SOUTH CAROLINA STATE REGISTER DISCLAIMER

SOUTH CAROLINA STATE REGISTER

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THE LEGISLATIVE COUNCIL
of the
GENERAL ASSEMBLY

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This issue contains notices, proposed regulations, emergency regulations, final form regulations, and other documents filed in the Office of the Legislative Council, pursuant to Article 1, Chapter 23, Title 1, Code of Laws of South Carolina, 1976.

THE SOUTH CAROLINA STATE REGISTER

An official state publication, *The South Carolina State Register* is a temporary update to South Carolina's official compilation of agency regulations--the *South Carolina Code of Regulations*. Changes in regulations, whether by adoption, amendment, repeal or emergency action, must be published in the *State Register* pursuant to the provisions of the Administrative Procedures Act. The *State Register* also publishes the Governor's Executive Orders, notices or public hearings and meetings, and other documents issued by state agencies considered to be in the public interest. All documents published in the *State Register* are drafted by state agencies and are published as submitted. Publication of any material in the *State Register* is the official notice of such information.

STYLE AND FORMAT OF THE SOUTH CAROLINA STATE REGISTER

Documents are arranged within each issue of the *State Register* according to the type of document filed:

Notices are documents considered by the agency to have general public interest.
Notices of Drafting Regulations give interested persons the opportunity to comment during the initial drafting period before regulations are submitted as proposed.
Proposed Regulations are those regulations pending permanent adoption by an agency.
Pending Regulations Submitted to General Assembly are regulations adopted by the agency pending approval by the General Assembly.
Final Regulations have been permanently adopted by the agency and approved by the General Assembly.
Emergency Regulations have been adopted on an emergency basis by the agency.
Executive Orders are actions issued and taken by the Governor.

1999 PUBLICATION SCHEDULE

Documents will be accepted for filing on any normal business day from 8:30 A.M. until 5:00 P.M. All documents must be submitted in the format prescribed in the Standards Manual for Drafting and Filing Regulations.

To be included for publication in the next issue of the *State Register*, documents will be accepted no later than 5:00 P.M. on any closing date. The modification or withdrawal of documents filed for publication must be made **by 5:00 P.M.** on the closing date for that issue.

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Submission Deadline	1/8	2/12	3/12	4/9	5/14	6/11	7/9	8/13	9/10	10/8	11/12	12/10
Publishing Date	1/22	2/26	3/26	4/23	5/28	6/25	7/23	8/27	9/24	10/22	11/26	12/24

Reproducing Official Documents

All documents appearing in the South Carolina *State Register* are prepared and printed at public expense. There are no restrictions on the re-publication of official documents appearing in the *State Register*. All media services are especially encouraged to give wide publicity to all documents printed in the *State Register*.

Public Inspection of Documents

A copy of each document filed with the Office of the State Register is available for public inspection during normal office hours, 8:30 A.M. to 5:00 P.M., Monday through Friday. Due to State House renovations, the Office of the State Register is temporarily located in The Carolina Plaza, Room B12, 937 Assembly Street, in Columbia. Telephone inquiries concerning material in the *State Register* or the *South Carolina Code of Regulations* may be made by calling (803) 734-2145.

Certificate

Pursuant to Section 1-23-20, Code of Laws of South Carolina, 1976, this issue contains all previously unpublished documents required to be published and filed before the closing date of the issue.

Lynn P. Bartlett
Editor

Adoption, Amendment and Repeal of Regulations

To adopt, amend or repeal a regulation, an agency must publish in the *State Register* a Notice of Drafting; a Notice of the Proposed Regulation that contains an estimate of the proposed action's economic impact; and, a notice that gives the public an opportunity to comment on the proposal. If requested by twenty-five persons, a public hearing must be held at least thirty days after the date of publication of the notice in the *State Register*.

After the date of hearing, the regulation must be submitted to the General Assembly for approval. The General Assembly has one hundred twenty days to consider the regulation. If no legislation is introduced to disapprove or enacted to approve before the expiration of the one-hundred-twenty-day review period, the regulation is approved on the one hundred twentieth day and is effective upon publication in the *State Register*.

EMERGENCY REGULATIONS

An emergency regulation may be promulgated by an agency if the agency finds imminent peril to public health, safety or welfare. Emergency regulations are effective upon filing for a ninety-day period. If the original filing began and expired during the legislative interim, the regulation can be renewed once.

REGULATIONS PROMULGATED TO COMPLY WITH FEDERAL LAW

Regulations promulgated to comply with Federal Law are exempt from General Assembly review. Following the notice of proposed regulation and hearing, regulations are submitted to the *State Register* and are effective upon publication.

EFFECTIVE DATE OF REGULATIONS

Final Regulations take effect on the date of publication in the *State Register* unless otherwise noted within the text of the regulation.
Emergency Regulations take effect upon filing with the Legislative Council and remain effective for ninety days. If the original ninety-day period begins and expires during legislative interim, the regulation may be renewable once.

SUBSCRIPTIONS

The *State Register* is published on the fourth Friday of each month by the Legislative Council of the General Assembly of the State of South Carolina. Subscription rate is $95.00 per year postpaid to points in the United States. Partial subscriptions may be ordered at the rate of $8.00 per issue for the remainder of a subscription term. Subscriptions begin July 1 and end June 30.

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South Carolina State Register
P.O. Box 11489
Columbia, South Carolina 29211

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Enclosed is my check or money order for $_____. Date _____

Name _____

Address _____

_____

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REGULATIONS SUBMITTED TO GENERAL ASSEMBLY

GOVERNOR'S EXECUTIVE ORDERS

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HEALTH AND ENVIRONMENTAL CONTROL, DEPARTMENT OF

LABOR, DEPARTMENT OF

NOTICES OF DRAFTING REGULATIONS

CLEMSON UNIVERSITY

EDUCATION, DEPARTMENT OF

FINANCIAL INSTITUTIONS, BOARD OF

HEALTH AND ENVIRONMENTAL CONTROL, DEPARTMENT OF

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2429	Breathalyzer Tests	3 26 00	Law Enforcement Division
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1981	1 14 99	Policy Development	Board of Education
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WITHDRAWN:

DOC NO.	DATE	SUBJECT	AGENCY
2372	6 22 99	Procedures for Contested Cases	Health and Envir Control

NO. 99-58

WHEREAS, changing state and world conditions, disrupted markets, extremely low commodity prices and drought conditions have created a financial crisis in the agricultural industry in South Carolina; and

WHEREAS, the agricultural financial crisis is resulting in farmers and associated businesses being forced to close their doors; and

WHEREAS, many small minority-owned and family farms are having difficulty finding an appropriate market niche; and

WHEREAS, the difficulties faced by large and small farms and the businesses associated with them are having an extremely deleterious effect on rural South Carolina; and

WHEREAS, a financial crisis in agriculture, one of the largest and most important industries in the state, will adversely affect the well being of the entire state; and

WHEREAS, an effective Farmers Market in Columbia could provide some economic relief to this struggling industry by providing a reliable outlet for alternative crops to the more traditional corn, cotton, soybeans, wheat and tobacco.

NOW, THEREFORE, I hereby establish a Study Committee to *Redefine the State's Objectives in Having a State Farmers Market.* The Study Committee shall have the following duties and responsibilities:

- Identify the state's purpose in having a State Farmers Market in Columbia;
- Identify who the Market should serve;
- Identify who will benefit from the Market;
- Identify what components would be necessary for the efficient and effective operation of a Market and where it should be located;
- Identify how capital improvements and operation of the Market should be financed;
- Identify how the Market should be managed;

FURTHER, the Study Committee shall have the following members who shall be appointed by the undersigned, unless otherwise indicated:

1. the Governor, or his designee;
2. the Commissioner of Agriculture, or his designee;
3. the Chairman of the Agriculture Commission of South Carolina, or his designee;
4. the Secretary of Commerce, or his designee;
5. the Chairman of the Senate Agriculture and Natural Resources Committee, or his designee;
6. the Chairman of the House Agriculture, Natural Resources and Environmental Affairs Committee, or his designee;
7. the President of the South Carolina Farm Bureau, or his designee;
8. two representatives of the seasonal food industry;
9. three vegetable producers;
10. two wholesale brokers;
11. a horticultural producer;
12. a representative from higher education with expertise in farmers markets; and

13. two members of the public, at least one of whom will represent consumer interests.

GIVEN UNDER MY HAND AND THE GREAT SEAL OF THE STATE OF SOUTH CAROLINA, THIS 13TH DAY OF OCTOBER, 1999.

JIM HODGES
GOVERNOR

NO. 99-59

WHEREAS, on September 14, 1999, I declared a state of emergency to exist because of the threat posed by Hurricane Floyd; and

WHEREAS, I subsequently rescinded that state of emergency and imposed a new state of emergency declaration for Georgetown, Horry, and Marion Counties due to the flooding that Hurricane Floyd generated; and

WHEREAS, the Constitution and Laws of South Carolina provide that a declared state of emergency shall not continue for a period of more than 15 days without the consent of the General Assembly; and

WHEREAS, the state of emergency for Georgetown, Horry, and Marion Counties ended at midnight, October 13, 1999.

NOW, THEREFORE, by virtue of the power and authority vested in me as Governor pursuant to the Constitution and Laws of South Carolina, I do hereby declare that the herein described Executive Orders are cancelled, rescinded, and from this date declared null and void: Executive Orders 99-45 (overcharging), 99-46 (curfew), 99-53 (watercraft restrictions), and 99-55 (additional watercraft restrictions).

GIVEN UNDER MY HAND AND THE GREAT SEAL OF THE STATE OF SOUTH CAROLINA, THIS 14th DAY OF OCTOBER, 1999.

