all observation wells and evidence that these observation wells are located effectively to detect hazardous constituents from the facility, based on all of the following:

(i) Groundwater flow direction.

(ii) Velocity.

(iii) Horizontal and vertical gradients.

(iv) Thickness of the saturated zone.

(v) The dispersion properties of hazardous waste constituents, such as the following:
(A) Specific gravity.
(B) Solubility.
(C) Chemical reactivity within the formation.
(D) Characteristics of decomposition products.

(f) At each soil boring that is to be completed as an observation well during or following the hydrogeologic investigation, the lithology of that soil boring shall be continuously sampled, logged, and classified pursuant to the unified soil classification system in accordance with ASTM standard D2487-69, which is adopted by reference in R 299.11001, from an elevation of 10 feet above the expected screened interval to the base of the borehole. Continuous sampling tubes, coring devices, or continuously collected split spoon samples may be used to satisfy this requirement. The director may allow the substitution of alternate information for this requirement or waive this requirement based on available information, site-specific hydrogeologic conditions, and available technology.

(3) If the presence of hazardous constituents has not been detected in the groundwater at the time of permit or license application, then the owner or operator shall submit sufficient information, supporting data, and analysis to establish a detection monitoring program that is in compliance with the requirements of R 299.9612 and the provisions of 40 C.F.R. "264.98. The submission shall include all of the following:

(a) A proposed list of primary and secondary monitoring parameters and proposed monitoring frequencies for these parameters.

(b) A proposed groundwater monitoring system.

(c) Background values for each proposed primary and secondary monitoring parameter or procedures to calculate such values.

(d) A description of proposed sampling, analysis, and statistical comparison procedures to be utilized in evaluating groundwater monitoring data.

(e) Procedures for preventing cross-contamination in wells during activities such as well installation, purging, or sampling.

(f) Evidence that sampling procedures and well construction materials are compatible with proposed monitoring parameters.

(4) If the presence of hazardous constituents has been detected in the groundwater at the point of compliance at the time of license application, the owner or operator shall submit sufficient information, supporting data, and analysis to establish a compliance monitoring program that is in compliance with the requirements of R 299.9612 and the provisions of 40 C.F.R. "264.99. The submission shall include all of the following:

(a) A description of the wastes previously handled at the facility.

(b) A characterization of the contaminated groundwater, including concentrations of hazardous constituents.

(c) A list of hazardous constituents for which compliance monitoring will be undertaken in accordance with the provisions of R 299.9612 and 40 C.F.R. ""264.97 and 264.99.

(d) Proposed concentration limits for each hazardous constituent which do not exceed the background level of that constituent in the groundwater or which do not exceed a concentration limit that is not less stringent than allowed pursuant to the provisions of RCRA and that has been established pursuant to the provisions of part 201 of the act.

(e) Detailed plans and an engineering report describing the proposed groundwater monitoring system in accordance with the requirements of 40 C.F.R. "264.97.

(f) A description of proposed sampling, analysis, and statistical comparison procedures to be utilized in evaluating groundwater monitoring data.

(5) If hazardous constituents have been measured in the groundwater that exceed the concentration limits established pursuant to the provisions of 40 C.F.R. "264.94(a)(2), Table I, or if groundwater monitoring conducted at the time of the license application indicates the presence of hazardous constituents from the facility in groundwater over background concentrations, then the

owner or operator shall submit sufficient information, supporting data, and analyses to establish a corrective action program that is in compliance with the requirements of R 299.9612 and the provisions of R 299.9629. To demonstrate compliance with the provisions of R 299.9612 and R 299.9629, the owner or operator shall address, at a minimum, all of the following items:

(a) A characterization of the contaminated groundwater, including concentrations of hazardous constituents.

(b) The concentration limit for each hazardous constituent found in the groundwater, which shall not exceed the background level of that constituent found in the groundwater at the time that limit is specified in the operating license.

(c) Detailed plans and an engineering report describing the corrective action to be taken.

(d) A description of how the groundwater monitoring program will demonstrate the adequacy of the corrective action.

(6) For landfills, surface impoundments, waste piles, and land treatment units, a hydrogeological report shall include all of the following additional information that is necessary to determine site suitability and facility design:

(a) For each boring made pursuant to the provisions of subrule (2) of this rule, all of the following tests at intervals of not more than 5 feet or change in geologic formation:

(i) Particle size distribution by both sieve and hydrometer.

(ii) Atterburg limits according to ASTM standard D423-66 and ASTM standard D424-5, which are adopted by reference in R 299.11001.

(iii) Classification pursuant to the unified soil classification system according to ASTM standard D2487-69, which is adopted by reference in R 299.11001.

(b) For each boring mad pursuant to the provisions of subrule (2) of this rule, the following tests at intervals of not more than 10 feet:

(i) Permeability, by any of the following methods:

(A) The triaxial cell method, as described in the EPA document entitled "Soil Properties, Classification and Hydraulic Conductivity Testing," which is adopted by reference in R299.11008.

(B) The constant head method, according to ASTM standard D2434-68, which is adopted by reference in R 299.11001.

(C) An in-situ field method approved by the director.

(D) Other methods approved by the director.

(ii) Moisture content, according to ASTM standard D422-63, which is adopted by reference in R 299.11001.

(c) Soil boring logs and the results of soil sampling from such borings that are sufficient to adequately define bedrock conditions at the site.

(d) Additional information for determining the geotechnical characteristics of each soil layer at the site, such as any of the following:

(i) Shear strength.

(ii) In-situ density.

(iii) Specific gravity.

(iv) Stress deformation.

(v) Shrinkage limit.

(vi) Clay mineralogy.

(vii) Information on the presence of cracks, fissures, and other voids that may increase the effective permeability of the soil.

(e) A series of geologic cross sections or fence diagrams referenced to a site map and illustrating all of the following:

(i) Existing topography.

(ii) Soil borings.

(iii) Soil classification.

(iv) Stratigraphy and other properties.

(v) Bedrock.
(vi) Wells.
(vii) Stabilized water level readings and proposed site grades.
(f) Water budget calculations under present site conditions, future active operations, and, for disposal facilities, the postclosure period. The calculations shall consider all of the following factors:
(i) Precipitation.
(ii) Evaporation.
(iii) Runoff.
(iv) Infiltration.
(v) Evapotranspiration.
(vi) Groundwater flow velocities and volume.
(vii) Soil moisture-holding capacity.
(viii) For disposal facilities, the capacity of proposed waste types to hold moisture.
(7) The director may waive or substitute alternate information for the information specified in subrule (2) or (6) of this rule based on site-specific considerations and available technology.
(8) The provisions of 40 C.F.R. ""264.94(a)(2), table 1, 264.95, 264.97, 264.98, 270.13(l), and 270.14(b)(19) and part 265, subpart F, are adopted by reference in R 299.11003.

R 299.9507 Construction permit application fees.

Rule 507. (1) The applicant shall calculate the construction permit application fee by totalling the appropriate fees in items (1), (2), (3), and (4) of table 501 of R 299.9523. Each construction permit application requires a separate application fee.
(2) A check made payable to the state of Michigan for the calculated fee shall be attached to the construction permit application.
(3) The applicant may request, upon application submittal, that the application fee be based on the cost of review, which consists of actual work hours required for construction permit review plus the cost of any public notices published or broadcast. This request shall be made, in writing, on the construction permit application. The applicant shall be assessed the actual review cost fee. A construction permit shall not be issued by the director until all fees required by this rule are paid in full. If the actual review cost fee is less than the calculated fee, the difference between the actual review cost fee and the calculated fee submitted with the application shall be refunded within 60 days after the construction permit is approved or denied.
(4) An applicant who has requested that the application fee be based on actual review costs forfeits the further opportunity to use calculated fees according to table 501 of R 299.9523.
(5) If a construction permit application is not resubmitted after being found to be administratively incomplete, the application fee, minus the cost of all public notices published or broadcast, shall be refunded.
(6) If a construction permit application is denied, no portion of the application fee shall be refunded.
(7) An applicant who makes a reapplication for a revised proposal within 6 months of denial shall be assessed only the actual costs to review the revised proposal. These actual costs shall not exceed the calculated fee from table 501 of R 299.9523.
(8) An applicant who withdraws a construction permit application within 14 days of receipt by the director shall have 70% of the original application fee, minus the cost of all public notices published or broadcast, refunded or shall be charged actual review costs if the option under subrule (3) of this rule was chosen.
(9) An applicant who withdraws a construction permit application within 30 days of receipt by the director shall have 35% of the original application fee, minus the cost of all public notices published or broadcast, refunded or shall be charged actual review costs if the option under subrule (3) of this rule was chosen.
(10) An applicant who withdraws an application between 30 and 60 days after receipt by the

director shall be issued a refund which is equal to 20% of the original application fee, minus the cost of all public notices published or broadcast, or shall be charged actual review costs if the option under subrule (3) of this rule was chosen.

R 299.9508 Operating license application contents.

Rule 508. (1) An application for an operating license shall include all of the following, except as provided for in subrule (3) of this rule:

(a) The names and addresses of the owner and the operator, including the name and address of the titleholder of the land on which the treatment, storage, or disposal facility is constructed; the location and description of the disposal facility; and other information pertinent to evaluation of the facility which is required by the director on an application form provided by the director.

(b) All information required for a construction permit application pursuant to R 299.9504.

(c) For a treatment, storage, or disposal facility which has a construction permit under part 111 of the act, any revisions to the cost estimates for closure and for postclosure maintenance and monitoring submitted with the construction permit application, and a written certification of construction pursuant to section 23(3) of part 111 of the act.

(d) A certification of the treatment, storage, or disposal facility's capability for disposing of hazardous waste, except as provided in subdivision (g) of this subrule. The certification shall be prepared and sealed by a registered professional engineer.

(e) Proof of financial capability as required by part 7 of these rules.

(f) Proof of issuance of all necessary state environmental permits for construction and operation of the treatment, storage, or disposal facility or portion of the facility.

(g) An owner or operator of a facility which meets the criteria of R 299.9502(2), (3), and (4) who cannot demonstrate compliance as required under section 23(3) of part 111 of the act shall submit a written program designed to bring the facility into compliance with part 111 of the act and these rules within 2 years from the date of license issuance. At a minimum, the program shall specify the necessary modifications to any procedure, equipment, process, or portion of the facility, together with the expected dates of completion. The provisions of this subdivision may only be exercised in the first operating license application after the effective date of these rules and shall not be exercised in subsequent applications for license renewal.

(h) A license fee of $500.00.

(i) For a landfill, proof that an instrument imposing a restrictive covenant upon the land involved has been executed by all the owners of the tract of land upon which the landfill is to be located and by the director, as required by section 39 of part 111 of the act.

(2) The director shall waive the hydrogeological report requirements of R 299.9506 for existing facilities other than landfills, surface impoundments, waste piles, or land treatment facilities if all treatment, storage, and waste-handling activities take place inside or under a structure that provides protection from precipitation and runon and if the facility is in compliance with part 6 of these rules.

(3) An application for an operating license for the postclosure period shall include all of the following information, unless the director determines that additional information specified in R 299.9505, R 299.9506, or R 299.9508 is necessary:

(a) The information specified in 40 C.F.R. §270.14(b)(1), (4) to (6), (11), (13), (14), (18), and (19) and (d).

(b) The information specified in R 299.9506.

(c) The most recent postclosure cost estimate prepared in accordance with R 299.9702.

(d) A copy of the documentation required to demonstrate compliance with R 299.9703.

(4) Owners or operators are required to submit the same information required in subrule (3) of this rule when an alternate authority is used in place of an operating license for the postclosure period as provided for in part 5 of these rules.

(5) Operating license applications shall be signed and certified in accordance with the provisions of 40 C.F.R. §270.11 and by the title holder of the land upon which the facility is located.

(6) The provisions of 40 C.F.R. §§270.11 and 270.14(b) and (d) are adopted by reference in R 299.11003.

R 299.9509 Submittal and processing of construction permit applications.

Rule 509. (1) Any person who requires a construction permit under part 111 of the act shall complete, sign, and submit, to the director, an application for each construction permit required under R 299.9501 as described in this rule. All applicants for construction permits shall provide the information set forth in R 299.9504 to the director on the application form provided by the director.

(2) The director shall not begin processing a construction permit application until it is complete. An application for a construction permit is complete when the director receives an application which includes all the information required by section 18(3) of part 111 of the act and R 299.9504. The completeness of any application for a construction permit shall be judged independently of the status of any other permit or permit application for the same facility. The statutory timetable of section 19(2) of part 111 of the act and the timetable of subrule (4) of this rule shall begin upon receipt of a complete construction permit application.

(3) When a facility or activity is owned by 1 person, but is operated by another person, it is the operator's duty to obtain a construction permit, except that the owner and titleholder of the land shall also sign the permit application.

(4) The director, or his or her designee, shall notify the applicant within 30 days after receipt of a construction permit application. Such notification shall include the date of receipt and whether any required items of an administrative nature were missing. This notice will not include all areas where the application is technically incomplete.

(5) The director, or his or her designee, shall notify the applicant of the construction permit status within 75 days after the complete construction permit application is received.

(6) The director shall recommend approval or shall deny a construction permit application within 120 days after the director receives a complete construction permit application.

(7) If the director intends to deny the construction permit application, the director, or his or her designee, shall commence a public participation process in accordance with R 299.9511.

(8) As directed by the site review board, the director shall either prepare a draft construction permit or deny the construction permit. Upon being directed to do so, the director shall commence a public participation process in accordance with R 299.9511.

(9) Applicants shall keep records of all data used to complete construction permit applications and any supplemental information submitted under R 299.9504 for a period of not less than 3 years from the date the application is signed.

R 299.9510 Submittal and processing of operating license applications.

Rule 510. (1) Any person who requires an operating license under part 111 of the act shall complete, sign, and submit, to the director, an application for each license required under R 299.9502, as described in this rule. Persons with interim status currently authorized to operate without a license as provided by R 299.9502 shall apply for operating licenses when required by the director. Procedures for applications, issuance and administration of emergency operating licenses, and research licenses are found exclusively in R 299.9501.

(2) All applicants for operating licenses shall provide the information set forth in R 299.9508 to the director and shall use the application form provided by the director.

(3) The director, or his or her designee, shall not begin the processing of an operating license application until it is complete, except for emergency operating licenses under R 299.9501. An application for an operating license is complete when the director receives an application which includes that information required by R 299.9508. The completeness of any application for an operating license shall be judged independently of the status of any other permit or permit application

for the same facility.

(4) When a facility or activity is owned by 1 person, but is operated by another person, it is the operator's duty to obtain a license, except that the owner and titleholder of the land shall also sign the license application.

(5) Any hazardous waste treatment, storage, or disposal facility with an effective operating license shall submit a new license application under R 299.9508 not less than 180 days before the expiration date of the existing operating license, unless permission for a later date has been granted by the director. The director shall not grant permission for applications to be submitted later than the expiration date of the existing operating license.

(6) The director shall make a final decision on an operating license application within 140 days after the director receives a complete application.

(7) Before making a final decision on an operating license, the director shall, when authorized under the provisions of 40 C.F.R. part 271, complete the public participation process specified in R 299.9511. The director may extend the 140-day deadline of subrule (6) of this rule to complete this process.

(8) Applicants shall keep records of all data used to complete operating license applications and any supplemental information submitted under R 299.9508 for a period of not less than 3 years from the date the application is signed.

(9) The director may separately license treatment, storage, and disposal facility units at the same facility if these units have different owners or operators or if these units have significantly different impacts or potential impacts on public health and the environment.

R 299.9511 Public participation procedures.

Rule 511. (1) Except as provided for in subrule (2) of this rule, the requirements of this subrule apply to any person required to obtain a construction permit or operating license under the act or these rules. Applicants shall comply with all of the following requirements:

(a) Prior to submission of an application, the applicant shall hold at least 1 public meeting in order to solicit comments from the public and inform the public of the proposed hazardous waste management activities.

(b) The applicant shall post a sign-in sheet or otherwise provide an opportunity for the preapplication meeting attendees to provide their names and addresses.

(c) The applicant shall provide notice of the preapplication meeting not less than 30 days in advance of meeting. The applicant shall maintain documentation of the preapplication meeting notice and provide the documentation to the director upon request. The notice of the preapplication meeting shall comply with the following requirements:

(i) The notice shall include all of the following information:

(A) The date, time, and location of the meeting.

(B) A brief description of the purpose of the meeting.

(C) A brief description of the facility and proposed operations, including, the facility address or a map of the facility location.

(D) A statement encouraging persons to contact the facility not less than 72 hours before the meeting if they require special accommodations to participate in the meeting.

(E) The name, address, and telephone number of the applicant's contact person.

(ii) The notice shall be provided by the applicant in all of the following forms:

(A) Published as a display advertisement in a newspaper of general circulation in the county or equivalent jurisdiction that hosts the proposed location of the facility. If the director determines that publication in newspapers of general circulation in the adjacent counties or equivalent jurisdictions is necessary to inform the affected public, the director shall advise the applicant to provide a notice in those newspapers.

(B) Posted as a notice on a clearly marked sign at or near the facility. If the applicant places the sign on the facility property, the sign shall be large enough to be readable from the nearest point

where the public would pass by the facility.

(C) Broadcast a notice at least once on 1 local radio station or television station. The applicant may employ another medium with prior approval from the director.

(d) The applicant shall provide a copy of the newspaper publication of the preapplication meeting notice to the director and the appropriate units of state and local government in accordance with 40 C.F.R. §124.10(c)(1)(x).

(2) The requirements of subrule (1) of this rule do not apply to any of the following:

(a) A renewal operating license application which does not propose any significant changes in facility operations. For the purposes of this subdivision, "significant changes" shall mean any changes that would qualify as a major modification under the provisions of R 299.9519.

(b) An operating license application which is submitted solely to address postclosure requirements or postclosure and corrective action requirements.

(c) An operating license modification submitted in accordance with the provisions of R 299.9519.

(d) A construction permit or operating license application submitted before the effective date of these rules.

(3) Except as provided for in subrule (4) of this rule, the director shall comply with all of the following requirements upon receipt of a construction permit or operating license application pursuant to the act or these rules:

(a) Within a reasonable period of time after the application is received, provide the facility mailing list and appropriate units of state and local government with notice in accordance with the provisions of 40 C.F.R. §124.10(c)(1)(x) that the application has been submitted to the department and is available for review. The notice shall include all of the following information:

(i) The name, address, and telephone number of the applicant's contact person.

(ii) The name, address, and telephone number of the department's contact.

(iii) The mailing address to which information, comments, and inquiries may be submitted to the department throughout the application review process.

(iv) The address to which persons may write to be placed on the facility mailing list.

(v) The location where a copy of the application and any supporting documents may be viewed and copied.

(vi) A brief description of the facility and proposed operations, including, the facility address or a map of the facility location, on the front page of the notice.

(vii) The date that the application was received by the department.

(b) Concurrent with the notice provided in subdivision (a) of this subrule, place the application and any supporting documents in a location accessible to the public in the vicinity of the facility or at an appropriate department office.

(4) The requirements of subrule (3) of this rule do not apply to either of the following:

(a) An operating license application which is submitted solely to address postclosure requirements or postclosure and corrective action requirements

(b) A minor operating license modification as specified in the provisions of R 299.9519(5) and (9).

(5) The director shall comply with all of the following requirements upon receipt of a construction permit or operating license application pursuant to the act or these rules:

(a) Assess the need, on a case-by-case basis, for an information repository based on the following information:

(i) The level of public interest.

(ii) The type of facility.

(iii) The presence of an existing repository.

(iv) The proximity of the facility to the nearest copy of the administrative record.

(b) If it is determined that an information repository is needed at any time after submittal of

the application, notify the applicant that he or she shall establish and maintain an information repository in compliance with the following requirements:

(i) The information repository shall include all documents, reports, data, and information deemed necessary by the director to fulfill the purposes for which the repository is established. The director shall have the discretion to limit the contents of the information repository.

(ii) The information repository shall be located and maintained at a site selected by the applicant. However, if the director finds that the site selected by the applicant is unsuitable for the purposes or persons for which the information repository is established, due to problems with the location, hours of availability, access, or other relevant considerations, the director shall specify a more appropriate site for the information repository.

(iii) The information repository shall be maintained and updated by the applicant for the time period specified by the director.

(c) Specify the requirements for informing the public about the information repository. At a minimum, the director shall require the applicant to provide a written notice about the information repository to all individuals on the facility mailing list.

(d) Based on the factors outlined in subdivision (a) of this subrule, make decisions regarding the appropriateness of closing the information repository and notify the applicant accordingly.

(6) For applications for incinerators, boilers, or industrial furnaces, the director shall provide notice to all persons on the facility mailing list and to the appropriate units of state and local government in accordance with the provisions of 40 C.F.R. §124.10(c)(1)(x) announcing the following:

(a) The scheduled commencement and completion dates for the trial burn. The notice shall be mailed within a reasonable time period before the scheduled trial burn. An additional notice is not required if the trial burn is delayed due to circumstances beyond the control of the facility or the department. The notice, which shall be issued before the applicant may commence the trial burn, shall contain all of the following information:

(i) The name, address, and telephone number of the applicant's contact person.

(ii) The name, address, and telephone number of the department's contact person.

(iii) The location where the approved trial burn plan and any supporting documents may be reviewed and copied.

(iv) The expected time period for commencement and completion of the trial burn.

(b) The department's intention to approve the trial burn plan in accordance with the timing and distribution requirements of 40 C.F.R. §§270.62(b)(6) and 270.66(d)(3) as applicable. The notice shall contain all of the following information:

(i) The name, address, and telephone number of the facility contact person.

(ii) The name, address, and telephone number of the department's contact person.

(iii) The location where the approved trial burn plan and any supporting documents may be reviewed and copied.

(iv) A schedule of the activities that are required prior to license issuance, including the anticipated time for department approval of the trial burn plan and the time period during which the trial burn will be conducted.

(7) Before making a final decision on a major permit modification or major license modification, construction permit application, or operating license application, the director or his or her designee shall, when authorized pursuant to the provisions of 40 C.F.R. part 271, do the following:

(a) Prepare either a draft major permit modification or major license modification, construction permit, operating license, or a notice of intent to deny.

(b) For major facilities, prepare a fact sheet pursuant to the provisions of R 299.9512 that briefly sets forth the significant factual, methodological, and policy questions considered in preparing the draft major permit modification or major license modification, construction permit, operating license, or notice of intent to deny and send this fact sheet to the applicant and, upon request, any other person.

(c) Publish a public notice that a draft construction permit, operating license, or notice of

intent to deny has been prepared and allow not less than 45 days for public comment.

(d) Publish a public notice that a draft major permit modification or major license modification has been prepared and allow not less than 60 days for public comment.

(e) Provide public notice of any public hearing scheduled pursuant to the provisions of R 299.9514 not less than 30 days before the hearing date.

(f) Prepare and make available to the public a response to comments on the draft major permit modification or major license modification, construction permit, operating license, or notice of intent to deny, which shall do all of the following:

(i) Specify which provisions of the draft major permit modification or major license modification, construction permit, or operating license have been changed, if any, and the reasons for the changes.

(ii) Briefly describe and respond to all significant comments raised during the public comment period or any hearing.

(iii) Indicate whether the comment period is to be reopened or extended or, in the case of a construction permit application, whether the site review board is to be reconvened.

(iv) For notices of intent to deny, the reasons for denial.

(8) If the director decides to prepare a draft construction permit or operating license, he or she shall prepare a draft permit or license that contains the information specified in the provisions of R 299.9521.

(9) Draft major permit modifications or major license modifications, permits, and licenses that are prepared by the director pursuant to the provisions of this rule shall be accompanied by a fact sheet pursuant to the provisions of R 299.9512, publicly noticed pursuant to the provisions of R 299.9513, and made available for public comment. The director shall give notice of the opportunity for a public hearing pursuant to the provisions of R 299.9514, issue a final decision, and respond to comments pursuant to the provisions of R 299.9515.

R 299.9512 Fact sheets.

Rule 512. A fact sheet on a draft construction permit, operating license, or notice of intent to deny shall include all of the following information after the director is authorized under the provisions of 40 C.F.R. part 271 to administer and enforce part 111 of the act and these rules instead of the federal program:

(a) A brief description of the type of facility or activity that is subject to a final decision.

(b) The type and quantity of wastes, fluids, or pollutants that are proposed to be or are being treated, stored, disposed of, injected, emitted, or discharged.

(c) Reasons why any requested variances or alternatives to minimum standards do or do not appear justified.

(d) A description of the procedures for reaching a final decision, including all of the following:

(i) The beginning and ending dates of the comment period under R 299.9511(7)(c) and the address where comments will be received.

(ii) Procedures for requesting a hearing and the nature of that hearing.

(iii) Other procedures by which the public may participate in the final decision.

(e) Name and telephone number of a person to contact for more information.

R 299.9513 Public notices.

Rule 513. (1) Public notices of draft construction permits, operating licenses, notices of intent to deny, and public hearings shall be given by the following methods after the director is authorized under the provisions of 40 C.F.R. part 271 to enforce and administer part 111 of the act and these rules in lieu of the federal program:

(a) By mailing a copy of the notice, fact sheet, construction permit or operating license application, and draft construction permit or operating license to all of the following entities:

(i) The applicant.

(ii) Any other agency which the director knows has issued or is required to issue an environmental permit for the same facility.

(iii) Federal and state agencies with jurisdiction over the following:

(A) Fish, shellfish, and wildlife resources.

(B) Coastal zone management plans.

(C) The advisory council on historic preservation.

(D) State historic preservation officers.

(E) Other appropriate government authorities, including any affected states.

(iv) Any unit of local government having jurisdiction over the area where the facility is proposed to be located.

(v) Each state agency having any authority under state law with respect to the construction or operation of such facility.

(b) By mailing a copy of the notice to persons on a facility mailing list developed pursuant to subrule (3) of this rule.

(c) By any method reasonably calculated to give actual notice of the action in question to the persons potentially affected by it, including press releases or any other forum or medium to elicit public participation.

(d) By publication of a notice in a daily or weekly major local newspaper of general circulation and by broadcasting over local radio stations.

(e) By posting the notice at the principal office of the department and any other locations considered appropriate by the director.

(2) All public notices required by this rule shall contain all of the following information:

(a) Name and address of the office processing the construction permit or operating license.

(b) Name and address of the applicant and the facility at issue.

(c) A brief description of the business conducted at the facility or activity described in the application or draft permit or license.

(d) Name, address, and telephone number of a person or agency from whom interested persons may obtain further information, including copies of the draft construction permit or operating license, fact sheet, and application.

(e) A brief description of the comment procedures required by R 299.9511 and the time and place of any hearing that will be held, including a statement of procedures to request a hearing and other procedures by which the public may participate in the final decision.

(f) For notices of public hearings, all of the following information:

(i) References to the date of previous public notices relating to the application.

(ii) Date, time, and place of the hearing.

(iii) A brief description of the nature and purpose of the hearing, including the applicable rules and procedures.

(iv) Any other information required by act 306.

(g) Any additional information considered necessary and proper.

(3) The director or his or her designee shall develop a facility mailing list which includes the following persons:

(a) Those who request in writing to be on the list.

(b) Participants from past application proceedings under part 111 of the act in that area.

(4) The director or his or her designee shall notify the public of the opportunity to be put on the mailing list through publication.

R 299.9514 Public hearings.

Rule 514. (1) During the public comment period provided under R 299.9511(7)(c), any interested person may submit written comments to the director on the draft construction permit, operating license, or notice of intent to deny and may request a public hearing if no hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of

the issues proposed to be raised at the hearing. All comments shall be considered in making the final decision on a public hearing and shall be answered as provided in R 299.9515.

(2) The director or his or her designee shall hold a public hearing when 1 of the following occurs:

(a) The director finds, on the basis of responses, a significant degree of interest in a draft construction permit, operating license, or notice of intent to deny.

(b) The director determines that a hearing might clarify 1 or more issues involved in the final decision on a construction permit or operating license.

(c) The director receives written notice of opposition to a draft construction permit, operating license, or notice of intent to deny within 45 days of the notice required by R 299.9511(7)(c).

(3) Public notice of the hearing shall be given as specified in R 299.9513.

(4) During a public hearing, any person may submit oral or written statements and data concerning the draft construction permit, operating license, or notice of intent to deny. The public comment period under R 299.9511(7)(c) shall automatically be extended to the close of any public hearing under this rule. The hearings officer may also extend the comment period by so stating at the hearing.

(5) When possible, the director or his or her designee shall schedule a public hearing on a draft construction permit, operating license, or notice of intent to deny at a location convenient to the nearest population center to the proposed facility.

(6) A tape recording or written transcript of the hearing shall be made available to the public.

(7) The provisions of act 306 governing a contested case shall apply to all hearings under this rule.

R 299.9515 Revisions based on public comment; response to comments.

Rule 515. (1) Upon completion of the public participation process for a construction permit or operating license application, the director shall review all comments made during that process and make a final decision on the issuance of the permit or license under the provisions of act 306.

(2) If the director determines through the public participation process that significant errors were made in the construction permit process, the director shall reconvene the site review board to evaluate whether the action of the board should be modified.

(3) The director shall give public notice of actions taken under subrule (2) of this rule under the requirements of R 299.9513.

(4) At the time that any construction permit or operating license is issued, the director shall issue a response to comments which does both of the following:

(a) Briefly describes and responds to all significant comments on the draft permit or license raised during the public comment period or during any hearing.

(b) Specifies which provisions, if any, of the draft construction permit or operating license have been changed in the final permit or license and the reason for the change.

(5) The director shall make the response to comments prepared under subrule (4) of this rule available to the public.

R 299.9516 Construction permit and operating license duration and effect.

Rule 516. (1) A construction permit is valid for 3 years from the date of issuance. The permit remains valid for a period of not more than 10 years if construction is initiated within the 3-year period and proceeds in a continuous manner.

(2) Extensions of a construction permit may be granted by the director if unexpected construction delays occur beyond the control of the permittee.

(3) An operating license shall be effective for a fixed term of not more than 10 years. Each operating license for a land disposal facility shall be reviewed by the director 5 years after the date of license issuance or reissuance and shall be modified as necessary in accordance with the provisions of R 299.9519 and R 299.9520. The term of an operating license shall not be extended by

modification beyond the maximum duration specified in this subrule.

(4) The director may issue any operating license for a duration that is less than the full allowable term under this rule.

(5) A construction permit or operating license may be modified or revoked during its term for cause as set forth in R 299.9519.

(6) The issuance of a construction permit or operating license does not relieve the owner or operator of his or her duty to comply with the statutory or regulatory requirements applicable to the facility that were enacted or promulgated after the permit or license was issued.

(7) The issuance of a construction permit or operating license does not convey any property rights of any sort or any exclusive privilege.

(8) The issuance of a construction permit or operating license does not authorize any injury to persons or property or invasion of other private rights or any infringement of other state or local law or regulations, except as otherwise specified in section 21 of part 111 of the act.

R 299.9517 Construction permit denial.

Rule 517. (1) The director shall deny an application for a construction permit if the proposed treatment, storage, or disposal facility would violate part 111 of the act or these rules.

(2) The applicant is on notice that the director shall deny the construction permit in either of the following situations:

(a) The applicant has not submitted the appropriate permit fee.

(b) The applicant has not submitted sufficiently detailed or accurate information to enable the director to make reasonable judgments as to whether the facility could comply with part 111 of the act and these rules.

(3) The director shall notify the applicant, in writing, of reasons for denial.

R 299.9518 Operating license denial.

Rule 518. (1) The director shall deny an application for an operating license if the operation of the treatment, storage, or disposal facility for which the license is sought will violate part 111 of the act or these rules.

(2) The applicant is on notice that, in addition to any other of these rules, the director shall deny an operating license application if any of the following occur:

(a) Notwithstanding the receipt of the certification of construction required by section 23(3) of part 111 of the act, the facility has not been constructed according to the plans approved by the director, the requirements of part 111 of the act or these rules, or the stipulations and conditions of the approved construction permit.

(b) The existing construction or operation of an existing facility or facility newly subjected to the licensing requirements of part 111 of the act and these rules presents a hazard to the public health or the environment.

(c) The applicant has not submitted sufficiently detailed or accurate information to enable the director to make reasonable judgments as to whether the license should be granted.

(3) The criteria specified for license revocation pursuant to the provisions of R 299.9519 are causes for denial of an operating license renewal application.

(4) When an application is denied, the applicant shall be notified, in writing, of the reasons for denial.

(5) If an initial operating license application is denied, the applicant shall cease all hazardous waste treatment, storage, limited storage, and disposal activities at the facility for which the application was submitted and perform closure in accordance with R 299.9613 for all hazardous waste treatment, storage, limited storage, and disposal units at the facility for which the application was submitted. Upon denial of an initial operating license application, the applicant may seek judicial review pursuant to the provisions of section 631 of act 236. Initial operating license applications shall include those applications for facilities for which interim status has been obtained pursuant to the provisions of

40 C.F.R. "270.70.

(6) If a renewal operating license application is denied, the applicant shall cease all hazardous waste treatment, storage, limited storage, and disposal activities at the facility for which the application was submitted and perform closure in accordance with R 299.9613 for all hazardous waste treatment, storage, limited storage, and disposal units at the facility for which the application was submitted, unless the applicant appeals the denial and initiates proceedings pursuant to the applicable provisions of act 236 or 306. If the applicant initiates proceedings pursuant to the applicable provisions of act 236 or act 306 and the denial is upheld pursuant to such proceedings, the applicant shall cease all hazardous waste treatment, storage, limited storage, and disposal activities at the facility for which the application was submitted and perform closure in accordance with R 299.9613 for all hazardous waste treatment, storage, limited storage, and disposal units at the facility for which the application was submitted.

R 299.9519 Modification, revocation, and suspension of construction permits and operating licenses during their terms.

Rule 519. (1) An owner or operator shall construct, operate, and maintain a facility in accordance with the provisions of part 111 of the act, these rules, and the construction permit or operating license issued to the facility pursuant to the provisions of part 111 of the act. Any deviation from the conditions of a permit or license or from approved plans shall require prior approval by the director, unless otherwise specified in this rule, and, if necessary, modification of the permit or license.

(2) If the director receives any information during the term of a construction permit or operating license, for example, inspects the facility, receives information submitted by the licensee as required in the license, receives a request for modification or revocation pursuant to this rule, or conducts a review of the license file, then he or she may determine if 1 or more of the causes listed in subrule (3) of this rule for modification or subrule (11) of this rule for revocation, or both, exist. If cause exists, the director may commence proceedings pursuant to the provisions of act 306 to modify or revoke a construction permit or operating license accordingly, subject to the limitation of subrule (4) of this rule, and may request an updated application pursuant to the provisions of R 299.9520, if necessary. If an operating license is modified, then only the conditions subject to modification are reopened. If a construction permit or operating license modification satisfies the criteria of subrule (5) of this rule for a minor modification, or if the director has not yet been authorized pursuant to the provisions of 40 C.F.R. part 271, then the license may be modified in accordance with the requirements of subrule (6) of this rule. Otherwise, a draft license shall be prepared and other procedures specified in R 299.9511 followed.

(3) Any of the following are causes for modification of a construction permit or operating license:

(a) The causes listed in the provisions of 40 C.F.R. §270.41(a), except 40 C.F.R. §270.41(a)(3).

(b) If the standards or regulations on which the permit or license was based have been changed by statute, through promulgation of new or amended standards or regulations, or by judicial decision after the permit or license was issued.

(c) To modify a monitoring program pursuant to the provisions of R 299.9611 or R 299.9612.

(d) Cause exists for modification pursuant to the provisions of subrule (5) of this rule and the director determines that modification is appropriate.

(e) The director has received notification pursuant to the provisions of R 299.9521 of a proposed transfer of ownership or operation.

(4) The director shall not consider suitability of the facility location at the time of construction permit or operating license modification, suspension, or revocation unless new information or standards indicate that a threat to human health or the environment exists which was unknown at the time of license issuance. In addition, the director shall not modify a construction permit beyond what is authorized in the construction permit by the site review board.

(5) The permittee or licensee may put into effect the following minor permit modifications or minor license modifications without following the procedures specified in R299.9511, if the permittee or licensee complies with the provisions of subrule (6) of this rule:

(a) Any of the following general permit or license modifications:

(i) An administrative and information change.

(ii) A correction of a typographical error.

(iii) Equipment replacement or upgrading with functionally equivalent elements for example, pipes, valves, pumps, conveyors, or controls.

(iv) A change in the frequency of, or procedures for, monitoring, reporting, sampling, or maintenance activities to provide for more frequent monitoring, reporting, sampling, or maintenance.

(v) A change in the interim compliance dates in the schedule of compliance if the prior written approval of the director is obtained.

(vi) A change in the expiration date of the permit or license to allow earlier permit or license termination if the prior written approval of the director is obtained.

(vii) A change in the ownership or operational control of a facility if the procedures specified in R 299.9522 are followed and if the prior written approval of the director is obtained.

(viii) Changes to remove operating license or construction permit conditions that are no longer applicable because the standards upon which they are based are no longer applicable to the facility if prior written approval from the director is obtained.

(b) Any of the following general facility modifications:

(i) A change to waste sampling or analysis methods to conform to agency guidelines or regulations.

(ii) A change to waste sampling or analysis methods to incorporate change associated with F039 (multisource leachate) sampling or analysis methods.

(iii) A change to waste sampling or analysis methods to incorporate changes associated with underlying hazardous constituents in ignitable or corrosive wastes if the prior written approval of the director is obtained.

(iv) A change in a sampling or analysis procedure or monitoring schedule if the prior written approval of the director is obtained.

(v) A change to analytical quality assurance/control plans to conform to department guidelines or rules.

(vi) A change in procedures for maintaining the operating record.

(vii) A change in the contingency plan to reflect the replacement of emergency equipment with functionally equivalent equipment, the upgrade of emergency equipment, or the relocation of emergency equipment listed.

(viii) A change to the training plan, other than those changes that affect the type of, or decrease the amount of, training given to employees.

(ix) The replacement of emergency equipment with functionally equivalent emergency equipment, the upgrade of emergency equipment, or the relocation of emergency equipment listed in the contingency plan.

(x) A change in the name, address, or phone number of a coordinator or another person or agency identified in the contingency plan.

(xi) A change in the procedures used to empty hazardous waste from transport vehicles and other containers.

(xii) A change that the construction quality assurance officer certifies will provide equivalent or better certainty that the unit components meet the design specifications. The certification shall be provided in the facility operating record.

(c) Any of the following groundwater protection modifications:

(i) Replacement of an existing well that has been damaged or rendered inoperable without changing the location, design, or depth of the well.

(ii) A change in groundwater sampling or analysis procedure or monitoring schedule if the

prior written approval of the director is obtained.

(iii) A change in statistical procedure for determining whether a statistically significant change in groundwater quality between upgradient and downgradient wells has occurred if the prior written approval of the director is obtained.