JIM HODGES
GOVERNOR

NO. 99-60

WHEREAS, South Carolina is increasingly vulnerable to the many natural and manmade hazards that threaten the lives and property of the people of this State; and

WHEREAS, as required by the South Carolina Code of Laws, Section 25-1-440(b), I am responsible for the development and coordination of a system of Comprehensive Emergency Management which shall include provisions for mitigation, preparedness, response, and recovery; and

WHEREAS, I have identified the need to bring together in a coordinated manner the principal agencies of state government involved in all areas of hazard mitigation planning and programming to address mitigation opportunities and approaches in a cooperative and comprehensive manner that will best serve the entire state.

NOW, **THEREFORE**, by virtue of the power and authority vested in me as Governor pursuant to the Constitution and laws of South Carolina, I hereby order the establishment of the South Carolina Hazard Mitigation Interagency Coordinating Committee, which shall have the following duties and responsibilities:

a. To assist the Governor's Office and the General Assembly in identifying the hazard mitigation issues and opportunities facing the state for the purpose of developing a comprehensive hazard mitigation strategy; and

b. To prepare strategies, policies, and reports on hazard mitigation issues, including hazard mitigation policy recommendations to the Governor, the General Assembly, and key state agencies involved in mitigation related areas within their normal agency missions; and

c. To ensure that state agencies and local governments collaborate and cooperate fully to develop and execute sustainable hazard mitigation actions that will reduce the risks posed by all hazards to this State; and

d. To coordinate with and support state agencies' efforts in obtaining and administering federal and other grants, including post-disaster mitigation grants available pursuant to the Robert T. Stafford Disaster Relief and Emergency Assistance Act, for the purposes of promoting hazard mitigation opportunities within the State.

I further order that the South Carolina Hazard Mitigation Interagency Coordinating Committee shall be comprised by the following voting members:

a. the Governor, or his designee;
b. the Director, South Carolina Emergency Preparedness Division, or his designee;
c. the Director, South Carolina Department of Natural Resources, or his designee;
d. the Commissioner, South Carolina Department of Health and Environmental Control, or his designee; and
e. the Director, South Carolina Department of Insurance, or his designee.

The committee shall elect a chairperson from the membership on an annual basis and all staff support shall be provided from the resources of the member agencies.

The committee shall annually identify, within the South Carolina Hazard Mitigation Plan, those state agencies and organizations that have responsibilities and expertise in statewide hazard mitigation. These agencies and organizations shall be encouraged by the committee to become non-voting advisors and participants in the development and implementation of hazard mitigation planning and programming actions across the state.

This Order shall take effect immediately.

GIVEN UNDER MY HAND AND THE GREAT SEAL OF THE STATE OF SOUTH CAROLINA THIS 22nd DAY OF OCTOBER, 1999.

JIM HODGES
GOVERNOR

DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

ERRATA

Document No. 2332, Amendment of R.61-79, Hazardous Waste Management Regulations

R.61-79, Hazardous Waste Management Regulations, was amended effective September 25, 1998, by publication as Document No. 2332 in Volume 22, Issue 9, of the State Register. The amendments were promulgated to maintain conformity with federal requirements and ensure compliance with federal standards.

The September amendment instructed as follows:

262.80	Add new Subpart H through 262.89
262.90	Renumber current 262.80 to 262.90

This errata corrects the instruction at 262.90 to read:

262.90 Move current 262 Subpart H heading, Hazardous Waste Discharge Reporting, and rename it 262 Subpart I - Hazardous Waste Discharge Reporting; and renumber current text of 262.80 as 262.90 and place it below the Subpart I heading.

262 Subpart I through 262.90 should read:

262. Subpart I - Hazardous Waste Discharge Reporting.

262.90 Discharge clean up (added 5/93)
A generator must clean up any hazardous waste discharge that occurs during generation or processing or storage and take such other action as may be required or approved by Federal, State or local officials so that the hazardous waste discharge no longer presents a hazard to human health or the environment. See also 262.34(a)(4) and 265 Subpart D.

DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

NOTICE OF CANCELLATION AND RESCHEDULING OF PUBLIC HEARING

Document No. 2453
Proposed Amendment of R.61-93, Standards for Licensing Outpatient Facilities for Chemically Dependent or Addicted Persons

The Public Hearing before the Department of Health and Environmental Control Board concerning the Proposed Revision of Regulation 61-93, Standards For Licensing Outpatient Facilities for Chemically Dependent or Addicted Persons, originally scheduled for December 9, 1999 has been rescheduled for January 20, 2000.

The public hearing will be held at the regularly-scheduled Board meeting on January 20, 2000, in the Board Room of the Commissioner's Suite, Third Floor, Aycock Building of the Department of Health and Environmental Control, 2600 Bull St., Columbia, S.C. The board meeting commences at 10:00 a.m. at which time the board will consider items on its agenda in the order presented. The order of presentation for public hearing on January 20 will be noticed in the board's agenda to be published by the department 10 days in advance of the meeting. Interested persons are invited to make oral or written comments on the proposed regulation at the public hearing. Persons desiring to make oral comments at the hearing are asked to limit their statements to five

minutes and, as a courtesy, are asked to provide written copies of their presentations for the record. Any comments made at the public hearing will be given consideration in formulating the final version of the regulation.

DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

In accordance with Section 44-7-200(C), Code of Laws of South Carolina, the public is hereby notified that a Certificate of Need application has been accepted for filing and publication November 26, 1999, for the following project(s). After the application is deemed complete, affected persons will be notified that the review cycle has begun. For further information, please contact Mr. Albert N. Whiteside, Director, Planning and Certification of Need Section, 2600 Bull St., Columbia, SC 29201 at (803) 737-7200.

Affecting Charleston County

Construction of a freestanding multi-specialty ambulatory surgery facility with three (3)operating rooms.
East Cooper Surgery Center
Mt. Pleasant, South Carolina
Project Cost: $ 4,640,900

Addition of three (3) comprehensive rehabilitation beds for a total of 42 comprehensive rehabilitation beds.
HealthSouth Rehabilitation Hospital of Charleston
Charleston, South Carolina
Project Cost: $ 13,311

Renovation and upgrade of an existing 16-bed unit to provide intermediate care nursing and cardiac monitoring capabilities via telemetry.
Roper Hospital
Charleston, South Carolina
Project Cost: $ 3,250,000

Affecting Darlington County

Purchase of a fixed base MRI scanner to replace the existing mobile MRI services.
Caroline Pines Regional Medical Center
Hartsville, South Carolina
Project Cost: $ 1,752,052

Affecting Horry County

Relocation of the two existing surgery suites and the addition of two surgery suites and an endoscopy suite for a total of four (4) operating rooms and one (1) endoscopy suite.
Carolina Regional Surgery Center
Myrtle Beach, South Carolina
Project Cost: $ 4,083,036

Affecting York County

Addition of ten (10) nursing home beds which will not participate in the Medicaid (Title XIX) Program for a total of 109 nursing home beds.
White Oak Manor-York
York, South Carolina

Project Cost: $ 20,575

In accordance with S.C. DHEC Regulation 61-15, the public and affected persons are hereby notified that the review cycle has begun for the following project(s) and a proposed decision will be made within 60 days beginning November 26, 1999. "Affected persons" have 30 days from the above date to submit comments or requests for a public hearing to Mr. Albert Whiteside, Director, Planning and Certification of Need Section, 2600 Bull Street, Columbia, S.C. 29201. For further information call (803) 737-7200.

Affecting Florence County

Establishment of a 28 bed long term acute care hospital to be known as NextCARE Specialty Hospital of Florence through the transfer of ownership of 28 acute care beds from Carolinas Hospital System (Florence), resulting in 262 general acute care beds at Carolinas Hospital System (Florence) and a 28 bed long term acute care hospital in the Cedar Tower of the Carolinas Hospital System.
NextCARE Specialty Hospital of Florence
Florence, South Carolina
Project Cost: $ 853,400

Affecting Greenville County

Addition of 11 nursing home beds which will not participate in the Medicaid (Title XIX) Program, for a total of 99 nursing home beds.
Magnolia Manor-Greenville
Greenville, South Carolina
Project Cost: $ - 0 -

Renovation and Expansion of Surgical Services.
St. Francis Hospital,
Greenville, South Carolina
Project Cost: $13, 181, 894

Affecting Greenwood County

Renovation of space for the existing CT Scanner and the addition of a second CT Scanner and related equipment.
Self Memorial Hospital
Greenwood, South Carolina
Project Cost: $ 2,202,080

Affecting Hampton County

Lease of Harper Nursing Center, Inc., by Clarendon Memorial Hospital.
Harper Nursing Center, Inc.
Estill, South Carolina
Project Cost: $ 2,956,571

Affecting Horry County
Construction of an ambulatory surgery center with two (2) operating rooms and one (1) procedure room for the single specialty of urology.

Grand Strand Urology Surgery Center
Myrtle Beach, South Carolina
Project Cost: $ 3,881,980

DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

Notice to the Regulated Community
Concerning Embedded Microprocessors
and the Year 2000

The South Carolina Department of Health and Environmental Control is actively working to assure all agency computer hardware and software systems will continue to function in the year 2000 and beyond. As part of that effort, the agency hereby advises the regulated community of potential problems with microprocessor-controlled equipment and devices used in the conduct of their business.

Information systems (hardware and software) used for essential business activities should be assessed for Year 2000 compliance, and, if necessary, renovated or replaced to achieve compliance. This includes devices, such as laboratory and communication equipment, which contain a microprocessor. It is possible these devices may not work properly after the year 2000 and could affect your compliance with state and federal regulations.