(d) Any of the following changes to closure plans:

(i) A change in the estimate of maximum inventory of waste on-site at any time during the active life of the facility, not to exceed the approved process design capacity of the facility if the prior written approval of the director is obtained.

(ii) A change in the closure schedule for any unit, a change in the final closure schedule for the facility, or extension of the closure period if the prior written approval of the director is obtained.

(iii) A change in the expected year of final closure, if other permit or license conditions are not changed and if the prior written approval of the director is obtained.

(iv) A change in procedure for the decontamination of facility equipment or structures if the prior written approval of the director is obtained.

(v) The addition of temporary tanks used for neutralization, dewatering, phase separation, or other separation with the prior written approval of the director.

(e) Any of the following postclosure modifications:

(i) A change in the name, address, or phone number of the contact person in the postclosure plan.

(ii) A change in the expected year of final closure if other permit or license conditions are not changed.

(f) The addition of a roof to a container unit without altering the containment system.

(g) The replacement of a tank with a tank that is in compliance with the same design standards, has the same capacity of the replaced tank, and is in compliance with the same conditions in the permit or license, or both.

(h) The replacement of a waste pile unit with another waste pile unit of the same design and capacity and which is in compliance with all the waste pile conditions in the permit or license, or both.

(i) Any of the following land treatment modification:

(i) A decreased rate of waste application.

(ii) A change in any condition specified in the permit or license for a land treatment unit to reflect the results of the land treatment demonstration if performance standards are met and if the prior written approval of the director is obtained.

(iii) A change to allow a second land treatment demonstration to be conducted when the results of the first demonstration have not shown the conditions under which the wastes can be treated completely, if the conditions for the second demonstration are substantially the same as the conditions for the first demonstration and if the prior written approval of the director is obtained.

(j) Any of the following incinerator, boiler, or industrial furnace modifications:

(i) Authorization of up to an additional 720 hours of waste burning during the shakedown period for determining operation readiness after construction if the prior written approval of the director is obtained.

(ii) A change in the operating requirements specified in the permit or license for conducting a trial burn, if the change is minor and if the prior written approval of the director is obtained.

(iii) A change in the ranges of the operating requirements specified in the permit or license to reflect the results of the trial burn, if the change is minor and if the prior written approval of the director is obtained.

(iv) Substitution of an alternate type of nonhazardous waste fuel that is not specified in the permit or license if the prior written approval of the director is obtained.

(v) Technology changes necessary to meet the standards under 40 C.F.R. part 63, subpart EEE if the owner or operator complies with the notification of intent to comply requirements of 40 C.F.R. §63.1211 before requesting a modification under this rule, and if prior written approval is obtained from the director.

(6) For minor permit modifications or minor license modifications, the permittee or licensee shall do both of the following:

(a) Notify the director concerning the minor modification by certified mail or other means that establish proof of delivery. For minor modifications that do not require the prior written approval of the director, the notification shall be made within 7 calendar days after the change is put into effect. For minor modifications that do require the prior written approval of the director, the notification shall be made before the change is put into effect. The notification shall be in compliance with all of the following provisions:

(i) Contain a minor modification request for the director's approval, if required.

(ii) Specify the exact change or changes being made or to be made to the permit or license conditions or supporting documents referenced by the permit or license.

(iii) Identify that the modification is a minor modification.

(iv) Explain why the modification is necessary.

(v) Provide the applicable information required by the provisions of R 299.9504 and R 299.9508, as appropriate.

(b) Send a notice of the minor modification to all persons on the facility mailing list that is maintained by the director in accordance with the provisions of 40 C.F.R. §124.10(c)(viii) and the appropriate units of state and local government in accordance with the provisions of 40 C.F.R. §124.10(c)(ix). The notification shall be made within 90 days after the change is put into effect. For minor modifications that require the prior written approval of the director, the notification shall be made within 90 calendar days after the director approves the minor modification request.

(7) Any person may request that the director review any minor permit modification or minor license modification. The director may reject for cause. The director shall inform the permittee or licensee by certified mail that a minor permit modification or minor license modification has been rejected and explain the reasons for the rejection. If a minor permit modification or minor license modification is rejected, the permittee or licensee shall comply with the existing permit or license conditions.

(8) For minor permit modifications or minor license modifications, the permittee or licensee may elect to follow the procedures specified in R 299.9511 instead of the minor permit modification or minor license modification procedures. The permittee or licensee shall inform the director of this decision in the notice that is required in subrule (6) of this rule.

(9) Any modification that is not specifically listed in subrule (5) of this rule shall be considered a major permit modification or major license modification and shall be subject to the requirements of R 299.9511 and R 299.9520, unless all of the following conditions are met:

(a) The licensee or permittee demonstrates, to the director's satisfaction, that a modification is in compliance with the criteria for a minor modification. In determining the appropriate classification for a modification, the director shall consider the similarity of the modification to other modifications listed in subrule (5) of this rule. Minor modifications apply to minor changes that keep the permit or license current with routine changes to the facility or its operation. These changes do not substantially alter the permit or license conditions or reduce the capacity of the facility to protect human health or the environment.

(b) The modification does not authorize the physical construction of a new treatment, storage, or disposal facility; the expansion or enlargement beyond the previously authorized design capacity or area of a treatment, storage, or disposal facility; or the alteration of the method of treatment or disposal previously authorized at a treatment, storage, or disposal facility to a different method of treatment or disposal.

(c) The classification of the modification is not less stringent than that allowed pursuant to the provisions of RCRA.

(10) For major permit modifications or major license modifications, the permittee or licensee shall submit a major modification request to the director by certified mail or by other means that establish proof of delivery. The request shall be made before the change is put into effect. The

request shall be in compliance with all of the following provisions:

(a) Describe the exact change or changes to be made to the permit or license conditions or supporting documents referenced by the permit or license.

(b) Identify that the modification is a major modification.

(c) Explain why the modification is necessary.

(d) Provide the applicable information required by the provisions of R 299.9504 and R 299.9508, as appropriate.

(11) A construction permit or operating license may be revoked for any of the following reasons:

(a) Noncompliance by the permittee or licensee with part 111 of the act, these rules, or any condition of the construction permit or operating license.

(b) A determination that the licensed activity endangers human health or the environment.

(c) The owner or operator fails in the application or during the construction permit or operating license issuance process to disclose fully all relevant facts or at any time misrepresents any relevant facts.

(12) Requests for construction permit or operating license modification by a permittee or licensee and updated applications requested by the director pursuant to the provisions of subrule (2) of this rule shall be made on forms provided by the director.

(13) An operating license may be suspended pursuant to the provisions of act 306.

(14) The provisions of 40 C.F.R. §270.41(a), except 40 C.F.R. §270.41(a)(3), are adopted by reference in R 299.11003.

R 299.9520 Procedures for modification or revocation of construction permits and operating licenses.

Rule 520. (1) Any interested person, including the licensee, may request the director to commence proceedings under act 306 to modify, suspend, or revoke a construction permit or operating license. All requests shall be in writing and shall contain facts or reasons supporting the request. If the director decides the request is not justified, he or she shall send the requestor a written response giving a reason for the decision.

(2) If the director decides to commence proceedings under act 306 to modify a construction permit or operating license under R 299.9519(2), he or she shall prepare a draft construction permit or operating license incorporating the proposed changes. The director may request submission of an updated permit or license application. During any modification proceeding, the permittee or licensee shall comply with all conditions of the existing permit or license until the permit or license is modified.

(3) If the director decides to commence proceedings under act 306 to revoke a construction permit or operating license under this rule, he or she shall issue a notice of intent to revoke and, when authorized under title II of the solid waste disposal act, follow those public participation procedures specified in R 299.9511.

(4) If a construction permit or operating license is revoked, the director shall order the owner or operator to carry out closure procedures under section 51 of part 111 of the act and shall require the cessation of all activities at the facility subject to permitting or licensure under part 111 of the act, except those necessary for closure.

R 299.9521 Operating license conditions.

Rule 521. (1) All operating licenses shall contain all of the following general conditions:

(a) The general conditions contained in the provisions of 40 C.F.R. §270.30, except §270.30(l)(1) and (8). For purposes of these conditions the word "licensee" shall replace the word "permittee" and the term "part 111 of the act" shall replace the term "RCRA."

(b) The following additional conditions:

(i) The licensee shall not initiate an enlargement, alteration, or expansion beyond the previously authorized design capacity or area of a treatment, storage, or disposal facility without first

obtaining a construction permit from the director.

(ii) For a facility being modified, the permittee or licensee shall not treat, store, or dispose of hazardous waste in the modified portion of the facility until 1 of the following conditions is met:

(A) The licensee has submitted, to the director, by certified mail or hand delivery, a letter signed by the permittee and a registered professional engineer stating that the facility has been constructed or modified in compliance with the license and approved plans, and the director has inspected the modified facility and finds it is in compliance with the conditions of the license.

(B) Within 15 days of the date of submission of the letter in subparagraph (A) of this paragraph, the licensee has not received notice from the director of his or her intent to inspect, prior inspection is waived, and the licensee may commence treatment, storage, or disposal of hazardous waste.

(iii) The licensee shall obtain the approval of the director by a modification to the license before transferring ownership or operation of the facility to another person. The new owner or operator shall not accept hazardous waste at the facility until the license modification has been issued by the director.

(c) Other conditions determined to be necessary by the director to clarify procedures for license issuance, reissuance, modification, and revocation under act 306.

(2) In addition to conditions required in all licenses, the director shall establish conditions on a case-by-case basis for all of the following:

(a) Compliance schedules, if applicable, consistent with the provisions of 40 C.F.R. §270.33.

(b) Requirements for recording and reporting monitoring results, as specified in the provisions of 40 C.F.R. §270.31 and part 6 of these rules.

(c) Duration of the permit or license under R 299.9516.

(d) Allowable waste types.

(3) Each construction permit and operating license under part 111 of the act shall include conditions necessary to do the following:

(a) Achieve compliance with part 111 of the act and these rules, including each of the applicable requirements of parts 6 and 8 of these rules. In satisfying this provision, the director shall incorporate applicable requirements of part 6 directly into the permit or license or establish other conditions that are based on these requirements. For the purpose of this paragraph, an applicable requirement is a statutory or regulatory requirement which takes effect before final administrative disposition of a permit or license or any requirement which takes effect before the modification of a permit or license under R 299.9519.

(b) Protect human health and the environment.

(4) New, reissued, and, to the extent allowed under R 299.9519, modified permits or licenses shall incorporate each of the applicable requirements referenced in this rule.

(5) A condition of a construction permit or operating license shall be incorporated either expressly or by reference. If incorporated by reference, a specific citation to the applicable regulations or requirements shall be given in the permit or license.

(6) The provisions of 40 C.F.R. §270.30, except §270.30(l)(1) and (8), §270.31, and §270.33 are adopted by reference in R 299.11003.

R 299.9522 Transfer of ownership or operation.

Rule 522. (1) A permit or license may be transferred by the permittee or licensee to a new owner or operator only if the permit or license has been modified pursuant to the provisions of R 299.9519(3) or a minor modification made pursuant to the provisions of R 299.9519(5) to identify the new licensee or permittee and incorporate such other requirements as may be necessary pursuant to the provisions of part 111 of the act and these rules.

(2) Changes in the ownership or operational control of a facility which is authorized to operate pursuant to the provisions of part 111 of the act or these rules but which has not been issued an operating license pursuant to the provisions of part 111 of the act or these rules may be made if the

new owner or operator submits a revised part a permit application not later than 90 days before the scheduled change. When a transfer of ownership or operational control of a facility occurs, the old owner or operator shall comply with the financial requirements of part 7 of these rules until the new owner or operator has demonstrated to the director that he or she is complying with the requirements of part 7 of these rules. The new owner or operator shall demonstrate compliance with the provisions of part 7 of these rules within 6 months of the date of the change in the ownership or operational control of the facility. Upon the new owner or operator demonstrating, to the director, compliance with the provisions of part 7 of these rules, the director, or his or her designee, shall notify the old owner or operator, in writing, that he or she no longer needs to comply with these requirements as of the date of the demonstration. All other interim status duties are transferred effective immediately upon the date of the change of ownership or operational control of the facility.

(3) The new owner or operator shall comply with all of the requirements of part 111 of the act and these rules and with the stipulations of previous operating licenses, construction permits, or other agreements entered into by the previous owner or operator and the director.

(4) The responsibility for remedial measures to correct any environmental problem resulting from previous operations at the facility shall be assumed by the new owner or operator. This requirement shall be incorporated into the operating license for the new owner or operator.

R 299.9523 Permit fee schedule.

Rule 523. Table 501 reads as follows:

Table 501
Permit Fee Schedule

Item				
(1)	Type of facility	Landfill, surface impoundment, land treatment, or waste pile	$ 9,000.00	
		Incinerator or other treatment	7,200.00	
		Storage**	500.00	
			Landfills, surface impoundments, lan treatment, and waste piles*	Other treatment and storage
(2)	Site size	(a) Less than 5 acres	$100.00	$ 50.00
		(b) 5 to 19 acres	170.00	100.00
		(c) 20 to 79 acres	240.00	100.00
		(d) 80 acres or more	320.00	100.00
(3)	Projected waste volume per day	(a) Less than 50 cubic yards or 10,000 gallons	60.00	50.00
		(b) 50 to 100 cubic yards or 10,000 to 20,000 gallons	80.00	100.00
		(c) 101 to 700 cubic yards or 20,000 to 140,000 gallons	100.00	100.00
		(d) More than 700 cubic yards or more than 140,000 gallons	130.00	150.00
(4)	Hydrogeological characteristics	(a) Natural clay	40.00	-
		(b) Natural sand	60.00	-
		(c) Compacted clay	70.00	-
		(d) Artificially lined (other materials)	100.00	-
		(e) Any combination of above	100.00	-
		(f) Surface water on site	_	75.00

*Except waste piles meeting the requirements of 40 C.F.R. §264.250(c).
**Storage associated with treatment or disposal activities which may be regulated under a single permit are not subject to this fee.

R 299.9524 Remedial action plans.

Rule 524. (1) The requirements of this rule apply to remedial action plans and owners or operators seeking remedial action plans to authorize the treatment, storage, or disposal of hazardous remediation waste at a remediation waste management site.

(2) A remedial action plan shall only be issued for the area of contamination where the

remediation wastes to be managed under the plan originated, or areas in close proximity to the contaminated area, except as allowed in limited circumstances under 40 C.F.R. §270.230.

(3) The requirements of part 5 of these rules do not apply to remedial action plans, with the exception of R 299.9516, unless otherwise specified in this rule.

(4) Notwithstanding any other provision of part 5 of these rules or this rule, any document that meets the requirements of this rule, constitutes a construction permit or operating license under part 111 of the act.

(5) A remedial action plan may include either of the following:

(a) A stand-alone document that includes only the information and conditions required in this rule.

(b) A part or parts of another document that includes information or conditions for other activities at the remediation waste management site, in addition to the information and conditions required by this rule.

(6) The treatment, storage, or disposal of hazardous remediation wastes under a remedial action plan as part of a cleanup compelled by federal or state cleanup authorities does not affect obligations that exist under such authorities in any way.

(7) The issuance of a remedial action plan to the owner or operator of a facility operating under interim status does not terminate the interim status of the facility.

(8) Treatment units that involve the combustion of hazardous remediation wastes at remediation waste management sites are not eligible for remedial action plans under this rule.

(9) An owner or operator of a facility already permitted or licensed under these rules may obtain approval of a remedial action plan for managing hazardous remediation waste at the facility by modifying the existing permit or license in accordance with the requirements of R 299.9519 and R 299.9520, except the requirements of R 299.9519(6)(a)(v) and (10)(d), thereby making the remedial action plan part of the permit or license. Requests to modify the permit or license shall include the information specified in 40 C.F.R. §270.110. Once incorporated into the permit or license, the remedial action plan is subject to the requirements for permit or license modification, revocation, reissuance, termination, and duration and effect provisions of part 5 of these rules.

(10) Owners or operators seeking a remedial action plan and owners or operators with existing remedial action plans shall comply with the requirements of this rule and 40 C.F.R. part 270, subpart H, except §§270.80, 270.85, 270.90, 270.155, 270.160, 270.190, and 270.195.

(11) Final decisions on remedial action plan applications and remedial action plans shall be subject to the appeal processes for operating licenses which are established under the act and act 306.

(12) A remedial action plan shall become effective 30 days after the director notifies the owner or operator and all persons which provided comments on the draft plan that the plan is approved, except under any of the following conditions:

(a) The director specifies a later effective date as part of the final decision.

(b) The owner or operator or another person has appealed the remedial action plan.

(c) No persons requested a change in the draft remedial action plan, in which case the plan becomes effective immediately when it is issued.

(13) Remedial action plans shall be issued for a fixed term, not to exceed 10 years, although the plans may be renewed upon approval by the director in fixed increments of not more than 10 years. Each remedial action plan for hazardous waste land disposal shall be reviewed by the director 5 years after the date of issuance or reissuance and shall be modified as necessary to ensure that the owner or operator is in compliance with the requirements of part 111 of the act and these rules.

(14) The provisions of 40 C.F.R. part 270, subpart H, except §§270.80, 270.85, 270.90, 270.155, 270.160, 270.190, and 270.195 are adopted by reference in R 299.11003. For the purposes of this adoption the words "part 5 of these rules" shall replace the words "§§270.3 through 270.66," the words "parts 6 and 8 of these rules" shall replace the words "part 264 and 266," the words "this act

and act 306" shall replace the words "§270.155," the words "R 299.9519 and R 299.9520" shall replace the words "§§270.40 through 270.43," "§§270.41 and 270.43," and "§270.43," The words "these rules" shall replace the words "parts 124, 260 through 266 and 270 of this chapter," the words "part 7 of these rules" shall replace the words "part 264, subpart H, of this chapter," the word "R 299.9511" shall replace the words "§§124.31, 124.32, and 124.33 of this chapter," and the word "R 299.9629" shall replace the word "§264.101."

R 299.9525 Notice requirements.

Rule 525. (1) An owner of a hazardous waste treatment, storage, or disposal facility shall execute and file a notice with the office of the register of deeds in the county in which the facility is located. The owner shall submit verification of the execution, filing, and recording of the notice to the department within 60 days of the effective date of this rule. The notice shall be titled "notice regarding statutory obligations applicable to property" and shall comply with all of the following requirements:

(a) The notice shall include a legal description of the land upon which the facility is located. The land and the facility shall be referred to as "the property."

(b) The notice shall state that the property has been used to manage hazardous waste and is subject to the corrective action requirements of part 111 of the act and RCRA, as amended by the 1984 hazardous and solid waste amendments.

(c) The form of the notice shall comply with the requirements of act 103 of the public acts of 1937, as amended, being §565.201 et seq. of the Michigan Compiled Laws.

(2) Owners or operators shall provide new owners or operators with a copy of the notice required pursuant to the provisions of subrule (1) of this rule.

(3) New owners or operators shall provide notice to the director of the transfer of ownership or operational control of a facility. The notification shall be provided to the director not later than 90 days before the scheduled change in ownership or operational control.

(4) The requirements of subrules (1) to (3) of this rule apply to both of the following:

(a) Owners or operators of hazardous waste treatment, storage, or disposal facilities which have been issued an operating license under part 111 of the act.

(b) Owners or operators of hazardous waste treatment, storage, or disposal facilities which have not yet been issued an operating license under part 111 of the act.

PART 6. OWNERS AND OPERATORS OF HAZARDOUS WASTE TREATMENT, STORAGE, AND DISPOSAL FACILITIES

R 299.9601 Applicability; relationship to interim status standards.

Rule 601. (1) The standards in this part apply to owners and operators of all facilities that treat, store, or dispose of hazardous waste, except as otherwise specifically provided in these rules.

(2) Treatment, storage, or disposal facilities which are authorized to operate pursuant to the provisions of these rules and which have not been issued or reissued an operating license after the effective date of these rules shall be in compliance with all of the following rules:

(a) R 299.9602 Environmental and human health standards generally.
(b) R 299.9607 Contingency plan and emergency procedures.
(c) R 299.9608 Use of manifest system.
(d) R 299.9609 Operating record; retention and disposition of records.
(e) R 299.9610 Reporting.
(f) R 299.9613(2) to (5) Closure and postclosure.
(g) R 299.9614 Use and management of containers.
(h) R 299.9615 Tank systems.
(i) R 299.9627 Land disposal restrictions.
(j) R 299.9629 Corrective action.
(k) R 299.9635 Corrective action management unit requirements.
(l) R 299.9636 Temporary unit requirements.
(m) R 299.9637 Hazardous waste munitions and explosives storage.
(n) R 299.9638 Staging pile requirements.

(3) In addition to the requirements specified in subrule (2) of this rule, the following persons shall comply with the interim status standards of 40 C.F.R. part 265, except subparts D, E, H, I, J, and DD, and 40 C.F.R. §§265.112(d)(1), 265.115, and 265.120:

(a) An owner or operator of an existing facility that treats, stores, or disposes of hazardous waste who has fully complied with the requirements for interim status pursuant to the provisions of section 3005(e) of RCRA and the provisions of 40 C.F.R. §270.10, until final administrative disposition of the owner's or operator's permit application pursuant to the provisions of RCRA or until an operating license is issued or reissued to the owner or operator after the effective date of these rules.

(b) An owner or operator of a facility that is in existence on November 19, 1980, or that is in existence on the effective date of amendments to part 111 of the act or these rules that render it subject to the licensing requirements of part 111 of the act, who has failed to provide timely notification as required by section 3010(a) of RCRA or failed to file part A of the permit application as required by the provisions of 40 C.F.R. §270.10(e) and (g).

(4) The requirements of this part apply to a person who disposes of hazardous waste by means of underground injection subject to a permit issued pursuant to an underground injection control program approved or promulgated under the federal safe drinking water act only to the extent that these requirements are included in the provisions of R 299.9503(3)(a).

(5) The requirements of this part apply to the owner or operator of a publicly owned treatment works that treats, stores, or disposes of hazardous waste only to the extent that these requirements are included in the provisions of R 299.9503(3)(b).

(6) The standards in this part do not apply to those persons who are listed in R 299.9503(1) and (2), except as otherwise specified by those subrules.

(7) Except as noted in this subrule, the provisions of part 6 of the rules do not apply to owners and operators of hazarous waste incinerator facilities identified in subrules (2) and (3) of this rule if the owner or operator demonstrates compliance with the maximum acheivable control technology standards of 40 C.F.R. part 63, subpart EEE by conducting a comprehensive performance test and submitting to the director a notification of compliance under 40 C.F.R.§§63.1207(j) and 63.1210(d) which documents compliance with the requirements of 40 C.F.R. part 63, subpart EEE. The

maximum acheivable control technology standards of 40 C.F.R. part 63, subpart EEE do not supercede the requirements of R 299.9608 to R 299.9610 and part 7 of these rules, and 40 C.F.R. part 265, subparts A to D, F, G, BB, and CC.

(8) Notwithstanding any other provisions of these rules, enforcement actions may be brought pursuant to section 48 of part 111 of the act.

(9) The provisions of 40 C.F.R. §270.10 and the provisions of 40 C.F.R. part 265, except subparts E, H, and DD, and 40 C.F.R. §§265.112(d)(1), 265.115, and 265.120, are adopted by reference in R 299.11003. Where provisions of 40 C.F.R. parts 264, 265, and 270 are referenced in this part, the word "director" shall replace the term "regional administrator" and the words "operating license" shall replace the word "permit." For the purposes of this adoption, the word "R 299.9629" shall replace the word "40 C.F.R. §264.101(a)," the words "part 5 of these rules" shall replace the word "40 C.F.R. §270.1(c)(7)," and the words "R 299.9703(8) and R 299.9710(17)" shall replace the word "40 C.F.R. §265.140(d)," and the words "R 299.9612 and R 299.9629" shall replace the words "40 C.F.R. §§264.91 through 264.100."

R 299.9602 Environmental and human health standards generally.

Rule 602. (1) All treatment, storage, and disposal facilities shall be located, designed, constructed, and operated in a manner that will prevent all of the following:

(a) Violations of the federal clean water act or part 31 of the act.

(b) Air emissions in violation of the federal clean air act or part 55 of the act.

(c) Degradation, as defined by part 31 of the act, of a sole-source aquifer.

(d) Exposure of humans or the environment to harmful quantities of hazardous waste or hazardous waste constituents.

(e) Pollution, impairment, or destruction of the natural resources of the state.

(2) The owner or operator of a treatment, storage, or disposal facility which discharges to surface water or groundwater, including discharges from leachate collection systems or surface water runoff collection systems, shall comply with the federal clean water act and part 31 of the act. Additionally, owners or operators of a treatment, storage, or disposal facility which discharges, other than sanitary sewage, to municipal sewerage systems shall meet the applicable pretreatment standards for these facilities.

R 299.9603 Location standards.

Rule 603. (1) Active portions of new treatment, storage, or disposal facilities or expansions, enlargements, or alterations of existing facilities shall not be located in any of the following areas:

(a) Within 61 meters of a fault which had its displacement in Holocene time.

(b) In a floodway designated by the department under part 31 of the act.

(c) In a coastal high-risk area designated under part 323 of the act.

(d) Over a sole-source aquifer or the recharge zone of a sole- source aquifer, unless the director grants an exemption to this provision based upon a demonstration by the applicant that the treatment, storage, or disposal facility will be located, designed, constructed, and operated in a manner that will prevent contamination of the aquifer.

(e) Within that isolation distance from public water supplies specified by act 399.

(f) In a wetland.

(2) Unless otherwise allowed by a construction permit or operating license under part 111 of the act or subrule (3) of this rule, the following isolation distances shall be maintained between the active portion of a new facility and adjacent commercial, residential, or recreational property lines:

(a) For landfills, 150 meters.

(b) For other facilities, 60 meters.

(3) For purposes of subrule (2) of this rule, adjacent commercial, residential, and designated recreational property shall not include public roads, railroads, or rights-of-way. However, the director may require greater isolation distances than those specified in subrule (2) of this rule, or allow lesser

isolation distances, based on the following criteria:

(a) The proposed design and operation of the facility.

(b) The location of private water wells.

(c) The potential for fugitive emissions in violation of part 55 of the act.

(4) Treatment, storage, and disposal facilities shall not be located in a floodplain. The director may grant an exemption to the floodplain restrictions of this rule for treatment and storage facilities if either of the following conditions is met:

(a) The facility is designed, constructed, operated, and maintained to prevent washout of any hazardous waste by a flood.

(b) The owner or operator can demonstrate to the director that procedures are in effect which will cause the waste to be removed safely, before floodwaters can reach the facility, to a location where the wastes will not be vulnerable to the floodwaters.

(5) Landfills, surface impoundments, and waste piles shall only be located in areas where there is not less than 6 meters of soil with a maximum permeability of 1.0×10^{-6} cm/sec at all points below and lateral to the liner or bottom of the landfill, surface impoundment, or waste pile, unless the owner or operator substitutes an engineered backup liner of equivalent design and demonstrates to the director that it provides equivalent environmental protection.

R 299.9604 Facility design and operating standards.

Rule 604. (1) The owner or operator of a treatment, storage, or disposal facility shall design, construct, operate, and maintain all of the following:

(a) A run-on control system capable of preventing flow onto the active portions of the facility during peak discharge from at least a 24-hour, 25-year storm.

(b) A runoff management system to collect and control at least the water volume resulting from active portions of the facility from a 24-hour, 100-year storm.

(c) Systems to prevent hazardous waste or hazardous waste constituents from escaping into the soil, directly or indirectly into surface water or groundwaters, or uncontrolled into drains or sewers.

(2) The director shall grant an exemption from the provisions of subrule (1)(a) and (b) of this rule for facilities other than landfills, surface impoundments, waste piles, and land treatment which are physically in existence at the time of initial licensing or permitting under part 111 of the act.

R 299.9605 General requirements for owners and operators.

Rule 605. (1) The owner or operator of a hazardous waste treatment, storage, or disposal facility shall comply with all of the requirements of 40 C.F.R. part 264, subpart B, unless otherwise specified in this rule. In addition to the notice requirements of 40 C.F.R. §264.12, the owner or operator shall, before transferring ownership or operation of a facility during its operating life or during any required postclosure care period, notify the new owner or operator, in writing, of the requirements of this part and part 5 of these rules.

(2) Hazardous waste transport vehicles and other containers leaving a designated facility shall be empty of hazardous waste in accordance with the provisions of R 299.9207 or accompanied by a manifest that is prepared in accordance with the provisions of these rules. The owner or operator shall develop and implement a procedure for insuring compliance with this subrule. If a transport vehicle or other container is not empty, then the owner or operator shall either take all steps required in the procedure to insure that the provisions of R 299.9207 are complied with or insure that the hazardous waste that remains in the vehicle or containers is accompanied by a manifest that is prepared in accordance with the provisions of these rules when leaving the designated facility.

(3) The requirements of 40 C.F.R. part 264, subpart B do not apply to remediation waste management sites, other than those sites which are located at facilities that are subject to the permitting or licensing requirements under part 111 of the act and these rules because the facility is also treating, storing, or disposing of hazardous wastes that are not remediation wastes, provided that the owners or operators of the remediation waste management sites comply with the requirements of

40 C.F.R. §264.1(j)(1) to (13).

(4) The provisions of 40 C.F.R. part 264, subpart B, and §264.1(j)(1) to (13) are adopted by reference in R 299.11003. For the purposes of this adoption, the words "regional administrator" shall be replaced by the word "director" and the word "§264.101" shall be replaced by the word "R 299.9629."

R 299.9606 Preparedness and prevention.

Rule 606. (1) Owners or operators of hazardous waste treatment, storage, and disposal facilities shall comply with the provisions of 40 C.F.R. part 264, subpart C, regarding preparedness and prevention unless otherwise specified in this rule.

(2) The requirements of 40 C.F.R. part 264, subpart C do not apply to remediation waste management sites, other than those sites which are located at facilities that are subject to the permitting or licensing requirements under part 111 of the act and these rules because the facility is also treating, storing, or disposing of hazardous wastes that are not remediation wastes, provided that the owners or operators of the remediation waste management sites comply with the requirements of 40 C.F.R. §264.1(j)(1) to (13).

(3) The provisions of 40 C.F.R. part 264, subpart C, and §264.1(j)(1) to (13) are adopted by reference in R 299.11003. For the purposes of this adoption, the word "§264.101" shall be replaced by the word "R 299.9629."

R 299.9607 Contingency plan and emergency procedures.

Rule 607. (1) Owners or operators of hazardous waste treatment, storage, and disposal facilities shall maintain a contingency plan for the facility and comply with all of the provisions of 40 C.F.R. part 264, subpart D, regarding the plan and emergency procedures, unless otherwise specified in this rule.

(2) If there is a fire, explosion, or other release of hazardous waste or hazardous waste constituents that could threaten human health or the environment, or if the owner or operator has knowledge that a spill has reached surface water or groundwater, then the owner or operator shall immediately notify the department's pollution emergency alerting system - telephone number 800-292-4706. The notification shall include all of the following information:

(a) The name and telephone number of the person who is reporting the incident.

(b) The name, address, telephone number, and EPA identification number of the facility.

(c) The name, address, and telephone number of the owner or operator.

(d) The date, time, and type of incident.

(e) The name and quantity of the material or materials involved and released.

(f) The extent of injuries, if any.

(g) The estimated quantity and disposition of recovered material that resulted from the incident, if any.

(h) An assessment of actual or potential hazards to human health or the environment.

(i) The immediate response action taken.

(3) The requirements of 40 C.F.R. part 264, subpart D do not apply to remediation waste management sites, other than those sites which are located at facilities that are subject to the permitting or licensing requirements under part 111 of the act and these rules because the facility is also treating, storing, or disposing of hazardous wastes that are not remediation wastes, provided that the owners or operators of the remediation waste management sites comply with the requirements of 40 C.F.R. §264.1(j)(1) to (13).

(4) The provisions of 40 C.F.R. part 264, subpart D, and §264.1(j)(1) to (13) are adopted by reference in R 299.11003. For the purposes of the adoption of 40 C.F.R. §264.56(j) and §264.1(j)(1) to (13), the word "director" shall replace the words "regional administrator" and the word "§264.101" shall replace the word "R 299.9629," respectivley.

R 299.9608 Use of manifest system.

Rule 608. (1) If a facility receives hazardous waste accompanied by a manifest, then the owner or operator, or his or her agent, shall do all of the following:

(a) Sign and date each copy of the manifest to certify that the hazardous waste covered by the manifest was received.

(b) Note any significant discrepancies in the manifest on each copy of the manifest.

(c) Immediately give the transporter at least 1 copy of the signed manifest.

(d) Within 30 days after the delivery, send a copy of the manifest to the generator.

(e) Retain, at the facility, a copy of each manifest for not less than 3 years from the date of delivery.

(f) Return a copy of the manifest to the director or his or her designee within a period of 10 days after the end of the month in which the waste was received.

(2) If a facility receives a bulk shipment of hazardous waste from a rail or water transporter which is accompanied by a shipping paper containing all the information required on the manifest, excluding the EPA identification numbers, generator's certification, and signatures, then the owner or operator, or the owner or operator's agent, shall do all of the following:

(a) Sign and date each copy of the manifest or shipping paper to certify that the hazardous waste covered by the manifest or shipping paper was received.

(b) Note any significant discrepancies in the manifest or shipping paper on each copy of the manifest and shipping paper.

(c) Immediately give the rail or water (bulk shipment) transporter at least 1 copy of the manifest or shipping paper.

(d) Within 30 days after the delivery, send a copy of the signed and dated manifest to the generator; or, if the manifest has not been received within 30 days after delivery, send a copy of the shipping paper signed and dated to the generator.

(e) Retain, at the facility, a copy of the manifest and shipping paper, for not less than 3 years from the date of delivery.

(f) Return a copy of the manifest to the director or his or her designee within a period of 10 days after the end of the month in which the waste was received.

(3) If a shipment of hazardous waste is initiated from a facility, then the owner or operator of that facility shall comply with the requirements of part 3 of these rules.

(4) Upon discovering a significant manifest discrepancy, the owner or operator shall attempt to reconcile the discrepancy with the waste generator or transporter through telephone conversations or otherwise. If the discrepancy is not resolved within 15 days after receiving the waste, then the owner or operator shall immediately submit, to the director and regional administrator, a letter describing the discrepancy and attempts to reconcile it and a copy of the manifest or shipping paper at issue. Significant manifest discrepancies are differences between the quantity or type of hazardous waste designated on the manifest or shipping paper and the quantity or type of hazardous waste a facility actually receives, as follows:

(a) For bulk waste, significant discrepancies are variations of more than 10% in weight.

(b) For batch waste, a significant discrepancy is any variation in piece count, such as a discrepancy of 1 drum in a truckload.

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

(5) A significant manifest discrepancy, as specified in this rule, which results in a total or partial rejected shipment requires all of the following:

(a) For a total rejected shipment, the owner or operator shall comply with all of the following requirements:

(i) Indicate on the original manifest, the reason for the rejection and the date of rejection and signature.

(ii) Leave the facility owner or operator certification of receipt portion of the original manifest unsigned and undated.

(iii) Retain the facility copy of the original manifest.

(iv) Obtain acknowledgement of receipt by having the transporter sign and date the original manifest.

(v) Return the remaining copies of the original manifest to the transporter.

(b) For a partial rejected shipment, the owner or operator shall comply with all of the following requirements:

(i) Otain permission from the generator to receive a portion of the original shipment.

(ii) Indicate on the original manifest, the reason for the rejection, the quantity of waste rejected, and the name of the generator contact authorizing the receipt of a portion of the original shipment.

(iii) Line out the total quantity of waste information on the original manifest and note the new quantity of waste that is being accepted at the facility.

(iv) Obtain acknowledgement of receipt by having the transporter sign and date the original manifest.

(v) Complete the facility owner or operator certification of receipt portion of the orginal manifest.

(vi) Distribute copies of the manifest in accordance with subrules (1) and (2) of this rule.

(6) Within 3 working days of the receipt of a shipment subject to the provisions of R 299.9312, the owner or operator shall provide a copy of the tracking document bearing all required signatures to the notifier, to the Office of Enforcement and Compliance Assurance, Office of Compliance, Enforcement Planning, and Targeting and Data Division (2222A), U.S. Environmental Protection Agency, 401 M Street, SW, Washington DC 20460, and to competent authorities of all other concerned countries. The owner or operator shall maintain the original copy of the tracking document at the facility for not less than 3 years from the date of signature.

(7) The requirements of this rule do not apply to owners or operators of off-site facilities with respect to waste military munitions exempted from manifesting requirements under R 299.9818.

R 299.9609 Operating record; availability, retention and disposition of records.

Rule 609. (1) An owner or operator shall keep a written operating record at his or her facility. The following information shall be recorded as it becomes available and shall be maintained in the operating record until closure of the facility:

(a) The information required by the provisions of 40 C.F.R. §264.73 and 40 C.F.R. part 264, appendix I.

(b) Any other records required to be kept in the operating record by a construction permit or operating license.

(2) All records, including plans, required under this part shall be furnished upon request, and made available at all reasonable times for inspection, by any officer, employee, or representative of the department who is duly designated by the director.

(3) The retention period for all records required under this part is extended automatically during the course of any unresolved enforcement action regarding the facility or as requested by the director or administrator.

(4) A copy of records of waste disposal locations and quantities under subrule (1) of this rule shall be submitted to the director, or his or her designee, the regional administrator, and local land authority upon closure of the facility.

(5) The provisions of 40 C.F.R. §264.73 and part 264, appendix I, are adopted by reference in R 299.11003.

R 299.9610 Reporting.

Rule 610. (1) The owner or operator shall prepare and submit one copy of a biennial report to

the director or the director's designee by March 1 of each even numbered year. The owner or operator shall submit the biennial report on a form and in a format specified by the director or the director's designee. The report shall cover facility activities during the previous calendar year and shall include all of the information specified in the provisions of 40 C.F.R. §264.75(a) to (j).

(2) If a facility accepts for treatment, storage, or disposal any hazardous waste from an off-site source without an accompanying manifest, and if the waste is not excluded from the manifest requirement by R 299.9205, then the owner or operator shall prepare and submit a single copy of a report to the director or his or her designee within 15 days after receiving the waste. The unmanifested waste report shall be submitted on a form approved by the director. The report shall be designated "Unmanifested Waste Report" and shall include all of the following information:

(a) The EPA identification number, name, and address of the facility.

(b) The date the facility received the waste.

(c) The EPA identification number, name, and address of the generator and the transporter, if available.

(d) A description and the quantity of each unmanifested hazardous waste and facility received.

(e) The method of treatment, storage, or disposal for each hazardous waste.

(f) The certification signed by the owner or operator of the facility or the owner or operator's authorized representative.

(g) A brief explanation of why the waste was unmanifested, if known.

(3) The owner or operator of a hazardous waste treatment or disposal facility on the site of generation shall submit a monthly report to the director or his or her designee, on forms provided by the director, which summarizes all managed hazardous wastes treated or disposed of, including the hazardous waste number of the wastes, quantity, method of treatment or disposal, and dates of treatment or disposal. The report shall be submitted to the director within 10 days after the end of each month.