You are encouraged to contact the manufacturers of any such devices and obtain a Year 2000 Certification for the equipment. Many certifications are already posted on the companies' world-wide web sites.

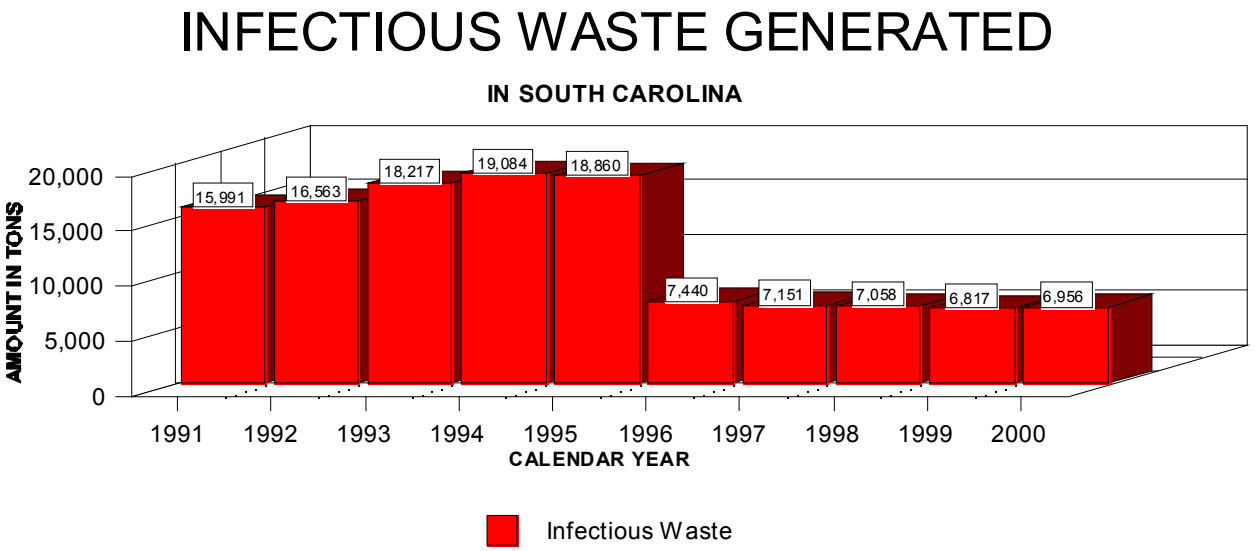
If you have questions or require additional information, please contact Ken Knight, DHEC Year 2000 Coordinator at (803) 898-3726, or Steve Vassey, EQC Information Technology, at (803) 898-3953.

DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

Section 44-93-210, Act Number 134 of 1989, as amended, the Infectious Waste Management Act, requires that beginning November 1, 1990, and annually thereafter, the Department

"shall estimate and publish the amount of infectious waste it expects to be generated within this State during the succeeding calendar year."

In accordance with this provision, the Department estimates that the amount of infectious waste it expects to be generated within this State during Calendar Year 2000 is 6,956.02 tons or 579.67 tons per month. Please note this is only an estimate based upon the information available to the Department as of October 11, 1999. An analysis of how the estimate was derived is available from the Bureau of Land and Waste Management. For further information, please contact Mr. Phil Morris, Bureau of Land and Waste Management, 2600 Bull Street, Columbia, South Carolina, 29201, at (803) 896-4173.


INFECTIOUS WASTE GENERATED
IN SOUTH CAROLINA
AMOUNT IN TONS
20,000
15,000
10,000
5,000
0
15,991
16,563
18,217
19,084
18,860
7,440
7,151
7,058
6,817
6,956
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
CALENDAR YEAR
Infectious Waste

October 11, 1999

DEPARTMENT OF HEALTH & ENVIRONMENTAL CONTROL
BUREAU OF LAND AND WASTE MANAGEMENT
INFECTIOUS WASTE GENERATORS

TOTAL AMOUNT OF INFECTIOUS WASTE GENERATED IN SOUTH CAROLINA

SHARPS: Needles, syringes, lancets and scalpel blades	218,895.62 pounds per month
MICROBIOLOGICALS: Specimens, cultures and stocks of etiological agents.	137,634.01 pounds per month
BLOOD AND BLOOD PRODUCTS: Unabsorbed human blood, or blood products, or absorbed blood and bloody body fluids.	442,250.63 pounds per month
PATHOLOGICAL: Tissues, organs, limbs and other body parts removed from the whole body.	120,445.22 pounds per month
ANIMAL: Animal carcasses, body parts and bedding of animals intentionally exposed to human pathogens during research	19,239.42 pounds per month
ISOLATION: Biosafety Level Four, highly communicable diseases, classified by the Centers for Disease Control and Prevention.	211,525.55 pounds per month
OTHER: Other waste material designated by the generator as infectious waste.	9,346.60 pounds per month

TOTALS OF ALL WASTE STREAMS: **1,159,337.05 pounds per month.**
(579.67 tons per month.)

DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

NOTICE OF GENERAL PUBLIC INTEREST
Public Notice #99-176-GP-N
November 26, 1999

The South Carolina Department of Health and Environmental Control (DHEC) does hereby give notice of authorization being granted to the following sources who have requested coverage under General Conditional Major Operating Permit (GCMP-01) "Textile Greige Operations." This general permit was previously opened for a 30 day public comment period on November 15, 1995, with final issuance on May 3, 1996. Pursuant to South Carolina Regulation 61-62.1, Section II G(7)(a)&(b), the Department may now grant coverage to those qualified

sources seeking to operate under the terms and conditions of this general permit. The authorization of each facility's coverage shall be a final permit action for purposes of administrative review.

In accordance with the provisions of the Pollution Control Act, Sections 48-1-50(5) and 48-1-110(a), and the 1976 Code of Laws of South Carolina, as amended, Regulation 61-62 "Air Pollution Control Regulations and Standards", these sources are hereby granted permission to discharge air contaminants into the ambient air. The Bureau of Air Quality authorizes the operation of these sources and their applicable equipment specified in accordance with the plans, specifications and other information submitted in the General Conditional Major Permit application. Facilities operating under this permit seek to limit their "potential to emit" to below the thresholds which define a major source by complying with the federally enforceable conditions contained in this permit. Permit coverage is subject to and conditioned upon the terms, limitations, standards, and schedules contained in or specified on said permit.

Interested persons may review the final general permit, materials submitted by the applicant, and any written comments received, during normal business hours, at the following location: SC DHEC, Bureau of Air Quality, 2600 Bull Street, Columbia, South Carolina, 29201.

This notice is given pursuant to the requirements of South Carolina Regulation 61-62.1, Section II G(7)(c). Comments and questions concerning any of the following individual facility's coverage under this permit should be directed to Mr. Carl W. Richardson, P.E., Director, Engineering Services Division, Bureau of Air Quality, SC DHEC, 2600 Bull Street, Columbia, South Carolina, 29201 at (803) 898-4123.

Cherokee County

TNS Mills, Inc.
325 Wilcox Avenue
Gaffney, South Carolina

Spartanburg County

Mount Vernon Mills (Arkwright Plant)
450 North Street
Spartanburg, South Carolina

TNS Mills, Inc.
400 TNS Road
Spartanburg, South Carolina

DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

NOTICE OF GENERAL PUBLIC INTEREST
Public Notice #99-177-GP-N
November 26, 1999

The South Carolina Department of Health and Environmental Control (DHEC) does hereby give notice of authorization being granted to the following sources who have requested coverage under General Conditional Major Operating Permit (GCMP-02) "Fuel Combustion Operations." This general permit was previously opened for a 30 day public comment period on November 15, 1995, with final issuance on May 3, 1996. Pursuant to South Carolina Regulation 61-62.1, Section II G(7)(a)&(b), the Department may now grant coverage to those

qualified sources seeking to operate under the terms and conditions of this general permit. The authorization of each facility's coverage shall be a final permit action for purposes of administrative review.

In accordance with the provisions of the Pollution Control Act, Sections 48-1-50(5) and 48-1-110(a), and the 1976 Code of Laws of South Carolina, as amended, Regulation 61-62, Air Pollution Control Regulations and Standards, these sources are hereby granted permission to discharge air contaminants into the ambient air. The Bureau of Air Quality authorizes the operation of these sources in accordance with the plans, specifications and other information submitted in the General Conditional Major Permit application. Facilities operating under this permit seek to limit their "potential to emit" to below the thresholds which define a major source by complying with the federally enforceable conditions contained in this permit. Permit coverage is subject to and conditioned upon the terms, limitations, standards, and schedules contained in or specified on said permit.

Interested persons may review the final general permit, materials submitted by the applicant, and any written comments received, during normal business hours, at the following location: SC DHEC, Bureau of Air Quality, 2600 Bull Street, Columbia, South Carolina, 29201.

This notice is given pursuant to the requirements of South Carolina Regulation 61-62.1, Section II G(7)(c). Comments and questions concerning any of the following individual facility's coverage under this permit should be directed to Mr. Carl W. Richardson, P.E., Director, Engineering Services Division, Bureau of Air Quality, SC DHEC, 2600 Bull Street, Columbia, South Carolina, 29201 at (803) 898-4123.

Greenville County

Greenville Water System
50 Pleasant Retreat Road
Travelers Rest, South Carolina

DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

NOTICE OF GENERAL PUBLIC INTEREST
Public Notice #99-178-GP-N
November 26, 1999

The South Carolina Department of Health and Environmental Control (DHEC), Bureau of Air Quality, does hereby give notice of authorization being granted to the following sources who have requested coverage under General Conditional Major Operating Permit (GCMP-04) "Concrete Batch Plants." This general permit was previously opened for a 30 day public comment period on May 2, 1996, with final issuance on August 5, 1996. Pursuant to South Carolina Regulation 61-62.1, Section II G(7)(a)&(b), the department may now grant coverage to those qualified sources seeking to operate under the terms and conditions of this general permit. The authorization of each facility's coverage shall be a final permit action for purposes of administrative review.