(4) All reports shall be signed and certified in accordance with the provisions of 40 C.F.R. §270.11, which is adopted by reference in R 299.11003.

R 299.9611 Environmental monitoring.

Rule 611. (1) An owner or operator of a hazardous waste treatment, storage, or disposal facility shall develop an environmental monitoring program that is capable of detecting a release of hazardous waste or hazardous waste constituents from the facility.

(2) An owner or operator shall do all of the following as part of the environmental monitoring program:

(a) Prepare a sampling and analysis plan for each environmental monitoring program that includes all of the following information:

(i) A sampling location map.

(ii) A sampling schedule.

(iii) The parameters to be analyzed.

(iv) The sampling equipment, well purging, and sample collection procedures.

(v) The field measured parameters.

(vi) The sampling preservation and handling techniques.

(vii) The sampling analytical protocols.

(viii) The field and laboratory quality assurance and quality control procedures.

(ix) The chain of custody procedures.

(x) The decontamination procedures.

(xi) The data analysis, including the statistical method used.

(b) Conduct a groundwater monitoring program that is in compliance with the requirements of R 299.9612, except as indicated in subrule (3) of this rule.

(c) Conduct an ambient air monitoring program approved by the director or his or her

designee to detect violations of the provisions of part 55 of the act.

(d) Conduct an annual soil monitoring program in areas subject to spills, such as loading and unloading areas, to detect hazardous wastes or hazardous waste constituents.

(3) The director shall waive the groundwater monitoring requirements of R 299.9612 if either of the following conditions is met:

(a) The facility is not a land disposal facility and the owner or operator complies with 1 of the following provisions:

(i) All treatment, storage, and waste handling activities take place inside or under a structure that provides protection from precipitation and runoff and the facility is in compliance with the provisions of R 299.9604.

(ii) The owner or operator demonstrates, to the director's satisfaction, that monitoring is not required.

(iii) The owner or operator demonstrates, to the director's satisfaction, that a lesser degree of monitoring, or that alternate information regarding monitoring activities conducted in conjunction with response activity in the area of the hazardous waste management unit or units, can be utilized to demonstrate compliance with the provisions of part 111 of the act and these rules.

(b) The director finds that there is no potential for migration of liquid from the facility to the uppermost aquifer during the active life of the facility and the postclosure care period specified pursuant to the provisions of 40 C.F.R. §264.117, which is adopted by reference in R 299.11003. The demonstration shall be certified by a qualified geologist or geotechnical engineer. To provide an adequate margin of safety in the prediction of potential migration of liquid, the owner or operator shall base any predictions made pursuant to this subdivision on assumptions that maximize the rate of liquid migration.

(4) The director shall waive the requirements of subrule (2)(c) and (d) of this rule if the owner or operator demonstrates that monitoring is not required or that a lesser degree of monitoring can be utilized to demonstrate compliance with the provisions of part 111 of the act and these rules.

(5) The director shall require more intensive or extensive monitoring programs if needed to demonstrate compliance with the provisions of part 111 of the act or these rules.

R 299.9612 Groundwater monitoring.

Rule 612. (1) Owners or operators of facilities that treat, store, or dispose of hazardous waste shall comply with the requirements of R 299.9629 and 40 C.F.R. part 264, subpart F, excluding the provisions of ""264.94(a)(2) and (3), 264.94(b) and (c), 264.100, and 264.101 and except as follows:

(a) The director may, in the facility operating license, extend the point of compliance into groundwaters other than the uppermost aquifer.

(b) In addition to wells required by the provisions of 40 C.F.R. part 264, subpart F, the owner or operator shall install wells at appropriate locations and depths to yield groundwater from any saturated zone other than the uppermost aquifer when such sampling will provide an earlier warning of failure from a hazardous waste management unit. All wells installed to monitor or evaluate groundwater shall be constructed and abandoned in accordance with the well installation and well decommissioning procedures in ASTM standards D5092-90 and D5299-92, or a plan approved by the director.

(c) The director may require sampling and analysis for secondary monitoring parameters at frequencies specified in the facility operating license. If the owner or operator determines that there is a statistically significant increase in 1 or more secondary monitoring parameters, then he or she shall do all of the following:

(i) Notify the director or his or her designee of the finding immediately.

(ii) Sample for both primary and secondary monitoring parameters, taking not less than 4 replicate measurements on each sample at each well.

(iii) Redetermine if a statistically significant increase has occurred in either primary or

secondary monitoring parameters and immediately notify the director or his or her designee of the results.

(d) The concentration limit of a hazardous constituent established pursuant to the provisions of 40 C.F.R. "264.94(a) shall not exceed the background level of that constituent in groundwater, unless a concentration limit which is not less stringent than that allowed pursuant to the provisions of RCRA has been established pursuant to the provisions of part 31 of the act or part 201 of the act.

(e) To determine whether background values or concentration limits have been exceeded pursuant to the provisions of 40 C.F.R. "264.97(h), the owner or operator shall use a statistical test approved by the director in the facility operating license and shall determine if the difference between the mean of the constituent at each well, using all replicates taken, and either of the following is significant:

(i) The background value of the constituent as defined in the operating license.

(ii) The mean value of 1 year's initial sampling for the well itself where the 1-year period is specified by the director in the facility operating license.

(f) The director may require compliance monitoring and corrective action pursuant to the provisions of 40 C.F.R. "264.99, R 299.9629, part 31 of the act, and part 201 of the act to be conducted pursuant to a consent agreement or other legally binding agreement rather than pursuant to an operating license.

(g) Nothing in the provisions of 40 C.F.R. part 264, subpart F, or this rule shall restrict the director from taking action pursuant to the provisions of section 48 or 51 of part 111 of the act.

(h) The owner or operator has been granted a waiver by the director pursuant to the provisions of R 299.9611(3).

(2) The provisions of 40 C.F.R. part 264, subpart F and 40 C.F.R. part 264, appendix IX, excluding the provisions of ""264.94(a)(2) and (3), 264.94(b) and (c), 264.100, and 264.101, are adopted by reference in R 299.11003. For the purposes of this adoption, the word "director" shall replace the term "regional administrator" or "administrator," the word "department" shall replace the word "agency," the words "part 1 of these rules" shall replace the word "40 C.F.R. §270.1(c)(7)," and the words "R 299.9612 and R 299.9629" shall replace the words "40 C.F.R. §§264.91 through 264.100."

R 299.9613 Closure and postclosure.

Rule 613. (1) The owner or operator of a hazardous waste treatment, storage, or disposal facility shall comply with the closure and postclosure provisions of 40 C.F.R. part 264, subpart G, except 40 C.F.R. §§264.112(d)(1), 264.115, and 264.120.

(2) The owner or operator shall notify the director, in writing, not more than 60 days before the date on which the owner or operator expects to begin partial or final closure of any or all hazardous waste management units at the treatment, storage, or disposal facility. A copy of the current or updated partial or final closure plan for the hazardous waste management unit or units that are being closed shall accompany the notification.

(3) Within 60 days of completion of closure of each hazardous waste management unit at a facility, and within 60 days of the completion of final closure, the owner or operator shall submit, to the director, by registered mail, a certification that the hazardous waste management unit or facility, as applicable, has been closed in accordance with the specifications in the approved closure plan. The certification shall be signed by the owner or operator and by an independent registered professional engineer and shall include all of the following supporting documentation:

(a) The results of all sampling and analysis.

(b) Sampling and analysis procedures.

(c) A map showing the location where samples were obtained.

(d) Any statistical evaluations of sampling data.

(e) A summary of waste types and quantities removed from the site and the destination of these wastes.

(f) If soil has been excavated, the final depth and elevation of the excavation and a description of the fill material used.

(4) Any documentation not listed in subrule (3) of this rule that supports the independent registered professional engineer's certification shall be furnished to the director upon request until the director releases the owner or operator from the financial assurance requirements for closure pursuant to the provisions of R 299.9703.

(5) Not later than 60 days after completion of the established postclosure care period for each hazardous waste disposal unit, the owner or operator shall submit, to the director, by registered mail, a certification that the postclosure care period for the hazardous waste disposal unit was performed in accordance with the specifications in the approved postclosure plan. The certification shall be signed by the owner or operator and an independent registered professional engineer. Documentation supporting the independent registered professional engineer's certification shall be furnished to the director upon request until the director releases the owner or operator from the financial requirements for postclosure pursuant to the provisions of R 299.9703.

(6) The environmental protection standards established pursuant to the provisions of part 201 of the act shall be used to perform closure and postclosure of a facility under part 111 of the act if the limits are not less stringent than those allowed pursuant to the provisions of RCRA.

(7) The provisions of 40 C.F.R. part 264, subpart G, except 40 C.F.R. §§264.112(d)(1), 264.115, and 264.120, are adopted by reference in R 299.11003. For the purposes of this adoption, the word "director" shall replace the words "regional administrator" and the words "R 299.9703(8) and R 299.9710(17)" shall replace the word "40 C.F.R. §264.140(d).

R 299.9614 Use and management of containers.

Rule 614. (1) Owners or operators of all hazardous waste facilities that store containers of hazardous waste shall do both of the following:

(a) Comply with all requirements of 40 C.F.R. part 264, subpart I.

(b) Ensure that each container is labeled or marked clearly with the words "Hazardous Waste" and the hazardous waste number.

(2) The provisions of 40 C.F.R. part 264, subpart I, are adopted by reference in R 299.11003.

R 299.9615 Tank systems.

Rule 615. (1) Owners or operators who use tank systems to treat or store hazardous waste shall comply with all of the requirements of 40 C.F.R. part 264, subpart J, except as provided in subrule (4) of this rule.

(2) Owners or operators of tank systems that are not in compliance with the containment requirements of 40 C.F.R. §264.193(b) to (f) shall do all of the following until either the tank system is brought into compliance with the standards of 40 C.F.R. §264.193(a) or until a variance is obtained as provided by 40 C.F.R. §264.193(h):

(a) Ensure that aboveground tank systems that are used for the treatment or storage of liquid hazardous wastes, or hazardous wastes which could generate free liquids during storage, are located in areas which are paved, diked, curbed, or otherwise structurally enclosed so as to be able to contain not less than 100% of the largest tank system within the enclosed area. Where the hazardous wastes that are stored are incompatible with the materials of construction of tank systems within the enclosed area, or where the tank systems are interconnected so that a loss from one tank system may lead to losses in other tank systems, the owner or operator shall insure that all tank systems are structurally enclosed so as to be able to contain not less than 100% of the liquid portion of the material being stored in all tank systems.

(b) For underground tank systems that are used for the treatment or storage of liquid hazardous wastes, or hazardous wastes that could generate free liquids, do all of the following:

(i) Provide adequate secondary containment and a leachate collection and withdrawal system to contain any release of hazardous wastes or hazardous waste constituents from the tank system.

(ii) Conduct a complete inventory of hazardous wastes in the tank system not less than twice a month.

(iii) Conduct leachate sampling and analysis at least once a year. If the inventories required pursuant to paragraph (ii) of this subdivision indicate a loss of waste, leachate sampling and analysis shall be performed within 24 hours of the discovery of the loss.

(3) All tank systems which are put into service after July 14, 1989, or which are upgraded pursuant to the provisions of 40 C.F.R. §264.193 shall be assessed in accordance with the provisions of 40 C.F.R. §264.192(a)(3) and provided with the necessary corrosion protection as determined pursuant to the assessment.

(4) All tank systems shall be designed, constructed, operated, and maintained in compliance with the requirements of R 29.4101 to R 29.4504 pursuant to the provisions of act 207.

(5) Owners or operators shall label tank systems in accordance with the provisions of NFPA standard no. 704.

(6) The director may waive the interim secondary containment requirements of subrule (2) of this rule for wastewater treatment units and elementary neutralization units based upon an assessment of the hydrogeological aspects of the site with respect to the provisions of part 31 of the act, the nature and volume of the waste treated or stored, and the location and nature of the facility.

(7) NFPA standard no. 704 is adopted by reference in R 299.11002. The provisions of 40 C.F.R. part 264, subpart J, are adopted by reference in R 299.11003, with the following exceptions:

(a) The word "director" shall replace the words "regional administrator" and "administrator."

(b) For purposes of 40 C.F.R. §§264.191 and 265.191, the date "January 12, 1989" shall replace the date "January 12, 1988."

(c) For purposes of 40 C.F.R. §§264.193 and 265.193, the date "January 12, 1988" shall replace the date "January 12, 1987."

R 299.9616 Surface impoundments.

Rule 616. (1) Owners or operators of facilities that use surface impoundments to treat or store hazardous waste shall comply with the requirements of 40 C.F.R. part 264, subpart K, except 40 C.F.R. §264.221(f). For new surface impoundments or replacements or lateral expansions of existing surface impoundments where liners are constructed of materials that might allow wastes to migrate into the liner, such as compacted clay, the liner shall, at a minimum, be constructed in accordance with the standards for clay liners contained in R 299.9620(2) and shall be designed, constructed, and installed to prevent any migration of wastes out of the impoundment to the adjacent subsurface soil, groundwater, or surface water at any time during the active life, including the closure period, of the impoundment.

(2) New surface impoundments or replacements or lateral expansions of existing surface impoundments shall contain a leak detection, containment, and removal system designed, constructed, operated, and maintained in accordance with R 299.9622, unless exempted under that rule.

(3) The owner or operator of an existing surface impoundment shall not close the impoundment as a landfill in accordance with the provisions of 40 C.F.R. §264.228 unless both of the following provisions are complied with:

(a) The site of the surface impoundment meets the location standards of R 299.9603 or can be engineered to meet these standards.

(b) The director does either of the following:

(i) Determines that all contaminated subsoils cannot be practicably removed.

(ii) Issues a construction permit for a facility alteration.

(4) The provisions of 40 C.F.R. part 264, subpart K, except 40 C.F.R. §264.221(f), are adopted by reference in R 299.11003.

R 299.9617 Waste piles.

Rule 617. (1) Owners or operators of facilities that store or treat hazardous waste in piles shall comply with the provisions of 40 C.F.R. part 264, subpart L, except 40 C.F.R. §264.251(f). Where liners are constructed of materials that might allow waste to migrate into the liner, such as compacted clay, the liner shall be constructed in accordance with the standards for clay liners contained in R 299.9620(2).

(2) New waste piles shall contain a leak detection, containment, and removal system designed, constructed, maintained, and operated in accordance with R 299.9622, unless exempted under that rule.

(3) The provisions of 40 C.F.R. part 264, subpart L, except 40 C.F.R. §264.251(f), are adopted by reference in R 299.11003.

R 299.9618 Land treatment.

Rule 618. (1) Owners or operators of facilities that treat or dispose of hazardous waste in land treatment units shall comply with all requirements of 40 C.F.R. part 264, subpart M.

(2) The provisions of 40 C.F.R. part 264, subpart M, are incorporated by reference in R 299.11003.

R 299.9619 Landfills.

Rule 619. (1) Owners or operators of facilities that use landfills to dispose of hazardous waste shall comply with the design and operating requirements of 40 C.F.R. part 264, subpart N, except 40 C.F.R. §264.301(f).

(2) In addition to the liner system requirements of 40 C.F.R. §264.301, the owner or operator of a landfill shall design the liner system to meet the requirements of R 299.9620.

(3) All landfills shall contain a leak detection, collection, and removal system beneath the liner system that is designed, constructed, operated, and maintained in accordance with the provisions of R 299.9622, unless the landfill is exempted pursuant to the provisions of R 299.9622.

(4) In addition to the requirements of 40 C.F.R. §264.301(a), the leachate collection and removal system shall include all of the following:

(a) Not less than 30 centimeters of granular material that has a permeability of 1×10^{-2} cm/second or greater, as determined by ASTM standard no. D2434-68, or a layer of geosynthetic drainage materials with a transmissivity of 3 x 10-5 m^2/second or greater covered by a minimum of 30 centimeters of a protective layer of granular material with a permeability of 1×10^{-3} cm/second or greater, as determined by ASTM standard no. D2434-68.

(b) Either of the following:

(i) Provisions for discharging the leachate directly to a wastewater treatment unit.

(ii) Provisions for storing the quantity of leachate that is expected to be generated from all cells during a 24-hour, 100-year storm.

(c) Leachate sumps that have all of the following:

(i) A volume that can properly maintain a leachate head of no more than 30 centimeters (12 inches) on the liner.

(ii) A leachate removal system to remove liquid from the sump.

(iii) A device for continuously monitoring the quantity of leachate in the sump and removed from the landfill.

(5) The director may approve alternate design or operating practices to those specified in subrule (4) of this rule if the owner or operator demonstrates to the director that such design and operating practices, together with location characteristics, comply with both of the following requirements:

(a) The alternate design and operating practices shall prevent the migration of any hazardous constituent into the groundwater or surface water at least as effectively as the leachate collection and removal systems specified in subrule (4) of this rule.

(b) The alternate design and operating practices shall allow the detection of leaks of hazardous constituents through the top liner at least as effectively as the leachate collection and removal systems specified in subrule (4) of this rule.

(6) In addition to the closure and postclosure care requirements of 40 C.F.R. §264.310, the owner or operator of a landfill shall do all of the following with respect to closure and postclosure care:

(a) Close the facility so that the final cover includes all of the following unless the owner or operator substitutes an equivalent design which shall include a flexible membrane liner component with a minimum thickness of 1 millimeter (40 mil), depending on the type of material selected, and demonstrates to the director that it provides equivalent environmental protection:

(i) Compacted clay which is in compliance with the requirements of R 299.9620(3) and which is not less than 90 centimeters thick.

(ii) A flexible membrane liner shall be placed directly over the compacted clay layer required pursuant to subdivision (i).

(iii) Not less than 60 centimeters of additional material, such as topsoil, subsurface drainage media, or cobbles to prevent animal burrowing. The additional material shall be applied in a manner that protects the clay and any synthetic component from the effects of temperature, erosion, and rooted vegetation. For temperature protection, the additional material thickness shall equal not less than 60 centimeters or the maximum depth of frost penetration, whichever is greater. In order to provide a minimum base for root penetration, the top component of the additional material shall consist of not less than 15 centimeters of topsoil.

(iv) Slopes of not less than 4% at any location.

(b) Establish shallow-rooted grasses at the earliest possible time and maintain the vegetation or use other erosion control measures so as to stabilize the cap and prevent erosion. Erosion shall be limited to not more than 2 tons per acre per year based on the universal soil loss equation.

(c) Establish a venting system to prevent the accumulations of gas. The venting system shall be installed in a manner that does not adversely affect the permeability of the cap and, if required pursuant to the provisions of part 55 of the act, gas emissions shall be monitored, collected, and treated. The director shall exempt the owner or operator from this requirement if the owner or operator demonstrates that gas will not be generated in the landfill.

(7) The provisions of 40 C.F.R. part 264, subpart N, except 40 C.F.R. §264.301(f), are adopted by reference in R 299.11003. For the purposes of this adoption, the word "director" shall replace the words "regional administrator."

R 299.9620 Liner requirements for landfills, surface impoundments, and waste piles.

Rule 620. (1) A liner system shall be located, designed, constructed, and operated so that there is no direct contact between the liners and groundwater in a saturated zone such that moisture content would adversely affect the structural and containment integrity of the liners.

(2) The primary liner for a landfill shall be a composite liner. The composite liner shall be designed to have a flexible membrane liner meeting the requirements of 40 C.F.R. 264 subpart N directly over compacted clay which is a minimum of 150 centimeters thick and meets the requirements of subrule (3) of this rule.

(3) A compacted clay liner that is designed to meet the requirements of 40 C.F.R. §§264.221, 264.251, and 264.301, which are adopted by reference in R 299.11003, or R 299.9619 shall meet all of the following requirements for that clay liner:

(a) Comply with the criteria for a unified soil classification of CL or CH as determined by the provisions of ASTM standard D2487-69 (reapproved 1975).

(b) Have more than 25% of the soil particles be less than 5 microns in size.

(c) Be placed in horizontal lifts of not more than 25 centimeters and be uniformly and thoroughly compacted to the standards approved in the design. The lift thickness shall not be more than 25 centimeters (six inches) after compaction. However, the material shall not be compacted to less than 90% of the maximum dry density, as determined by the modified proctor test described in

the provisions of ASTM standard D1557-91, or 95% of the maximum dry density, as determined by the standard proctor test described in the provisions of ASTM standard D698-91, which are adopted by reference in R 299.11001, and the moisture content shall be within a range of -2% to +5% of the optimum moisture content.

(d) Have a maximum permeability coefficient of 1.0×10^{-7} cm/sec or less at all points.

(4) The waste pile or landfill base floor shall be graded to a minimum slope of 2% in directions perpendicular to the leachate collection pipes to promote drainage. The leachate pipes shall be laid on a slope of 1% or more in a direction to intercept liquid flow. The director may approve an alternate design to those specified in this subrule if the owner or operator demonstrates to the director that such design, together with location characteristics, complies with both of the following requirements:

(a) The alternate design will prevent the migration of any hazardous constituent into the groundwater or surface water at least as effectively the design requirements specified in this subrule.

(b) The alternate design will allow the detection of leaks of hazardous constituents through the top liner at least as effectively as the design requirements specified in this rule.

(5) Liner systems and leachate collection systems shall be designed to prevent the damage of the materials of both systems in the event of differential settlement of the foundation under worst case conditions.

R 299.9621 Quality control for landfills, surface impoundments, and waste piles.

Rule 621. (1) Owners or operators of landfills, surface impoundments, and waste piles shall conduct a quality control program during construction which shall assure all of the following:

(a) That the natural clay base meets or exceeds the thickness and permeability requirements of R 299.9603(5), by doing either of the following:

(i) Obtaining soil borings and determining the natural moisture content as determined by ASTM standard D2216, grain size distribution (sieve and hydrometer) as determined by ASTM standards D421 and D422-63, classification by the unified soil classification system as determined by ASTM standard D2487-69 (reapproved in 1979), and Atterburg limits of the soil as determined by ASTM standard D4318-94 at varying depths every 100 feet, and the permeability of an undisturbed sample every 200 feet as determined by ASTM standard D5084-90.

(ii) Utilizing resistivity surveys to replace or supplement borings specified in paragraph (i) of this subdivision. Such resistivity surveys shall employ an electrode spacing to give an effective depth of penetration. A sufficient number of stations shall be used to insure that complete coverage to the edge of the waste management area is provided and correlation with borings or wells is obtained.

(b) That the natural clay base provides an adequate sub-base for overlying liners and leachate collection and removal systems, by evaluating the subgrade conditions for stability and correcting wet or unstable areas.

(c) That compacted clay liners meet or exceed the requirements of R 299.9620(2), by doing all of the following:

(i) Constructing the liner such that the bottom liner and the side wall liner (dike) will be continuous and completely keyed together at all construction joints.

(ii) During winter construction, removing all ice and snow before placing the liner and not using frozen soil in any part of liner.

(iii) Determining the field density-moisture of the liner material by utilizing the provisions of ASTM standard D2922-78 for each 1,000 cubic yards placed, with a minimum of 1 test per day of construction or layer of clay placed.

(iv) Determining the particle size distribution (sieve and hydrometer) according to ASTM standards D421 and D422-63, Atterburg limits according to ASTM standard D4318-94, and natural moisture content according to ASTM standard D2216 of random samples of liner material from each 5,000 cubic yards of material placed.

(v) Redetermining the density of liner materials by the modified proctor test, ASTM standard

D1557-91, when the texture of the soil changes and every 5,000 cubic yards placed.

(vi) Determining the permeability with water of a soil sample every 10,000 cubic yards placed by using ASTM standard D5084-90, which is adopted by reference in R 299.11001, or other method approved by the director on a sample that is not less than 2.8 inches in diameter.

(vii) Verifying liner thickness and subgrade slope by a final elevation check to ensure that all of the following requirements are met:

(A) The final elevation shall be within plus or minus 0.2 feet of the approved plans.

(B) The slope reduction of the subgrade shall not be greater than 10% of the approved slopes.

(C) The final clay liner thickness shall not be less than the approved thickness at any point.

(d) That synthetic liners are properly installed, by doing all of the following:

(i) Properly preparing the foundation for the liner by doing all of the following:

(A) Compacting to the requirements of R 299.9620.

(B) Grading the foundation to a smooth and true line.

(C) Grading consistent with approved plans.

(D) Grading the foundation to be free from stones or deleterious material.

(E) Removing any vegetation from the foundation before installation of the liner.

(ii) Insuring that field seaming is done under the direction of a registered professional engineer and when weather conditions are favorable for installation.

(iii) Insuring that field seams, joints, and mechanical seals are properly made by wiping contact surfaces clean of dirt, dust, moisture, or other foreign material, assuring that seaming is done in accordance with manufacturer specifications, and testing all field seams by nondestructive tests approved by the director.

(iv) Recording the ambient temperature and liner temperature hourly during liner installation or field seaming.

(e) That leachate collection and leak detection, collection, and removal systems are installed such that the requirements of this rule are met, by doing both of the following:

(i) Making elevation checks at least every 200 feet to verify the appropriate thickness of granular material.

(ii) Sampling randomly at least every 5,000 cubic yards placed to verify the required aggregate classification.

(2) The quality control program required by subrule (1) of this rule shall be documented by written daily records of all work and tests performed during construction. All daily records shall be kept in the operating record for the facility and be made available for inspection by the director or his or her authorized representative.

(3) ASTM standards D421, D2216, D2487-69, D1557-91, D422-63, D2434-68, D4318-94, and D5084-90 are adopted by reference in R 299.11001.

R 299.9622 Leak detection systems.

Rule 622. (1) Each new unit and lateral expansion or replacement of an existing unit at a landfill, surface impoundment, waste pile, or land treatment facility shall include a leak detection system capable of detecting, collecting, and removing leaks of hazardous constituents at the earliest practicable time.

(2) If contamination is detected in the leak detection system required by this rule, the owner or operator shall do all of the following:

(a) Immediately notify the director or his or her designee.

(b) Within 30 days, determine what failures have occurred in the liner system.

(c) If failures have occurred, do either of the following on a schedule which insures the protection of human health and the environment:

(i) Repair the failures in the liner system and obtain the certification of a registered professional engineer that, to the best of his or her knowledge and opinion, the failure has been

corrected.

(ii) Cease placing waste in the failed unit and take action to prevent the migration of hazardous waste and hazardous waste constituents from the facility.

(3) The director shall grant an exemption from the requirements for a leak detection system if the owner or operator satisfies the waiver requirements for 2 liners and a leachate collection system between such liners established under the provisions of 40 C.F.R. part 264.301.

R 299.9623 Incinerator applicability and performance standard.

Rule 623. (1) The provisions of R 299.9624, R 299.9625, R 299.9626, and this rule apply to owners and operators of facilities that incinerate hazardous waste, except as R 299.9601 and subrule (2) of this rule provides otherwise. The following facility owners or operators are considered to incinerate hazardous waste:

(a) Owners or operators of hazardous waste incinerators as defined in R 299.9104.

(b) Owners or operators who burn hazardous waste in boilers or in industrial furnaces to destroy the wastes.

(2) Except as noted in this subrule, the provisions of part 6 of the rules do not apply to owners and operators of facilities that incinerate hazardous waste if the owner or operator demonstrates compliance with the maximum achievable control technology standards of 40 C.F.R. part 63, subpart EEE by conducting a comprehensive performance test and submitting to the director a notification of compliance under 40 C.F.R.§§63.1207(j) and 63.1210(d) which documents compliance with the requirements of 40 C.F.R. part 63, subpart EEE. Nevertheless, even after this compliance demonstration is made, the operating license conditions that are based on the standards of part 6 of the rules will continue to be in effect until they are removed from the operating license or the operating license is terminated or revoked, unless the operating license expressly provides otherwise. The maximum achievable control technology standards of 40 C.F.R. part 63, subpart EEE do not supersede the requirements of R 299.9601, R 299.9605 to R 299.9610, R 299.9612, R 299.9613, R 299.9625(5), R 299.9630, R 299.9631, and part 7 of these rules.

(3) An incinerator burning hazardous waste shall be designed, constructed, and maintained so that it will comply with the provisions of part 55 of the act.

(4) Principal organic hazardous constituents (POHCs) in the waste feed shall be treated to the extent required by the performance standards of 40 C.F.R. "264.343. The director shall specify one or more POHCs in the facility's operating license from the list of hazardous constituents in the provisions of 40 C.F.R. part 261, appendix VIII, pursuant to the provisions of 40 C.F.R. "264.342(b)(1). The director may, in addition, specify one or more POHCs from the lists of hazardous waste or hazardous constituents contained in tables 201 to 206 of these rules.

(5) The provisions of 40 C.F.R. part 63, subpart EEE and ""264.342(b)(1), 264.343, and 261, appendix VIII, are adopted by reference in R 299.11003.

R 299.9624 Incinerator design standards.

Rule 624. (1) To comply with the performance standards of R 299.9623, and to minimize the emission of hazardous constituents formed during combustion, incinerators burning hazardous waste shall be designed and operated in conformance with table 601. Table 601 reads as follows:

Table 601 - Incinerator design criteria minimum conditions

Waste type	Combustion zone temperature (degrees Celsius)	Retention time (seconds)	Oxygen in exiting combustion gases (%)
Halogenated aromatic hydrocarbons	1200	2	3

All other combustible hazardous constituents	1000	2	2

(2) The director shall waive the requirements of subrule (1) of this rule and establish other conditions of temperature, retention time, and oxygen content if the owner or operator can demonstrate both of the following under these alternative conditions:

(a) Compliance with the performance standards of R 299.9623.

(b) That hazardous constituents will not be formed during combustion in quantities sufficient to endanger human health or the environment.

R 299.9625 Incinerator operation.

Rule 625. (1) The owner or operator of an incinerator shall comply with the operating requirements of 40 C.F.R. §264.345.

(2) The owner or operator of an incinerator shall comply with monitoring and inspection requirements of 40 C.F.R. §264.347 and, in addition, monitor and record the following parameters while incinerating hazardous waste:

(a) Oxygen content in the exhaust gas at a location which accurately measures the oxygen content in the combustion zone on a continuous basis.

(b) Fuel feed rate.

(c) Any other parameter necessary for proper operation of the automatic hazardous waste feed shutoff system required by the provisions of 40 C.F.R. §264.345(e).

(3) The owner or operator of a hazardous waste incinerator shall comply with the waste analysis requirements of 40 C.F.R. §264.341.

(4) The owner or operator of a hazardous waste incinerator shall burn only wastes specified in his or her operating license and only under operating conditions specified for those wastes under this rule, except in approved trial burns or trial operations under R 299.9626. Other hazardous wastes may be burned only after operating conditions have been specified in a new construction permit or operating license. Operating requirements for new wastes may be based on either trial burn results or alternative data included with the construction permit or operating license application.

(5) At closure, the owner or operator shall remove all hazardous waste and hazardous waste residues from the incinerator site.

(6) The provisions of 40 C.F.R. §§264.341, 264.345, and 264.347 are adopted by reference in R 299.11003.

R 299.9626 Incinerator trial burn; trial operation.

Rule 626. (1) If the owner or operator of a new hazardous waste incinerator conducts a trial burn before application for an operating license, the construction permit for the hazardous waste incinerator shall establish appropriate conditions for each of the applicable requirements of this part, including, but not limited to, allowable waste feeds and operating conditions necessary to meet the requirements of 40 C.F.R. §264.345 and sufficient to comply with the standards of 40 C.F.R. §264.344(c)(1) and (2) for the period before and during the trial burn.

(2) The director may require trial operation of an incinerator and the submittal of a trial operations plan containing the information specified in the provisions of 40 C.F.R. §270.62(b)(2) under the following circumstances:

(a) Before the renewal of an incinerator's operating license under part 111 of the act.

(b) Before the licensing of an incinerator newly subjected to the license requirements of part 111 of the act and these rules.

(c) Before the approval of new waste types through an operating license modification.

(d) The director has evidence that an incinerator may be emitting hazardous constituents in quantities which violate part 55 of the act or these rules.

(3) The director shall approve a trial burn plan or trial operations plan if he or she finds all of the following:

(a) The trial burn or trial operation is likely to determine if the incinerator performance standard required by R 299.9623 can be met.

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

(c) The trial burn or trial operation will help the director determine future operating license requirements.

(d) The information sought by subdivisions (a) and (c) of this subrule cannot reasonably be developed through other means.

(4) During each approved trial burn or trial operation, the applicant shall make those determinations identified in the provisions of 40 C.F.R. §270.62(b)(7) and any other determinations required by the director.

(5) An applicant for a new operating license shall submit all trial burn data and a certification that the trial burn was carried out in accordance with the approved trial burn plan to the director with the operating license application. For trial operations, the owner or operator shall submit, to the director, all trial operation data and certification that the trial operation was carried out in accordance with the approved trial operations plan within 90 days of completion of the trial operation or later if approved by the director. All submissions required by this rule shall be certified on behalf of the applicant or owner or operator by the signature of a person authorized to sign an application or report under the provisions of 40 C.F.R. §270.11.

(6) The operating license for a hazardous waste incinerator shall establish appropriate conditions for each of the applicable requirements of this part, including, but not limited to, allowable waste feeds and operating conditions necessary to meet the requirements of this part and the provisions of 40 C.F.R. §264.345. The operating requirements shall be those demonstrated, in a trial burn, trial operation, or by alternative data specified in the provisions of 40 C.F.R. §270.19(c), to be sufficient to ensure compliance with the performance standards of 40 C.F.R. §264.343. Modifications to an operating license made as a result of a trial operation shall proceed as a minor modification according to R 299.9519(5).

(7) The requirements of this rule do not apply if the owner or operator of a facility that incinerates hazardous waste demonstrates compliance with the air emission standards and limitations of 40 C.F.R. part 63, subpart EEE by conducting a comprehensive performance test and submitting to the director a notification of compliance under 40 C.F.R. §§63.1207(j) and 63.1210(d). Nevertheless, the director may apply the provisions of this rule, on a case-by-case basis, for the purposes of information collection in accordance with R 299.9504(18) and R 299.9521(3)(b).

(8) The provisions of 40 C.F.R. §§264.343, 264.344(c)(1) and (2), 264.345, 270.11, and 270.62(b)(2) and (7) are adopted by reference in R 299.11003.

R 299.9627 Land disposal restrictions.

Rule 627. (1) The owner or operator of a treatment, storage, or disposal facility shall comply with the restrictions on land disposal contained in the provisions of 40 C.F.R. part 268.

(2) The provisions of 40 C.F.R. part 268 are adopted by reference in R 299.11003. For purposes of this adoption, the word "director" shall replace the words "administrator" and "assistant administrator," except in the provisions of 40 C.F.R. §§268.5, 268.6, 268.40(b), 268.42(b), and 268.44(a) to (g) and (i) to (o).

R 299.9628 Requirements for miscellaneous units.

Rule 628. (1) An owner or operator of a facility that treats, stores, or disposes of hazardous waste in miscellaneous units shall comply with the provisions of 40 C.F.R. part 264, subpart X.

(2) Treatment of hazardous waste shall not be allowed in an underground mine or cave.

(3) In addition to the requirements of 40 C.F.R. part 264, subpart X, and all other applicable

requirements of these rules, an owner or operator of a facility that stores or disposes of hazardous waste in an underground mine or cave shall design, operate, and maintain the facility throughout its active life and after closure to insure all of the following:

(a) Management of water so as to maintain the integrity of the mine or cave and protect human health and the environment.

(b) Proper transportation of waste from any surface operation to the final disposal or storage area in the mine or cave so as to prevent the release of a hazardous waste or hazardous waste constituent.

(c) Development of a waste placement map and maintenance of a daily log identifying waste placement locations and correlating those waste placement locations to surface property boundaries.

(d) That the mine or cave is not penetrated by drilling or otherwise adversely impacted by off-site activities.

(4) The provisions of 40 C.F.R. part 264, subpart X, are adopted by reference in R 299.11003.

R 299.9629 Corrective action.

Rule 629. (1) Owners or operators of facilities that treat, store, or dispose of hazardous waste shall conduct corrective action as necessary to protect the public health, safety, welfare, and the environment in accordance with a corrective action program approved by the director, unless otherwise specified in this rule. The corrective action program shall be conducted as follows:

(a) Owners or operators of facilities that apply for, or have been issued, an operating license pursuant to the provisions of part 111 of the act shall institute corrective action for all releases of a contaminant from any waste management units at the facility, regardless of when the contaminant may have been placed in or released from the waste management unit.

(b) Owner or operators of facilities that are not included in the provisions of subdivision (a) of this subrule and for which the owner or operator, or both, is or was subject to the interim status requirements defined in RCRA, except for facilities that have received formal written approval of the withdrawal of their EPA part A hazardous waste permit application from the director or the EPA, shall institute corrective action for all releases of hazardous waste from the facility, regardless of when the hazardous waste may have been placed in or released from the facility.

(2) Owners or operators shall implement corrective action beyond the facility boundary if the releases referenced in subrule (1) of this rule have or may have migrated, or otherwise have or may have been emitted, beyond the facility boundary, unless the owner or operator demonstrates, to the satisfaction of the director, that, despite the owner's or operator's best efforts, the owner or operator is unable to obtain the necessary permissions to undertake such actions. The owner or operator shall not be relieved of all responsibility to clean up a release that has migrated or been emitted beyond the facility boundary where off-site access is denied. On-site measures to address such releases shall be determined on a case-by-case basis. Assurances of financial responsibility for such corrective action shall be provided.

(3) The owners or operators who are required to establish a corrective action program pursuant to the provisions of part 111 of the act and these rules shall, at a minimum, do the following, as applicable:

(a) For facilities that are specified in subdivision (a) of subrule (1) of this rule, the owner or operator, or both, shall take corrective action to ensure compliance with the groundwater protection standards, and, if necessary, other applicable environmental protection standards, established by the director. The director shall specify in a permit, operating license, postclosure operating license, consent order, or other order, in accordance with this rule and R 299.9635 and R 299.9636, schedules of compliance for corrective action and assurances of financial responsibility for completing the corrective action and other requirements, including, any of the following:

(i) A list of the hazardous wastes and hazardous constituents. The list of hazardous constituents are identified pursuant to the provisions of 40 C.F.R. §264.93.

(ii) The groundwater protection standards which are expressed as concentration limits that are established pursuant to the provisions of R 299.9612(1)(d) or as concentration limits established pursuant to the provisions of part 31 or part 201 of the act if the limits are not less stringent than allowed pursuant to the provisions of RCRA.

(iii) The environmental protection standards which are necessary for the cleanup and protection of soil, surface water, sediments, and ambient air that are established pursuant to the provisions of part 201 of the act if the limits are not less stringent than allowed pursuant to the provisions of RCRA.

(iv) The compliance point or points at which the standards apply and at which monitoring shall be conducted, which for groundwater are specified pursuant to the provisions of 40 C.F.R. §264.95.

(v) The compliance period, which for groundwater is specified pursuant to the provisions of 40 C.F.R. §264.96.

(vi) The restoration and mitigation measures that are necessary to mitigate damage to the natural resources of the state, including, wildlife, fish, wetlands, or other ecosystems.

(b) For facilities that are specified in subdivision (b) of subrule (1) of this rule, the owner or operator, or both, shall take corrective action to ensure compliance with the groundwater protection standards, and, if necessary, other applicable environmental protection standards, established by the director. The director shall specify in a consent order or other order, in accordance with this rule and R 299.9635 and R 299.9636, schedules of compliance for corrective action and assurances of financial responsibility for completing the corrective action and other requirements, including, any of the following:

(i) A list of the hazardous wastes and hazardous waste constituents.

(ii) The groundwater protection standards which are expressed as concentration limits that are established pursuant to the provisions of part 31 or part 201 of the act if the limits are not less stringent than allowed pursuant to the provisions of RCRA.

(iii) The environmental protection standards which are necessary for the cleanup and protection of soil, surface water, sediments, and ambient air that are established pursuant to the provisions of part 201 of the act if the limits are not less stringent than allowed pursuant to the provisions of RCRA.

(iv) The compliance point or points at which the standards apply and at which monitoring shall be conducted.

(v) The compliance period.

(vi) The restoration and mitigation measures that are necessary to mitigate damage to the natural resources of the state, including, wildlife, fish, wetlands, or other ecosystems.

(4) The owner or operator shall implement a corrective action program that prevents contaminants, hazardous wastes, or hazardous waste constituents, as provided for in subrule (1) of this rule, from exceeding their respective protection standards or concentration limits at the compliance point by removing the contaminants, hazardous wastes, or hazardous waste constituents or treating them in place.

(5) For facilities that are conducting a groundwater compliance monitoring program at the time a permit, operating license, postclosure operating license, consent order, or other order is issued or entered, the owner or operator shall begin groundwater corrective action within a reasonable time period after the groundwater protection standard is exceeded. The director shall specify the time period in the permit, operating license, postclosure operating license, consent order, or other order. If a permit, operating license, postclosure operating license, consent order, or other order includes a groundwater corrective action program in addition to a compliance groundwater monitoring program, then the operating license, postclosure operating license, consent order, or other order shall specify when the corrective action groundwater program will begin and the corrective action groundwater program shall operate in place of the compliance groundwater monitoring program.

(6) In conjunction with a groundwater corrective action program, the owner or operator shall

establish and implement a groundwater monitoring program to demonstrate the effectiveness of the groundwater corrective action program. The monitoring program may be based on the requirements for a compliance groundwater monitoring program and shall be as effective as that program in determining compliance with the groundwater protection standards specified in the permit, operating license, postclosure operating license, consent order, or other order and in determining the success of a corrective action program pursuant to the provisions of subrule (7) of this rule, where appropriate. All wells installed to monitor, evaluate, or remediate groundwater shall be constructed and abandoned in accordance with the well installation and well decommissioning procedures in ASTM standards D5092-90 and D5299-92, or a plan approved by the director.

(7) In addition to the other requirements of this rule, the owner or operator shall conduct a corrective action program to remove or treat in place any contaminants, hazardous wastes, and hazardous waste constituents, as provided for in subrule (1) of this rule, that exceed the groundwater protection standards or other environmental protection standards that are specified by the director as follows:

(a) Between the compliance points that are established pursuant to the provisions of subrule (3)(a)(iv) and (b)(iv) of this rule and the downgradient property boundary and beyond the facility boundary in accordance with the provisions of subrule (2) of this rule.

(b) Corrective action measures that are undertaken pursuant to the provisions of this rule shall be initiated and completed within a reasonable period of time considering the extent of contamination.

(c) Corrective action measures that are pursuant to the provisions of this rule may be terminated once the environmental protection standards specified by the director in the facility permit, operating license, postclosure operating license, consent order, or other order have been achieved for the required period.

(8) The owner or operator shall continue corrective action measures during the compliance period to the extent necessary to ensure that the environmental protection standards are not exceeded. If the owner or operator is conducting corrective action at the end of the compliance period, then corrective action shall be continued for as long as necessary to achieve compliance with the environmental protection standards. The owner or operator may terminate corrective action measures taken beyond the period equal to the active life of the waste management area, including the closure period, if the owner or operator can demonstrate that the environmental protection standards have been achieved for the required period.

(9) The owner or operator shall report, in writing, to the director, on the effectiveness of the corrective action program pursuant to the schedule specified in the permit, operating license, postclosure operating license, consent order, or other order, but not less than semiannually.

(10) If an owner or operator determines that the corrective action program does not satisfy the requirements of these rules, he or she shall, in accordance with the permit, operating license, postclosure operating license, consent order, or other order, submit an application for a permit or license modification or request a modification or termination of appropriate sections of any consent order or other order.

(11) The requirements of this rule do not apply to remediation waste management sites unless they are part of a facility subject to the permitting or licensing requirements under part 111 of the act and these rules because the facility is also treating, storing, or disposing of hazardous wastes that are not remediation wastes.

R 299.9630 Air emission standards for process vents.

Rule 630. (1) Owners or operators of treatment, storage, or disposal facilities shall comply with the provisions of 40 C.F.R. part 264, subpart AA.

(2) The provisions of 40 C.F.R. part 264, subpart AA are adopted by reference in R 299.11003. For the purposes of this adoption, the word "director" shall replace the words "regional administrator" and "administrator."

R 299.9631 Air emission standards for equipment leaks.

Rule 631. (1) Owners or operators of treatment, storage, or disposal facilities shall comply with the provisions of 40 C.F.R. part 264, subpart BB.

(2) The provisions of 40 C.F.R. part 264, subpart BB are adopted by reference in R 299.11003. For the purposes of this adoption, the word "director" shall replace the words "regional administrator" and "administrator."

R 299.9632 Drip pads.

Rule 632. (1) Owners or operators of facilities that use new or existing drip pads to convey treated wood drippage, precipitation, or surface water run-off to an associated collection system shall comply with the provisions of 40 C.F.R. part 264, subpart W.

(2) For the purposes of this rule, existing drip pads are those constructed before December 6, 1990, and those for which the owner or operator had a design and had entered into binding financial or other agreements for construction prior to December 6, 1990. All other drip pads are new drip pads.

(3) The provisions of 40 C.F.R. part 264, subpart W, are adopted by reference in R 299.11003. For the purposes of this adoption, the word "director" shall replace the words "regional administrator" and "administrator."

R 299.9633 Hazardous waste treatment.

Rule 633. (1) An owner or operator of a facility that treats hazardous waste shall ensure that the treatment process will change the physical, chemical, or biological character or composition of the waste to do any of the following:

(a) Neutralize the waste.

(b) Recover energy or material resources from the waste.

(c) Render the waste nonhazardous, safer for handling or transport, amenable to recovery, amenable to storage, or reduced in volume.

(d) Chemically bind or render toxic constituents nonhazardous rather than only diluted.

R 299.9634 Air emission standards for tanks, surface impoundments, and containers.

Rule 634. (1) Owners or operators of treatment, storage, or disposal facilities shall comply with the provisions of 40 C.F.R. part 264, subpart CC.

(2) The provisions of 40 C.F.R. part 264, subpart CC, are adopted by reference in R 299.11003. For the purposes of this adoption, the word "director" shall replace the words "regional administrator" and "administrator."

R 299.9635 Corrective action management unit requirements.

Rule 635. (1) For the purposes of implementing corrective action remedies under part 111 of the act and these rules or implementing remedies at facilities that are not subject to corrective action under part 111 of the act and these rules, the director may designate in a license or enforceable document an area at a facility as a corrective action management unit. A corrective action management unit shall be located within the contiguous property under the control of the owner or operator where the wastes to be managed in the corrective action management unit originated. One or more corrective action management units may be designated at a facility. In designating an area at a facility as a corrective action management unit, the director shall ensure that the corrective action management unit meets all of the following requirements:

(a) The corrective action management unit facilitates the implementation of reliable, effective, protective, and cost-effective remedies.

(b) The waste management activities associated with the corrective action management unit do not create unacceptable risks to humans or to the environment which result from exposure to

hazardous wastes or hazardous constituents.

(c) The corrective action management unit contains only contaminated areas of the facility unless the inclusion of uncontaminated areas of the facility for the purpose of managing remediaton waste is more protective than management of such wastes at contaminated areas of the facility.

(d) Areas within the corrective action management unit where wastes will remain in place after closure of the unit are managed and contained so as to minimize future releases, to the extent practicable.

(e) The corrective action management unit expedites the timing of remedial activity implementation, when appropriate and practicable.

(f) The corrective action management unit enables the use, when appropriate, of treatment technologies to enhance the long-term effectiveness of the remedial actions by reducing the toxicity, mobility, or volume of wastes that will remain in place after closure of the unit.

(g) The corrective action management unit, to the extent practicable, minimizes the land area of the facility upon which wastes will remain in place after closure of the unit.

(2) The director may designate a hazardous waste management unit as a corrective action management unit or incorporate a hazardous waste management unit into a corrective action management unit provided both of the following requirements are met:

(a) The hazardous waste management unit is closed or the closure process under part 6 of these rules has been initiated.

(b) The inclusion of the hazardous waste management unit into the corrective action management unit will enhance the implementation of effective, protective, and reliable remedial actions for the facility.

(3) All of the following requirements that applied to the hazardous waste management unit continue to apply to that portion of a corrective action management unit containing the hazardous waste management unit regardless of the designation of the hazardous waste management unit as a corrective action management unit or the incorporation of the hazardous waste management unit into a corrective action management unit:

(a) R 299.9612.

(b) R 299.9629.

(c) 40 C.F.R. part 265, subpart F.

(d) R 299.9613.

(e) 40 C.F.R. part 265, subpart G.

(f) Part 7 of these rules.

(g) The unit-specific requirements of part 6 of these rules that applied to the hazardous waste management unit.

(4) The owner or operator shall provide the director with sufficient information to enable the director to designate a corrective action management unit in accordance with the criteria specified in subrule (1) of this rule.

(5) The director shall document the rationale for designating an area as a corrective action management unit and make such documentation available to the public.

(6) The director shall specify all of the following information in the license or order for each corrective action management unit:

(a) The areal configuration of the corrective action management unit.

(b) The requirements for remediation waste management, including the specification of applicable design, operation, and closure requirements.

(c) The requirements for groundwater monitoring as necessary to provide for both of the following:

(i) The continued detection and characterization of the nature, extent, concentration, direction, and movement of existing releases of hazardous constituents in the groundwater from sources located within the corrective action management unit.

(ii) The detection and subsequent characterization of releases of hazardous constituents to

the groundwater that may occur from areas of the corrective action management unit in which wastes will remain in place after closure of the unit.

(d) Closure requirements as necessary to minimize the need for further maintenance and control, minimize, or eliminate, to the extent necessary to protect human health and the environment, for areas where wastes remain in place, postclosure escape of hazardous waste, hazardous constituents, leachate, contaminated runoff, or hazardous waste decomposition products to the ground, surface waters, or atmosphere. The requirements for closure shall include all of the following information as appropriate and deemed necessary by the director for a given corrective action management unit, after considering the characteristics of the unit, volume of wastes which will remain in place after closure, potential for releases from the corrective action management unit, physical and chemical characteristics of the wastes, hydrogeological and other relevant environmental conditions at the facility which may influence the migration of any potential or actual releases, and potential for exposure of humans and environmental receptors if releases were to occur from the unit:

(i) The requirements for excavation, removal, treatment, and containment of the wastes.

(ii) For areas in which wastes will remain in place after closure of the corrective action management unit, the requirements for capping these areas. The final cover shall include a flexible membrane liner component with a minimum thickness of 40 mils, depending on the type of material selected.

(iii) The requirements for removal and decontamination of equipment, devices, and structures used in remediaton waste management activities within the corrective action management unit.

(e) The postclosure requirements as necessary to protect human health and the environment, including, for areas in which wastes will remain in place, monitoring and maintenance activities and the frequency at which the activities shall be performed to ensure the integrity of any cap, final cover, or other containment system.

(7) The incorporation of a corrective action management unit into an existing license shall be approved by the director in accordance with R 299.9519 and R 299.9520.

(8) The placement of remediation wastes into or within a corrective action management unit does not constitute land disposal for the purposes of part 111 of the act or these rules.

(9) The consolidation or placement of remediation wastes into or within a corrective action management unit does not constitute the creation of a unit subject to the minimum technology requirements of these rules.

(10) The designation of a corrective action management unit does not change the department's existing authority to address environmental protection standards, media-specific points of compliance to be applied to remediation at a facility, or other remedy selection decisions.

R 299.9636 Temporary unit requirements.

Rule 636. (1) For the purposes of implementing corrective action remedies under part 111 of the act and these rules or implementing remedies at facilities that are not subject to corrective action under part 111 of the act and these rules, the director may designate tank or container storage units used for the treatment or storage of remediation wastes as temporary units. A temporary unit shall be located within the contiguous property under the control of the owner or operator where the wastes to be managed in the temporary unit originated. In establishing standards for temporary units, the director shall consider all of the following factors:

(a) The length of time the unit will be in operation.

(b) The type of unit.

(c) The volume of waste to be managed.

(d) The physical and chemical characteristics of the wastes to be managed in the unit.

(e) The potential for releases from the unit.

(f) The hydrogeological and other relevant environmental conditions at the facility which may influence the migration of any potential releases.

(g) The potential for exposure of humans and environmental receptors if a release were to

occur from the unit.

(2) The director may allow the use of alternate design, operating, and closure standards for temporary units provided all of the following requirements are met:

(a) The temporary unit is located within the facility boundary.

(b) The temporary unit is used only for the treatment or storage of remediation wastes.

(c) The alternate standards are protective of human health and the environment.

(3) The director shall specify all of the following information in the license or order for each temporary unit:

(a) The length of time a temporary unit will be allowed to operate shall be not greater than 1 year.

(b) The design, operating, and closure requirements for the unit.

(4) The director may extend the operational period of the temporary unit 1 time, for a period of no longer than 1 year beyond the time period originally specified in the license or order, provided that all of the following requirements are met:

(a) The continued operation of the unit will not pose a threat to human health and the environment.

(b) The continued operation of the unit is necessary to ensure timely and efficient implementation of remedial actions at the facility.

(5) The incorporation of a temporary unit or a time extension for a temporary unit into an existing license shall be requested and approved by the director in accordance with R 299.9519 and R 299.9520.

(6) The director shall document the rationale for designating a temporary unit and for granting time extensions for temporary units and make the documentation available to the public.

R 299.9637 Hazardous waste munitions and explosives storage requirements.

Rule 637. (1) Owners or operators of storage facilities that store munitions and explosive hazardous wastes shall comply with the requirements of 40 C.F.R. part 264, subpart EE.

(2) The provisions of 40 C.F.R. part 264, subpart EE are adopted by reference in R 299.11003. For the purposes of this adoption, the word "director" shall replace the words "regional administrator," the word "R 299.9607" shall replace the words "40 C.F.R. part 264, subpart D," the word "R 299.9203(5)" shall replace the words "40 C.F.R. §261.3(d)," the word "R 299.9613" shall replace the words "40 C.F.R. part 264, subpart G," and the words Part 7 of the rules promulgated pursuant to the act" shall replace the words "40 C.F.R. part 264, subpart H."

R 299.9638 Staging pile requirements.

Rule 638. (1) Owners or operators of staging piles shall comply with the provisions of 40 C.F.R. §264.554, except §264.554(l).

(2) Staging piles shall be designated by the director in accordance with the requirements of 40 C.F.R. §264.554.

(3) Owners or operators that wish to modify an order to incorporate a staging pile or a staging pile operating term extension shall follow the terms of the order and the applicable provisions of part 5 of these rules.

(4) The provisions of 40 C.F.R. §264.554, except §264.554(l) are adopted by reference in R 299.11003. For the purposes of this adoption, the word "R 299.9212" shall replace the words "§261.21 or §261.23."

PART 7. FINANCIAL CAPABILITY

R 299.9701 Applicability; definitions.

Rule 701. (1) Except as specified in subrule (2) of this rule, the requirements of this part apply to all facilities which treat, store, or dispose of hazardous waste or which accepted hazardous waste for disposal after November 19, 1980.

(2) States and the federal government are exempt from the requirements of this part.

(3) The definitions of terms contained in the provisions of 40 C.F.R. "264.141 are adopted by reference in R 299.11003.

R 299.9702 Cost estimate for closure and postclosure care.

Rule 702. (1) The owner or operator shall comply with the requirements of 40 C.F.R. §§264.142 and 264.144 regarding written cost estimates for closure and postclosure care.

(2) The provisions of 40 C.F.R. §§264.142 and 264.144 are adopted by reference in R 299.11003.

R 299.9703 Financial assurance for closure and postclosure care.

Rule 703. (1) The owner or operator of each facility shall establish financial assurance for closure of the facility by utilizing the options specified in R 299.9704 to R 299.9709. The owner or operator of each disposal facility shall establish financial assurance for postclosure care of the facility utilizing the options specified in R 299.9704 to R 299.9709. An owner or operator of a new facility shall submit these documents to the director or his or her designee not less than 60 days before the date on which hazardous waste is first received for treatment, storage, or disposal. An owner or operator shall submit all revisions and renewals of the documents to the director within 60 days of the revision or renewal.

(2) An owner or operator may satisfy the requirements of this rule by establishing more than 1 financial mechanism per facility. These mechanisms are limited to trust funds, surety bonds, letters of credit, certificates of deposit and time deposit accounts, and insurance. The mechanisms shall be as specified in this part, except that it is the combination of mechanisms, rather than the single mechanism, which shall provide financial assurance for an amount at least equal to the current closure and postclosure cost estimate. The director may use any or all of the mechanisms to provide for closure and postclosure care of the facility.

(3) An owner or operator may use a financial assurance mechanism specified in this part to meet the requirements of this rule for more than 1 facility. Evidence of financial assurance submitted to the director shall include a list showing, for each facility, the EPA identification number, name, address, and the amount of funds for closure and postclosure assured by the mechanism. If the facilities covered by the mechanism are in more than 1 EPA region, identical evidence of financial assurance shall be submitted to, and maintained with, the regional administrators of all such EPA regions. The amount of funds available through the mechanism shall be not less than the sum of funds that would be available if a separate mechanism had been established and maintained for each facility. In directing funds available through the mechanism for closure and postclosure care of any of the facilities covered by the mechanism, the director may direct only the amount of funds designated for that facility, unless the owner or operator agrees to the use of additional funds available under the mechanism.

(4) An owner or operator may satisfy the requirements for financial assurance for both closure and postclosure care for one or more facilities by using a trust fund, surety bond, letter of credit, certificate of deposit and time deposit account, or insurance that meets the requirements of this part for both closure and postclosure care. The amount of funds available through the mechanism shall not be less than the sum of funds that would be available if a separate mechanism had been established and maintained for financial assurance of closure and of postclosure care.

(5) Within 60 days after receiving certifications from the owner or operator and an

independent registered professional engineer that closure has been accomplished in accordance with the closure plan, or that the postclosure care period has been completed for a hazardous waste disposal unit in accordance with the approved postclosure plan, the director shall notify the owner or operator, in writing, that he or she is no longer required by this section to maintain financial assurance for closure of the particular facility or postclosure care of the particular unit, unless the director has reason to believe that closure or postclosure care has not been in accordance with the approved plan. The director shall provide the owner or operator with a detailed written statement of any such reason to believe that closure or postclosure care has not been in accordance with the approved plan.

(6) An owner or operator shall notify the director, by certified mail, of the commencement of a voluntary or involuntary proceeding under the bankruptcy provisions of Public Law 95-598, 11 U.S.C. §§1 to 151302, naming the owner or operator as debtor, within 10 days after commencement of the proceeding.

(7) An owner or operator who fulfills the requirements of this rule by obtaining a trust fund, surety bond, letter of credit, certificate of deposit or time deposit account, or insurance policy shall be deemed to be without the required financial assurance or liability coverage in the event of bankruptcy of the trustee or issuing institution, a suspension or revocation of the authority of the trustee institution to act as trustee, or a suspension or revocation of the authority of the institution issuing the surety bond, letter of credit, certificate of deposit or time deposit account, or insurance policy to issue such instruments. The owner or operator shall establish other financial assurance or liability coverage within 60 days after such an event.

(8) The director may replace all or part of the requirements of this rule with alternative requirements for financial assurance if the director does all of the following:

(a) Prescribes alternative requirements for the hazardous waste management unit under 40 C.F.R. §§264.90(f) or 264.110(d), or both.

(b) Determines that it is not necessary to apply the requirements of this rule because the alternative financial assurance requirements will protect human health and the environment.

(c) Specifies the alternative financial assurance requirements in an operating license or enforceable document.

(9) The provisions of 40 C.F.R. §§264.90(f) and 264.110(d) are adopted by reference in R 299.11003.

R 299.9704 Trust fund.

Rule 704. (1) An owner or operator may satisfy the financial assurance requirements of R 299.9703 by establishing a trust fund for closure or postclosure, or both, which conforms to the requirements of this rule. The trustee shall be a bank or other financial institution which has the authority to act as a trustee and whose trust operations are regulated and examined by a federal or state agency, and the trust agreement shall be executed on a form approved by the director.

(2) The trust fund shall be funded at 100% of the closure and postclosure cost estimate approved at the time of execution. Additional payments to the trust fund shall be made by the owner or operator to maintain 100% funding when the closure or postclosure cost estimates, or both, are increased.

(3) If the value of the trust fund is more than the total amount of the current closure or postclosure cost estimate, or both, the owner or operator may submit a written request to the director for release of the amount in excess of the current closure or postclosure cost estimate.

(4) If an owner or operator substitutes other financial assurance, as specified in this part, for all or part of the trust fund, he or she may submit a written request to the director for release of the amount in excess of the current closure or postclosure cost estimate covered by the trust fund.

(5) Within 60 days after receiving a request from the owner or operator for release of funds as specified in subrules (3) or (4) of this rule, the director shall instruct the trustee to release to the owner or operator such funds as the director specifies in writing.

(6) After beginning partial or final closure, an owner or operator or any other person

authorized to perform closure, partial closure, or postclosure care may request reimbursements for closure, partial closure, or postclosure expenditures by submitting itemized bills to the director. The owner or operator may request reimbursement for partial closure only if sufficient funds are remaining in the trust fund to cover the maximum costs of closing the facility over its remaining operating life. Within 60 days after receiving bills for closure, partial closure, or postclosure care activities, the director shall determine whether the closure, partial closure, or postclosure care expenditures, or both, are in accordance with the closure plan or otherwise justified, and, if so, he or she shall instruct the trustee to make reimbursement in such amounts as the director specifies in writing. If the director does not instruct the trustee to make such reimbursements, the director shall provide the owner or operator with a detailed written statement of reasons.

(7) If the director has reason to believe that the cost of closure or postclosure care, or both, will be significantly more than the value of the trust fund, the director may withhold reimbursement of such amounts as he or she deems prudent until he or she determines, in accordance with R 299.9703(6), that the owner or operator is no longer required to maintain financial assurance for closure or postclosure care, or both.

(8) During the period of postclosure care, the director may approve a release of funds if the owner or operator demonstrates to the director that the value of the trust fund exceeds the remaining cost of postclosure care.

(9) The director shall agree to termination of the trust when an owner or operator substitutes alternate financial assurance as specified in this part and the director releases the owner or operator from the requirements of this part in accordance with R 299.9703(5).

(10) If the director issues a notice of violation or other order to the owner or operator alleging violation of closure or postclosure requirements, or both, the director may, after providing the owner or operator 7 days notice and opportunity for hearing, access the funds in the trust to correct the violations, complete closure, and maintain the facility in accordance with the approved plans.

R 299.9705 Surety bond guaranteeing performance of closure and/or postclosure care.

Rule 705. (1) An owner or operator may satisfy the financial assurance requirements of R 299.9703 by obtaining a surety bond which is executed on a form approved by the director and which conforms to the requirements of this rule. The surety company issuing the bond shall, at a minimum, be among those listed as acceptable sureties on federal bonds in circular 570 of the United States department of the treasury.

(2) The bond shall guarantee that the owner or operator will do either of the following:

(a) Perform final closure or postclosure care in accordance with the closure or postclosure plan and other requirements of the operating license for the facility when required to do so.

(b) Within 90 days after receipt by both the owner or operator and the director of a notice of cancellation of the bond from the surety, provide alternate financial assurance as specified in this part and obtain the director's written approval of the assurance provided.

(3) Under the terms of the bond, the surety shall become liable on the bond obligation under the following circumstances:

(a) When the owner or operator fails to perform as guaranteed by the bond.

(b) Following issuance of a notice of violation or other order by the director alleging that the owner or operator has failed to perform final closure or postclosure care, or both, in accordance with the closure and postclosure plans and other operating license requirements when required to do so and after providing the owner or operator 7 days notice and an opportunity for a hearing.

(4) The penal sum of the bond shall be in an amount at least equal to the current closure and postclosure cost estimates.

(5) When the current closure or postclosure cost estimate, or both, increases to an amount more than the penal sum, the owner or operator, within 60 days after the increase, shall either cause the penal sum to be increased to an amount at least equal to the current closure or postclosure cost estimate, or both, and submit evidence of such increase to the director or obtain other financial

assurance as specified in this part. When the current closure or postclosure cost estimate decreases, the penal sum may be reduced to the amount of the current closure or postclosure cost estimate following written approval by the director.

(6) Under the terms of the bond, the surety may cancel the bond by sending notice of cancellation, by certified mail, to the owner or operator and to the director. Cancellation shall not occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by both the owner or operator and the director, as evidenced by the return receipts.

(7) The owner or operator may cancel the bond if the director has given prior written consent. The director shall provide such written consent when either of the following occurs:

(a) An owner or operator substitutes alternate financial assurance as specified in this part.

(b) The director releases the owner or operator from the requirements of this part in accordance with R 299.9703(5).

(8) The surety shall not be liable for deficiencies in the performance of closure or postclosure care, or both, by the owner or operator after the director releases the owner or operator from the requirements of this part in accordance with R 299.9703(5).

(9) Upon receipt of a notice of cancellation of the bond from the surety, the owner or operator shall obtain alternate financial assurance approved by the director within 60 days. If the owner or operator fails to so provide, the director may issue a notice of violation or other order rendering the surety liable on the bond obligation.

R 299.9706 Letter of credit.

Rule 706. (1) An owner or operator may satisfy the requirements of this part by obtaining an irrevocable letter of credit which conforms to the requirements of this rule and which is executed on a form approved by the director. The issuing institution shall be a bank or financial institution which has the authority to issue letters of credit and whose letter of credit operations are regulated and examined by a federal or state agency.

(2) The letter of credit shall include all of the following information:

(a) The EPA identification number.

(b) Name and address of the facility.

(c) The amount of funds assured for closure or postclosure care of the facility by the letter of credit.

(3) The letter of credit shall be irrevocable and issued for a period of at least 1 year. The letter of credit shall provide that the expiration date will be automatically extended for a period of at least 1 year unless, not less than 120 days before the current expiration date, the issuing institution notifies both the owner or operator and the director by certified mail of a decision not to extend the expiration date. Under the terms of the letter of credit, the 120 days shall begin on the date when both the owner or operator and the director have received the notice, as evidenced by the return receipts.

(4) The letter of credit shall be issued in an amount at least equal to the current closure or postclosure cost estimate, or both, except as provided in R 299.9703(2).

(5) When the current closure or postclosure cost estimate, or both, increases to an amount more than the amount of the credit, the owner or operator, within 60 days after the increase, shall either cause the amount of the credit to be increased so that it at least equals the current closure or postclosure cost estimate and submit evidence of such increase to the director or obtain other financial assurance as specified in this part to cover the increase. When the current closure or postclosure cost estimate decreases, the amount of the credit may be reduced to the amount of the current closure or postclosure cost estimate following written approval by the director.

(6) The director may draw on the letter of credit to correct violations, complete closure, and maintain the facility in accordance with approved plans after doing both of the following:

(a) Issuing a notice of violation or other order to the owner or operation which alleges that the owner or operator has failed to perform final closure or postclosure care, or both, in accordance with the closure and postclosure plans and other permit requirements when required.

(b) Providing the owner or operator with 7 days notice and opportunity for hearing.

(7) If the owner or operator does not establish alternate financial assurance as specified in this part and obtain written approval of such alternate assurance from the director within 90 days after receipt by both the owner or operator and the director of a notice from the issuing institution that it has decided not to extend the letter of credit beyond the current expiration date, then the director shall draw on the letter of credit. The director may delay the drawing if the issuing institution grants an extension of the term of the credit. During the last 30 days of any such extension, the director shall draw on the letter of credit if the owner or operator has failed to provide alternate financial assurance as specified in this part and obtain written approval of such assurance from the director.

(8) The director shall return the letter of credit to the issuing institution for termination when either of the following occurs:

(a) An owner or operator substitutes alternate financial assurance as specified in this part.

(b) The director releases the owner or operator from the requirements of this part in accordance with R 299.9703(5).

R 299.9707 Certificate of deposit or time deposit account.

Rule 707. (1) An owner or operator may satisfy the requirements of R 299.9703 by placing funds in the amount of the current approved closure or postclosure cost estimate in an insured, negotiable certificate of deposit or time deposit account held by a bank or other financial institution regulated and examined by a federal or state agency. The value of the certificate of deposit or time deposit account shall be fully insured by an agency of the United States government, unless otherwise approved by the director.

(2) The certificate or account shall be in the sole name of the director with a maturity of not less than 6 months.

(3) The owner or operator shall execute an agreement with the director which identifies the reasons for which the director may cash the certificate of deposit or time deposit account. The agreement shall be executed on a form approved by the director.

(4) A certificate or time deposit account of less than a 1-year maturity shall provide for automatic renewal. An owner or operator shall renew or replace a certificate of deposit or time deposit account of 1 year or more not less than 60 days before the maturity date.

(5) The certificate of deposit or time deposit account shall be issued in an amount at least equal to the current approved closure or postclosure cost estimate, except when used with other mechanisms as provided in R 299.9703(2).

(6) When the current approved closure or postclosure cost estimate increases to an amount more than the value of the certificate of deposit or time deposit account, the owner or operator, within 60 days after the increase is approved or issued by the director, shall either cause the amount of the certificate of deposit or time deposit account to be increased so that it at least equals the current approved closure or postclosure cost estimate and submit evidence of such increase to the director or obtain other financial assurance as specified in this part to cover the increase. During the period of postclosure care, the director may approve a decrease in the amount of the certificate of deposit or time deposit account if the owner or operator demonstrates to the director that the amount exceeds the remaining cost of postclosure care after inflation is considered.

(7) The director may cash the certificate of deposit or withdraw funds from the time deposit account to correct the violations, complete closure, and maintain the facility in accordance with the approved plans after doing both of the following:

(a) Issuing a notice of violation or other order to the owner or operator which alleges that the owner or operator has failed to perform closure or postclosure care in accordance with the closure or postclosure plan or other license requirements.

(b) Providing the owner or operator 7 days notice and opportunity for hearing.

(8) If the owner or operator elects not to continue the use of the certificate of deposit or time deposit account to provide financial assurance as required, or any portion thereof, the owner or

operator shall provide acceptable financial assurance to the director 60 days before the maturity date of the certificate of deposit or time deposit account. If the owner or operator fails to so provide, the director may cash the certificate of deposit or time deposit account and place the funds in a state treasury account. The director may release such funds to the owner or operator at such time as the owner or operator provides acceptable replacement financial assurance.

(9) The director shall release funds held in a certificate of deposit or time deposit account to the owner or operator when the owner or operator substitutes alternate financial assurance as specified in this part or the director releases the owner or operator from the requirements of this part in accordance with R 299.9703(5).

R 299.9708 Closure or postclosure insurance.

Rule 708. (1) An owner or operator may satisfy the requirements of R 299.9703 by obtaining closure or postclosure insurance, or both, which conforms to the requirements of this rule and by submitting both of the following to the director:

(a) A certificate of insurance which uses wording approved by the director.

(b) A certified true and complete copy of the insurance policy.

(2) An owner or operator of a new facility shall submit the certificate of insurance and insurance policy to the director not less than 60 days before the date on which hazardous waste is first received for treatment, storage, or disposal. The insurance shall be effective before this initial receipt of hazardous waste.

(3) The insurer shall satisfy all of the following requirements:

(a) The insurer shall be licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer, in the state of Michigan.

(b) The insurer shall have a minimum of $7,000,000.00 of unimpaired surplus funds.

(c) The insurer shall assume financial responsibility for the accepted risk, pursuant to the terms of the policy, using its own pool of resources that is independent, separate, and unrelated to that of the owner or operator.

(4) The closure or postclosure insurance policy shall be issued for a face amount at least equal to the current closure or postclosure cost estimate, except as provided in R 299.9703(2). Actual payments by the insurer shall not change the face amount, although the insurer's future liability will be lowered by the amount of the payments.

(5) The closure insurance policy shall guarantee that funds will be available to close the facility when final closure occurs. The postclosure insurance policy shall guarantee that funds will be available to provide postclosure care of the facility when the postclosure period begins. The policy shall also guarantee that, once final closure begins, the insurer will be responsible for paying out funds, up to an amount equal to the face amount of the policy, upon the direction of the director, to such person or persons as the director specified.

(6) After beginning partial or final closure, an owner or operator or any other person authorized to perform closure or postclosure care may request reimbursements for closure or postclosure expenditures by submitting itemized bills to the director. The owner or operator may request reimbursements for partial closure only if the remaining value of the policy is sufficient to cover the maximum costs of closing the facility over its remaining operating life. Within 60 days after receiving bills for closure or postclosure activities, the director shall determine if the expenditures are in accordance with the closure or postclosure plan or otherwise justified, and, if so, he or she shall instruct the insurer to make reimbursement in such amounts as the director specified in writing. If the director has reason to believe that the maximum cost of closure over the remaining life of the facility will be significantly more than the face amount of the policy, the director may withhold reimbursement of such amounts as he or she deems prudent until he or she determines, in accordance with R 299.9703(5), that the owner or operator is no longer required to maintain financial assurance for closure of the facility. If the director does not instruct the insurer to make such reimbursements, then the director shall provide the owner or operator with a detailed written statement of reasons.

(7) The owner or operator shall maintain the policy in full force and effect until the director consents to termination of the policy by the owner or operator as specified in subrule (12) of this rule. In addition, failure to pay the premium without substitution of alternate financial assurance as specified in this part shall constitute a significant violation of these rules and shall warrant such other remedy as the director deems necessary. Such violation will be deemed to begin upon receipt, by the director, of a notice of future cancellation, termination, or failure to renew due to nonpayment of the premium, rather than upon the date of expiration.

(8) Each policy shall contain a provision allowing assignment of the policy to a successor owner or operator. Such assignment may be conditional upon consent of the insurer if such consent is not unreasonably refused.

(9) The policy shall provide that the insurer shall not cancel, terminate, or fail to renew the policy except for failure to pay the premium. The automatic renewal of the policy shall, at a minimum, provide the insured with the option of renewal at the face amount of the expiring policy. If there is a failure to pay the premium, then the insurer may elect to cancel, terminate, or fail to renew the policy by sending notice, by certified mail, to the owner or operator and the director; however, the policy shall unconditionally provide for all of the following:

(a) That if the owner or operator fails to renew the policy or provide alternate financial assurance as approved by the director not less than 60 days before the expiration date of the policy, then the insurer shall immediately pay, to the director, the full amount of closure and postclosure coverage under the policy if requested, in writing, by the director before the expiration date of the policy.

(b) That cancellation, termination, or failure to renew shall not occur during the 120 days beginning with the date of receipt of the notice by both the director and the owner or operator, as evidenced by the return receipts.

(c) That cancellation, termination, or failure to renew shall not occur, and the policy shall remain in full force and effect, if, on or before the date of expiration, any of the following occurs:

(i) The director deems the facility abandoned.

(ii) The permit is terminated or revoked or a new permit is denied.

(iii) Closure is ordered by the director, a United States district court, or other court of competent jurisdiction.

(iv) The owner or operator is named as debtor in a voluntary or involuntary proceeding under the bankruptcy provisions of Public Law 95-598 11 U.S.C. §§1 to 151302.

(v) The premium due is paid.

(10) The policy shall unconditionally provide that the insurer shall, after the hearing, immediately pay to the director any amount requested by the director up to the full value of the appropriate closure or postclosure policy to correct the closure or postclosure violations following issuance of a notice of violation or other order by the director which does both of the following:

(a) Alleges that the owner or operator has failed to perform closure or postclosure care, or both, in accordance with the closure plan, postclosure plan, or other requirements of part 111 of the act, these rules, or the operating license.

(b) Provides 7 days notice and opportunity for hearing.

(11) If the current closure or postclosure cost estimate increases to an amount more than the face amount of the policy, then the owner or operator, within 60 days after the increase, shall either cause the face amount to be increased to an amount at least equal to the current closure or postclosure cost estimate and submit evidence of such increase to the director or obtain other financial assurance as specified in this part to cover the increase. If the current closure or postclosure cost estimate decreases, then the face amount may be reduced to the amount of the current closure or postclosure cost estimate following written approval by the director.

(12) The director shall give written consent to the owner or operator that the owner or operator may terminate the insurance policy when either of the following occurs:

(a) An owner or operator substitutes alternate financial assurance as specified in this rule.

(b) The director releases the owner or operator from the requirements of this part in accordance with R 299.9703(5).

R 299.9709 Financial test and corporate guarantee for closure or postclosure.

Rule 709. (1) An owner or operator may satisfy the requirements of this part by demonstrating that he or she passes a financial test as specified in this rule. To pass this test, the owner or operator shall meet the criteria of either subdivision (a) or (b) of this subrule as follows:

(a) The owner or operator shall have all of the following:

(i) Two of the following 3 ratios:

(A) A ratio of total liabilities to net worth less than 2.0.

(B) A ratio of the sum of net income plus depreciation, depletion, and amortization to total liabilities of more than 0.1.

(C) A ratio of current assets to current liabilities of more than 1.5.

(ii) Net working capital and tangible net worth each not less than 6 times the sum of the current closure and postclosure cost estimates and any other obligations covered by a financial test.

(iii) Tangible net worth of not less than $10,000,000.00.

(iv) Assets in the United States amounting to not less than 90% of his or her total assets or not less than 6 times the sum of the current closure and postclosure cost estimates and any other obligations covered by a financial test.

(v) Total assets in Michigan of not less than $50,000,000.00, excluding the value of any land used for hazardous waste disposal or have total assets in Michigan which are not less than 6 times the sum of the approved closure and postclosure cost estimates for facilities subject to these rules, whichever is larger.

(b) The owner or operator shall have all of the following:

(i) A current rating for its senior unsecured debt of AAA, AA, A, or BBB, as issued by Standard and Poor's, or Aaa, Aa, A, or Baa as issued by Moody's.