In accordance with the provisions of the Pollution Control Act, Sections 48-1-50(5) and 48-1-110(a), the 1976 Code of Laws of South Carolina, as amended, and Regulation 61-62 "Air Pollution Control Regulations and Standards," these sources are hereby granted permission to discharge air contaminants into the ambient air. The Bureau of Air Quality authorizes the operation of these sources in accordance with the plans, specifications and other information submitted by each facility in the General Conditional Major Permit application. Facilities operating under this permit seek to limit their potential to emit to below the thresholds which define a major source by complying with the federally enforceable conditions contained in this permit. Permit coverage is subject to and conditioned upon the terms, limitations, standards, and schedules contained in or specified on said permit.

Interested persons may review the final general permit, materials submitted by the applicant, and any written comments received, during normal business hours, at the following location: SC DHEC, Bureau of Air Quality, 2600 Bull Street, Columbia, South Carolina, 29201.

This notice is given pursuant to the requirements of South Carolina Regulation 61-62.1, Section II G(7)(c). Comments and questions concerning any of the following individual facility's coverage under this permit should be directed to: Mr. Carl W. Richardson, P.E., Director, Engineering Services Division, Bureau of Air Quality, SC DHEC, 2600 Bull Street, Columbia, South Carolina, 29201 at (803) 898-4123.

Horry County

Winyah Concrete & Block Company, Inc.
2555 Fire Tower Road
Little River, South Carolina

DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

PUBLIC NOTICE

Section IV of R.61-98, the State Underground Petroleum Environmental Response Bank (SUPERB) Site Rehabilitation and Fund Access Regulation, requires that the Department of Health and Environmental Control evaluate and certify site rehabilitation contractors to perform site rehabilitation of releases from underground storage tanks under the State Underground Petroleum Environmental Response Bank (SUPERB) Act. Pursuant to Section IV.B.1., the Department is required to place a list of those contractors requesting certification on public notice and accept comments from the public for a period of thirty (30) days. If you wish to provide comments regarding the companies and individuals listed below, please submit your comments in writing, no later than December 26, 1999, to:

Contractor Certification Program
South Carolina Department of Health and Environmental Control
Division of Underground Storage Tank Management
Attn: Loraine Tindall
2600 Bull Street
Columbia, SC 29201

The following companies and individuals have applied for certification as Underground Storage Tank Site Rehabilitation Contractors:

Class I	Class II
Environmental Management & Consulting, Inc.	Environmental Management & Consulting, Inc.

DEPARTMENT OF LABOR, LICENSING AND REGULATION

NOTICE OF PUBLIC HEARING

OCCUPATIONAL SAFETY AND HEALTH STANDARDS

The South Carolina Department of Labor, Licensing, and Regulation does hereby give notice under Section 41-15-220, S.C. Code of Laws, 1976, as amended, that a public hearing will be held on January 5, 2000, at 10:00 a.m. at the S.C. Department of LLR, 1st floor, room 103, 3600 Forest Drive, Columbia, S.C., at which time interested persons will be given the opportunity to appear and present views on the occupational safety and health standards being considered for adoption, which are as follows:

In Subarticle 6 (General Industry & Marine Terminals [Public Sector]):
Revisions to E., Section 1910.108, Dipping and Coating Operations.
Revisions to 1917.1, Powered Industrial Truck Operator Training.

Any omissions or corrections to the occupational safety and health standards being considered for adoption published in the FEDERAL REGISTER prior to this hearing may be presented at this hearing. These revisions are necessary to comply with federal law and copies of them can be obtained or reviewed at the S.C. Department of Labor, Licensing and Regulation during normal business hours by contacting the Public Information Office at (803) 896-4380.

Persons desiring to speak at the hearing shall file with the Director of Labor, Licensing and Regulation a notice of intention to appear and the approximate amount of time required for her/his presentation on the particular matter no later than December 29, 1999. Any person who wishes to express her/his views, but is unable or does not desire to appear and testify at the hearing, should submit those views in writing to Rita M. McKinney, Director, on or before December 29, 1999.

CLEMSON UNIVERSITY

CHAPTER 27

Statutory Authority: 1976 Code Section 46-21-620

Notice of Drafting:

Clemson University proposes to amend its regulations concerning seed certification standards. Interested persons may submit comments to Dr. David Howle, Department of Fertilizer and Seed Certification, 511 Westinghouse Road, Pendleton, S. C. 29670. To be considered comments must be received no later than 5:00 P.M., on December 29, 1999, the close of the drafting comment period.

Synopsis:

The regulations are to be generally up-dated taking into account the changes in technology and business practices that have occurred since the last revision.

Legislative review of this proposal will be required.

DEPARTMENT OF EDUCATION

CHAPTER 43

Statutory Authority: S.C. Code Ann. Section 59-5-60(1) & 59-43-10, *et seq*. (1990)

Notice of Drafting:

The Department of Education proposes amendments to regulations 43-237, Adult Education Curriculum and 43-237.1, Adult Education Program to include, but not limited to, the enrollment and provision of services for children with disabilities. Interested persons may submit comments to Dr. Sam F. Drew, Jr., Office of Adult and Community Education, Division of District and Community Services, South Carolina Department of Education, 1429 Senate Street, Columbia, South Carolina 29201. To be considered, comments must be received no later than 5:00 p.m. on December 20, 1999, the close of the drafting comment period.

Synopsis:

Federal law, the Individuals with Disabilities Education Act (20 U.S.C. 1400 *et seq*.) and its implementing regulations at 34 C.F.R. Part 300 *et seq*., sets forth requirements for services to children with disabilities. The amendments will bring these state regulations in compliance with federal law.

Legislative review of this proposal will not be required.

DEPARTMENT OF EDUCATION

CHAPTER 43

Statutory Authority: S.C. Code Ann Section 59-5-60(1), 59-67-410 and. Section 59-67-570

Notice of Drafting:

The Department of Education proposes drafting amendments to Regulation 43-80, Operation of Public Pupil Transportation Services, dealing with School Bus Specifications. Interested persons may submit comments to Donald Tudor, Director, Office of Transportation, Columbia, S.C. Department of Education, 1429 Senate Street, Columbia, S.C. 29201. To be considered, comments must be received no later than 5:00 p.m. on December 20, 1999, the close of the drafting comment period.

Synopsis:

The State Board of Education wants to formally establish the South Carolina School Bus Specifications Committee and the vommittee's membership and authority. Since 1994 the Department of Education has used a Specifications Committee composed of school district and State school transportation officials to create school bus specifications. The new regulation will officially create the School Bus Specifications Committee within the Department of Education, Office of Transportation; identify how members will be appointed, their terms and representation; and establish committee responsibilities, meeting schedules, and the reporting process. The goal of the State Board of Education is to establish a structured entity that will annually recommend school bus specifications to the State Superintendent of Education. The committee will be charged with developing school bus specifications for all types of school buses needed in South Carolina. The committee will be empowered to review and amend specifications, when necessary, to assure that South Carolina maintains the best specifications to address South Carolina's student transportation needs.

Legislative review of this proposal will be required.

BOARD OF FINANCIAL INSTITUTIONS

CHAPTER 15

Statutory Authority: 1976 Code Section 34-1-60 and 34-1-110

Article 1. Banking, Commercial Paper and Finance

Notice of Drafting:

The Board of Financial Institutions proposes to amend Regulations 15-21 and 15-25. Regulation 15-21 concerns investments of state banks in fixed assets and Regulation15-25 concerns the purchase of property acquired for future expansion by state chartered banks and savings and loan associations.

Synopsis:

The proposed amendment of Regulation 15-21 would increase the amount a State chartered bank is allowed to invest in fixed assets from 60% to 100% of the combined outstanding capital stock, surplus, and capital notes and/or debentures of the bank. The proposed amendment of Regulation 15-25 would extend the chargeoff period from two to five years on property acquired for future expansion that is not used for the purpose for which it was purchased by state chartered banks and savings and loan associations. The amendments are being proposed to provide state chartered banks and savings and loan associations parity with federally chartered institutions.

DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

CHAPTER 61

Statutory Authority: 1976 Code Sections 48-1-30 and 47-20-165

Notice of Drafting:

The South Carolina Department of Health and Environmental Control proposes to amend R.61-43, “Standards for the Permitting of Agricultural Animal Facilities,” by replacing Part 100 (Swine Facilities) is its entirety and modifying Parts 200 (Other Animal Facilities) and Part 300 (Innovative and Alternative Technology). The proposed amendments will address the permitting requirements for commercial agricultural animal production facilities, including the residual materials. The amended regulation will address the following:

1. Swine operations.
2. Poultry (including broiler, layer, turkey, quail, pigeon) operations.
3. Dairy and beef operations.

4. All other animal operations with a wet waste handling system.
5. All other animal operations with a dry waste handling system.
6. Manure broker operations.
7. Innovative and alternative Technologies.
8. Integrator permits and/or registration.

Interested persons may submit written comments to Alton Boozer, Bureau Chief, Bureau of Water, SC Department of Health and Environmental Control, 2600 Bull Street, Columbia, SC 29201. To be considered, all written comments must be received no later than 5:00 p.m. on December 31, 1999, the close of the drafting comment period.

Synopsis:

The amendments of the regulation will address methods of handling, treating, and disposing of residual material from animal production facilities. It will include land application considerations such as agronomic rates for crop utilization. Also, minimum requirements for the location of facilities for production and residual material treatment and handling will be included. The administrative permitting process and technical criteria for permit issuance will be included. The amended Part 100 of these regulations will be the separate and distinct regulations for swine facilities as required by Title 47, Chapter 20, Confined Swine Feeding Operations Act.