(ii) Tangible net worth not less than 6 times the sum of the current closure and postclosure cost estimates and any other obligations covered by a financial test.

(iii) Tangible net worth of not less than $10,000,000.00.

(iv) Assets located in the United States amounting to not less than 90% of his or her total assets or not less than 6 times the sum of the current closure and postclosure cost estimates and any other obligations covered by a financial test.

(v) Have total assets in Michigan of not less than $50,000,000.00, excluding the value of any land used for hazardous waste disposal, or have total assets in Michigan that are not less than six times the sum of the approved closure and postclosure cost estimates for facilities subject to these rules, whichever is larger.

(2) The phrase "current closure and postclosure cost estimates," as used in subrule (1) of this rule, means the cost estimates required under R 299.9702 and equivalent or substantially equivalent federal or state regulations. The phrase "other obligations covered by a financial test," as used in subrule (1) of this rule, means the financial assurance for solid waste management facilities under part 115 of the act and equivalent or substantially equivalent federal or state regulations, the financial assurance for injection wells under 40 C.F.R. part 144, the financial assurance for underground storage tanks under 40 C.F.R. part 280 and equivalent or substantially equivalent state regulations, the financial assurance for polychlorinated biphenol facilities regulated under 40 C.F.R. part 761 and equivalent or substantially equivalent state regulations, the financial assurance for remediation costs under part 201 of the act and equivalent federal or state regulations, and the fiinancial assurance for corrective action under R 299.9713 and equivalent or substantially equivalent federal or state regulations.

(3) To demonstrate that he or she meets this test, the owner or operator shall submit all of the following items to the director:

(a) A letter signed by the owner or operator's chief financial officer and worded as specified

by the director.

(b) A copy of the independent certified public accountant's report on examination of the owner's or operator's financial statements for the latest completed fiscal year.

(c) A special report from the owner's or operator's independent certified public accountant to the owner or operator on comparison of the data presented in the chief financial officer's letter to the independently audited, year-end financial statements. The special report shall describe the agreed-upon procedures performed and related findings, including if there were any discrepancies found.

(4) An owner or operator of a new facility shall submit the items specified in subrule (3) of this rule to the director not less than 60 days before the date on which hazardous waste is first received for treatment, storage, or disposal.

(5) After the initial submission of the items specified in subrule (3) of this rule, the owner or operator shall send updated information to the director within 90 days after the close of each succeeding fiscal year. This information shall consist of all items specified in subrule (3) of this rule.

(6) If the owner or operator no longer meets the requirements of subrule (1) of this rule, he or she shall send notice to the director of the intent to establish alternate financial assurance as specified in this part. The notice shall be sent, by certified mail, within 90 days after the end of the fiscal year for which the year-end financial data show that the owner or operator no longer meets the requirements. The owner or operator shall provide the alternate financial assurance within 120 days after the end of such fiscal year.

(7) The director may, based on a reasonable belief that the owner or operator might no longer meet the requirements of subrule (1) of this rule, require reports of financial condition at any time from the owner or operator in addition to that information required of the owner or operator in subrule (3) of this rule. If the director finds, on the basis of such reports or other information, that the owner or operator no longer meets the requirements of subrule (1) of this rule, the owner or operator shall provide alternate financial assurance as specified in this part within 30 days after notification of such a finding.

(8) The director may disallow use of a financial test to meet the requirements of this part on the basis of qualifications in the opinion expressed by the independent certified public accountant in his or her report on examination of the owner's or operator's financial statements. An adverse opinion or a disclaimer of opinion will be cause for disallowance. The director shall evaluate other qualifications on an individual basis. The owner or operator shall provide alternate financial assurance as specified in this rule within 30 days after notification of the disallowance.

(9) The owner or operator is no longer required to submit the items specified in subrule (3) of this rule when one of the following occurs:

(a) An owner or operator substitutes alternate financial assurance as specified in this rule.

(b) The director releases the owner or operator from the requirements of this part in accordance with R 299.9703(5).

(10) An owner or operator may meet the requirements of this rule by obtaining a written guarantee, hereafter referred to as "corporate guarantee." The guarantor shall be the parent corporation of the owner or operator. The guarantor shall meet the requirements for owners or operators in subrules (1) to (8) of this rule and shall comply with the terms of the corporate guarantee. The wording of the corporate guarantee shall be identical to wording provided by the director. The corporate guarantee shall accompany the items sent to the director as specified in subrule (3) of this rule. The terms of the corporate guarantee shall provide for all of the following:

(a) That if the owner or operator fails to perform final closure or postclosure care of a facility covered by the corporate guarantee in accordance with the closure and postclosure plans and other operating license requirements when required to do so, the guarantor shall do so or establish a trust fund as specified in R 299.9704 in the name of the owner or operator.

(b) The corporate guarantee shall remain in force unless the guarantor sends notice of cancellation, by certified mail, to the owner or operator and to the director. Cancellation shall not occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by

both the owner or operator and the director, as evidenced by the return receipts.

(c) If the owner or operator fails to provide alternate financial assurance as specified in this part and obtain the written approval of such alternate assurance from the director within 90 days after receipt by the owner or operator and the director of a notice of cancellation of the corporate guarantee from the guarantor, the guarantor shall provide such alternative financial assurance in the name of the owner or operator.

(d) In the case of corporations that are incorporated outside of Michigan, the guarantor shall identify and maintain a registered agent for service of process in Michigan.

R 299.9710 Liability requirements for treatment, storage, and disposal facilities.

Rule 710. (1) An owner or operator of a hazardous waste treatment, storage, or disposal facility, or a group of such facilities, shall demonstrate financial responsibility for bodily injury and property damage to third parties caused by sudden and accidental occurrences arising from operations of the facility or group of facilities. The owner or operator shall have and maintain liability coverage for sudden and accidental occurrences in an amount not less than $1,000,000.00 per occurrence with an annual aggregate of not less than $2,000,000.00, exclusive of legal defense costs.

(2) An owner or operator of a surface impoundment, landfill, land treatment facility, or disposal miscellaneous unit which is used to manage hazardous waste, or a group of such facilities, shall demonstrate financial responsibility for bodily injury and property damage to third parties caused by nonsudden accidental occurrences arising from operations of the facility or group of facilities. The owner or operator shall have and maintain liability coverage for nonsudden accidental occurrences in an amount not less than $3,000,000.00 per occurrence with an annual aggregate of not less than $6,000,000.00, exclusive of legal defense costs.

(3) An owner or operator shall demonstrate the existence of the required liability coverage through any of the following:

(a) Insurance as specified in subrule (6) of this rule.

(b) The financial test specified in subrule (7) of this rule.

(c) The financial test specified in subrule (8) of this rule.

(d) The corporate guarantee specified in subrule (9) of rule.

(e) The letter of credit specified in subrule (10) of this rule.

(f) The trust fund specified in subrule (11) of this rule.

(4) An owner or operator may demonstrate the existence of the required liability coverage through a combination of the financial mechanisms specified in subrule (3) of this rule, except that any combination shall not include more than 1 of the financial tests specified and shall not include both a financial test and corporate guarantee. The amounts of coverage shall total at least the minimum amounts required by this rule.

(5) If more than 1 financial mechanism is used to demonstrate the existence of the required liability coverage, then the owner or operator shall specify at least 1 financial mechanism as primary coverage and shall specify the other financial mechanisms as excess coverage.

(6) An owner or operator may satisfy the liability requirements of this rule by obtaining an insurance policy as follows:

(a) Each insurance policy shall be issued by an insurer which, at a minimum, is licensed to transact the business of insurance, or which is eligible to provide insurance as an excess or surplus lines insurer, in the state of Michigan.

(b) Each insurance policy shall be amended by attaching an endorsement on a form provided by the director. The owner or operator shall submit, to the director, a signed duplicate original of the endorsement, and, if requested by the director, a signed duplicate of the insurance policy.

(c) Each policy that is obtained to meet the requirements of this rule shall provide that cancellation, termination, or a material change to the policy that affects the coverages required by this rule shall not occur unless and until not less than 30 days' written notice of the cancellation, termination, or material change is first provided to the director. The notice shall be given no matter

which party initiates the cancellation, termination, or material change and whether or not nonpayment of premium is involved.

(d) If the underlying policies required by subrules (1) and (2) of this rule do not provide sufficient limits of liability, the policy shall be amended by attaching an excess insurance endorsement on a form approved by the director.

(7) An owner or operator may satisfy the liability requirements of this rule by complying with the financial test requirements specified in the provisions of 40 C.F.R. §264.147(f). To demonstrate that he or she passes this test, the owner or operator shall submit all of the information required in 40 C.F.R. §264.147(f)(3) to the director. The words "regional administrator" in the provisions of 40 C.F.R. §264.151(g) shall be replaced with the word "director."

(8) An owner or operator may satisfy the liability requirements of this rule by complying with the financial test requirements specified in the provisions of R 299.9709 and both of the following provisions:

(a) The financial test criteria of R 299.9709 shall be modified as follows:

(i) In the provisions of R 299.9709(1)(a)(ii), net working capital and tangible net worth shall each be not less than 6 times the sum of the current closure and postclosure cost estimates, any other obligations covered by a financial test, and the amount of annual aggregate liability coverage.

(ii) In the provisions of R 299.9709(1)(a)(iv), assets in the United States shall be not less than 90% of the owner's or operator's total assets or not less than 6 times the sum of the current closure and postclosure cost estimates, any other obligations covered by a financial test, and the amount of annual aggregate liability coverage.

(iii) In the provisions of R 299.9709(1)(b)(ii), tangible net worth shall be not less than 6 times the sum of the current closure and postclosure cost estimates, any other obligations covered by a financial test, and the amount of annual aggregate liability coverage.

(iv) In the provisions of R 299.9709(1)(b)(iv), assets in the United States shall be not less than 90% of the owner's or operator's total assets or not less than 6 times the sum of the current closure and postclosure cost estimates, any other obligations covered by a financial test, and the amount of annual aggregate liability coverage.

(b) To demonstrate that the owner or operator passes the financial test requirements of this subrule, the owner or operator shall submit all of the information required by the provisions of R 299.9709(3) to the director.

(c) If the owner or operator no longer meets the requirements of this subrule, then he or she shall obtain alternate liability coverage as specified in this rule. Evidence of alternate liability coverage shall be submitted to the director within 90 days after the end of the fiscal year for which the year-end financial data show that the owner or operator no longer meets the financial test requirements of this subrule.

(9) An owner or operator may satisfy the liability requirements of this rule by obtaining a written guarantee for liability coverage, hereafter referred to as "corporate guarantee," as follows:

(a) The guarantor shall be the parent corporation of the owner or operator. The guarantor shall meet the requirements for owners or operators specified in subrule (7) or (8) of this rule and shall comply with the terms of the corporate guarantee.

(b) The corporate guarantee shall provide for all of the following:

(i) If the owner or operator fails to satisfy a judgment based on a determination of liability for bodily injury or property damage to third parties caused by sudden or nonsudden, or both, accidental occurrences arising from the operation of facilities covered by the corporate guarantee, or fails to pay an amount agreed to in settlement of claims arising from, or alleged to have arisen from, such injury or damage, then the guarantor will satisfy the judgment or pay the settlement amount up to the limits of coverage.

(ii) The guarantor shall make payment of third-party liability awards and settlements upon presentation of a certification of a valid claim or a valid final court order that establishes a judgment against the owner or operator for bodily injury or property damage caused by sudden or nonsudden

accidental occurrences arising from the operation of the facilities covered by the corporate guarantee.

(iii) The liability coverage shall not apply to the exclusions specified in the provisions of subrule (12) of this rule.

(iv) The corporate guarantee shall remain in force unless the guarantor sends a notice of cancellation, by certified mail, to the owner or operator and to the director. Cancellation shall not occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by both the owner or operator and the director, as evidenced by the return receipts.

(v) The corporate guarantee shall not be terminated unless the owner or operator obtains, and the director approves, alternate liability coverage as specified in this rule.

(vi) The guarantor shall obtain alternate liability coverage as specified in this rule in the name of the owner or operator, unless the owner or operator has done so, within 30 days after being notified by the director that the guarantor no longer meets the financial test criteria or that the guarantor is disallowed from continuing as guarantor, and within 120 days after the end of any fiscal year before termination of the guarantee in which the guarantor fails to meet the financial test criteria.

(c) The wording of the corporate guarantee shall be identical to the wording specified by the director.

(d) The corporate guarantee shall accompany the items sent to the director as specified in subrule (7) or (8) of this rule.

(e) If a corporation is incorporated outside of Michigan, then a guarantee may be used to satisfy the requirements of this rule only if the non-Michigan corporation has identified a registered agent for service of process in Michigan.

(f) The director shall agree to termination of the guarantee if either of the following occurs:

(i) The owner or operator or guarantor substitutes alternate financial assurance as specified in this rule.

(ii) The director releases the owner or operator from the liability requirements in accordance with the provisions of subrule (16) of this rule.

(10) An owner or operator may satisfy the liability requirements of this rule by obtaining an irrevocable letter of credit for liability coverage as follows:

(a) The issuing institution shall be a bank or financial institution which has the authority to issue letters of credit and which has its letter of credit operations regulated and examined by a federal or state agency.

(b) The letter of credit shall provide for both of the following:

(i) The financial institution shall deposit amounts designated by the trustee, up to the amount of the letter of credit, into a standby trust fund upon presentation of a sight draft.

(ii) The letter of credit shall be irrevocable and issued for a period of at least 1 year. The expiration date shall be automatically extended for a period of at least 1 year unless, not less than 120 days before the current expiration date, the issuing institution notifies both the owner or operator and the director, by certified mail, of a decision not to extend the expiration date. The 120 days shall begin on the date when both the owner or operator and the director receive the notice, as evidenced by the return receipts.

(c) The wording of the letter of credit shall be identical to the wording specified by the director.

(d) The director shall agree to termination of the letter of credit when either of the following occurs:

(i) The owner or operator substitutes alternate financial assurance as specified in this rule.

(ii) The director releases the owner or operator from the liability requirements in accordance with the provisions of subrule (16) of this rule.

(e) An owner or operator who uses a letter of credit to satisfy the requirements of this rule shall establish a standby trust fund in accordance with both of the following provisions:

(i) The trustee shall be a bank or other financial institution which has the authority to act as trustee and which has its trust operations regulated and examined by a state or federal agency.

(ii) The trust fund shall provide for all of the following:

(A) The trustee shall satisfy third-party liability claims by drawing on the letter of credit and by making payments from the fund upon presentation of a certification of a valid claim or a valid final court order that establishes a judgment against the owner or operator for bodily injury or property damage caused by sudden or nonsudden accidental occurrences arising from the operation of the facilities covered by the trust fund.

(B) The liability coverage shall not apply to the exclusions specified in the provisions of subrule (12) of this rule.

(C) The trust shall be irrevocable and shall continue until terminated pursuant to the written agreement of the owner or operator, the trustee, and the director or until terminated by the trustee and the director if the owner or operator ceases to exist.

(D) The wording of the trust agreement shall be identical to the wording specified by the director.

(f) The director shall agree to termination of the standby trust if either of the following occurs:

(i) The owner or operator substitutes alternate financial assurance as specified in this rule.

(ii) The director releases the owner or operator from the liability requirements in accordance with the provisions of subrule (16) of this rule.

(g) The owner or operator shall submit a copy of the letter of credit and a signed duplicate original of the standby trust agreement to the director.

(h) If the owner or operator does not establish alternate liability coverage as specified in this rule and obtain written approval of the alternate coverage from the director within 90 days after receipt, by both the owner or operator and the director, of a notice from the issuing institution that it has decided not to extend the letter of credit beyond the current expiration date, then the director shall notify the trustee and the trustee shall draw on the letter of credit and deposit the proceeds of the letter of credit into the standby trust fund.

(11) An owner or operator may satisfy the liability requirements of this rule by obtaining a trust fund for liability coverage as specified in the following provisions and submitting a signed duplicate original of the trust agreement to the director:

(a) The trustee shall be a bank or other financial institution which has the authority to act as trustee and which has its trust operations regulated and examined by a state or federal agency.

(b) The trust fund shall be funded for the full amount of liability coverage to be provided by the trust fund. After the trust fund is established, if the trust fund amount is reduced below the full amount of liability coverage to be provided by the trust fund, then the owner or operator shall make payment to the trustee to cause the value of the trust fund to at least equal the full amount of liability coverage to be provided by the trust fund. The payments shall be made before the anniversary date of the establishment of the fund.

(c) The trust fund shall provide for all of the following:

(i) The trustee shall make payment of third-party liability awards and settlements, up to the value of the fund, upon presentation of a certification of a valid claim or a valid final court order that establishes a judgment against the owner or operator for bodily injury or property damage caused by sudden or nonsudden accidental occurrences arising from the operation of the facilities covered by the trust fund.

(ii) The liability coverage shall not apply to the exclusions specified in the provisions of subrule (12) of this rule.

(iii) The trust shall be irrevocable and shall continue until terminated pursuant to the written agreement of the owner or operator, the trustee, and the director or until terminated by the trustee and the director if the owner or operator ceases to exist.

(d) The wording of the trust agreement shall be identical to the wording specified by the director.

(e) The director shall agree to termination of the trust if either of the following occurs:

(i) The owner or operator substitutes alternate financial assurance as specified in this rule.

(ii) The director releases the owner or operator from the liability requirements in accordance with the provisions of subrule (16) of this rule.

(12) The liability coverages provided by the corporate guarantee, letter of credit, and trust fund pursuant to the provisions of this rule shall not apply to any of the following categories of damages or obligations:

(a) Bodily injury or property damage for which the owner or operator is obligated to pay damages by reason of the assumption of liability in a contract or agreement. This exclusion does not apply to liability for damages which the owner or operator would be obligated to pay in the absence of the contract or agreement.

(b) Any obligation of the owner or operator pursuant to a worker's compensation, disability benefits, or unemployment compensation law or similar law.

(c) Bodily injury to an employee of the owner or operator arising from, and in the course of, employment by the owner or operator, or bodily injury to the spouse, child, parent, brother, or sister of that employee as a consequence of, or arising from, and in the course of, employment by the owner or operator. This exclusion applies whether the owner or operator may be liable as an employer or in any other capacity and applies to any obligation to share damages with or repay another person who must pay damages because of injury to the employee or the spouse, child, parent, brother, or sister of the employee.

(d) Bodily injury or property damage arising out of the ownership, maintenance, use, or entrustment to others of any aircraft, motor vehicle, or watercraft.

(e) Property damage to any of the following:

(i) Any property that is owned, rented, or occupied by the owner or operator.

(ii) Premises that are sold, given away, or abandoned by the owner or operator if the property damage arises out of any part of the premises.

(iii) Property that is loaned to the owner or operator.

(iv) Personal property in the care, custody, or control of the owner or operator.

(v) The part of real property on which the owner, operator, or any contractor or subcontractor who is working directly or indirectly on behalf of the owner or operator are performing operations, if the property damage arises out of these operations.

(13) An owner or operator shall notify the director, in writing, within 30 days, if any of the following conditions occur:

(a) A claim results in a reduction in the amount of financial responsibility for liability coverage provided by a financial mechanism authorized in subrule (3) of this rule.

(b) A certification of valid claim for bodily injury or property damages caused by a sudden or nonsudden accidental occurrence arising from the operation of a hazardous waste treatment, storage, or disposal facility is entered between the owner or operator and a third-party claimant for liability coverage pursuant to the provisions of this rule.

(c) A final court order that establishes a judgment for bodily injury or property damage caused by a sudden or nonsudden accidental occurrence arising from the operation of a hazardous waste treatment, storage, or disposal facility is issued against the owner or operator or a financial mechanism for liability coverage pursuant to the provisions of this rule.

(14) An owner or operator shall continuously provide liability coverage for a facility as required by this rule until certifications of closure of the facility as specified in the provisions of R299.9613(3) are received by the director and the director notifies the owner or operator that the owner or operator is no longer required to maintain financial assurance for closure pursuant to the provisions of R 299.9703(5).

(15) The director may adjust the levels of financial responsibility required by this rule for the reasons specified in the provisions of 40 C.F.R. §264.147(c) and (d). Any adjustment to the level or type of coverage for a facility that has an operating license shall be treated as an operating license modification pursuant to the provisions of R 299.9519.

(16) Within 60 days after receiving certifications from the owner or operator and an

independent registered professional engineer that final closure has been completed in accordance with the approved closure plan, the director shall notify the owner or operator, in writing, that the owner or operator is no longer required by this rule to maintain liability coverage for that facility, unless the director has reason to believe that closure has not been in accordance with the approved closure plan.

(17) If all other hazardous waste management units at the facility which are subject to a liability coverage requirement under this rule are closed, or if the closure process under part 6 of these rules has been initiated for all other hazardous waste management units that are subject to a liability coverage requirement, then the director may replace all or part of that liability coverage requirement for a hazardous waste management unit with alternative requirements under R 299.9713 if the director does all of the following:

(a) Prescribes alternative requirements for the hazardous waste management unit under 40 C.F.R. §§264.90(f) or 264.110(d).

(b) Determines that it is not necessary to apply the requirements of this rule because the alternative financial assurance requirements will protect human health and the environment.

(c) Specifies the alternative requirements in an operating license or enforceable document.

(18) The provisions of 40 C.F.R. §§264.90(f), 264.110(d), 264.147(c), (d), and (f) and 264.151(g) are adopted by reference in R 299.11003.

R 299.9711 Financial capability requirements for transporters operating a transfer facility or group of transfer facilities.

Rule 711. (1) A transporter who operates a transfer facility or group of transfer facilities shall demonstrate financial responsibility for bodily injury and property damage to third parties caused by sudden and accidental occurrences arising from the operations of the facility or group of facilities. The transporter shall have and maintain liability coverage for sudden and accidental occurrences in an amount not less than $500,000.00 per occurrence, exclusive of legal defense costs. The requirement for liability coverage is in addition to any other insurance requirements of sections 3101 and 3102 of act 218. The transporter shall comply with the liability coverage requirements of this subrule by obtaining an insurance policy in accordance with the provisions of subrule (2) of this rule or by passing the financial test specified in the provisions of subrule (3) of this rule.

(2) Each insurance policy that is obtained by a transporter to fulfill the requirements of this rule shall be in compliance with all of the following provisions:

(a) The policy shall include a provision that the insurer notify the director 30 days before either of the following:

(i) Cancellation or termination of the insurance by either party for any reason.

(ii) A material change to the policy for any reason.

(b) The policy shall be issued by an insurer which, at a minimum, is licensed to transact the business of insurance, or which is eligible to provide insurance as an excess or surplus line insurer, in the state of Michigan.

(c) The deductible written into the policy shall not be more than 5% of the per occurrence limit of liability of the policy. If more than one policy is used to provide the coverage required by this rule, the total of all deductibles shall not be more than 5% of the total of the per occurrence limits of the policies used.

(d) The policy shall be amended by attaching an endorsement on a form provided by the director.

(3) A transporter may satisfy the liability coverage requirements of this rule by demonstrating that he or she passes a financial test as specified in this rule. To pass the test, the owner or operator shall meet the criteria of either subdivision (a) or (b) of this subrule as follows:

(a) A transporter shall comply with all of the following provisions:

(i) Have a net working capital and a tangible net worth which, for each, is not less than six times the amount of liability coverage to be demonstrated by the test.

(ii) Have a tangible net worth of not less than $10,000,000.00.

(iii) Have assets in the United States that amount to not less than 90% of his or her total assets or not less than 6 times the amount of liability coverage to be demonstrated by the test.

(b) A transporter shall comply with all of the following provisions:

(i) Have a current rating for its senior unsecured debt of AAA, AA, A, or BBB as issued by standard and poor's or Aaa, Aa, A, or Baa as issued by moody's.

(ii) Have tangible net worth of not less than $10,000,000.00.

(iii) Have a tangible net worth that is not less than 6 times the amount of liability coverage to be demonstrated by the test.

(iv) Have assets in the United States that amount to not less than 90% of his or her total assets or not less than 6 times the amount of liability coverage to be demonstrated by the test.

(c) The phrase "amount of liability coverage" as used in this subrule refers to the annual aggregate amounts for which coverage is required pursuant to the provisions of subrule (1) of this rule.

(4) A transporter shall demonstrate the existence of the liability coverage required pursuant to this rule by submitting either of the following to the director:

(a) All information that is necessary to meet the financial test requirements of subrule (3) of this rule, as follows:

(i) A letter which is signed by the transporter's chief financial officer and which is worded as specified by the director.

(ii) A copy of the independent certified public accountant's report upon examining the transporter's financial statements for the latest completed fiscal year.

(iii) A special report from the transporter's independent certified public accountant to the transporter on comparison of the data presented in the chief financial officer's letter to the independently-audited, year-end financial statements. The special report shall describe the agreed-upon procedures performed and related findings, including whether or not there were any discrepancies found.

(b) An endorsement provided by the director which shows that the coverage required in this rule has been obtained by the transporter. The transporter shall submit a signed duplicate original of each insurance endorsement. If requested by the director, the transporter shall provide signed duplicate originals of all insurance policies that are needed to fulfill the requirements of this rule.

(5) After the initial submission of the items specified in subrule (4)(a) of this rule, the transporter shall send updated information to the director within 90 days after the close of each succeeding fiscal year. The information shall consist of all of the items specified in subrule (4)(a) of this rule.

(6) A transporter using insurance to satisfy the liability coverage requirements of this rule shall submit to the director the endorsement required under subrule (4)(b) of this rule for the renewal or replacement policy upon issuance of the renewal or replacement policy.

(7) If underlying policies that are required pursuant to the provisions of subrule (2) of this rule do not provide sufficient limits of liability, then the transporter shall amend the policy by attaching an excess liability insurance endorsement on a form provided by the director.

(8) If a transporter is using the financial test to demonstrate financial responsibility for liability coverage required pursuant to the provisions of this rule and no longer meets the requirements of subrule (3) of this rule, then he or she shall send notice to the director of the intent to obtain an insurance policy as specified in this rule. The transporter shall send the notice by certified mail within 90 days after the end of the fiscal year for which year-end financial data show that the transporter no longer meets the requirements of subrule (3) of this rule. The transporter shall obtain liability insurance within 120 days after the end of the fiscal year.

(9) The director may disallow the use of a financial test to meet the requirements of this rule on the basis of qualifications in the opinion expressed by the independent certified public accountant in his or her report upon examining the transporter's financial statements. An adverse opinion or

disclaimer of opinion is cause for the disallowance of the use of a financial test to meet the requirements of subrule (1) of this rule. The director shall evaluate other qualifications on an individual basis. The transporter shall obtain an insurance policy as specified in this rule within 30 days after notification of the disallowance.

R 299.9712 Cost estimate for corrective action.

Rule 712. (1) The owner or operator of a facility who is required to perform corrective action pursuant to the provisions of part 111 of the act or these rules shall have a detailed written estimate, in current dollars, of the cost of performing corrective action at the facility in accordance with the provisions of R 299.9629.

(2) The cost estimate shall be based on the cost of hiring a third-party to complete the corrective action measures required pursuant to the provisions of R 299.9629.

(3) The cost estimate shall not incorporate any salvage value for the sale of hazardous wastes, facility structures or equipment, land or other facility assets.

(4) When preparing the cost estimate, the owner or operator shall not incorporate a zero cost for hazardous waste that may have economic value.

(5) The owner or operator shall adjust the cost estimate for inflation within the 60-day period before the anniversary date of the establishment of the financial mechanisms used to comply with the provisions of R 299.9713. For owners and operators who use the financial test or corporate guarantee, the cost estimate for corrective action shall be updated within 30 days after the close of the firm's fiscal year and before the submission of updated information to the director. The adjustment for inflation may be made by recalculating the costs in current dollars or by using an inflation factor that is derived from the most recent annual implicit price deflator for gross national product published by the United States department of commerce in its survey of current business.

(6) The owner or operator shall adjust the cost estimate for corrective action not later than 30 days after the director has approved a modification to the corrective action program if the modification increases the cost of corrective action.

R 299.9713 Financial assurance for corrective action.

Rule 713. (1) The owner or operator shall establish financial assurance for the cost of performing corrective action at the facility in accordance with the provisions of R 299.9629.

(2) The owner or operator shall maintain the financial assurance for corrective action until the corrective action is completed and the owner or operator is released from this requirement by the director.

(3) During the period in which the corrective action program is implemented, the director may approve a reduction in the amount of financial assurance that is required for corrective action if the owner or operator demonstrates, to the director's satisfaction, that the amount of the financial assurance exceeds the remaining cost of corrective action.

(4) If the director issues a notice of violation or other order to the owner or operator alleging a violation of the corrective action program, the director may, after providing the owner or operator 7 days' notice and an opportunity for a hearing, access funds to correct violations, complete corrective action, and maintain the facility in accordance with the corrective action program.

(5) Within 60 days after receiving certification from the owner or operator and an independent registered professional engineer that corrective action has been completed in accordance with the corrective action program, the director shall notify the owner or operator, in writing, that the owner or operator is no longer required by this rule to maintain financial assurance for corrective action at a particular facility, unless the director has reason to believe that any aspect of corrective action has not been completed in accordance with the corrective action program. The director shall provide the owner or operator with a detailed written statement of any reason to believe that corrective action has not been completed in accordance with the corrective action program.

(6) An owner or operator shall notify the director, by certified mail, of the commencement of a

voluntary or involuntary proceeding under the bankruptcy provisions of public law 95-598, 11 U.S.C. §§1 to 151302, naming the owner or operator as debtor, within 10 days after commencement of the proceeding.

(7) An owner or operator who fulfills the requirements of this rule by obtaining a trust fund, surety bond, letter of credit, or insurance policy shall be deemed to be without the required financial assurance in the event of bankruptcy of the trustee or issuing institution, a suspension or revocation of the authority of the trustee institution to act as a trustee, or a suspension or revocation of the authority of the institution issuing the surety bond, letter of credit, or insurance policy to issue such instruments. The owner or operator shall establish other financial assurance within 60 days after any event specified in this subrule.

PART 8. MANAGEMENT OF SPECIFIC HAZARDOUS WASTES, SPECIFIC TYPES OF HAZARDOUS WASTE MANAGEMENT FACILITIES, AND USED OIL

R 299.9801 Recyclable materials used in manner constituting disposal.

Rule 801. (1) The requirements of this rule apply to recyclable materials that are applied to or placed on the land in either of the following ways:

(a) Without mixing with any other substance.

(b) After mixing or combining with any other substance or substances.

(2) The materials specified in subrule (1) of this rule will be referred to throughout this rule as materials "used in a manner that constitutes disposal."

(3) Products produced for the general public's use that are used in a manner that constitutes disposal and that contain recyclable materials are not presently subject to regulation pursuant to the provisions of these rules if the recyclable materials have undergone a chemical reaction in the course of producing the product so as to become inseparable by physical means and if such products are in compliance with the applicable treatment standards specified in R 299.9311, R 299.9413, and R 299.9627, or where no treatment standards have been established, the applicable prohibition levels specified in 40 C.F.R. §268.32 or the provisions of section 3004(d) of RCRA, for each recyclable material that the products contain. Commercial fertilizers that are produced for the general public's use and that contain recyclable materials are not presently subject to regulation pursuant to the provisions of these rules if they are in compliance with the same treatment standards or prohibition levels for each recyclable material that they contain. Zinc-containing fertilizers using hazardous waste K061 and that are produced for the general public's use are not presently subject to regulation pursuant to the provisions of these rules.

(4) An anti-skid/deicing use of slags that are generated from the high temperature metals recovery (HTMR) processing of K061, K062, and F006 in a manner that constitutes disposal is not covered by the exemption in subrule (3) of this rule and the use remains subject to regulation under part 111 of the act and these rules.

(5) Generators and transporters of materials that are used in a manner that constitutes disposal are subject to the applicable requirements of parts 3 and 4 of these rules.

(6) Owners or operators of facilities that store recyclable materials that are to be used in a manner that constitutes disposal, but who are not the ultimate users of the materials, are regulated pursuant to all of the applicable provisions of parts 5, 6, and 7 of these rules.

(7) Owners or operators of facilities that use recyclable materials in a manner that constitutes disposal are regulated pursuant to all of the applicable provisions of parts 5, 6, and 7 of these rules, except that these requirements do not apply to products that contain these recyclable materials pursuant to the provisions of subrule (3) of this rule.

(8) Waste, used oil, or other material that is contaminated with a hazardous waste shall not be used for dust suppression or road treatment.

R 299.9802 Rescinded.

R 299.9803 Recyclable materials utilized for precious metals recovery.

Rule 803. (1) The requirements of this rule apply to recyclable materials that are reclaimed to recover economically significant amounts of any of the following elements:

(a) Gold.

(b) Silver.

(c) Platinum.

(d) Palladium.

(e) Iridium.

(f) Osmium.

(g) Rhodium.

(h) Ruthenium.

(i) Any combination of the elements listed in subdivisions (a) to (h) of this subrule.

(2) Persons who generate, transport, or store recyclable materials that are regulated under this rule are subject to the following requirements:

(a) For generators, the identification number requirements of R 299.9303 and manifest requirements of R 299.9304.

(b) For transporters, the requirements of part 4 of these rules.

(c) For persons who store, the manifest requirements of R 299.9608.

(d) For persons who export precious metals to, or import precious metals from, designated organization for economic cooperation and development member countries for the purpose of recovery, the requirements of R 299.9312 and 40 C.F.R. §265.12(a)(2).

(e) For persons who export precious metals to, or import precious metals from, non-organization for economic cooperation and development member countries for the purpose of recovery, the requirements of R 299.9309 and R 299.9310.

(3) Persons who store recyclable materials that are regulated under this rule shall keep all of the following records to document that such storage does not constitute speculative accumulation:

(a) Records showing the volume of these materials stored at the beginning of the calendar year.

(b) The amount of these materials generated or received during the calendar year.

(c) The amount of these materials remaining at the end of the calendar year.

(4) Recyclable materials which are regulated under this rule and which are accumulated speculatively are subject to all applicable provisions of these rules.

(5) The director may decide, on a case-by-case basis, that persons accumulating or storing recyclable materials from which precious metals are reclaimed shall be regulated under R 299.9206(1). The basis for this decision is that the materials are being accumulated or stored in a manner that does not protect human health and the environment because the materials or their toxic constituents have not been adequately contained or because the materials being accumulated or stored together are incompatible. In making this decision, the director shall consider all of the following factors:

(a) The types of materials accumulated or stored and the amounts accumulated or stored.

(b) The methods of accumulation or storage.

(c) The length of time the materials have been accumulated or stored before being reclaimed.

(d) Whether any contaminants are being released into the environment or are likely to be so released.

(e) Any other relevant factors.

(6) The director shall use the following procedures when determining whether to regulate hazardous waste recycling activities involving recyclable materials from which precious metals are reclaimed under R 299.9206(1) rather than under subrules (1) to (4) of this rule:

(a) If a generator is accumulating the waste, the director shall issue a notice setting forth the factual basis for the decision and stating that the person shall comply with part 3 of these rules. The notice shall become final within 30 days, unless the person served contests the decision under act 306. As part of the appeal procedure under act 306, the director shall hold a public hearing, provide notice of the public hearing, and allow public participation at the hearing. After the appeal procedures of act 306 are completed, the director shall issue a final order stating if compliance with part 3 of these rules is required. The order becomes effective 30 days after service of the decision, unless the director specifies a later date or unless review by the director is requested. The order may be appealed to the director by any person who participated in the public hearing. The director may choose to grant or to deny the appeal. Final action occurs when a final order is issued and appeal procedures under act 306 are exhausted.

(b) If the person accumulating the recyclable material is a storage facility, then the notice

shall state that the person shall obtain an operating license in accordance with all applicable provisions of part 5 of these rules. The owner or operator shall apply for an operating license within not less than 60 days and not more than 6 months of notice, as specified in the notice. If the owner or operator wishes to contest the director's decision under act 306, then he or she may do so in his or her license application, in a public hearing held on the draft license, or in comments filed on the draft license or in the notice of intent to deny the license. The fact sheet accompanying the license shall specify the reasons for the director's determination. The question of whether the director's decision was proper shall remain open for consideration during all public comment periods and hearings.

R 299.9804 Spent lead acid batteries being reclaimed.

Rule 804. (1) The requirements of this rule apply to persons who generate, collect, transport, store, or regenerate spent lead acid batteries for reclamation purposes.

(2) Persons who manage spent lead acid batteries which will be reclaimed through regeneration are not subject to parts 3 to 7 of these rules except for the requirements of R 299.9302. These persons shall also comply with the requirements of part 2 of these rules.

(3) Persons who generate, collect, or transport spent lead acid batteries which will be reclaimed by a means other than regeneration are not subject to parts 3 to 7 of these rules except for the requirements of R 299.9302. These persons shall also comply with the requirements of part 2 of these rules and 40 C.F.R. part 268.

(4) Persons who store spent lead acid batteries which will be reclaimed by a means other than regeneration but do not reclaim the batteries themselves are not subject to parts 3 to 7 of these rules except for the requirements of R 299.9302. These persons shall also comply with the requirements of part 2 of these rules and 40 C.F.R. part 268.

(5) Persons who store spent lead acid batteries which will be reclaimed by a means other than regeneration and store these batteries before reclaiming the batteries themselves are subject to all applicable requirements of R 299.9302 and parts 2, 5, 6, and 7 of these rules, except for the manifest requirements of R 299.9608.

(6) Persons who store spent lead acid batteries which will be reclaimed by a means other than regeneration and do not store these batteries before reclaiming the batteries themselves are not subject to parts 3 to 7 of these rules except for the requirements of R 299.9302. These persons shall also comply with the requirements of part 2 of these rules and 40 C.F.R. part 268.

(7) Instead of managing spent lead acid batteries in accordance with this rule, persons may manage spent lead acid batteries as universal wastes in accordance with the requirements of R 299.9228.

(8) The provisions of 40 C.F.R. part 268 are adopted by reference in R 299.11003.

R 299.9805 Rescinded.

R 299.9806 Rescinded.

R 299.9807 Rescinded.

R 299.9808 Management of hazardous waste burned in boilers and industrial furnaces.

Rule 808. (1) The requirements of this rule apply to hazardous waste that is burned or processed in a boiler or industrial furnace irrespective of the purpose of the burning or processing, except as noted in subrules (2) to (4) of this rule. For the purposes of this rule, the term "burn" means burning hazardous waste for energy recovery or destruction or processing hazardous waste for materials recovery or as an ingredient.

(2) The following hazardous wastes and facilities are not subject to regulation under this rule:

(a) Used oil burned for energy recovery that is also a hazardous waste solely because it exhibits a characteristic of hazardous waste identified in R 299.9212. The used oil is subject to

regulation under the provisions of R 299.9809 to R 299.9816.

(b) Gas recovered from hazardous waste or solid waste landfills when the gas is burned for energy recovery.

(c) Hazardous wastes that are exempt from regulation pursuant to the provisions of R 299.9204 and R 299.9206(3)(c) to (f), and hazardous wastes that are subject to the special requirements for conditionally exempt small quantity generators under the provisions of R 299.9205.

(d) Coke ovens, if the only hazardous waste burned in an oven is K087.

(3) The following owners or operators are not subject to regulation under this rule, except as noted:

(a) An owner or operator of a smelting, melting, and refining furnace, including pyrometallurgical devices such as cupolas, sintering machines, roasters, and foundry furnaces, that processes hazardous waste solely for metal recovery is exempt from regulation under this rule, except for the requirements of subrules (6) and (8) of this rule, if the owner or operator is in compliance with the requirements of 40 C.F.R. §266.100(c)(1) to (3). The exemption does not apply to cement kilns, aggregate kilns, or halogen acid furnaces that process hazardous waste solely for metals recovery.

(b) An owner or operator of a smelting, melting, and refining furnace, including pyrometallurgical devices such as cupolas, sintering machines, roasters, and foundry furnaces, that processes hazardous waste for recovery of economically significant amounts of the precious metals gold, silver, platinum, palladium, iridium, osmium, rhodium, or ruthenium, or any combination of the metals, is exempt from regulation under this rule, except for the requirements of subrule (8) of this rule, if the owner or operator is in compliance with the requirements of 40 C.F.R. §266.100(f)(1) to (3).

(c) An owner or operator of a facility that burns, in an on-site boiler or industrial furnace that is exempt from regulation pursuant to the small quantity provisions of 40 C.F.R. §266.108, hazardous waste that the facility has generated is exempt from regulation under parts 5 to 7 of these rules for storage units that store mixtures of hazardous waste and the primary fuel to the boiler or industrial furnace in tanks that feed the fuel mixture directly to the burner. The storage of hazardous waste before mixing it with the primary fuel is subject to the provisions of subrule (6) of this rule.

(d) An owner or operator of a facility that burns hazardous waste in an on-site boiler or industrial furnace, if all of the small quantity exemption criteria outlined in the provisions of 40 C.F.R. §266.108 are met.

(4) Except as noted in this subrule, the provisions of part 8 of these rules do not apply if the affected source demonstrates compliance with the maximum achievable control technology standards of 40 C.F.R. part 63, subpart EEE by conducting a comprehensive performance test and submitting to the director a notification of compliance under 40 C.F.R. §§63.1207(j) and 63.1210(d) which documents compliance with the requirements of 40 C.F.R. part 63, subpart EEE. Nevertheless, after this compliance demonstration is made, the operating license conditions that are based on the standards of part 8 of these rules shall continue to be in effect until they are removed from the operating license or the operating license is terminated or revoked, unless the operating license expressly provides otherwise. The maximum achievable control technology standards of 40 C.F.R. part 63, subpart EEE do not supersede the requirements of R 299.9601, R 299.9605 to R 299.9610, R 299.9612, R 299.9613, R 299.9625(5), R 299.9630, R 299.9631, R 299.9808(7) and part 7 of these rules and 40 C.F.R. part 265, subparts A to D, F, G, BB, and CC and §§266.102(e)(11), 266.103(l), 266.111, 266.112, except 266.112(a) and (c), as applicable.

(5) A generator and a transporter of hazardous waste that is burned in a boiler or industrial furnace shall comply with the requirements of parts 3 and 4 of these rules, respectively.

(6) An owner or operator of a facility that stores hazardous waste that is burned in a boiler or industrial furnace shall comply with the applicable requirements of parts 5 to 7 of these rules. The requirements of parts 5 to 7 of these rules shall apply to the storage by the burner and to storage facilities operated by intermediaries, including processors, blenders, distributors, between the generator and the burner.

(7) An owner or operator of a boiler or an industrial furnace that burns hazardous waste shall

comply with the applicable requirements of parts 5 to 7 of these rules and 40 C.F.R. part 266, subpart H and appendices I to XIII; except §§266.100(a) and (b), 266.101, 266.102(a), and 266.112(a) and (c); and §270.66.

(8) A residue derived from the burning or processing of hazardous waste in a boiler or industrial furnace is not excluded from the definition of hazardous waste under the provisions of R 299.9204(2)(d), (h), and (j), unless the device and the owner or operator are in compliance with all of the following requirements:

(a) The device meets the following criteria:

(i) If the device is a boiler, it shall burn not less than 50% coal on a total heat input or mass input basis, whichever results in the greater mass feed rate of coal.

(ii) If the device is an industrial furnace subject to the provisions of R 299.9204(2)(h), it shall process not less than 50%, by weight, normal, nonhazardous raw materials.

(iii) If the device is a cement kiln, it shall process not less than 50%, by weight, normal cement production raw materials.

(b) The owner or operator demonstrates, in writing, to the director's satisfaction, that the hazardous waste does not significantly affect the residue by demonstrating conformance with the criteria outlined in 40 C.F.R. §266.112(b)(1) and (2).

(c) Records sufficient to document compliance with the provisions of this subrule shall be retained until closure of the boiler or industrial furnace unit. At a minimum, the following information shall be included in the records, as applicable:

(i) The levels of constituents in 40 C.F.R. part 261, appendix VIII, that are present in waste-derived residues.

(ii) If the waste-derived residue is compared with normal residue under this subrule, then all of the following information shall be documented in the records:

(A) The levels of constituents in 40 C.F.R. part 261, appendix VIII, that are present in normal residues.

(B) Data and information, including analyses of samples as necessary, that were obtained to determine if changes in raw materials or fuels would reduce the concentration of toxic constituents of concern in the normal residue.

(9) The provisions of 40 C.F.R. parts 265, subparts A to D, F, G, BB, and CC and 266, subpart H and appendices I to XIII; except §§266.100(a) and (b), 266.101, 266.102(a), and 266.112(a) and (c); and §270.66 are adopted by reference in R 299.11003. For the purposes of 40 C.F.R. part 266, subpart H and §270.66, the word "director" shall replace the words "regional administrator."

R 299.9809 Used oil regulation; applicability.

Rule 809. (1) Used oil and the following materials are subject to regulation as used oil pursuant to the provisions of R 299.9810 to R 299.9816, unless otherwise specified in subrule (2) of this rule:

(a) A mixture of used oil and hazardous waste generated by a conditionally exempt small quantity generator who is regulated pursuant to the provisions of R 299.9205.

(b) A material that contains, or is otherwise contaminated with, used oil and is burned for energy recovery.

(c) Used oil that is drained or removed from materials that contain, or are otherwise contaminated with, used oil.

(d) A mixture of used oil and fuel.

(e) A material which is produced from used oil and which is burned for energy recovery.

(f) Used oil that is burned for energy recovery and any fuel produced from used oil by processing, blending, or other treatment if it exceeds any of the used oil specifications. Specification used oil is used oil that does not exceed any of the used oil specifications and off-specification used oil is used oil that exceeds any of the specifications specified in this subdivision. The used oil

specifications are as follows:

(i) A maximum arsenic concentration of 5 parts per million.

(ii) A maximum cadmium concentration of 2 parts per million.

(iii) A maximum chromium concentration of 10 parts per million.

(iv) A maximum lead concentration of 100 parts per million.

(v) A minimum flash point of 100 degrees Fahrenheit.

(vi) A maximum total halogen concentration of 4,000 parts per million.

(g) Used oil that is recycled and is also a hazardous waste solely because it exhibits a hazardous characteristic.

(h) Used oil that contains polychlorinated biphenyls at any concentration less than 50 parts per million. Such used oil may also be subject to 40 C.F.R. part 761, including 40 C.F.R. §§761.20(d) and (e). Marketers and burners of used oil who market used oil that contains any quantifiable level, 2 parts per million or greater, of polychlorinated biphehyls are also subject to the requirements of 40 C.F.R. §761.20(e)

(2) The following materials are not subject to regulation as used oil under the provisions of R 299.9810 to R 299.9816, but may be subject to regulation as a hazardous waste under part 111 of the act and these rules:

(a) A mixture of used oil and hazardous waste, except as specified in subrule (1)(a) of this rule.

(b) Used oil that contains more than 1,000 parts per million total halogens is presumed to be a hazardous waste and is regulated under part 111 of the act and these rules. A person may rebut the presumption by demonstrating that the used oil does not contain hazardous waste. The demonstration may be made by showing that the used oil does not contain significant concentrations of halogenated hazardous constituents that are listed in 40 C.F.R. part 261, appendix VIII. The rebuttable presumption rule does not apply to the following materials:

(i) Metalworking oils or fluids that contain chlorinated paraffins if the oils or fluids are processed through a tolling arrangement as specified in 40 C.F.R. §279.24(c) to reclaim the oils or fluids. The rebuttable presumption does apply, however, if the oils or fluids are recycled in any other manner or disposed of.

(ii) Used oil that is contaminated with chlorofluorocarbons which have been removed from refrigeration units if the chlorofluorocarbons are destined for reclamation. The rebuttable presumption does apply, however, if the used oil is contaminated with chlorofluorocarbons that have been mixed with used oil from sources other than refrigeration units.

(c) A material that contains, or is are otherwise contaminated with, used oil if the used oil has been properly drained or removed to the extent possible so that visible signs of free-flowing oil do not remain in or on the material and the material is not burned for energy recovery.

(d) A mixture of used oil and diesel fuel that is mixed on-site by the generator of the used oil for use in the generator's own vehicles. Before mixing, the used oil is regulated pursuant to the provisions of subrule (1) of this rule.

(e) Used oil and materials that are derived from used oil and that are disposed of or used in a manner constituting disposal.

(f) Used oil rerefining distillation bottoms that are used as a feedstock to manufacture asphalt products.

(g) Wastewater, the discharge of which is subject to regulation pursuant to the provisions of either section 402 or section 307(b) of the federal clean water act, including wastewater at facilities that have eliminated the discharge of wastewater, that is contaminated with de minimis quantities of used oil. For the purposes of this subdivision, "de minimis" quantities of used oil means small spills, leaks, or other drippings from pumps, machinery, pipes, and other similar equipment during normal operations or small amounts of oil lost to the wastewater treatment system during washing or draining operations. De minimis quantities of used oil do not include used oil discarded as a result of abnormal manufacturing operations that result in substantial leaks, spills, or other releases or to used

oil recovered from wastewaters.

(h) Used oil mixed with crude oil or natural gas liquids for insertion into a crude oil pipeline. Before mixing with crude oil or natural gas liquids, the used oil is regulated pursuant to the provisions of subrule (1) of this rule.

(i) A mixture of used oil and crude oil or natural gas liquids that contains less than 1% used oil if the mixture is being stored, or transported to a crude oil pipeline or petroleum refining facility, for insertion into the refining process at a point before crude distillation or catalytic cracking.

(j) Used oil that is inserted into the petroleum refining facility process before crude distillation or catalytic cracking without prior mixing if the used oil constitutes less than 1% of the crude oil feed to any petroleum refining facility process unit at any given time. Before insertion into the petroleum refining facility, the used oil is regulated pursuant to the provisions of subrule (1) of this rule.

(k) Used oil that is introduced into a petroleum refining facility process after crude distillation or catalytic cracking if the used oil meets the used oil specifications pursuant to the provisions of subrule (1)(f) of this rule. Before insertion into the petroleum refining facility process, the used oil is regulated pursuant to the provisions of subrule (1) of this rule.

(l) Used oil that is incidentally captured by a hydrocarbon recovery system or wastewater treatment system as part of routine process operations at a petroleum refining facility and inserted into the petroleum refining process. Used oil that is intentionally introduced into a hydrocarbon recovery system or wastewater treatment system is regulated as a used oil pursuant to the provisions of subrule (1) of this rule.

(m) Tank bottoms from stock tanks that contain exempt mixtures of used oil and crude oil or natural gas liquids.

(n) Used oil that is produced on vessels from normal shipboard operations. Once the used oil is transported ashore, which is when the used oil is considered to be generated by the owner or operator of the vessel and the person removing or accepting the used oil from the vessel, then the used oil is regulated pursuant to the provisions of subrule (1) of this rule.

(o) Specification used oil fuel when the person who determined that the used oil fuel is specification used oil fuel demonstrates compliance with the requirements of R 299.9815(3)(b), (c), and (f) and 40 C.F.R. §279.73.

(p) Used oil that contains polychlorinated biphenyls at concentrations of 50 parts per million or greater. This used oil is subject to regulation pursuant to the provisions of 40 C.F.R. part 761.

(3) The provisions of 40 C.F.R. part 761 are adopted by reference in R 299.11003.

R 299.9810 Used oil generators; requirements.

Rule 810. (1) The requirements of this rule apply to a used oil generator, unless otherwise specified in subrule (2).

(2) The requirements of this rule do not apply to the following:

(a) A household do-it-yourselfer used oil generator.

(b) A farmer who generates, in a calendar year, an average of 25 gallons per month or less of used oil from vehicles or machinery used on the farm.

(3) A used oil generator shall comply with the provisions of 40 C.F.R. §§279.22, 279.23, and 279.24, except §279.22(a).

(4) A used oil generator shall not store used oil in units other than containers or tanks.

(5) The provisions of 40 C.F.R. §§279.22, 279.23, and 279.24, except §279.22(a), are adopted by reference in R 299.11003. For the purposes of the adoption, the word "director" shall replace the words "regional administrator."

R 299.9811 Used oil collection centers and aggregation points; requirements.

Rule 811. (1) The requirements of this rule apply to an owner or operator of a used oil collection center or aggregation point.

(2) An owner or operator of a do-it-yourselfer used oil collection center, used oil collection

center, or used oil aggregation point shall comply with both of the following requirements:

(a) The provisions of R 299.9810.

(b) Provide written notification of used oil management activities to the department.

R 299.9812 Used oil transporters and transfer facilities; requirements.

Rule 812. (1) The requirements of this rule apply to a used oil transporter unless otherwise specified in subrule (2) of this rule.

(2) The requirements of this rule do not apply to any of the following:

(a) The on-site transportation of used oil by the generator.

(b) A used oil generator who transports shipments of used oil that total 55 gallons or less from the generator to a used oil collection center as specified in the provisions of 40 C.F.R. §279.24(a).

(c) A used oil generator who transports shipments of used oil that total 55 gallons or less from the generator to a used oil aggregation point that is owned or operated by the same generator as specified in the provisions of 40 C.F.R. §279.24(b).

(d) The transportation of used oil from household do-it-yourselfers to a regulated used oil generator, used oil collection center, used oil aggregation point, processor or rerefiner, or a used oil burner. The exemption does not apply to the transportation of collected household do-it-yourselfer used oil from a used oil generator, used oil collection center, used oil aggregation point, or other facilities where household do-it-yourselfer used oil is collected.

(3) A used oil transporter and an owner or operator of a used oil transfer facility shall comply with the provisions of 40 C.F.R. §§279.41, 279.42, 279.43, 279.45, and 279.46, except §279.45(b).

(4) A used oil transporter shall ensure that the used oil being transported or stored at a transfer facility is not a hazardous waste pursuant to the provisions of R 299.9809(2)(b). The determination shall be made by testing the used oil, applying knowledge of the halogen content of the used oil in light of the materials or processes used, or by obtaining copies of analyses or other information from the generator. Records of the analyses conducted or information used to comply with this subrule shall be maintained by the transporter for a period of not less than 3 years.

(5) An owners or operator of a used oil transfer facility shall not store used oil in units other than containers or tanks.

(6) A used oil transporter who generates residues from the storage or transport of used oil shall manage the residues in accordance with part 111 of the act and these rules.

(7) The provisions of 40 C.F.R. §§279.24, 279.41, 279.42, 279.43, 279.45, and 279.46, except §279.45(b), are adopted by reference in R 299.11003. For the purposes of the adoption, the word "director" shall replace the words "regional administrator," and the term "R 299.9813" shall replace the words "subpart F of this chapter."

R 299.9813 Used oil processors and rerefiners; requirements.

Rule 813. (1) The requirements of this rule apply to an owner or operator of a facility that processes used oil, unless otherwise specified in subrule (2) of this rule.

(2) The requirements of this rule do not apply to any of the following:

(a) Incidental processing that occurs during the normal course of transportation as provided in 40 C.F.R. §279.41.

(b) Incidental processing that occurs during the normal course of used oil management before burning as provided in 40 C.F.R. §279.61(b).

(c) A used oil generator who performs any of the following activities is not a processor if the used oil is generated on-site and is not being sent off-site to a burner of specification or off-specification used oil fuel:

(i) Filtering, cleaning, or otherwise reconditioning used oil before returning it for reuse by the generator.

(ii) Separating used oil from wastewater generated on-site to make the wastewater

acceptable for discharge or reuse pursuant to section 402 or section 307(b) of the federal clean water act or other applicable federal or state requirements governing the management or discharge of wastewaters.

(iii) Using oil mist collectors to remove small droplets of used oil from in-plant air to make plant air suitable for continued recirculation.

(iv) Draining or otherwise removing used oil from materials that contain, or are otherwise contaminated with, used oil to remove excessive oil to the extent possible pursuant to the provisions of R 299.9809(2)(c).

(v) Filtering, separating, or otherwise reconditioning used oil before burning it in a space heater pursuant to the provisions of 40 C.F.R. §279.23.

(3) An owner or operator of a facility that processes used oil shall comply with the provisions of 40 C.F.R. §§279.51, 279.52, 279.54, 279.55, 279.56, 279.57, and 279.58, except §279.54(a).

(4) An owners or operator of a facility that processes used oil shall ensure that the used oil is not a hazardous waste pursuant to the provisions of R 299.9809(2)(b). The determination shall be made by testing the used oil or applying knowledge of the halogen content of the used oil in light of the materials or processes used. Records of the analyses conducted or information used to comply with this subrule shall be maintained by the owner or operator for a period of not less than 3 years.

(5) An owner or operator of a facility that processes used oil shall not store used oil in units other than containers or tanks.

(6) An owners or operator of a facility who generates residues from the storage, processing, or rerefining of used oil shall manage the residues in accordance with part 111 of the act and these rules.

(7) The provisions of 40 C.F.R. §§279.41, 279.51, 279.52, 279.54, 279.55, 279.56, 279.57, 279.58, and 279.61, except §279.54(a), are adopted by reference in R 299.11003. For the purposes of the adoption, the word "director" shall replace the words "regional administrator" and the term "R 299.9813" shall replace the words "subpart F of this chapter."

R 299.9814 Used oil burners who burn off-specification used oil for energy recovery; requirements.

Rule 814. (1) The requirements of this rule apply to a owner or operator of a facility that burns used oil for energy recovery, unless otherwise specified in subrule (2) of this rule.

(2) The requirements of this rule do not apply to any of the following:

(a) A facility that burns used oil for energy recovery under either of the following conditions:

(i) The used oil is burned by a used oil generator in an on-site space heater pursuant to the provisions of 40 C.F.R. §279.23.

(ii) The used oil is burned by a used oil processor or rerefiner for the purposes of processing used oil, which is considered burning incidentally to used oil processing.

(b) A person who burns specification used oil if the burner is in compliance with the requirements of R 299.9815.

(3) A used oil burner shall comply with both of the following restrictions on burning:

(a) Off-specification used oil fuel shall be burned for energy recovery in only the following types of devices:

(i) An industrial furnace.

(ii) A boiler that meets 1 of the following criteria:

(A) It is an industrial boiler that is located on the site of a facility which is engaged in a manufacturing process where substances are transformed into new products, including component parts of products, by mechanical or chemical processes.

(B) It is a utility boiler that is used to produce electric power, steam, heated or cooled air, or other gases or fluids for sale.

(C) It is a used oil-fired space heater if the burner is in compliance with the provisions of 40 C.F.R. §279.23.

(iii) A hazardous waste incinerator subject to regulation under part 6 of these rules.

(b) A used oil burner may aggregate off-specification used oil with virgin oil or specification used oil for the purposes of burning, but shall not conduct such aggregation for the purposes of producing specification used oil fuel.

(4) A used oil burner shall comply with the provisions of 40 C.F.R. §§279.62, 279.64, 279.65, and 279.66, except §279.64(a).

(5) A used oil burner shall ensure that the used oil managed at the used oil burner facility is not a hazardous waste pursuant to the provisions of R 299.9809(2)(b). The determination shall be made by testing the used oil, applying knowledge of the halogen content of the used oil in light of the materials or processes used, by obtaining copies of analyses or other information from the generator, or, if the used oil has been received from a processor or rerefiner regulated under the provisions of R 299.9813, using the information provided by the processor or rerefiner. Records of the analyses conducted or information used to comply with this subrule shall be maintained by the burner for a period of not less than 3 years.

(6) A used oil burner shall not store used oil in units other than containers or tanks.

(7) A used oil burner who generates residues from the storage or burning of used oil shall manage the residues in accordance with part 111 of the act and these rules.

(8) The provisions of 40 C.F.R. §§279.23, 279.62, 279.64, 279.65, and 279.66, except §279.64(a), are adopted by reference in R 299.11003. For the purposes of the adoption, the word "director" shall replace the words "regional administrator."

R 299.9815 Used oil fuel marketers; requirements.

Rule 815. (1) The requirements of this rule apply to a person who conducts either of the following activities:

(a) Directs a shipment of off-specification used oil from his or her facility to a used oil burner.

(b) First claims that the used oil which is to be burned for energy recovery meets the used oil specifications of R 299.9809(1)(f).

(2) The requirements of this rule do not apply to the following:

(a) A used oil generator, and a transporter who transports used oil that is received only from generators, unless the generator or transporter directs a shipment of off-specification used oil from his or her facility to a used oil burner. Used oil processors or rerefiners who burn some used oil fuel for the purposes of processing are considered to be burning incidentally to processing. A used oil generator or transporter who directs shipments of off-specification used oil to used oil processors or rerefiners who incidently burn used oil is not a used oil fuel marketer subject the requirements of this rule.

(b) A person who directs shipments of specification used oil fuel and who is not the first person to claim that the used oil meets the used oil specification of R 299.9809(1)(f).

(3) A used oil fuel marketer shall comply with all of the following requirements:

(a) Initiate shipments of off-specification used oil only to a used oil burner who is in compliance with both of the following requirements:

(i) Has an EPA identification number.

(ii) Burns the used oil in an industrial furnace or boiler as identified in R 299.9814(3)(a).

(b) Determine that the used oil which is to be burned for energy recovery meets the used oil specifications of R 299.9809(1)(f) by performing analyses of the used oil or by obtaining copies of analyses or other information documenting that the used oil meets the specifications.

(c) Maintain copies of the analyses of the used oil or other information used to make the determination that the used oil meets the used oil specifications of R 299.9809(1)(f) for a period of 3 years after the determination is made.

(d) The provisions of 40 C.F.R. §§279.73 and 279.75.

(e) Maintain a record of each shipment of off-specification used oil to a used oil burner for a period of not less than 3 years from the date of shipment. The records shall take the form of a log,

invoice, manifest, bill of lading, or other shipping documents. The records for each shipment shall include all of the following information:

(i) The name, address, and EPA identification number of the transporter who delivers the used oil to the burner.

(ii) The name, address, and EPA identification number of the burner who will receive the used oil.

(iii) The quantity of used oil shipped.

(iv) The date of the used oil shipment.

(f) Maintain a record of each shipment of specification used oil to a used oil burner for a period of not less than 3 years from the date of shipment. The records shall take the form of log, invoice, manifest, bill of lading, or other shipping documents. The records for each shipment shall include all of the following information:

(i) The name and address of the facility that receives the shipment.

(ii) The quantity of used oil fuel delivered.

(iii) The date of the shipment or delivery.

(iv) A cross-reference to the record of used oil analysis or other information used to make the determination that the used oil meets the used oil specifications of R 299.9809(1)(f).

(4) The provisions of 40 C.F.R. §§279.73 and 279.75 are adopted by reference in R 299.11003. For the purposes of the adoption, the word "director" shall replace the words "regional administrator."

R 299.9816 Used oil disposal; requirements.

Rule 816. (1) The requirements of this rule apply to all used oil that cannot be recycled and is therefore being disposed of. Used oil is assumed to be recycled unless the used oil handler disposes of the used oil or sends it for disposal.

(2) Used oil that is not hazardous waste and cannot be recycled in accordance with the provisions of R 299.9810 to R 299.9815 shall be managed in accordance with the applicable federal and state regulations.

(3) The use of used oil as a dust suppressant is prohibited.

R 299.9817 Military munitions; applicability.

Rule 817. (1) Persons handling waste military munitions shall comply with the requirements of this rule and R 299.9818 to R 299.9821.

(2) Unless otherwise specified in this rule or R 299.9818 to R 299.9821, all applicable requirements of these rules apply to waste military munitions.

(3) A military munition is not a waste if it meets one of the following criteria:

(a) It is used for its intended purpose, including any of the following:

(i) Use in training military personnel or explosives and munitions emergency response specialists which may include the destruction of unused propellant or other munitions.

(ii) Use in research, development, testing, and evaluation of military munitions, weapons, or weapons systems.

(iii) Recovery, collection, and on-range destruction of unexploded ordnance and munitions fragments during range clearance activities at active or inactive ranges. However, in this case, "use for intended purpose" does not include the on-range disposal or burial of unexploded ordnance and contaminants if the burial is not a result of product use.

(b) It is an unused munition, or component thereof, which is being repaired, reused, recycled, reclaimed, disassembled, reconfigured, or otherwise subjected to materials recovery activities, unless such activities involve use constituting disposal or burning for energy recovery under R 299.9202.

(4) An unused military munition is a waste if any of the following occurs:

(a) The munition is abandoned by being disposed of, burned, detonated, incinerated, or treated before to disposal, except as provided in subrule (3) of this rule.

(b) The munition is being removed from storage in a military magazine or other storage area for the purpose of being disposed of, burned, or incinerated, or treated before disposal.

(c) The munition is deteriorated or damaged to the point that it cannot be put into serviceable condition, and cannot reasonably be recycled or used for other purposes. For the purposes of this provision, the term "damaged" shall mean cracked, leaking, or other impairment that compromises the integrity of the munition.

(d) The munition has been declared a waste by an authorized military official.

(5) A used or fired military munition is a waste if either of the following occurs:

(a) The munition is transported off range or from the site of use, where the site of use is not a range, for the purposes of storage, reclamation, treatment, disposal, or treatment before disposal.

(b) If the munition is recovered, collected, and disposed of by burial, or landfilling either on or off range.

(6) For the purposes of part 111 of the act, a used or fired military munition is a waste and therefore, is potentially subject to corrective action and imminent and substantial endangerment authorities under part 111 of the act, if the munition lands off-range and is not promptly rendered safe or retrieved. Any imminent and substantial threats associated with any remaining material shall be addressed. If remedial action is infeasible, the operator of the range shall maintain a record of the event for as long as any threat remains. The record shall include the type of munition and its location to the extent the location is known.

R 299.9818 Military munitions; waste munitions transportation standards.

Rule 818. (1) A person transporting waste military munitions shall comply with the requirements of 40 C.F.R. §266.203.

(2) The provisions of 40 C.F.R. §266.203 are adopted by reference in R 299.11003. For the purposes of the adoption, the words "40 CFR part 261" shall be replaced by the words "part 2 of these rules" and the words "40 CFR parts 260 through 270" shall be replaced by the words "these rules."

R 299.9819 Military munitions; emergency response standards.

Rule 819. Explosives and munitions emergencies involving military munitions or explosives shall comply with the requirements of R 299.9301(8), R 299.9401(7), R 299.9501(3), and R 299.9503(2).

R 299.9820 Military munitions; waste munitions storage standards.

Rule 820. (1) Any person storing waste military munitions shall comply with the requirements of 40 C.F.R. §266.205(a), (b), (d), and (e)

(2) Any person not complying with the criteria outlined in 40 C.F.R. §266.205(a) is subject to the requirements of parts 5 and 6 of these rules.

(3) The provisions of 40 C.F.R. §266.205(a), (b), (d), and (e) are adopted by reference in R 299.11003. For the purposes of this adoption, the words "part 2 of these rules" shall replace the words "40 CFR part 261," the words "the act and these rules" shall replace the words "RCRA subtitle C," and the words "these rules" shall replace the words "40 CFR parts 260 through 279."

R 299.9821 Military munitions; waste munitions standards.

Rule 821. The treatment and disposal of military munitions which are considered a hazardous waste under these rules are subject to all of the applicable permitting, licensing, procedural, and technical requirements of these rules.

PART 9. HAZARDOUS WASTE SERVICE FUND

R 299.9901 "Hazardous waste emergency" defined.

Rule 901. "Hazardous waste emergency" means an actual or potential escape of hazardous wastes or hazardous waste constituents into the environment for which the director, or his or her designee, determines that immediate corrective action to remove or contain the wastes or waste constituents is required to prevent or correct environmental damage.

R 299.9902 Declaration of hazardous waste emergency.

Rule 902. (1) The director, or his or her designee, shall declare a hazardous waste emergency based on the following criteria:

(a) The waste meets the criteria of section 3(3) of part 111 of the act.

(b) A determination and oral or written report by on-scene emergency response staff to the director, or his or her designee, that the hazardous wastes or hazardous waste constituents have entered the environment or might enter the environment without corrective action or that corrective action must be taken to eliminate a threat to the environment or public health, safety, and welfare.

(c) The use of the hazardous waste service fund is needed to initiate or complete the corrective action.

(2) If a hazardous waste emergency is declared, it shall be declared ended by the director, or his or her designee, when the threat to the environment has ended.

R 299.9903 Report by the on-scene coordinator.

Rule 903. A written report shall be filed with the director, or his or her designee, by the on-scene coordinator summarizing the tasks accomplished, including an evaluation of the effectiveness of the action to control the hazardous waste emergency.

R 299.9904 Certification of performance.

Rule 904. Before payment is made from the hazardous waste service fund, the on-scene coordinator shall certify all of the following:

(a) That equipment used and work performed as stated on the contractor's invoice is accurate.

(b) That the charges accurately reflect the cost of the equipment used and work performed by the contractor.

(c) Whether or not a hazardous waste was generated as a result of the hazardous waste emergency for which a manifest was issued and whether or not the manifest copy was returned to indicate that the hazardous waste was properly delivered to the treatment, storage, or disposal facility.

R 299.9905 Documentation of expenditures.

Rule 905. The director shall keep records detailing expenditures from the hazardous waste service fund. Each expenditure shall be attributable to a specific hazardous waste emergency.

R 299.9906 Expenditure of funds.

Rule 906. The hazardous waste service fund shall be used only for hazardous waste emergencies determined under R 299.9901.

PART 10. AVAILABILITY OF REFERENCED MATERIALS

R 299.11001 Publications; adoption by reference.

Rule 1001. (1) The following ASTM standards are adopted by reference in these rules:

(a) D93-79 ($35).
(b) D93-80 ($35).
(c) D147-70 ($30).
(d) D168-88 (25).
(e) D421 ($25).
(f) D422-63 ($30)
(g) D698-91 ($30).
(h) D1557-91 ($30).
(i) D1586-67 ($30).
(j) D1946-82 ($30).
(k) D2216. ($25)
(l) D2267-88 ($30).
(m) D2382-83 ($30).
(n) D2434-68 (30).
(o) D2487-69 (reapproved 1979) ($35).
(p) D2879-92 ($30).
(q) D2922-78 ($30).
(r) D3278-78 ($30).
(s) D4318-94 ($35).
(t) D5084-90 ($30).
(u) D5092-90 ($25).
(v) D5299-92 ($35).
(w) E168-88 ($35).
(x) E169-87 ($30).
(y) E260-85 ($35).
(z) E926-88, Test Method C ($30).

(2) The standards listed in subrule (1) of this rule are available from the American Society for Testing and Materials, Sales Services, 100 Barr Harbor Drive, West Conshoshocken, Pennsylvania 19428-2959, for the costs identified in subrule (1), or from the Michigan Department of Environmental Quality, Waste Management Division, P.O. Box 30241, Lansing, Michigan 48909, at cost. The costs identified in subrule (1) reflect the costs at the time these rules were promulgated. The standards adopted in subrule (1) of this rule are available for inspection at the Lansing office of the department and the Office of the Federal Register, 800 North Capital Street, N.W., Washington, DC 20408.

(3) The publication entitled "APTI Course 415: Control of Gaseous Emissions," EPA Publication EPA-450/2-81-005, December 1981, is adopted by reference in these rules. The publication is available from the National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161, for $70, the cost at the time these rules were promulgated, or from the Michigan Department of Environmental Quality, Waste Management Division, P.O. Box 30241, Lansing, Michigan 48909, at cost. The publication adopted in this subrule is available for inspection at the Lansing office of the department.

(4) The publication entitled "U.S. EPA, Screening Procedures for Estimating the Air Quality Impact of Stationary Sources, Revised," October 1992, EPA Publication No. EPA-454/R-92-019, is adopted by reference in these rules. The publication is available from the National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161, for $34, the cost at the time these rules were promulgated, or from the Michigan Department of Environmental Quality, Waste Management Division, P.O. Box 30241, Lansing, Michigan 48909, at cost. The publication adopted in this subrule is available for inspection at the Lansing office of the department.

(5) The publication entitled "API Publication 2517, Third Edition, Evaporative Loss From External Floating Roof Tanks," February 1989, is adopted by reference in these rules. The publication is available from the American Petroleum Institute, 1220 L Street, N.W., Washington DC, 20005, for $80, the cost at the time these rules were promulgated, or from the Michigan Department of Environmental Quality, Waste Management Division, P.O. Box 30241, Lansing, Michigan 48909, at cost. The publication adopted in this subrule is available for inspection at the Lansing office of the department.

(6) The publication entitled "Method 1664, Revision A, n-Hexane Extractable Material (HEM; Oil and Grease) and Silica Gel Treated n-Hexane Extractable Material (SGT-HEM; Non-Polar Material) by Extraction and Gravimetry. The publication is available from the National Technical Information Service 5285 Port Royal Road, Springfield VA 22161, for $25.50, the cost at the time these rules were promulgated, or from the Michigan Department of Environmental Quality, Waste Management Division, P.O. Box 30241, Lansing, Michigan 48909, at cost. The publication adopted in this subrule is available for inspection at the Lansing office of the department.

R 299.11002 NFPA standard; adoption by reference.

Rule 1002. (1) The NFPA standard no. 704 (1977 or 1981) is adopted by reference in these rules.

(2) The standard listed in subrule (1) of this rule is available from the National Fire Protection Association, Library, 1 Batterymarch Drive, Quincy, Massachusetts 02269-9101, for $14, the cost at the time these rules were promulgated, or from the Michigan Department of Environmental Quality, Waste Management Division, P.O. Box 30241, Lansing, Michigan 48909, at cost. The standard adopted in this rule is available for inspection at the Lansing office of the department.

R 299.11003 Adoption by reference of federal regulations.

Rule 1003. (1) The following federal regulations in 40 C.F.R. are adopted by reference in these rules:

(a) 40 C.F.R. part 60, appendices A and B.

(b) 40 C.F.R.part 63, subparts EEE and LLL.

(c) 40 C.F.R. part 124.

(d) 40 C.F.R. part 144.

(e) 40 C.F.R. part 145.

(f) 40 C.F.R. part 146.

(g) 40 C.F.R. part 147.

(h) 40 C.F.R. §§260.20, 260.21, 260.22, 260.31, 260.32, and 260.33.

(i) 40 C.F.R. §§261.10, 261.11, and 261.38, except 261.38(a) and (b).

(j) 40 C.F.R. part 261, appendix I, appendix II, appendix III, appendix VII, and appendix VIII.

(k) 40 C.F.R. §§262.40(a), (c), and (d), 262.41(a)(1)-(8), and 262.43, and 40 C.F.R. part 262, subparts E and H, except 40 C.F.R. §§262.54, 262.55, and 262.80.

(l) 40 C.F.R. part 263, subpart B.

(m) 40 C.F.R. part 264, subpart B, subpart C, subpart D, subpart F, subpart G, subpart I, subpart J, subpart K, subpart L, subpart M, subpart N, subpart X, subpart W, subpart AA, subpart BB, subpart CC, subpart EE, except 40 C.F.R. §§264.94(a)(2) and (3), 264.94(b) and (c), 264.100, 264.101, 264.112(d)(1), 264.115, 264.120, 264.221(f), 264.251(f), 264.301(f), and 264.1200.

(n) 40 C.F.R. §§264.1(j)(1) to (13), 264.73, 264.75(a)-(j), 264.94(a)(2), table 1, 264.141, 264.142, 264.144, 264.147(c), (d), and (f), 264.151(g), 264.341, 264.342(b)(1), 264.343, 264.344(c)(1) and (c)(2), 264.345, 264.347, and 264.554, except 264.554(l).

(o) 40 C.F.R. part 264, appendix I and appendix IX.

(p) 40 C.F.R. part 265, except subparts E, H, and DD and 40 C.F.R. §§265.112(d)(1), 265.115, and 265.120.

(q) 40 C.F.R. part 265, appendices I and VI.

(r) 40 C.F.R. part 266, subpart H, except §§266.100(a) and (b), 266.101, 266.102(a), and 266.112(a) and (c).

(s) 40 C.F.R. §§266.203 and 266.205(a), (b), (d), and (e).

(t) 40 C.F.R. part 266, appendices I through XIII.

(u) 40 C.F.R. part 268, including appendices II through XI.

(v) 40 C.F.R. §§270.10(e), (g), and (k); 270.11; 270.13; 270.14(b) and (d); 270.15; 270.16; 270.17; 270.18; 270.19(c); 270.20; 270.21; 270.22; 270.23; 270.24; 270.25; 270.26; 270.27; 270.30, except §270.30(l)(1) and (8); 270.31; 270.32; 270.33; 270.41(a), except §270.41(a)(3); 270.62(b)(2) and (b)(7); 270.64; 270.66; 270.70; 270.71; 270.73; and 40 C.F.R. part 270, subpart H, except §§270.80, 270.85, 270.90, 270.155, 270.160, 270.190, and 270.195.

(w) 40 C.F.R. part 273, subpart B, subpart C, subpart D, and subpart E, except §§273.10, 273.18(b), 273.30, 273.38(b), 273.50, 273.53, and 273.60.

(x) 40 C.F.R. §§279.22, except §279.22(a); 279.23, 279.24, 279.33, 279.41 to 279.43, 279.45, except §279.45(b); 279.46, 279.51, 279.52, 279.54, except §279.54(a); 279.55 to 279.58, 279.61, 279.62, 279.64, except §279.64(a); 279.65, 279.66, 279.73, and 279.75.

(y) 40 C.F.R. part 280.

(z) 40 C.F.R. part 761.