In addition to the proposed regulations as stated above, the public and regulated community are invited to recommend additional issues for consideration.

Legislative review is required.

DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

CHAPTER 61

Statutory Authority: S.C. Code Section 48-1-10 et seq.

Notice of Drafting:

The Department of Health and Environmental Control proposes to amend Regulation 61-62, Air Pollution Control Regulations and Standards, and the South Carolina Air Quality Implementation Plan, also known as the State Implementation Plan, or SIP. Interested persons are invited to present their views in writing to Dennis Camit; Division of Air Planning, Development and Outreach; Bureau of Air Quality; 2600 Bull Street; Columbia, SC 29201. To be considered, written comments must be received no later than 5:00 p.m. on December 28, 1999, the close of the drafting period.

Synopsis:

The department proposes to amend Regulation 61-62 and the South Carolina Air Quality Implementation Plan to address particulate matter emissions from crushed stone processing facilities. “Crushed Stone Processing” operations may include crushing, screening, size classification, material handling, and storage operations. All of these processes can be significant sources of particulate matter emissions if uncontrolled. As in other operations, crushed stone emission sources may be categorized as either process sources or fugitive dust sources. Factors affecting emissions from either source category include the stone size distribution and surface moisture content of the stone processed; the process throughput rate; the type of equipment and operating practices used; and topographical and climatic factors.

The proposed amendments to Regulation 61-62 and the South Carolina Air Quality Implementation Plan will require legislative review.

DEPARTMENT OF HEALTH AND HUMAN SERVICES

CHAPTER 126

Statutory Authority: 1976 Code Section 44-6-90

Notice of Drafting:

The South Carolina Department of Health and Human Services intends to promulgate regulations concerning the administration of the Optional State Supplementation (OSS) Program. Interested persons are invited to submit their views in writing to Ms. Anita Bowen, Division of Community and Facility Services, Post Office Box 8206, Columbia, South Carolina 29202-8206. To be considered, all comments must be received no later than the close of business on December 31, 1999.

Synopsis:

The state budget proviso establishing the OSS Program transferred responsibility for the program from the Department of Social Services to the Department of Health and Human Services, effective for the state's fiscal year 1997-1998. The Department of Health and Human Services proposes to promulgate regulations to formalize certain aspects of the OSS Program, particularly with respect to recipient eligibility criteria, the requirements for participation by community residential care facilities, issues concerning the payment process, and other matters relating to the administration of the program. These regulations by the Department of Health and Human Services will supplant the Department of Social Services' OSS Program regulations, which are no longer in effect as the result of the transfer of program responsibility.

COMMISSION ON HIGHER EDUCATION

CHAPTER 62

Statutory Authority: Act 512, Part 2, Section 9
Division 2, Subdivision C, Subpart 1(6),
Acts of Joint Resolutions of South Carolina, 1984
Article II S.C. Student Loan Corporation

Notice of Drafting:

The Commission on Higher Education proposes to amend regulations of the South Carolina Teachers Loan Program (TLP) to reduce the current interest rate of 12% to 8.32% while the student is in school and 8.92% once the student is in repayment. (This rate would not exceed 10.25%.)

Synopsis:

The SC Student Loan Corporation requests that the commission recommend two changes to the regulations governing the SC TLP. The first change is to amend the regulations to reduce the interest rate. The current interest rate for the TLP loan is 12%. It is recommended that the interest rate be changed to a variable rate that mirrors the Stafford Student Loan Program rate plus 2 percentage points. This rate will encourage borrowers to participate in the program. Interest rates in the Stafford Program are determined by the auction of 91 day Treasury Bills and changes annually on July 1. The current Stafford Loan rates are 6.32% while the borrower is in school and 6.92% when the borrower enters repayment status. It is proposed that the TLP interest rate decrease to 8.32% while the borrower is in school and 8.92% once the borrower enters repayment status. The interest rate would never exceed 10.25%.

The second change is to amend Section 62-132 (Repayment) to allow recipients of the TLP to cancel the applicable portion of their loans if they teach in areas deemed to be critical subject areas at the time they receive their loan or subsequently. The suggested actual wording to amend the regulation is as follows: Upon employment in an eligible subject area, as defined by the board at the time of loan application or subsequently, the borrower will be entitled to cancellation of all loans received under this program.

DEPARTMENT OF INSURANCE
CHAPTER 69
Statutory Authority: 1976 Code Sections 38-3-110; 38-73-500; 1-23-10, *et seq*.

Notice of Drafting:

The South Carolina Department of Insurance proposes to draft Regulation 69-55, Five Percent Credit For Employers With Qualified Drug Testing Programs. Interested persons should submit their views in writing to: Dean F. Kruger, South Carolina Department of Insurance, Post Office Box 100105, Columbia, South Carolina 29202-3105.

Synopsis:

The purpose of this regulation is to provide guidance regarding S.C. Code Ann. Section 41-1-15, requiring an insurance premium rate credit of at least five percent for all insured employers and applicant employers which have established a qualified workplace drug and alcohol prevention program. This credit must be allowed to all qualified insured employers and all qualified applicant employers for all workers= compensation casualty insurance policies issued or renewed within this State on, or after, October 1, 1997.

DEPARTMENT OF INSURANCE
CHAPTER 69
Statutory Authority: 1976 Code Sections 38-3-110; 38-73-70; 1-23-10, *et seq*.

Notice of Drafting:

The South Carolina Department of Insurance proposes to draft Regulation 69-56, Hurricane Deductible. Interested persons should submit their views in writing to: Dean F. Kruger, South Carolina Department of Insurance, Post Office Box 100105, Columbia, South Carolina 29202-3105.

Synopsis:

The purpose of this regulation is to clarify the process for insurers to inform policyholders who purchase property policies insuring the peril of wind/hail which contains wind/hail deductibles and to require the signature of the policyholder prior to changing the amount of the wind/hail deductible.

DEPARTMENT OF LABOR, LICENSING AND REGULATION
OFFICE OF ELEVATOR AND AMUSEMENT RIDE SAFETY

CHAPTER 71

Statutory Authority: 1976 Code Section 41-16-40

Notice of Drafting:

The Department of Labor, Licensing and Regulation proposes to amend its regulations that address fall protection from elevator car tops and confined space entry protection for workers entering elevator pits. Interested persons may submit comments to Gene Matthews, Deputy Director, Division of Labor, South Carolina Department of Labor, Licensing and Regulation, P.O. Box 11329, Columbia, South Carolina 29211

Synopsis:

Persons who perform maintenance, repair, and inspection duties on the tops of elevator cars are subject to a variety of fall hazards. Some of these hazards are best addressed by modification of the elevator car tops to minimize the need for personal protective equipment. Similarly, persons who perform maintenance, repair, and inspection duties in elevator pits may be subject to hazards associated with confined space entry. Because the owner of the elevator facility is often in the best position to identify and correct these dangerous conditions, the department is considering amendment of the safety standards for elevators to address the safety of these workers.

The proposed regulations will address guardrails, ladders, personal fall protection anchorage points, confined space hazard evaluation, and staffing for compliance with the permit required confined space entry provisions of the South Carolina Occupational Safety and Health regulations. SCRR 71-I-1910.146.

DEPARTMENT OF LABOR, LICENSING AND REGULATION
STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS

CHAPTER 49

STATUTORY AUTHORITY: 1976 CODE SECTION 40-22-130

Notice of Drafting:

The South Carolina State Board of Registration for Professional Engineers and Land Surveyors is considering drafting regulations that would require all persons that have not renewed their license by September 30 to file a notarized affidavit certifying that they have not been engaged in the practice of engineering or land surveying during the period their certificates were not in a current status. These regulations would also eliminate the requirement that a registrant seeking to renew within three months of the lapse of his or her license be issued a new certificate number and eliminate the requirement that such a registrant file a new application to renew within the three month "grace period." Interested persons should submit their views in writing to Mr. Jay Pitts, Administrator, South carolina state board of registration for professional engineers and land surveyors, department of labor, licensing and regulation, post office box 11329, columbia, south carolina 29211-1329.

Synopsis:

Regulations are being considered that will require all persons that have not renewed their license by September 30 to file a notarized affidavit certifying that they have not been engaged in the practice of engineering or land

surveying during the period their certificates were not in a current status. These regulations also consider to eliminating the requirement that a registrant seeking to renew within three months of the lapse of his or her license be issued a new certificate number and eliminating the requirement that such a registrant file a new application to renew within the three month "grace period."

Document No. 2481
DEPARTMENT OF EDUCATION
CHAPTER 43
Statutory Authority: S. C. Code Ann. Sections 59-5-60, 59-67-20, and 59-67-410 and S. C. Code Ann. Section 59-67-570

43-80 (N) (T). Operation of Public Pupil Transportation Services

Preamble:
The department proposes to amend the Student Transportation Regulation, Parts "N" and "T," to reflect the availability of a new Commercial Driver's License for school bus drivers offered by the Department of Public Safety. This change requires new regulatory language to address school bus driver physical examinations and the State Board of Education's acceptance of the School Bus Commercial Driver's License as verification of a driver's competency to operate a school bus.

The Department of Education desires to align its school bus driver testing requirements with those of the Department of Public Safety. The Department of Public Safety is establishing new commercial driver's licenses that are specifically designed for school bus drivers. The Department of Public Safety will offer a School Bus Driver Restricted Commercial Driver's License (CDL-P restricted) and a Commercial Driver's License with a School Bus Driver Endorsement (CDL-S endorsement). These new commercial driver's licenses will contain testing requirements equivalent to the existing testing requirements of the Department of Education School Bus Driver's Certification. The proposed regulation will allow the Department of Education to accept the new school bus driver commercial driver's licenses as appropriate tests to determine a school bus driver's competency. The Department of Education will provide school bus driver training as a prerequisite for a driver qualifying to take either of the new school bus driver commercial driver's licenses. To determine a school bus driver's ability to perform these physical actions, the proposed regulation directs the Department of Education to establish a physical performance test as an extension of the school bus driver's commercial driving test.

Section-by-Section Discussion

(1) To coordinate and consolidate the Department of Education school bus driver certification requirements with the Commercial Driver's License requirements of the Department of Public Safety.

43-80 Part N Several amendments are made to align the physician's certification for school bus drivers with the requirements of a regular Commercial Driver's License.

43-80 Part T An amendment is made to establish the Department of Education School Bus Driver's Certification as a training requirement before a school bus driver can be tested for a School Bus Commercial Driver's License. The amendment also requires that the School Bus Driver's Certification training and testing may only be administered by individuals so certified by the Department of Education.

(2) To clarify existing regulatory language.

43-80 Part N An amendment deletes language referencing a date that has passed and is no longer relevant.

(3) To add text to address a new concern associated with the safe operation of school buses.

43-80 Part T Text is added to establish a school bus driver performance test to assure that drivers have the physical ability to operate a school bus and evacuate students.

Notice of Public Hearing and Opportunity for Public Comment:
Should a hearing be requested pursuant to S. C. Code Ann. Section 1-23-110(A)(3) (Supp. 1998), as amended, such a hearing shall be held on January 11, 2000, at 3:30 p.m., at the Rutledge Building. Interested members can submit written comments on the proposed regulation by writing to Mr. Donald Tudor, Director of Transportation, South Carolina Department of Education, Room 209-A, Rutledge Building, 1429 Senate Street, Columbia, S. C. 29201. Comments must be received no later than 5:00 p.m. on December 20, 1999.

Preliminary Fiscal Impact Statement:

There will be no increased costs to the State or its political subdivisions.

Statement of Need and Reasonableness:

DESCRIPTION OF REGULATION: 43-80. (N) (T) Operation of Public Pupil Transportation Services

Purpose: Regulation 43-80. Parts N and T are being amended to coordinate with school bus driver licensing changes proposed by the South Carolina Department of Public Safety, to clarify the regulations, and to enhance the transportation safety of school students.

Legal Authority: The legal authority for Regulation 43-80 is S. C. Code Ann. Sections 59-5-60, 59-67-20, and 59-67-410 (1990) and Section 59-67-570 (Supp. 1998).

Plan for Implementation: The proposed amendments will take effect upon approval by the General Assembly and publication in the *State Register*. The proposed amendments will be implemented by providing the regulated community with copies of the regulation.

DETERMINATION OF NEED AND REASONABLENESS OF THE PROPOSED REGULATION BASED ON ALL FACTORS HEREIN AND EXPECTED BENEFITS: The proposed amendments will simplify the training and licensing of school bus drivers and improve the safety of the school transportation program.

DETERMINATION OF COSTS AND BENEFITS: There are no anticipated additional costs. The proposed amendments will accelerate the training and licensing of school bus drivers and improve target training and testing to the direct needs of school bus service.

UNCERTAINTIES OF ESTIMATES: None

EFFECT ON ENVIRONMENT AND PUBLIC HEALTH: None

DETRIMENTAL EFFECT ON THE ENVIRONMENT AND PUBLIC HEALTH IF THE REGULATION IS NOT IMPLEMENTED: There will be no detrimental effects on the environment and public health if this regulation is not implemented.

Text:

The full text of this regulation is available on the South Carolina General Assembly Home Page: **www.lpitr.state.sc.us.** If you do not have access to the Internet, the text may be obtained from the promulgating agency.

Document No. 2482
DEPARTMENT OF EDUCATION
CHAPTER 43
Statutory Authority: S.C. Code Ann. Section 59-5-60 (1) (1990) and Section 59-139-10 (A)(1) (Supp. 1998)

43-265. Parenting/Family Literacy

Preamble:

The Department of Education proposes Regulation 43-265, Parenting/Family Literacy, to assist school districts in establishing quality parenting and family literacy programs. The proposed regulation will clarify goals, define program components and specify service delivery methods. The Notice of Drafting was published in the State Register on July 23, 1999.

Notice of Public Hearing and Opportunity for Public Comment:

Should a hearing be requested pursuant to S.C. Code Ann. Section 1-23-110(A)(3) (Supp. 1998) of the 1976 Code, as amended, such a hearing shall be held on January 11, 1999, at 3:00 P.M., at the Rutledge Building. Interested persons can submit written comments on the proposed regulation by writing to Dr. Jim Ray, Deputy Superintendent for District and Community Services, 906 Rutledge Building, 1429 Senate Street, Columbia, South Carolina, 29201. Comments must be received by no later than 5:00 P.M. on December 20, 1999.

Preliminary Fiscal Impact Statement: None

Statement of Need and Reasonableness:

DESCRIPTION OF REGULATION: 43-265, Parenting/Family Literacy

Purpose: The regulation is being proposed to meet the requirements of the Early Childhood Development and Academic Assistance Act of 1993 and to assist school districts in establishing effective parenting and family literacy programs.

Legal Authority: The legal authority for Regulation 43-265 is S.C. Code Ann. Section 59-5-60(1) (1990) and Section 59-139-10(A)(1) (Supp. 1998).

Plan for Implementation: The proposed new regulation will take effect upon the approval of the General Assembly and after publication in the State Register. The proposed regulation will be implemented by providing school districts with copies of the regulation.

DETERMINATION OF NEED AND REASONABLENESS OF THE PROPOSED REGULATION BASED ON ALL FACTORS HEREIN AND EXPECTED BENEFITS:
In compliance with The Early Childhood Development and Academic Assistance Act of 1993, the Office of Early Childhood Education of the State Department of Education proposes a regulation for establishing parenting/family literacy programs. These programs support parents in their role as principal teachers of their preschool children.

DETERMINATION OF COSTS AND BENEFITS:
School districts will benefit by receiving clarification of program requirements and by defining program components consistent with state and federal legislation. Implementation of research-based practices and literacy-oriented models are emphasized.

EFFECT ON ENVIRONMENT AND PUBLIC HEALTH: None

DETRIMENTAL EFFECT ON THE ENVIRONMENT AND PUBLIC HEALTH IF THE REGULATION IS NOT IMPLEMENTED: There will be no detrimental effect on the environment and public health if the regulation is not implemented.

Summary of Preliminary Assessment Report: None

Text:

The full text of this regulation is available on the South Carolina General Assembly Home Page: **www.lpitr.state.sc.us.** If you do not have access to the Internet, the text may be obtained from the promulgating agency.

Document No. 2483
DEPARTMENT OF EDUCATION
CHAPTER 43
Statutory Authority: S.C. Code Ann. Section 59-5-60(1) and
S.C. Code Ann. Section 59-26-10, *et seq.*

R43-205.1. Assisting, Developing, and Evaluating Professional Teaching (ADEPT).

Preamble:

In 1998, the State Board of Education adopted regulations implementing ADEPT. Comments were received from educators during the pilot year (1997-98) and the first year of full implementation (1998-99). The State Board of Education is proposing amendments to the regulation that address the following concerns expressed by educators: (1) add flexibility to the evaluation requirements for teachers employed from out of state; (2) add specifications for the composition of evaluation teams; (3) specify a date for notifying continuing contract teachers of a recommendation for formal evaluation.

Notice of Public Hearing:

Should a public hearing be requested pursuant to S.C. Code Ann. Section 1-23-110(A)(3) (Supp. 1998) such a hearing will be conducted at 1429 Senate Street on January 11, 2000, at 9:00 a.m. Written comments may be directed to Dr. Sandra Rowe, Director, Office of Teacher Education and Certification, 1600 Gervais Street, Columbia, South Carolina 29201, no later than 5:00 p.m. on December 20, 1999.

Preliminary Fiscal Impact Statement:

No additional costs to districts beyond current funding level.

Statement of Need and Reasonableness:

DESCRIPTION OF REGULATION: R43-205.1, Assisting, Developing, and Evaluating Professional Teaching (ADEPT).

Purpose: The proposed amendments will add flexibility to the evaluation requirements for teachers employed from out of state, add specifications for the composition of evaluation teams, and specify a date for notifying continuing contract teachers of a recommendation for formal evaluation.

Legal Authority: The legal authority for regulation 43-205.1 is S.C. Code Ann. Section 59-5-60(1) (1990) and S.C. Code Ann. Section 59-26-10, *et seq.* (Supp. 1998)

Plan for Implementation: The proposed amendments will take effect upon the approval of the General Assembly and after publication in the State Register. The proposed amendments will be implemented by

providing all deans of teacher education programs, district superintendents, principals, and educational organizations with copies of the amended regulation.

DETERMINATION OF NEED AND REASONABLENESS BASED ON ALL FACTORS HEREIN AND EXPECTED BENEFITS:

The proposed amendments will add flexibility to the evaluation requirements for teachers employed from out of state, add specifications for the composition of evaluation teams, and specify a date for notifying continuing contract teachers of a recommendation for formal evaluation.

DETERMINATION OF COSTS AND BENEFITS:

The proposed regulation amendments would allow more flexibility in certain areas while maintaining high standards for those who teach and those who evaluate teachers. No additional costs to districts beyond current funding level.