(2) Federal hazardous waste regulations are contained in 40 C.F.R. part 60, 40 C.F.R. part 63, 40 C.F.R. parts 87 to 135, 40 C.F.R. 136 to 149, 40 C.F.R. parts 260 to 265, 40 C.F.R. parts 266 to 299, and 40 C.F.R. part 700 to 789, July 1, 1999 editions. These editions are available from the Superintendent of Documents, Government Printing Office, Washington, DC 20402, for $59, $94, $53, $40, $32, $33, and $42, respectively, the costs at the time these rules were promulgated, or from the Michigan Department of Environmental Quality, Waste Management Division, P.O. Box 30241, Lansing, Michigan 48909, at cost. The provisions of 40 C.F.R. part 60 were amended in the Federal Register on September 30, 1999. The provisions of 40 C.F.R. part 63 were amended in the Federal Register on September 30, 1999 and November 19, 1999. The provisions of 40 C.F.R. part 261 were amended in the Federal Register on September 30, 1999, November 19, 1999, and March 17, 2000. The provisions of 40 C.F.R. part 265 were amended in the Federal Register on July 6, 1999. The provisions of 40 C.F.R. part 266 were amended in the Federal Register on September 30, 1999 and November 19, 1999. The provisions of 40 C.F.R. part 268 were amended in the Federal Register on July 6, 1999, October 20, 1999, and March 17, 2000. The provisions of 40 C.F.R. part 270 were amended in the Federal Register on September 30, 1999. The provisions of 40 C.F.R. part 273 were amended in the Federal Register on July 6, 1999. Reprints of these federal registers are available from Solid Waste Information, United States EPA, 26 West St. Clair Street, Cincinnati, Ohio 45268, at no cost, or from the Michigan Department of Environmental Quality, Waste Management Division, P.O. Box 30241, Lansing, Michigan 48909, at cost. The sections adopted by reference in this rule are available for inspection at the Lansing office of the department.

R 299.11004 Federal regulations in 29 C.F.R., 33 C.F.R., and 49 C.F.R.; adoption by reference.

Rule 1004. (1) The federal regulations in 29 C.F.R. §§1910.120(q) and 1910.132 to 1910.138 and part 1910, subpart L, are adopted by reference in these rules.

(2) The federal regulations in 33 C.F.R. §153.203 are adopted by reference in these rules.

(3) The following federal regulations in 49 C.F.R. are adopted by reference in these rules:

(a) 49 C.F.R. part 107.

(b) 49 C.F.R. part 130.

(c) 49 C.F.R. part 171.

(d) 49 C.F.R. part 172.

(e) 49 C.F.R. part 173.

(f) 49 C.F.R. part 174.

(g) 49 C.F.R. part 175.

(h) 49 C.F.R. part 176.
(i) 49 C.F.R. part 177.
(j) 49 C.F.R. part 178.
(k) 49 C.F.R. part 179.
(l) 49 C.F.R. part 180.
(m) 49 C.F.R. §390.21.

(4) Federal labor regulations are contained in 29 C.F.R. parts 1900 to 1910, 1999 edition. Federal navigation regulations are contained in 33 C.F.R. parts 125 to 199, 1999 edition. Federal transportation regulations are contained in 49 C.F.R. parts 100 to 185 and 49 C.F.R. parts 200 to 399, 1999 editions. The 1999 editions are available from the Superintendent of Documents, Government Printing Office, Washington, DC 20402, for $46, $41, $53, and $53, respectively, the costs at the time these rules were promulgated, or from the Michigan Department of Environmental Quality, Waste Management Division, P.O. Box 30241, Lansing, Michigan 48909, at cost. The sections adopted in this rule are available for inspection at the Lansing office of the department.

R 299.11005 Test methods for evaluating solid waste; adoption by reference.

Rule 1005. (1) Test methods in the publication entitled "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846, Third Edition, November 1986, and its updates I (July 1992), II (September 1994) and IIA (August 1993), IIB (January 1995), III (December 1996), and IIIA (April 1998) are adopted by reference in these rules.

(2) The documents listed in subrule (1) of this rule are available from the Superintendent of Documents, Government Printing Office, Washington, DC 20402, (202)512-1800, Document Number 955-001-00000-1, for $367, the total cost at the time these rules were promulgated. The documents listed in subrule (1) of this rule are available from the National Technical Information Service, 5285 Port Royal Road, Springfield, Virginia, 22161, (703)605-6000 or (800)553-6847, for $211, $123, $101, $21.50, $150, and $25.50, respectively, the costs at the time these rules were promulgated. The documents listed in subrule (1) of this rule are available from the Michigan Department of Environmental Quality, Waste Management Division, P.O. Box 30241, Lansing, Michigan 48909, at cost. Update IIIA is available through the United States EPA'S Methods Information Communication Exchange Service at (703)676-4690 and the United States EPA, Office of Solid Waste (5307W), OSW Methods Team, 401 M Street, SW, Washington, DC 20460 at no cost. The documents adopted in this rule are available for inspection at the Lansing office of the department, the Library, United States EPA, 401 M Street, SW, Washington, DC 20460, and the Office of the Federal Register, 800 North Capitol Street NW, Suite 700, Washington DC, 20002.

R 299.11006 Analytical method for aflatoxins; adoption by reference.

Rule 1006. (1) The analytical method for aflatoxin in the official methods of analysis of the AOAC International, subsection 26, natural poisons, 16th edition, 1995, is adopted by reference in these rules.

(2) The analytical method listed in subrule (1) of this rule is available from AOAC International, 481 North Frederick Avenue, Suite 500, Gaithersburg, Maryland 20877, at cost, or from the Michigan Department of Environmental Quality, Waste Management Division, P.0. Box 30241, Lansing, Michigan 48909, at cost. The document adopted in this rule is available for inspection at the Lansing office of the department.

R 299.11007 Standard industrial classification manual; adoption by reference.

Rule 1007. (1) The office of management and budget document entitled "Standard Industrial Classification Manual" is adopted by reference in these rules.

(2) The document adopted in subrule (1) of this rule is available from the Superintendent of Documents, Government Printing Office, Washington, DC 20402, at cost, or from the Michigan Department of Environmental Quality, Waste Management Division, P.O. Box 30241, Lansing,

Michigan 48909, at cost. The document adopted in this rule is available for inspection at the Lansing office of the department.

R 299.11008 Soil permeability method; adoption by reference.

Rule 1008. (1) The triaxial cell method for determining the permeability of soil contained in the EPA document entitled "Soil Properties, Classification, and Hydraulic Conductivity Testing," 1984 edition, is adopted by reference in these rules.

(2) The document listed in subrule (1) of this rule is available from the United States EPA, Office of Solid Waste, 401 M Street, Southwest, Washington, DC 20460, at cost, or from the Michigan Department of Environmental Quality, Waste Management Division, P.O. Box 30241, Lansing, Michigan 48909, at cost. The document is available for inspection at the Lansing office of the department.

PART 11. CERTIFIED LOCAL HEALTH DEPARTMENTS

R 299.11101 Certification eligibility.

Rule 1101. The director shall consider an application for certification from any local health department which shall agree to perform, at a minimum, those services specified in R 299.11104(1) and (2) and which demonstrates, to the director's satisfaction, that the services to be provided by the local health department under part 111 of the act warrant the assignment of at least a full-time equivalent position of professional staff.

R 299.11102 Certification procedures.

Rule 1102. (1) Not later than 90 days after the effective date of these rules, or by July 1 of each year thereafter, an uncertified city, county, or district department of health desiring to be considered for certification shall file an application on a form provided by the director.

(2) An application shall be accompanied by a document containing the proposed methods, budget, and staffing to be used in carrying out the performance requirements of R 299.11104(1) and (2) and any services the local health department elects to carry out which are listed in R 299.11104(3). The document shall include the qualifications of designated authorized representatives to participate in the program and all other pertinent information that may be deemed necessary by the director.

(3) The director, or his or her designee, shall negotiate performance contracts, as specified in subrule (4) of this rule, with local health departments which have applied under subrules (1) and (2) of this rule, in the order they appear on the priority list determined under R 299.11106, until all funds are committed or all needs are met. The director shall certify those local health departments for which funds are available when agreement on the performance contract is reached.

(4) The application and accompanying documents shall be used by the director as the basis for negotiation of a performance contract with the local health department. The performance contract shall cover a 1-year period and shall specify the services to be carried out by the local health department and the funding to be provided by the state. The contract shall be terminated if certification is rescinded.

(5) Health department certification shall be reviewed each year by the director. Updated information relative to certification shall be provided by the certified health department as appropriate or upon request of the director.

R 299.11103 Certification rescinding procedures.

Rule 1103. Certification may be rescinded by the director as provided in section 45(1) of part 111 of the act.

R 299.11104 Performance requirements.

Rule 1104. (1) A health department certified under the provisions of these rules shall protect the public health and the natural resources of the state by assisting the director in the administration of part 111 of the act. The certified health department shall provide professional environmental health services to evaluate compliance with the technical and administrative provisions of part 111 of the act and these rules.

(2) A certified health department shall carry out 1 or more of the following hazardous waste investigative and surveillance activities:

(a) Conduct inspections of treatment, storage, or disposal facilities and file written reports as required by section 44 of part 111 of the act.

(b) When investigating waste management practices, review and inspect manifests and records carried by hazardous waste transporters or maintained by generators and treatment, storage, or disposal facility owner or operators.

(c) Provide surveillance of generator waste accumulation sites.

(d) Investigate complaints of violations of part 111 of the act and these rules and report

findings to the director.

(e) Assist in the review of hazardous waste transporter business license applications and participate in inspections of stationary facilities and methods of operation under R 299.9407.

(f) Provide information to the director and the Michigan department of public health to assist in evaluating the existence of an imminent or substantial hazard to the public health or natural resources and in issuing orders for immediate corrective action.

(g) Perform surveillance and investigative activities to evaluate compliance with part 111 of the act and these rules and participate in enforcement actions by the director.

(3) A certified health department may be authorized to provide any of the following additional services:

(a) Encourage methods of hazardous waste management which are environmentally sound, which maximize the use of valuable resources, and which encourage resource conservation, including source separation and waste reduction.

(b) Provide input on the development and implementation of the hazardous waste management plan through the county representative on the state hazardous waste management planning committee.

(c) Assist the director in the development of rules to implement the hazardous waste management plan.

(d) Provide assistance to the site review board in carrying out its responsibilities as provided in section 17(6) of part 111 of the act.

(e) Upon receipt of a construction permit application, assist the director, as needed, to obtain information for the proper notification of all parties required by section 19(1)(a) of part 111 of the act.

(f) Provide a location where the complete construction permit application may be reviewed by the public.

(g) Participate in public hearings relative to an application for a construction permit.

(h) Review applications for construction permits and prepare a written report and recommendation to the director.

(i) Monitor construction of disposal facilities to ascertain conformity to the construction permit.

(j) Assist in review of applications for operating licenses, review engineering certifications, and make recommendations, in writing, to the director for or against the granting of operating licenses.

(k) Oversee closure and postclosure monitoring and surveillance activities.

(1) Conduct investigations to determine if hazardous wastes are managed according to the act and these rules.

(m) Provide services designated by the director at treatment, storage, or disposal facilities.

R 299.11105 General performance requirements.

Rule 1105. (1) Authorized representatives of a certified health department shall, when appropriate, attend hazardous waste courses, seminars, and in-service training programs. They shall keep abreast of developments in hazardous waste management through review of periodicals.

(2) The certified health department shall provide reports of its participation in the state's hazardous waste management program, as requested by the director, and shall make program records available for review by the director.

R 299.11106 Funding priority.

Rule 1106. (1) Health departments applying for funding during the first year after promulgation of these rules shall be ranked, for purposes of funding priority, in order according to the following formula:

$R = (100F) + G + T + (P - 10,000)$

F = Number of treatment, storage, or disposal facilities located within the jurisdiction of the local health department which have received, or are required to obtain, construction permits or operating licenses under part 111 of the act.
G = Number of generators of hazardous waste whose amount exceeds 100 kilograms per month.
T = Number of transporters located within the jurisdiction of the local health department which have received transporter business licenses under part 111 of the act.
P = Population of the certified health department jurisdiction.

(2) The priority listing for funding in subsequent years shall be prepared in the same manner as for the first year. Changes in local health department jurisdictions applying, the number of treatment, storage, and disposal facilities located within the jurisdictions, and populations might result in changes to the priority list. However, continuation of funding to previously certified health departments which have performed satisfactorily shall take precedence over the priority list if conflicts arise.

R 299.11107 Substantiation of expenditures of grant funds; required records; redistribution of unobligated grant funds; certification of local health departments which cannot be funded because of insufficient appropriations or low priority.

Rule 1107. (1) To substantiate appropriate expenditures of grant funds and to provide documentation of the level of work effort for future performance contract negotiations, the certified health department shall keep records of receipts of grant funds, costs attributable to its operation of the hazardous waste management programs, and expenditure of grant funds. Such records shall be available to state auditors during regular business hours without advance notice.

(2) Any unobligated grant funds shall be made available to other certified health departments. Such redistribution shall be proportioned to maximize health department performance as determined by the director.

(3) An eligible, uncertified, local health department which cannot be funded because of either insufficient appropriations or low priority under R 299.11106 may be certified by the director. Details of the services to be carried out by such a certified, but unfunded, local health department shall be specified, in writing, by the director.

Ken

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562-8570

Asheif@chem.

AUBUchd

Comprehensive Compliance Monitoring and Enforcement Report

Report run August 22, 2002 4:39 PM

User Selection Criteria

Location:	MICHIGAN	Evaluation Date Range	From: 10/01/1980 To: 8/22/2002
Handler Name:		Only Evaluations with Violations:	NO
Handler ID's:	MID099113169	Federal facilities only:	NO
Universe:		Reason Code:	
Sort Order:	Region, State, Handler Name	Display Code Description:	YES

Results

Data meeting the criteria you selected follows.

Total Pages: 4

Report Description

This report provides a complete listing of evaluation, violation and enforcement activities for each Handler. Below the Handler ID information, the data is presented in three sections; evaluations, violations and enforcements. Comments, referred to as Notes, are provided in the respective sections for evaluations and violations. Violation coverage areas are shown horizontally across the page in the evaluation data section. Since evaluations are included regardless of whether or not violations are identified, this report also serves as a useful management tool for tracking progress made towards meeting RECAP commitments.

Report Information

Name:	CMECOMP.RDF
Developed by:	EPA Headquarters, Office of Enforcement and Compliance Assurance
Deployed Date:	May 2001
Last Updated:	May 1, 2001
Contact:	rcrainfo.help@epa.gov

Report run on: August 22, 2002 4:39 PM

This report may contain enforcement sensitive data.

DAIMLERCHRYSLER PLYMOUTH RD OFFICE CMPLX

MID099113169

Location: 14250 PLYMOUTH RD
DETROIT, MI 48227

Mailing: 14250 PLYMOUTH RD
DETROIT, MI 48227

County Name/Code: WAYNE/MI163

Universes Subjinsp: PCWrkId: ClosWrkId: PermC/PC: PermWrkId: SubjCA: CAWrkId:

LQG: X SQG: CESQG: Transporter: SNC: BOYSNC:

State District: Accessibility: Accepts Offsite: Non-Notifier:

CEI Evaluation 07/14/1994 Act Loc: MI By: State Seq #: 002 Person: Branch: Reason: Found Violation: Y

Notes:

Coverage Areas: GER

Violation Data										Enforcement Data									
Act Loc	C L	P R	Type	Res Per	Branch	Determined Date	Sched Compliance	Actual Compliance	Seq #	Act Loc	Date	Type	Seq #	Docket Number	A G	Res Per	Branch	Proposed Penalty	Final Penalty	Collected Amount
MI	1		GOR			07/14/1994	08/30/1994	10/19/1994	S0001	MI	07/14/1994	120	001		S					

Viol. Notes:

CEI Evaluation 10/26/1989 Act Loc: MI By: C-State Seq #: 001 Person: Branch: Reason: Found Violation: N

Notes:

Coverage Areas: GER GLB

Violation Data	Enforcement Data
No Violations	No Enforcements

Total Number of Handlers: 1

*** End of Report ***

Descripti of codes used on the report:

Universes	Description Of Universes
Subjinjsp	Indicates that the facility is a treatment, storage or land disposal facility subject to any type of enforcement. Then specifies type facility (see LIBST below for further explanation).
PCWrkld	Indicates that the facility is a treatment, storage or land disposal facility which is part of the Post-Closure Workload universe. It is then specifies type of facility (see LIBST below for further explanation).
ClosWrkld	Indicates that the facility is a treatment, storage or land disposal facility which is part of the closure Workload universe. It is then specifies type of facility (see LIBST below for further explanation).
Perm/PC	Indicates that the facility is a treatment, storage or land disposal facility which is part of the Permitting/Closure/Post-Closure Progress universe. It is then specifies type of facility (see LIBST below for further explanation).
PermWrkld	Indicates that the facility is a treatment, storage or land disposal facility which is part of the Permit Workload universe. It is then specifies type of facility (see LIBST below for further explanation).
SubjCA	Indicates that the facility is subject to Corrective Action. ('X' indicates that the facility is in this universe).
CAWrkld	Indicates that the facility is part of the Corrective Action Workload universe. ('X' indicates that the facility is in this universe).
LQG	Indicates that the facility is a Large Quantity Generator. ('X' indicates that the facility is in this universe).
SQG	Indicates that the facility is a Small Quantity Generator. ('X' indicates that the facility is in this universe).
CESQG	Indicates that the facility is a Conditionally Exempt Small Quantity Generator. ('X' indicates that the facility is in this universe). Note: CESQGs are not nationally required to notify or abtain an EPA ID. Therfore, the absence of CESQG data for any given state or facility does not indicate a date quality problem.
Transporter	Indicates that the facility transports waste subject to RCRA regulations. ('X' indicates that the facility is in this universe).
SNC	Indicates that the facility is a Significant Non-Complier. ('X' indicates that the facility is in this universe).
BOYSNC	Indicates that the facility was a Significant Non-Complier at the beginning of the fiscal year: Oct 1- Sep 30. ('X' indicates that the facility is in this universe).

LIBST in the above universes indicates:

L	Land Disposal facility
I	Facility is an Incinerator
B	Facility is a Boiler or Industrial Furnace (BIF)
S	Storage facility
T	Treatment facility

ACT LOC

Act Loc indicates the activity location where the evaluation/inspection was performed, the violation was discovered or the enforcement action was taken.

Description of codes used on the report:

Agency indicates the agency performing the evaluation or the enforcement action:	
X-EPA	EPA region performed the evaluation or enforcement action as part of their oversight function.
C-EPA	Contractor working for EPA conducted the evaluation.
C-State	Contractor working for State conducted the evaluation.
EPA	EPA performed the evaluation or enforcement action.
State	State performed the evaluation or enforcement action.

BY
By indicates the agency who performed the evaluation/inspection.

Evaluation Type	Type Description
CEI	COMPLIANCE EVALUATION INSPECTION ON-SITE

Evaluation Reason Type	Reason Description

FOUND VIOLATION indicated whether or not the evaluation discovered a violation.
It will contain the following values:

Code	Description
Y	indicates that the evaluation did find violations.
N	indicates that the evaluation did not find violations.
U	indicates that it is undetermined at this time. The agency may still be determining whether violations existed.
blank	converted from the previous system which did not have a definitive answer to whether nor not violations were found.

Coverage Area/Violation Type	Description
GOR	GENERATOR-OTHER REQUIREMENTS

Enforcement Type	Enforcement Description
120	WRITTEN INFORMAL

1.3 Distribution of Episode Plan and Updates

This Episode Plan and any amendments to the plan shall be distributed to the following:

On Site (Entire Plan)

TRAINED TO 1ST RESPONDER LEVEL

- Incident Commander — MIKE ~~LEHMAN~~ LAYMAN
- Plant Security — CONTRACTED FIRM WACKENHUT
- Plant Safety — TOM FANSLOW
- Facility Manager — JOHN GARBISIK
- Environmental Coordinator

On Site (Area Plans)

- Area No. 1 Drum Storage Area
- Area No. 2 Hazardous Waste Accumulation Area
- Area No. 3 Flammable Material Storage Buildings
- Area No. 4 Underground Storage Tanks

Off-Site (Entire Plan)

- Corporate Environmental
- Corporate Security and Fire Prevention Services
- Corporate Occupational Safety & Health
- Regional Industrial Hygienist
- Marine Pollution Control
- Inland Waters
- City of Detroit Water and Sewerage Department
- Grace Hospital
- City of Detroit Emergency Management Division (LEPC)
- Michigan Department of Environmental Quality (SERC)
- Detroit Fire Department

1.4 Amendment Requirements of Plan

As required under 40 CFR 112.5 - Amendments to Spill Prevention Control and Countermeasure Plans, this Episode Plan shall be updated whenever there is a change in facility design, construction, operation, or maintenance which materially affects the facility's potential for the discharge of oil. The amendments must be fully implemented as soon as possible, but not later then six months after such change occurs. At a minimum, this plan must be review and updated once every three years. Substantive amendments to this plan must by certified by a Professional Engineer.

RCRA, 40 CFR 265, Subpart D, requires that a facility's Contingency Plan and Emergency Procedures be reviewed and immediately amended whenever:

(A) Applicable regulations are revised.

D.Corrective Action

RECEIVED
DEC 13 1999
PROGRAM MANAGEMENT BRANCH
Waste, Pesticides & Toxics Division
U.S. EPA - REGION 5

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

Waste Management Division

revised 4/99

Hazardous Waste Compliance Inspection Procedure Manual

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Chapter 1

General Information

General Guidelines

The following factors are to be used as general guidelines to determine which facility should be inspected. For more specific information, refer to the neutral inspection criteria in the Appendix.

- Any inspection required by statute or the Environmental Protection Agency-Department of Environmental Quality (EPA-DEQ) grant.
- Action(s) taken as a response to complaints from citizens, Pollution Emergency Alerting System (PEAS), other governmental agencies or manifest tracking.

Inspections usually involve three steps, specifically,

- office preparation,
- on-site evaluation, and
- written correspondence.

Inspection Authority

Part 111, Hazardous Waste Management, Michigan Compiled Laws (MCL) 324.11101 *et seq.* (Part 111) of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451).

Sec. 11146. (1) Any person who generates, stores, treats, transports, disposes of, or otherwise handles or has handled hazardous waste shall furnish information relating to the hazardous wastes or permit access to and copying of all records relating to the hazardous wastes, or both, if the information and records are required to be kept under this part or the rules promulgated under this part, upon a request of the department, made for the purpose of developing a rule or enforcing or administering this part or a rule promulgated under this part. This subsection does not limit the department's authority to pursue appropriate court authorization in order to obtain information pertaining to enforcement actions under this part.

(2) The department may enter at reasonable times any treatment, storage, or disposal facility or other place where hazardous wastes are or have been generated, stored, treated, disposed of, or transported from and may inspect the facility or other place and obtain from any person samples of the hazardous wastes and samples of the containers or labeling of the wastes for the purpose of developing a rule or enforcing or administering this part or a rule promulgated under this part.

(3) If the department or a law enforcement official has probable cause to believe that a person is violating this part or a rule promulgated under this part, the department or law enforcement official may search without a warrant a vehicle or equipment that is possessed, used, or operated by that person. The department or a law enforcement official may seize a vehicle, equipment, or other property used or operated in a manner or for a purpose contrary to this part or a rule promulgated under this part. The department shall request that the attorney general petition the circuit court for the county of Ingham or the county where the violation occurred for permission to preserve the property as evidence to prosecute the violation or alternatively shall file an appropriate action to condemn the property.

History: 1994, Act 451, Eff. Mar. 30, 1995.

Inspection Authority

Subtitle C of the Federal Resource Conservation and Recovery Act of 1976, as amended.

INSPECTIONS

Sec. 3007. (a) ACCESS ENTRY - For purpose of developing or assisting in the development of any regulation or enforcing the provisions of this title, any person who generates, stores, treats, transports, disposes of, or otherwise handles or has handled hazardous waste shall, upon request of any officer, employee or representative of the Environmental Protection Agency, duly designated by the Administrator, or upon request of any duly designated officer, employee or representative of a State having an authorized hazardous waste program, furnish information relating to such wastes and permit such person at all reasonable time to have access to, and to copy all records relating to such wastes. For the purposes of developing or assisting in the development of any regulation or enforcing the provisions of this title, such officers, employees or representatives are authorized -

(1) to enter at reasonable times any establishment or other place where hazardous wastes are or have been generated, stored, treated, disposed of, or transported from;

(2) to inspect and obtain samples from any person of any such wastes and samples of any containers or labeling for such wastes.

Each such inspection shall be commenced and completed with reasonable promptness. If the officer, employee, or representative obtains any samples, prior to leaving the premises, he shall give to the owner, operator, or agent in charge a receipt describing the sample obtained and if requested a portion of each sample equal in volume or weight to the portion retained. If any analysis is made of such samples, a copy of the results of such analysis shall be furnished promptly to the owner, operator, or agent in charge.

(b) **AVAILABILITY TO PUBLIC**.-(1) Any records, reports, or information (including records, reports, or information obtained by representatives of the Environmental Protection Agency) obtained from any person under this section shall be available to the public, except that upon a showing satisfactory to the Administrator (or the State, as the case may be) by any person that records, reports, or information, or particular part thereof, to which the Administrator (or the State, as the case may be) or any officer, employee or representative thereof has access under this section if made public, would divulge information entitled to protection under section 1905 of title 18 of the United States Code, such information or particular portion thereof shall be considered confidential in accordance with the purposes of that section, except that such record, report, document, or information may be disclosed to other officers, employees, or authorized representatives of the United States concerned with carrying out this Act, or when relevant in any proceeding under this Act.

(2) Any person not subject to the provisions of section 1905 of title 18 of the United States Code who knowingly and willfully divulges or discloses any information entitled to protection under this subsection shall, upon conviction, be subject to a fine of not more than $5,000 or to imprisonment not to exceed one year, or both.

Chapter 2

Generator Inspection

Office Preparation

A) File Review:
- Review facility history
- Verify the address and location
- Check for contact person(s)
- Identify types of waste(s) managed
- Review facility layout, processes, contingency plan, and previous inspection reports
- Review manifest history
- Print Resource Conservation Recovery Information System (RCRIS) handler module data

B) Equipment:
- Minimal equipment includes safety glasses, hard hat, safety shoes; and, as needed, sample bottles, camera, gloves, and hearing protection.

C) Forms and References:
- Inspector's Hazardous Waste credentials
- State Identification Card
- Resource Conservation and Recovery Act (RCRA) regulations
- Facility's notification form, if available
- Facility's RCRIS Handler Module Printout
- Act 451, Part 111 regulations
- Inspection forms

D) Additional information
- Spill reporting requirements
- Personnel Training handout
- Contingency Plan handout
- Blank manifests and sample copy
- U.S. Department of Transportation (DOT) placard example sheet
- Blank EQP5150 with instructions
- Small Quantity Generator Requirements handout

- Small Quantity Generator (SQG) emergency information placard
- Manifest tracking log
- Required weekly hazardous waste management checklist
- Rejected Load Procedures handout
- Toxicity Characteristic Leaching Procedure (TCLP) constituents and regulatory limits (copy)
- Used Oil and Spent Filter handout
- Electric Lamps handout
- Conditionally Exempt Small Quantity Generator handout
- Universal Waste handout
- Secondary Containment handout

Facility Inspection

A) Site Entry:

- Inspect during normal working hours. If possible, do not arrive just before lunch or quitting time.

- Upon arrival, give the receptionist your business card, inform receptionist that "I am _____ from the Department of Environmental Quality and am here to conduct an unannounced hazardous waste inspection. I would like to speak to _____."

- You can sign a log/guest book, but do not sign any waivers.

- If inspection is refused, obtain the name of person refusing access and the reason for the refusal before you leave the site. Contact your supervisor.

- If the inspection is refused because a key person is not available, conduct the visual portion with someone else, if possible, and make an appointment for the written portion.

  NOTE: Most facilities will have more than one person available to help conduct the visual portion of the inspection, however, some of the smaller operations may not. In this case, it may be appropriate to return at a later date.

B) Inspection Introduction:

- Introduce yourself as a Department of Environmental Quality (DEQ) employee and as a certified hazardous waste inspector.

- Show your inspector identification.

- Explain that this is an Act 451, Part 111; and RCRA inspection.

C) Written Portion:

- The following are general comments on completing the inspection form(s), with some specific comments on reviewing personnel training records and contingency plans.

  - REVIEW AND CORRECT RCRIS HANDLER MODULE DATA WITH FACILITY CONTACT and then submit the data to the Notification Program Coordinators.

  - THE FINAL COPY OF INSPECTION FORMS MUST BE IN INK. Be consistent when you generate the final copies of the inspection forms. Either:
    (a) always re-write all the inspection forms when you get back to the office, OR
    (b) always keep the forms that were written during the inspection as the final forms.

  - THOROUGHLY DOCUMENT THE INSPECTION. Additional information should be added to the form as soon as possible after the inspection. Answer each question on the appropriate form for the inspection being conducted. Abbreviated inspections, as specified in the Waste Management Division (WMD) Abbreviated Inspection Procedure, may be conducted. Where applicable, quantify and qualify observations as much as possible. This is especially important for violations. For example, document how many drums/containers were on-site and how many were not labeled. Additionally, document the facility's operation (what the facility does or produces, the type and quantity of wastes generated, and where wastes are generated and accumulated).

  - Remember that the inspection forms establish guidelines only. Not all information will apply to all situations. Determine which areas are and are not applicable and indicate that information on the inspection form.

  - It is not necessary to review all manifests currently on file. Examine representative sample of manifests generated since the last inspection, if possible. In reviewing manifests, pay special attention to the following items:

    - GENERATOR IDENTIFICATION NUMBER - Does it match RCRIS?

    - WASTE CODES - Actual codes and applicable to type of facility?

    - SIGNATURES - Are all signatures and dates properly recorded?

    - MANIFEST RETENTION - Are manifests being kept on file for three years?

  - CONTINGENCY PLANS DO NOT HAVE TO BE ELABORATE DOCUMENTS, nor do they have to be written for hazardous wastes only. They can be part of a Pollution Incident Prevention Plan (PIPP) or Spill Prevention Control and

Countermeasure plan (SPCC), or even a plan developed for an insurance company's needs, as long as all items required in 40 CFR Part 265.50-265.56 are covered.

- EXTRA QUESTIONS MAY REVEAL THAT THE COMPANY IS IN COMPLIANCE MORE THAN INITIALLY INDICATED. An example: when given a "No" response to--"Do you have a contingency plan?"--ask about fire plans, safety plans, PIPP, SPCC, and plans developed for their insurance company. The other plans may have all that is required or have a majority of the information.

- PERSONNEL TRAINING RECORDS CAN BE PART OF THE GENERAL EMPLOYEE PERSONNEL FILES. When the facility response is "No hazardous waste training has been given and/or recorded," ask about Michigan Occupational Safety and Health Administration (MIOSHA), Federal Communication Standards (Right-to-Know), or DOT training and records. However, the training must include hazardous waste management issues, and all employees involved in handling hazardous waste must be trained.

- REMEMBER, THE HAZARDOUS WASTE INSPECTION GOAL IS TO GAIN VOLUNTARY COMPLIANCE through identification of violations. You can assist in voluntary compliance by asking additional questions, explaining the regulations, giving suggestions for ways to comply, and explaining how the contingency plan can be useful or why it is needed. Additionally, it might be useful to discuss and distribute handouts that detail the areas that need to be addressed, such as the personnel training or contingency plan information.

D) Visual Inspection Portion:

- INSPECT THE AREAS WHERE HAZARDOUS WASTE IS GENERATED, HANDLED AND ACCUMULATED. Containment, labeling and satellite accumulation should be documented. Additionally, check around the perimeter of the plant to look for additional storage, old waste piles, lagoons, or drums that the facility may not have identified. Document spills to the ground, surface water, or into storm sewers or catch basins. If spills are observed, inform the facility to immediately take cleanup actions and to prevent future occurrences. Take photos as appropriate.

- If it can be done within WMD - QA/QC Manual for the Sampling and Analysis of Environmental Media, take samples, as needed, of any spills or waste streams where you question the declaration by the facility that the waste stream is not a hazardous waste. Issue receipt for samples collected (copy of sampling field notes which indicates samples taken) and furnish copies of analytical results promptly.

- MAKE NOTES OR RECORD OBSERVATIONS on the inspection forms or on the attached comment page. Documentation is very important.

- TAKE IMMEDIATE ACTION IF YOU OBSERVE SITUATIONS WHICH THREATEN PUBLIC HEALTH OR THE ENVIRONMENT. For example, the appropriate DEQ division(s) should be contacted directly and, if necessary, the Pollution Emergency Alerting System (PEAS) used. Contact the DEQ Criminal Investigations Section (ECO's) if there is an activity, such as illegal dumping, possibly warranting a criminal investigation. Contact your supervisor if you need guidance on a specific situation.

- Make notes of pollution prevention areas and provide the facility handout material or pollution prevention sources.

E) Exit Briefing:

Have a summary discussion during a short wrap-up meeting with facility personnel. The purpose of the meeting is to explain the outcome of the inspection. This discussion should typically include the violations found, what the facility can expect with regard to a deficiency letter, the response time for correction of violations, or whether an "In-Compliance" letter will be sent. Discuss comments or recommendations. If unsure of a violation or regulation, or if you receive a question which you cannot answer, indicate that you will obtain the answer and get back to them. Distribute handouts where applicable.

NOTE: Remember that other than specifying the violation(s) we can only recommend avenues for items such as waste minimization. Do not recommend transporters, consultants, etc. If asked for names, provide pre-written lists or give at least three names, and stress that this IS NOT a recommendation.

Written Correspondence

A) INITIAL INSPECTION LETTER

WRITE THE INITIAL INSPECTION LETTER WITHIN TEN WORKING DAYS.
The letter is for either of the following unless escalated enforcement is immediately taken; in which case a letter may not be applicable:

- A "Letter of Warning" (LOW) identifying the deficiencies by specifying the exact rule citation, violation, and explanation of where or when the violation occurred.
  OR
- An "In-Compliance" (IC) letter indicating compliance.

In cases of major, extensive and/or repeat violations, a Compliance Order (CO), Notice of Violation (NOV), or Fast-Track Order (FTO) may be needed in addition to the LOW. Consult with Compliance and Enforcement Section (C&E) or your District Supervisor, as specified in Operational Memos 111-7 and 111-17.

B) ALLOW NO MORE THAN 30 DAYS FOR CORRECTION OF VIOLATIONS, unless the nature of the work necessary to correct the violations warrants more time.

C) INSPECTION FOLLOW-UP
Verifying compliance can be through either of the following:

- A review of submitted documentation with a letter verifying receipt of the facility's response and indicating compliance status.

- A re-inspection of the facility to review the violations originally cited during the initial inspection. Documentation is required and may be a new inspection form, field report, or memo to the file. Note any new violations identified and follow up with appropriate notification to the facility.

D) SECOND LETTER OF WARNING

Send second letter of warning when a facility is delinquent in correcting outstanding violations. The letter states that the facility must correct the violations identified in the first letter of warning by a given date (usually 30 days), or the matter will/may be referred for possible escalated enforcement action. This letter is to be signed by the District Supervisor. If the facility still does not comply, discuss the next course of action with the District Supervisor. Escalated enforcement can include an administrative action under the provisions of Operational Memos 111-7 and 111-17, or for possible criminal enforcement (see attached flow chart in the Appendix).

E) OTHER LETTERS

There are other types of form letters available for use.
- "Return to Compliance" (RTC) letter
- Follow-up inspection letter
- Approve/deny 30-day extension to the 90 days accumulation time letter
- Contingency Plan review letter

Chapter 3

Transporter Inspection

Office Preparation

Transporter inspections may be conducted under any of the following conditions:
- Prior to registration and issuance of a permit
- Prior to registration and re-issuance of a permit
- When a problem is suspected
- When information indicates a change in operation (i.e., relocation, initiates transfer facility, storing on-site, etc.)
- In accordance with the neutral criteria

A) File Review:
- Review facility history
- Verify the address and location
- Check for contact person(s)
- Identify types of waste(s) managed
- Review facility layout, processes and contingency plan, as appropriate
- Review manifest history
- Print Resource Conservation Recovery Information System (RCRIS) handler module data
- Proper hazardous waste and liquid industrial waste credential issuance

B) Equipment:
- Minimal equipment includes safety glasses, hard hat, safety shoes; and, as needed, sample bottles, camera, gloves, and hearing protection.

C) Forms and References:
- Inspector's Hazardous Waste credentials
- State Identification Card
- Facility's RCRIS Handler Module Printout
- Facility's completed Notification Form, if available
- Resource Conservation and Recovery Act (RCRA) regulations
- Act 451, Part 111 regulations
- U.S. Department of Transportation (DOT) regulations

- Inspection forms
- DOT placard example sheet

NOTE: There will be instances where a credential transporter will also be a hazardous waste generator, treatment, storage, or disposal facility. This should be noted as part of the file review, and the appropriate inspection forms completed during the site inspections.

Facility Inspection

A) Site Entry:

- Inspect during normal working hours. If possible, do not arrive just before lunch or quitting time.

- Upon arrival, give the receptionist your card, inform receptionist that "I am _____ from the Department of Environmental Quality and am here to conduct an unannounced hazardous waste transporter inspection. I would like to speak to _____."

- You can sign a log/guest book, but do not sign any waivers.

- If inspection is refused, obtain the name of person refusing access and the reason for the refusal before you leave the site. Contact your supervisor.

- If inspection is refused because a key person is not available, conduct the visual portion with someone else, if possible, and make an appointment for the written portion.

  NOTE: Most facilities will have more than one person available to help conduct the visual portion of the inspection, however, some of the smaller operations may not. In this case, it may be appropriate to return at a later date.

B) Inspection Introduction:

- Introduce yourself as a DEQ employee and as a certified hazardous waste inspector.

- Show your inspector identification.

- Explain that this is an Act 451, Part 111; and RCRA inspection.

- If the facility also functions as a TSDF or generator, explain that these inspections will also be completed. A transporter inspection conducted at a TSD facility will be evaluated no more than one time in a calendar year.

C) Written Portion:

- The following are general comments on completing the inspection form(s).

  - REVIEW AND CORRECT RCRIS HANDLER MODULE DATA WITH FACILITY CONTACT and submit a copy to the Notification Program Coordinator.

  - THE FINAL COPY OF INSPECTION FORMS MUST BE IN INK. Be consistent when you generate the final copies of the inspection forms. Either:
    (a) always re-write all the inspection forms when you get back to the office, OR
    (b) always keep the forms that were written during the inspection as the final forms.

  - THOROUGHLY DOCUMENT THE INSPECTION. Additional information should be added to the form as soon as possible after the inspection. Answer each question on the inspection form. Where applicable, quantify and qualify observations as much as possible. This is especially important for violations.

  - Remember that the inspection forms establish guidelines only. Not all information will apply to all situations. Determine which areas are and are not applicable and indicate that information on the inspection form.

  - It is not necessary to review all manifests currently on file. Examine a representative sample of manifests generated since the last inspection, if possible. In reviewing manifests, pay special attention to the following items:

    - TRANSPORTER IDENTIFICATION NUMBER - Is it appropriate for the type of transporter?

    - SIGNATURES - Are all signatures and dates properly recorded?

    - DELIVERY TIME - Has the 10-day storage limit been exceeded?

    - MANIFEST RETENTION - Are manifests being kept on file for three years?