UNCERTAINTIES OF ESTIMATES: None

EFFECT ON THE ENVIRONMENT AND PUBLIC HEALTH: None

DETRIMENTAL EFFECT ON THE ENVIRONMENT AND PUBLIC HEALTH IF THE REGULATION IS NOT IMPLEMENTED: None

Text:

The full text of this regulation is available on the South Carolina General Assembly Home Page: **www.lpitr.state.sc.us.** If you do not have access to the Internet, the text may be obtained from the promulgating agency.

Document No. 2479
DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL
CHAPTER 61
Statutory Authority: 1976 Code Section 44-55-10 et seq.

R.61-58. State Primary Drinking Water Regulations

Preamble:

The department proposes to amend R.61-58. to adopt federal requirements promulgated December 16, 1998, under the National Primary Drinking Water Regulations. These changes are to meet federal requirements of the Disinfectants and Disinfection Byproducts Rule as well as the Interim Enhanced Surface Water Treatment Rule.

Also, the department is proposing minor changes to Consumer Confidence Reports regulations to maintain consistency with the reporting requirements of the Disinfectant and Disinfection Byproducts Rules and minor changes to unregulated contaminant monitoring to eliminate some monitoring of small systems which is no longer required by federal regulation.

These regulations will comply with federal law pursuant to 40 CFR parts 141 and 142 (final Disinfectants and Disinfection Byproducts Rule and final Interim Enhanced Surface Water Treatment Rule) published in the Federal Register on December 16, 1998 (63 FR 69478 and 63 FR 69390)

A Notice of Drafting for the proposed regulations was published in the State Register on April 23, 1999. A preliminary fiscal impact statement or assessment report is not required.

Section-by-Section Discussion of Proposed Revisions

SECTION	CHANGE
R.61-58(B)	Thirteen (13) new definitions are added in alphabetical/numerical order. In addition, the definition of "Ground water under the direct influence of surface water" is revised to include Cryptosporidium for systems serving at least 10,000 people.
R.61-58.5.S(2) & (3)	Revised to establish dates for phasing out the existing Total Trihalomethane (TTHM) Maximum Contaminant Level (MCL) for different system sizes and types to coincide with the effective dates of the new MCL included in the amendment.
R.61-58.5.T(1), T(1)(a) & (b)	Revised to eliminate compliance dates which have already passed. (T(1)(a) & (b) are deleted.
R.61-58.5.T(14)	New subsection added to establish dates for phasing out other existing TTHM requirements for different system sizes and types to coincide with new requirements included in this amendment.
R.61-58.5.CC(1)	Revised introductory paragraph to remove the requirement for systems serving less than 10,000 people from monitoring for unregulated contaminants listed in R.61-58.5(CC) and to delete an outdated reference. List of contaminants remain the same.
R.61-58.5.GG	This new section is added to add new MCLs for disinfection byproducts and to establish effective dates for the new MCLs for different system sizes and types.
R.61-58.5.HH	This new section is added to add new Maximum Residual Disinfectant Levels (MRDLs) for disinfectants and to establish effective dates for the new MCLs for different system sizes and types.
R.61-58.6.E(1)	Revised introductory paragraph to add requirements for public notification for systems which exceed the MRDL for a disinfectant residual. Subitems E(1)(a), (1)(a)(i)and (ii) remain the same.
R.61-58.6.E(1)(a)(iii)	Subsection item is revised to include a violation of the chlorine dioxide MRDL as an acute risk to human health
R.61-58.6.E(3)	Revised to add requirements for providing a copy of the most recent public notification for any outstanding violation of a MRDL to new billing units.
R.61-58.6.E(5)(www) through (bbbb)	New subitems are added to include mandatory health effects language for Chlorine, Chloramines, Chlorine Dioxide, disinfection byproducts (DBPs) and treatment techniques for DBPs, Bromate and Chlorite.
R.61-58.7.B(4)	Revised to add requirement that analyses conducted for compliance with monitoring requirements of R.61-58.13 be conducted by a certified laboratory.
R.61-58.7.C(7)	Revised to add requirement that analyses conducted for compliance with monitoring requirements of R.61-58.13 be conducted by a certified laboratory.

R.61-58.10.A	Revised to include additional requirements for public water systems which use surface water source or ground water source under the influence of surface water and serve at least 10,000 people. This section is also revised stylistically to correct the outline.
R.61-58.10.C(2)(f)	Revised to make compliance dates consistent with new disinfection byproduct control requirements.
R.61-58.10.E(1)(c)	Added to include additional requirements for public water systems which serve at least 10,000 people.
R.61-58.10.E(4)	Revised to include additional requirements for public water systems which serve at least 10,000 people.
R.61-58.10.H	New section added to include new requirements for public water systems which use surface water source or ground water source under the influence of surface water and serve at least 10,000 people.
R.61-58.12.C(4)(d)(v)(C)	Revised to make consistent with new turbidity regulations for public water systems which use surface water source or ground water source under the influence of surface water and serve at least 10,000 people.
R.61-58.12.D(4)	Revised introductory paragraph to clarify requirements. Subitems D(4)(a) and (b) remain the same.
R.61-58.12.D(5)	Added new requirement that systems include health effects language for TTHM if they exceed the proposed MCL for TTHM between now and when the proposed MCL goes into effect.
R.61-58.12 Appendix A	1. Total Coliform Bacteria is amended to change wording for Total Coliform MCL
R.61-58.12 Appendix A	73. TTHM (Total Trihalomethanes)is amended to change MCLG for TTHM to "n/a".
R.61-58.12 Appendix B	1. Total Coliform Bacteria is amended to change wording for Total Coliform MCL.
R.61-58.12 Appendix B	68. Tetrachloroethylene is amended to remove reference to leaching from PVC pipe as a source of the contaminant.
R.61-58.12 Appendix B	73. TTHM (Total Trihalomethanes)is amended to change MCLG for TTHM to 'n/a'.
R.61-58.13	New section added to establish criteria for the control of disinfectant residuals, disinfection byproducts and disinfection byproduct precursors.

Notice of Staff Informational Forum:

Staff of the Department of Health and Environmental Control invites members of the public and regulated community to attend a staff-conducted informational forum to be held on January 10, 2000, at 2:00 p.m. in Room 1625 of the S.C. Department of Health and Environmental Control office at 2600 Bull Street, Columbia, S.C. The

purpose of the forum is to answer questions, clarify issues and receive comments from interested persons on the proposed amendment of R.61-58. Comments received shall be considered by staff in formulating the final draft proposal for submission to the Board of Health and Environmental Control for public hearing scheduled for the February 10, 2000, board meeting, as noticed below.

Interested persons are also provided an opportunity to submit written comments on the proposed amendment to the staff forum by writing to Glenn Trofatter at Bureau of Water, S.C. Department of Health and Environmental Control, 2600 Bull Street, Columbia, S.C. 29201; Fax number (803) 898-4215. Written comments must be received no later than 10:00 a.m. on January 10, 2000. Comments received by the deadline shall be submitted in a Summary of Public Comments and Department Responses for the Board's consideration at the public hearing, as noticed below.

Copies of the text of the proposed amendments for public notice and comment may be obtained by contacting Glenn Trofatter at Bureau of Water, S.C. Department of Health and Environmental Control, 2600 Bull Street, Columbia, S.C. 29201: Telephone number (803) 898-4233; Fax number (803) 898-4215.

Notice of Public Hearing and Opportunity for Public Comment Pursuant to S.C. Code Sections 1-23-110 and 1-23-111:

Interested members of the public and regulated community are invited to make oral or written comments on the proposed amendment to R.61-58 at a public hearing to be conducted by the Board of Health and Environmental Control at its regularly scheduled meeting on February 10, 2000. The public hearing will be held in the Board Room of the Commissioner's Suite, Third Floor, Aycock Building of the Department of Health and Environmental Control at 2600 Bull Street, Columbia, S.C. The board meeting commences at 10:00 a.m. at which time the board will consider items in the order presented on its agenda. The agenda is published by the Department ten days in advance of the meeting. Persons desiring to make oral comments at the hearing are asked to limit their statements to five minutes and, as a courtesy, are asked to provide written comments of their presentations for the record.

Interested persons are also provided an opportunity to submit written comments on the proposed amendment of R.61-58 by writing to Glenn Trofatter at the Bureau of Water, S.C. Department of Health and Environmental Control, 2600 Bull Street, Columbia, S.C. 29201; Fax number (803) 898-4215. Written comments must be received no later than 10:00 a.m. on January 19, 2000. Comments received by the deadline shall be submitted in a Summary of Public Comments and Department Responses for the board's consideration at the public hearing, as noticed above.

Copies of the text of the proposed amendments for public hearing may be obtained by contacting Glenn Trofatter at Bureau of Water, S.C. Department of Health and Environmental Control, 2600 Bull Street, Columbia, S.C. 29201: Telephone number (803) 898-4233; Fax number (803) 898-4215.

Statement of Need and Reasonableness

The Statement of Need and Reasonableness was determined by staff analysis pursuant to S.S. Code Section 1-23-115(C)(1)-(3) and (9)-(11):

DESCRIPTION OF REGULATION: Amendment to Regulation 61-58, State Primary Drinking Water Regulations

Purpose: The department is proposing this amendment to revise R.61-58 in order to adopt federal regulations commonly referred to as the Stage 1 Disinfection Byproducts Rule and the Interim Enhanced Surface Water Treatment Rule as well as make minor changes concerning Consumer Confidence Reports and Unregulated Contaminant Monitoring. This amendment will comply with federal law and ensure consistency with the Safe Drinking Water Act and the National Primary Drinking Water Regulations and to enable the Department to retain

primary enforcement responsibility for the public drinking water supervision program. This action is mandated by the 1996 amendments to the Federal Safe Drinking Water Act. Proposed regulations will comply with 40 CFR Parts 141 and 142. The final Stage 1 Disinfection Byproducts Rule and the Interim Enhanced Surface Water Treatment Rule were published in the December 16, 1998 Federal Register.