  - REMEMBER, THE HAZARDOUS WASTE INSPECTION GOAL IS TO GAIN VOLUNTARY COMPLIANCE through identification of violations. You can assist in voluntary compliance by asking additional questions, explaining the regulations, giving suggestions for ways to comply, and explaining how the contingency plan can be useful or why it is needed. Additionally, it might be useful to discuss and distribute handouts that detail the areas that need to be addressed, such as the personnel training or contingency plan information.

D) Visual Inspection Portion:

- The visual inspection portion should address the following areas of concern:

  - VEHICLES - It is unlikely that all of the vehicles will be available for inspection. Inspect the vehicles that are available. It is not necessary to inspect all vehicles. Review the following:

    - What is the general condition of the equipment such as tires, tank seams, and valves? [The Michigan Department of Transportation (MDOT) inspection paperwork for the vehicle can be requested to determine the findings on the last inspection.]

    - Is there evidence of leakage?

    - Is the vehicle generally clean?

    - Are copies of the appropriate credential being carried in the vehicle at all times?

    - Does the vehicle identification numbers on the vehicle match the credential?

    - Has the credential expired.

  - GENERAL HOUSEKEEPING - Note the condition of vehicle storage areas and the yard in general. Document spills to the ground, surface water, or into storm sewers or catch basins. If spills are observed, inform the company to immediately take cleanup actions. Take photos as appropriate. If it can be done safely and within Waste Management Division (WMD) sampling guidelines, take samples, as needed, of any spills. Issue receipts for samples collected and furnish copies of analytical results promptly. Most transporters clean the interior of their vehicles at the disposal site, but a few will elect to do this at their own facility. If this is the case, make sure the wash waters are being handled in accordance with Part 111. If exterior washing is done on-site, the wash water must be contained and characterized or be authorized for discharge to the sanitary sewer. Inspect vehicle maintenance areas for other generator activity.

  - TRANSFER ACTIVITIES - Review R 299.9404. The transfer facility definition is very broad. While in transportation, waste cannot be held at any single location more than 10 days. Off-loading wastes into storage requires notification to the Department and triggers other specific requirements. Review any storage for leaking containers, the required log, and other specific requirements. There are also standards for off-loading wastes directly to other vehicles.

  - CONSOLDATED AND COMMINGLING ACTIVITIES - Review R 299.9405. Commingling wastes requires a generator approval on the manifest. Commingling the same DOT shipping descriptions, where the DOT hazard class and DOT packing group remain the same, have specific requirements. Commingling different DOT shipping

descriptions requires notification to the Department and compliance with other specific requirements.

- TAKE IMMEDIATE ACTION IF YOU OBSERVE SITUATIONS WHICH THREATEN PUBLIC HEALTH OR THE ENVIRONMENT. For example, the appropriate DEQ division(s) should be contacted directly and, if necessary, the Pollution Emergency Alerting System (PEAS) used. Contact Office of Criminal Investigation (ECO's) if there is an activity, such as illegal dumping, possibly warranting a criminal investigation. Contact your supervisor if you need guidance on a specific situation.

E) Exit Briefing:

Hold summary discussion during a short wrap-up meeting with facility personnel. The purpose of the meeting is to explain the outcome of the inspection. This discussion would typically include the violations found, what the facility can expect with regard to a deficiency letter, the response time for correction of violations, or whether an "In-Compliance" letter will be sent. Discuss comments or recommendations. If you are unsure of a violation or regulation, or receive a question that you cannot answer, indicate that you will obtain the answer and get back to them. Distribute handouts when applicable.

NOTE: Remember that other than specifying the violation(s) we can only recommend avenues for items such as waste minimization. Do not recommend TSDFs, consultants, etc. If asked for names, provide pre-written lists or give at least three names, and stress that this IS NOT a recommendation.

Written Correspondence

A) INITIAL INSPECTION LETTER

WRITE THE INITIAL INSPECTION LETTER WITHIN TEN WORKING DAYS. The letter is for either of the following unless escalated enforcement is immediately taken; in which case a letter may not be applicable:

- A "Letter of Warning" (LOW) identifying the deficiencies by specifying the exact rule citation, violation, and explanation of where or when the violation occurred.

  OR

- An "In-Compliance" (IC) letter indicating compliance.

In cases of major, extensive and/or repeat violations, a Compliance Order (CO), Notice of Violation (NOV), or Fast-Track Order (FTO) may be needed in addition to the LOW. Consult with Compliance and Enforcement Section (C&E) or your District Supervisor.

B) ALLOW NO MORE THAN 30 DAYS FOR CORRECTION OF VIOLATIONS unless the nature of the work necessary to correct the violations warrants more time.

C) INSPECTION FOLLOW-UP

Follow-up can be either of the following:

- A review of submitted documentation with a letter verifying receipt of facility's response indicating compliance status.

- A re-inspection of the facility to review the violations originally cited during the initial inspection. Documentation is required and may be a new inspection form, field report, or memo to the file. Note any new violations identified and follow up with appropriate notification to the facility.

D) SECOND LETTER OF WARNING

Send second letter of warning when a facility is delinquent in correcting outstanding violations. The letter states that the facility must correct the violations identified in the first letter of warning by a given date (usually 30 days), or the matter will/may be referred for possible escalated enforcement action. This letter is to be signed by the District Supervisor. If the facility still does not comply, discuss the next course of action with the District Supervisor. Escalated enforcement can include an administrative action under the provisions of Operational Memos 111-7 and 111-17, or for possible criminal enforcement (see attached flow chart in the Appendix).

Chapter 4

TSD Facility Inspection

Office Preparation

Most treatment, storage, or disposal facilities of hazardous waste (TSDF) have many site-specific requirements that must be inspected. These requirements will be in the facility's Part B, the final license/permit, a consent order, or a judicial order. A facility specific inspection form must be prepared when a license/permit, consent order, or judicial order is issued.

A) File Review:
- Review facility history
- Verify the address and location
- Check for contact person(s)
- Identify types of waste(s) managed
- Review facility layout, processes, contingency plan, waste analysis plan, and operating plan
- Review manifest history
- Review any permit/license, consent order or judicial order for the facility
- Develop, if one has not been previously prepared, or obtain the facility specific inspection form

B) Equipment:
- Minimal equipment includes safety glasses, hard hat, safety shoes; and, as needed, sample bottles, camera, gloves, and hearing protection.

C) Forms and References:
- Inspector's Hazardous Waste credentials
- State Identification Card
- Resource Conservation and Recovery Act (RCRA) regulations
- Facility's Resource Conservation Recovery Information System (RCRIS) Handler Module Printout
- Facility specific inspection form, if applicable
- Post-closure or corrective action permit, if applicable
- Operating license, as appropriate
- Act 451, Part 111 amendments and rules
- Inspection forms

D) Additional information:
- Spill reporting requirements
- Personnel Training handout
- Contingency Plan handout
- Blank manifests and sample copy
- U.S. Department of Transportation (DOT) placard example sheet
- Blank EQP5150 with instructions
- Sample container inspection log handout
- Small Quantity Generator Requirements handout
- Small Quantity Generator (SQG) emergency information placard
- Manifest tracking log
- Required weekly hazardous waste management checklist
- Rejected Load Procedures handout
- Toxicity Characteristic Leaching Procedure (TCLP) constituents and regulatory limits (copy)
- Used Oil and Spent Filter handout
- Electric Lamps handout
- Conditionally Exempt Small Quantity Generator handout
- Universal Waste handout
- Secondary Containment handout

Facility Inspection

A) Site Entry:

- Inspect during normal working hours. If possible, do not arrive just before lunch or quitting time.

- Upon arrival, give the receptionist your business card, inform receptionist that "I am _____ from the Department of Environmental Quality and am here to conduct an unannounced hazardous waste inspection. I would like to speak to _____."

- You can sign a log/guest book, but do not sign any waivers.

- If inspection is refused, obtain the name of person refusing access and the reason for the refusal before you leave the site. Contact your supervisor.

- If the inspection is refused because a key person is not available, conduct the visual portion with someone else, if possible, and make an appointment for the written portion.

B) Inspection Introduction:

- Introduce yourself as a Department of Environmental Quality (DEQ) employee and as a certified hazardous waste inspector.
- Show your inspector identification.

- Explain that this is an Act 451, Part 111; and RCRA inspection.

C) Written Portion:

- The following are general comments on completing the inspection form(s).

  - THE FINAL COPY OF INSPECTION FORMS MUST BE IN INK. Be consistent when you generate the final copies of the inspection forms. Either:
    (a) always re-write all the inspection forms when you get back to the office, OR
    (b) always keep the forms that were written during the inspection as the final forms.

  - THOROUGHLY DOCUMENT THE INSPECTION. Additional information should be added to the form as soon as possible after the inspection. Answer each question on the appropriate form for the inspection being conducted. Where applicable, quantify and qualify observations as much as possible. This is especially important for violations. For example, document how many drums/containers were on-site and how many were not labeled. Additionally, document the facility's operation (what the facility does or produces, the type and quantity of wastes generated, and where wastes are generated and accumulated).

  - Remember that the inspection forms establish guidelines only. Not all information will apply to all situations. Determine which areas are and are not applicable and indicate that information on the inspection form.

  - It is not necessary to review all manifests currently on file. Examine representative sample of manifests generated since the last inspection, if possible. In reviewing manifests, pay special attention to the following items:

    - TSDF IDENTIFICATION NUMBER - Does it match RCRIS?

    - WASTE CODES - Are they appropriate for the waste generated?

    - SIGNATURES - Are all signatures and dates properly recorded?

    - MANIFEST RETENTION - Are manifests being kept on file for three years?

  - The guidelines applicable to generators and transporters may be appropriate and should be reviewed, as needed.

  - Use the facility specific inspection form, if applicable.

- REMEMBER, THE HAZARDOUS WASTE INSPECTION GOAL IS TO GAIN VOLUNTARY COMPLIANCE through identification of violations. You can assist in voluntary compliance by asking additional questions, explaining the regulations, giving suggestions for ways to comply, and explaining how the contingency plan can be useful or why it is needed. Additionally, it might be useful to discuss and distribute handouts that detail the areas that need to be addressed, such as the personnel training or contingency plan information.

D) Visual Inspection Portion:

- INSPECT THE AREAS WHERE HAZARDOUS WASTE IS GENERATED, HANDLED AND ACCUMULATED, if applicable. Containment, labeling, and satellite accumulation should be documented. Additionally, check around the perimeter of the plant to look for additional storage, old waste piles, lagoons, or drums that the facility may not have identified. Document spills to the ground, surface water, or into storm sewers or catch basins. If spills are observed, inform the facility to immediately take cleanup actions and to prevent future occurrences. Take photos as appropriate.

- If it can be done within the Department's sampling and safety protocol, take samples, as needed, of any spills or waste streams where you question the declaration by the facility that the waste stream is not a hazardous waste. Issue receipts for samples collected and furnish copies of analytical results promptly.

- MAKE NOTES OR RECORD OBSERVATIONS on the inspection forms or on the attached comment page. Documentation is very important.

- TAKE IMMEDIATE ACTION IF YOU OBSERVE SITUATIONS WHICH THREATEN PUBLIC HEALTH OR THE ENVIRONMENT. For example, the appropriate DEQ division(s) should be contacted directly and, if necessary, the Pollution Emergency Alerting System (PEAS) used. Contact the DEQ Criminal Investigations Section (ECO's) if there is an activity, such as illegal dumping, possibly warranting a criminal investigation. Contact your supervisor if you need guidance on a specific situation.

- Make notes of pollution prevention areas and provide the facility handout material or pollution prevention sources.

E) Exit Briefing:

Have a summary discussion during a short wrap-up meeting with facility personnel. The purpose of the meeting is to explain the outcome of the inspection. This discussion should typically include the violations found, what the facility can expect with regard to a deficiency letter, the response time for correction of violations, or whether an "In-Compliance" letter will be sent. Discuss comments or recommendations. If unsure of a violation or regulation, or you receive a question that you cannot answer, indicate that you will obtain the answer and get back with them. Distribute handouts when applicable.

NOTE: Remember that other than specifying the violation(s) we can only recommend avenues for items such as waste minimization. Do not recommend transporters, consultants, etc. If asked for names, provide pre-written lists or give at least three names, and stress that this IS NOT a recommendation.

Written Correspondence

A) INITIAL INSPECTION LETTER

WRITE THE INSPECTION LETTER WITHIN TEN WORKING DAYS. The letter is for either of the following unless escalated enforcement is immediately taken, in which case a letter may not be applicable:

- A "Letter of Warning" (LOW) identifying the deficiencies by specifying the exact rule citation, violation, and explanation of where or when the violation occurred.
  OR
- An "In-Compliance" (IC) letter indicating compliance.

In cases of major, extensive and/or repeat violations, a Compliance Order (CO), Notice of Violation (NOV), or Fast-Track Order (FTO) may be needed in addition to the LOW. Consult with Compliance and Enforcement Section (C&E) or your District Supervisor.

B) ALLOW NO MORE THAN 30 DAYS FOR CORRECTION OF VIOLATIONS unless the nature of the work necessary to correct the violations warrants more time.

C) INSPECTION FOLLOW-UP
Verifying compliance can be through either of the following:

- A review of submitted documentation with a letter verifying receipt of the facility's response indicating compliance status.

- A re-inspect of the facility to review the violations originally cited during the initial inspection. Documentation is required and may be a new inspection form, field report, or memo to the file. Note any new violations identified and follow up with appropriate notification to the facility.

D) SECOND LETTER OF WARNING

Send second letter of warning when a facility is delinquent in correcting outstanding violations. The letter states that the facility must correct the violations identified in the first letter of warning by a given date (usually 30 days), or the matter will/may be referred for possible escalated enforcement action. This letter is to be signed by the District Supervisor. If the

facility still does not comply, discuss the next course of action with the District Supervisor. Escalated enforcement can include an administrative action under the provisions of Operational Memos 111-7 and 111-17, or for possible criminal enforcement (see attached flow chart in the Appendix).

E) OTHER LETTERS

There are other types of form letters available for use.

- "Return to Compliance" (RTC) letter
- Follow-up inspection letter
- Approve/deny 30-day extension to the 90 days accumulation time letter
- Contingency Plan review letter

Neutral Plan for Hazardous Waste Inspections
Adopted October 27, 1997

Inspections by Waste Management Division (WMD) hazardous waste staff must comply with the constitutional requirement that searches be reasonable. In the majority of WMD inspections, this standard is achieved because the owner or operator of the site inspected allows access. This renders the search voluntary. Should access be denied, however, WMD would need to obtain an administrative search warrant. The search would be reasonable, and hence a warrant would be granted, if it were based upon probable cause or a neutral inspection plan. See Marshall v. Barlows, Inc., 436 US 307 (1978).

Administrative Probable Cause Criteria

An inspection based upon specific evidence of a known or probable violation qualifies under the administrative probable cause concept. Falling in this category are inspections based upon: 1) Manifest discrepancies, 2) citizen complaints, 3) emergencies, 4) specific knowledge of an inspector that a violation exists or is likely, and 5) past violations. Administrative probable cause may also be based on a showing that "reasonable legislative or administrative standards for conducting an . . . inspection are satisfied with respect to a particular [establishment]." Camara v. Municipal Court 387 U.S. 523, 538, quoted in Marshall, supra at 320. Falling in this category of administrative probable causes are: 1) enforcement case support, 2) waste or process changes, 3) facility staff changes, 4) changes in owner or operator, 5) changes in hazardous waste activity notification, and 6) in conjunction with the consideration of an operating license application for a treatment, storage, or disposal facility (TSDF). See MCL 324.11124.

Neutral Plan Criteria

A neutral inspection plan is a "general administrative plan for the enforcement of [an] Act derived from neutral sources such as, for example, dispersion of employees in various types of industries across a given area and the desired frequency of searches in any of the lesser divisions of the area. . . ." Marshall, supra at 321. This memorandum sets forth the neutral inspection plan for administration of Part 111, Hazardous Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended.

The target frequency[1] of inspections at facilities regulated under Part 111 is as follows:

Licensed TSDF: quarterly
CERCLA facilities: twice per year

[1] These frequencies are the targeted minimums based on current staffing levels. More frequent inspections may be necessary based on factors described under the Administrative Probable Cause discussion.

Interim Status or closing TSDF: once every two years
Generator: once every three years
Small Quantity Generator: once every six years
Conditionally Exempt Small Quantity Generator: once
Hazardous Waste Transporters: once every two years

Each district shall describe in its annual work plan the nature of its neutral criteria inspection activities. This description of facilities shall be distinct from those facilities to be inspected based upon administrative probable cause. The description should include the following:

1. The number of neutral criteria inspections planned. Accordingly, it will be necessary to estimate the amount of staff resources which will be devoted to administrative probable cause inspections and those devoted to neutral inspection plan inspections.

2. The description may list specific facilities (based upon a stated criteria) or specify the neutral criteria to be used in selecting the specific facilities (or a combination of the two).

The neutral criteria that may be used to select among facilities to be inspected are:

1. The target frequency for the type of facility in question (e.g., generator inspection once every three years).

2. If the target frequency cannot be met given staff levels, a similar frequency (e.g., generator inspection once every five years).

3. A statewide or federal priority.[2]

4. Specified areas of the district.

The district may also use a combination of factors to establish the means of selection among facilities in the work plan. For example, where district resources do not allow inspections of all TSDFs on a quarterly basis, the district could choose to establish standard frequencies by type of TSDF and its operational status. An acceptable frequency might be:

TSDF commercial facility: semi-annually (unless closed or closing)
TSDF land disposal facility: annually (unless closed or closing)

[2] Statewide or federal priorities would apply to all districts in the state. Examples include particular industry types; facilities that generate a particular class or quantity of waste or which use a particular type of process; a geographic initiative; and a facility which uses a process or generates, stores, treats, or disposes of a waste subject to legislation or administrative rule development or revision.

Other TSDF: once every two years (unless closed or closing)

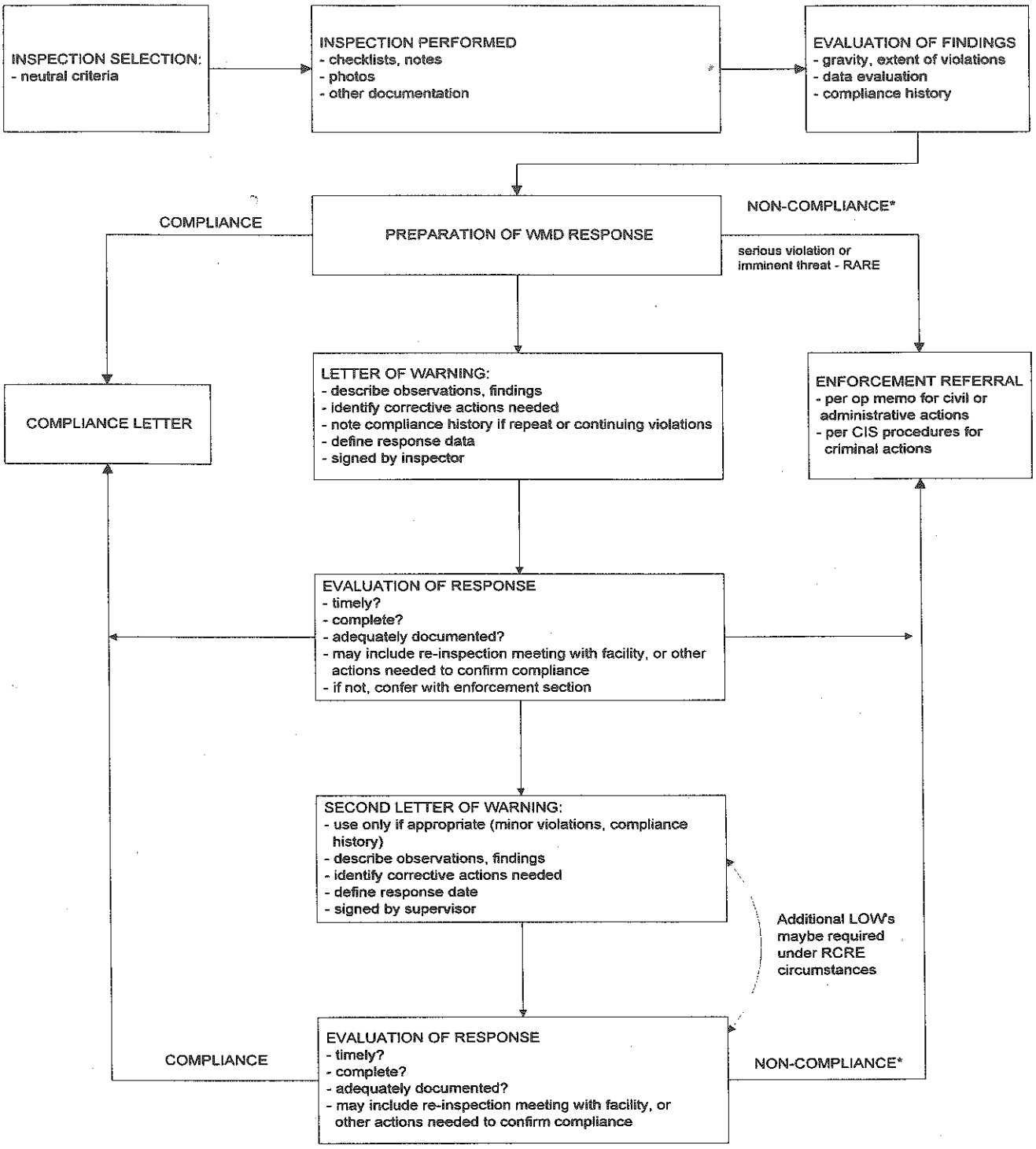
Finally, two additional points with respect to the description of the district neutral inspection activities:

1. The description can be amended at any time during the fiscal year.

2. Not all neutral plan inspections need to meet the criteria in the work plan. In order to maximize efficient use of the division's resources, a facility which does not qualify under the description can be inspected if it is en route to, or in the same geographic area as a facility to be inspected due to neutral inspection criteria.[3]

[3] Likewise, an inspector may visit a second facility if the primary purpose of the inspector's travel is the inspection of a facility based on administrative probable cause.

Field Components: Compliance and Enforcement Process



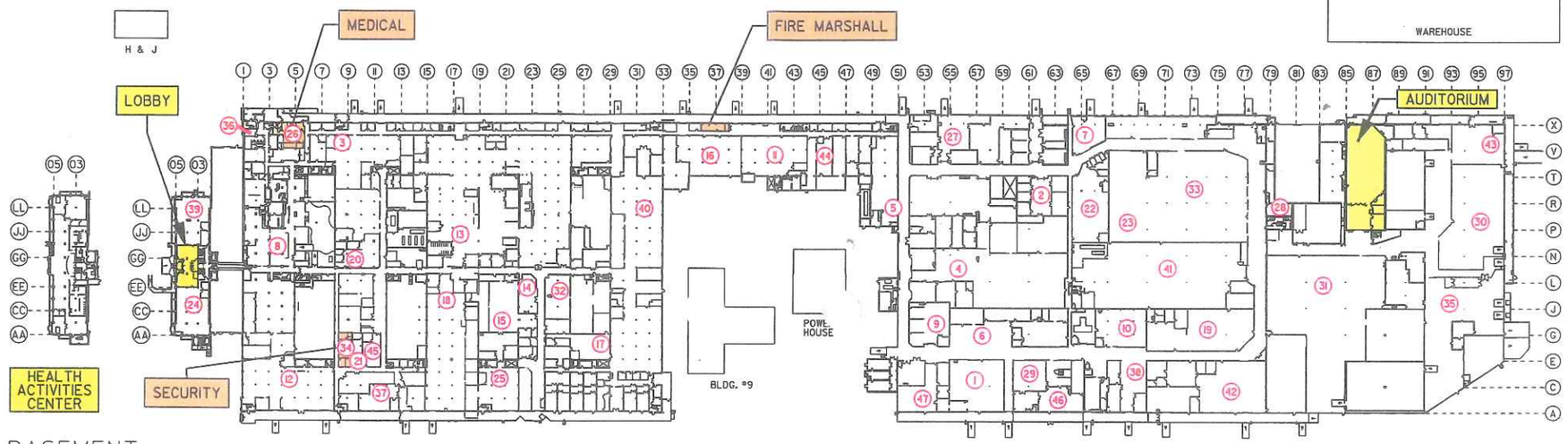
* NOTE: If a Hazardous Waste Program case, determinations of significant non-compliance (SNC) requires notificaiton of enforcement section, EPA and data entry via RCRIS

F.1 Imagery/Special Studies

Plymouth Road Office Complex

FIRST FLOOR PLAN

		BUILDING	COLUMN
1	AB - VAN	7	E57
2	AC LAB	7	T62
3	ADVANCED ENGINE SYSTEMS	1	V7
4	ADVANCED VEHICLE ENGINEERING	7	L52
5	ADVANCED VEHICLE ENGINEERING (SLA)	6	R51
6	AXLE LAB	7	F60
7	BSR LAB	7	V64
8	CAFETERIA AND DINING AREAS	1	P4
9	COMPETITIVE TEAR DOWN	7	F53
10	COMPONENTS TEST	7	F66
11	CUSTOMER ADVOCATE GROUP	6	W42
12	ELECTRICAL / ELECTRONICS LAB	1	C2
13	EMISSIONS CERTIFICATION ENGINEERING	3	M17
14	ADVANCE METROLOGY LAB	4	J24
15	ENGINE BUILD	4	H23
16	ENGINE SYSTEMS	6	W34
17	ENGINE TEAR DOWN AND INSPECTION	5	E29
18	EXHAUST EMISSION SOAK AREA	3	L16
19	EXPERIMENTAL VEHICLE OPERATIONS	7	F76
20	FACILITIES OFFICE	2	M9
21	HOUSEKEEPING	2	E10
22	HVAC LAB	7	V64
23	IMPACT ANALYSIS	7	V69
24	JEEP ADVANCED MANUFACTURING	A	EE04
25	MACHINE SHOP AND ENGINE STORAGE	4	E21
26	MEDICAL	1	V6
27	NOISE, VIBRATION AND HARSHNESS	7	V58
28	PHOTOGRAPHIC	7	P78
29	PLASTIC SHOP	7	E63
30	PRODUCTION CRIB	8	P93
31	PROTOTYPE CRIB NORTH	8	M80
32	PROTOTYPE CRIB SOUTH	4	L24
33	PROTOTYPE LAB	7	V75
34	SECURITY	2	E10
35	SHIPPING & RECEIVING	8	N92
36	STAYWELL OFFICE	1	V2
37	TECHNICAL COMPUTER CENTER	2	C13
38	TRIM SHOP	7	D68
39	TRUCK PLATFORM MANUFACTURING ENGINEERING	A	GG04
40	VEHICLE BUILD UP	5	M30
41	VEHICLE DEVELOPMENT	7	L77
42	VEHICLE DYNAMICS	7	E76
43	VEHICLE TRANSPORT	8	W96
44	VIPER ENGINE	6	W64
45	WJ ONEIL	2	F12
46	WOOD SHOP	7	E63
47	XJ DESIGN AIDS	7	E54

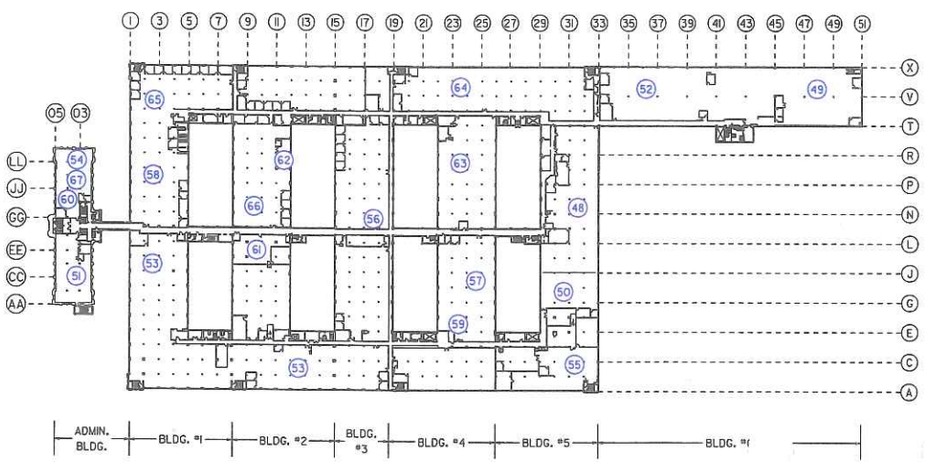


BASEMENT FLOOR PLAN

FIRST FLOOR PLAN

SECOND FLOOR PLAN

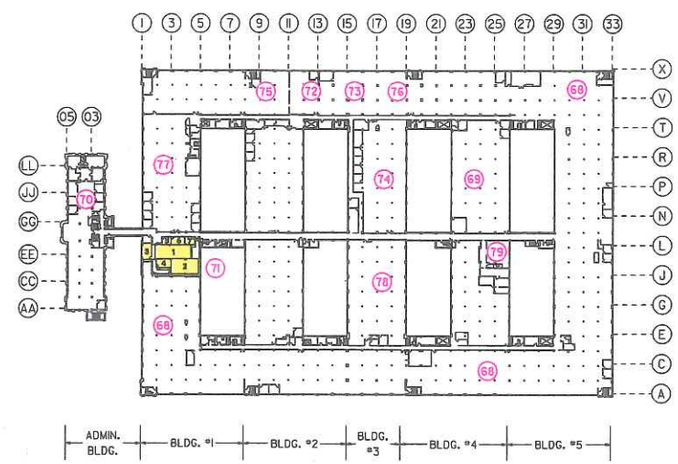
		BUILDING	COLUMN
48	ADVANCED VEHICLE ENGINEERING	5	M30
49	BODY ENGINEERING	6	U45
50	CAE STRUCTURES	5	F30
51	CUSTOMER ADVOCATE	A	CC03
52	DN PROGRAMS	6	U34
53	ELECTRICAL ENGINEERING	1	L3
54	HOMOLOGATION	A	JJ03
55	JTICS	5	D29
56	MANUFACTURING	3	M17
57	MATERIALS ENGINEERING	4	G25
58	PROCUREMENT & SUPPLY	1	M3
59	PRODUCT FINANCIAL ANALYSIS	4	E22
60	QUALITY AND RELIABILITY ENVIRONMENT	A	JJ03
61	TECHNICAL COMPUTING CENTER	2	L10
62	TELECOM CONTROL CENTER	2	R11
63	TRUCK BODY	4	M24
64	TRUCK CHASSIS	4	U20
65	TRUCK PROGRAM AND PRODUCTION PLANNING	1	T3
66	TRUCK VEHICLE DEVELOPMENT	2	M10
67	VEHICLE CERTIFICATION	A	JJ03



SECOND FLOOR PLAN

THIRD FLOOR PLAN

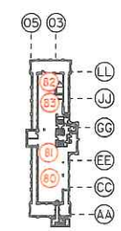
68	BODY ENGINEERING	5	U30
69	BODY OPERATIONS	4	M24
70	ENGINEERING ADMINISTRATION	A	LL04
71	EXECUTIVE CONFERENCE CENTER	1	L3
72	IMPACT ANALYSIS	2	U12
73	JEEP CHASSIS	2	U14
74	JEEP PROGRAM MANAGEMENT AND PRODUCTION PLANNING	3	M18
75	JEEP VEHICLE DEVELOPMENT	2	U11
76	JEEP PROGRAMS	3	U18
77	POWERTRAIN	1	M3
78	PRODUCT PLANNING	3	M17
79	REPRODUCTION	4	M25



THIRD FLOOR PLAN

FOURTH FLOOR PLAN

80	ENGINEERING GRAPHICS	A	EE04
81	MEXICO LIASON GROUP	A	GG04
82	MEXICO MANUFACTURING	A	KK04
83	MOPAR SERVICE & PARTS	A	HH04



FOURTH FLOOR PLAN

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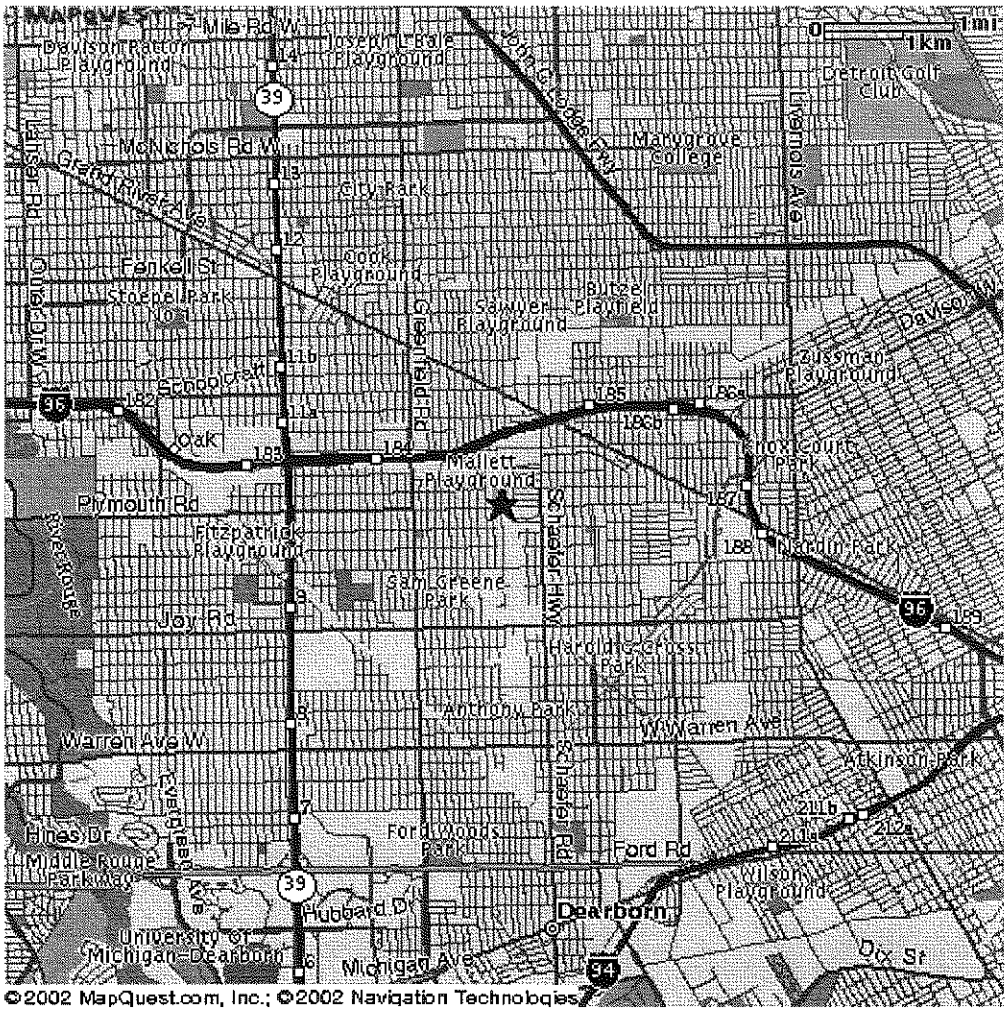

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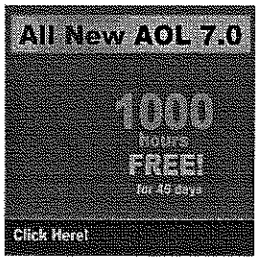

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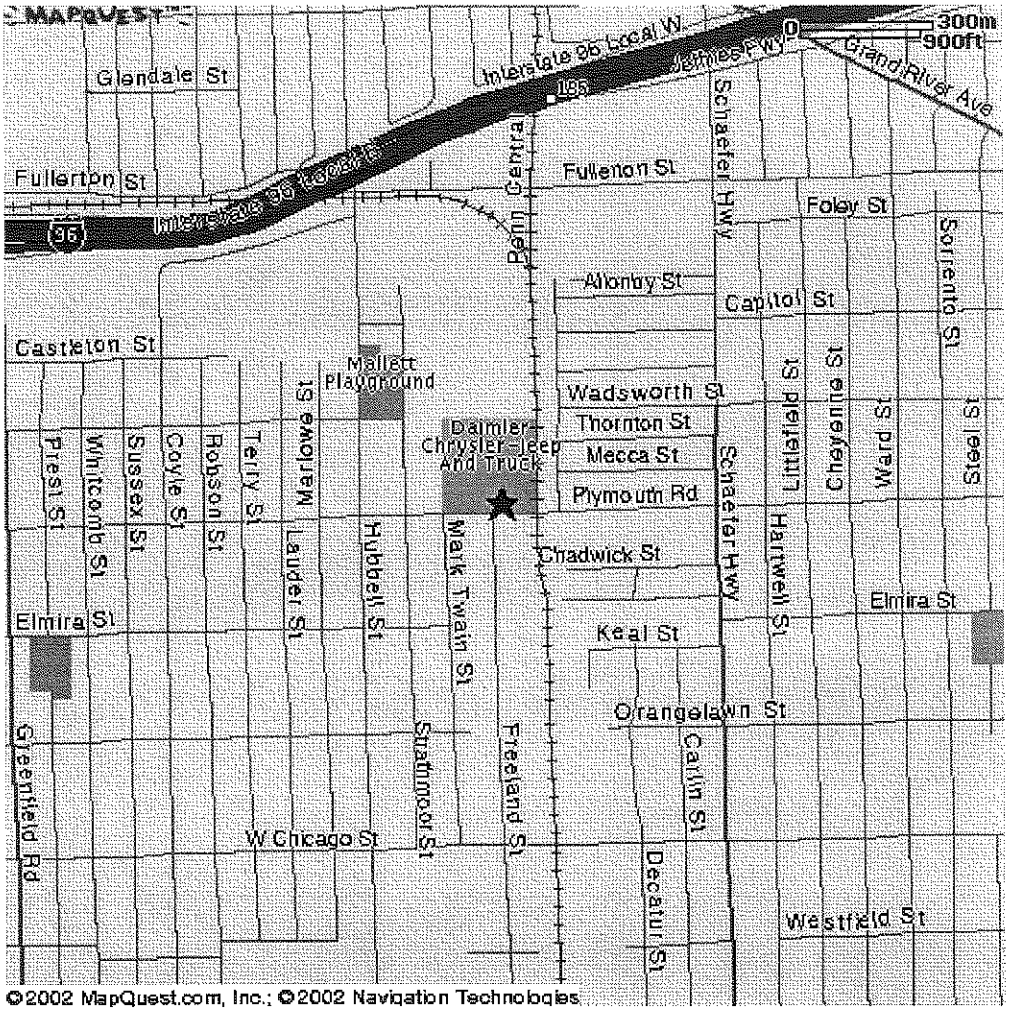

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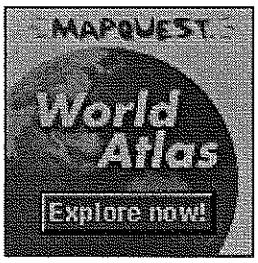

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