Legal Authority: The State Primary Drinking Water Regulations are authorized by S.C. Code Ann. 44-55-10 et. seq., State Safe Drinking Water Act.

Plan for Implementation: The proposed amendments would be incorporated within R.61-58 upon publication in the State Register as a final regulation. The proposed amendment will be implemented in the same manner in which the existing regulation is implemented.

DETERMINATION OF NEED AND REASONABLENESS OF THE PROPOSED REGULATION BASED ON ALL FACTORS HEREIN AND EXPECTED BENEFITS:

The adoption of these regulations will allow the department to continue being the primacy agency for the implementation of the Safe Drinking Water Act and the National Primary Drinking Water Regulations in the state. This action is mandated by the 1996 amendments to the Federal Safe Drinking Water Act. The proposed regulations will comply with 40 CFR Parts 141 and 142.

DETERMINATION OF COSTS AND BENEFITS: The "Interim Enhanced Surface Water Treatment Rule" (IESWTR) will result in increased costs to public water systems for improved turbidity treatment, monitoring, and disinfection benchmarking. The rule will only apply to surface water systems which serve at least 10,000 people. EPA has estimated that the total national annualized costs for implementing the IESWTR is $307 million. This estimate includes annualized costs to utilities ($192 million), start-up and annualized monitoring costs to utilities ($99 million), and start-up and annual monitoring costs to states ($16 million). According to national EPA estimates, 92 percent of affected households will incur less than a cost of $1 per month; 7 percent will incur an increase in cost between $1 and $5 per month; and other households may face additional costs of up to $8 per month. EPA has estimated the national benefit resulting from this rule range from $263 million to $1.24 billion.

The Stage 1 "Disinfection By-products Rule" (DBPR) will result in increased costs to public water systems for improved treatment to reduce public exposure to potentially harmful disinfection by-products and additional monitoring. This rule will apply to all public water systems which add a chemical disinfectant. EPA has estimated that the total national annualized cost for implementing the Stage 1 DBPR is $702 million. This estimate includes annualized treatment costs to utilities ($593 million), start-up and annualized monitoring costs to utilities ($91.7 million) and start-up and annualized monitoring costs to States ($17.3 million). According to national EPA estimates, 95 percent of affected households will incur less than a cost of $1 per month; 4 percent will incur an increase in cost between $1 and $10 per month; and other households may face additional costs of up to $33.40 per month. EPA has estimated the national benefit resulting from this rule range from zero to $4 billion.

Costs incurred by public water systems or the state due to minor changes in unregulated contaminant monitoring and Consumer Confidence Reports will be minimal.

UNCERTAINTIES OF ESTIMATES: considerable
EFFECT ON ENVIRONMENT AND HEALTH: There will be no effect on the environment. The amendments will promote public health through improved drinking water quality.

DETRIMENTAL EFFECT ON THE ENVIRONMENT AND PUBLIC HEALTH IF THE REGULATION IS NOT IMPLEMENTED: There will be no detrimental effect on the environment if the amendments are not implemented. However, there could be a substantial adverse impact on public health if the amendments are not implemented. Failure of the department to adopt these federal regulations will likely result in the department loosing primacy to enforce the Safe Drinking Water Act and the National Primary Drinking Water Regulations.

Text:

The full text of this regulation is available on the South Carolina General Assembly Home Page: **www.lpitr.state.sc.us.** If you do not have access to the Internet, the text may be obtained from the promulgating agency.

Document No. 2480
DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL
CHAPTER 61
Statutory Authority: S.C. Code Sections 13-4-10, 13-7-40 and 13-7-45 et seq. and Supplement

R.61-64, X-Rays (Title B)

Preamble:

The department proposes to amend R.61-64, Sections 1.16, 4.2.3 and 5.3.3, regarding rules and regulations for radiation control. On June 30, 1999, Act No. A101 was signed by Governor Hodges amending Title 44 of the Code of Laws of South Carolina by adding Chapter 74 so as to enact the "Medical Radiation Health and Safety Act" and create the South Carolina Radiation Quality Standards Association. The act requires the department to promulgate regulations consistent with Chapter 74, which establishes minimum standards of education and provides for the appropriate examination and certification of persons using x-ray equipment on humans for diagnostic and therapeutic purposes, thereby superceding the requirements currently outlined in R.61-64.4.2.3 and R.61-64.5.3.3. The department will be responsible for the enforcement of Section 44-74-50 of Chapter 74. The proposed amendment will ensure the applicable areas of R.61-64 are consistent with the provisions in Act No. A101 and Chapter 74 from Title 44. Specific areas the department seeks to address in the regulations include: requiring a registrant to ensure that operators of diagnostic and therapeutic x-ray equipment possess a valid, current certificate from the South Carolina Radiation Quality Standards Association; prohibiting a registrant from employing a person as an operator when certification has not been obtained; requiring operators to be under the direction and supervision of a licensed practitioner; requiring an operator who has been approved to display a current training certificate; maintaining of training records; and, assessing civil penalties for violating the aforementioned provisions. The department also seeks to add regulations to exempt dentists and their auxiliaries provided they meet the requirements of the South Carolina Dental Practice Act.

A Notice of Drafting for the proposed amendment was published in the State Register August 27, 1999. Comments were considered in formulating the proposed revisions. See Discussion of Proposed Revisions below and Statement of Need and Reasonableness herein.

Discussion of Proposed Revisions

SECTION	REVISION
R.61-64.1.16.1.12	New subsection was added to include civil penalties for repeated failure by a registrant to ensure operators possess a valid, current certificate from the South Carolina Quality Standards Association (SCQSA).
R.61-64.1.16.1.13	New subsection was added to include civil penalties for repeated incidents of a person not certified by the SCQSA indicating they are authorized to operate x-ray equipment when the person is not certified.
R.61-64.1.16.2.16	New subsection was added to include civil penalties for failure by a registrant to ensure operators poses a valid, current certificate from the South Carolina Quality Standards Association (SCQSA).

R.61-64.1.16.2.17 New subsection was added to include civil penalties for an incident of a person not certified by the SCQSA indicating they are authorized to operate x-ray equipment when the person is not certified.

R.61-64.1.16.2.18 New subsection was added to include civil penalties for repeated failures by a registrant to ensure that an x-ray equipment operator receives the required training.

R.61-64.1.16.3.8 New subsection was added to include civil penalties for failure by a registrant to ensure that an x-ray equipment operator receives the required training.

R.61-64.1.16.4.6 New subsection was added to include civil penalties for repeated failures by a registrant to display each operator's current certificate from the SCQSA.

R.61-64.1.16.5.7 New subsection was added to include civil penalties for failure by a registrant to display each operator's current certificate from the SCQSA.

R.61-64.4.2.3 Subsection was revised to add the requirement that x-ray equipment operators must be a licensed practitioner or certified by the SCQSA, add a definition of a radiologic technologist, and indicate the effective date of this part. Subsection was also revised to delete reference to other training requirements.

R.61-64.4.2.3.1 Text of existing subsection and subitems were deleted and replaced by new text to require that only persons certified by the SCQSA shall operate diagnostic x-ray equipment.

R.61-64.4.2.3.2 Text of existing subsection was deleted and replaced by new text to prohibit a registrant from allowing persons not certified by the SCQSA to operate diagnostic x-ray equipment.

R.61-64.4.2.3.3 Existing text of subsection was deleted and replaced by new text to prohibit persons holding a certificate from the SCQSA from operating diagnostic x-ray equipment except under the direction and supervision of a licensed practitioner and unless directed by a prescription from a licensed practitioner.

R.61-64.4.2.3.4 New subsection was added to prohibit persons taking specific types of x-rays from indicating they are authorized to do so when they are not certified by the SCQSA.

R.61-64.4.2.3.5 New subsection was added to permit student or resident physicians to take x-rays without a certificate from the SCQSA as long as they are under the supervision of a licensed practitioner or a certified radiologic technologist.

R.61-64.4.2.3.6 New subsection was added to require the registrant to display each operator's current certificate from the SCQSA.

R.61-64.4.2.3.7 New subsection was added to require registrants to ensure operators have received specific equipment and procedural training, and that such training records be maintained and available for Department review.

R.61-64.4.2.3.8 New subsection was added to exempt dentists and their auxiliaries who meet the requirements of the S.C. Dental Practice Act.

R.61-64.5.3.3 Subsection title was revised to indicate the effective date of the requirements.

R.61-64.5.3.3.1 Subsection item was revised to add the requirements that therapeutic equipment operators must be a licensed practitioner or certified by the SCQSA, and add a definition of a radiation therapist. Revised to delete a reference to other training requirements.

R.61-64.5.3.3.2 Subsection item was revised to change numbering.

R.61-64.5.3.3.3 Text of existing subsection and subitems were deleted and replaced by new text to require that only persons certified by the SCQSA shall operate therapeutic equipment.

R.61-64.5.3.3.4 New subsection was added to prohibit a registrant from allowing persons not certified by the SCQSA to operate therapeutic equipment. Existing section R.61-64.5.3.3.4 was renumbered to R.61-64.5.3.3.9.

R.61-64.5.3.3.5 New subsection was added to prohibit persons holding a certificate from the SCQSA from operating therapeutic equipment except under the direction and supervision of a licensed practitioner and unless directed by a prescription from a licensed practitioner. Existing R.61-64.5.3.3.5 was renumbered to R.61-64.5.3.3.10.

R.61-64.5.3.3.6 New subsection was added to prohibit persons taking specific types of x-rays from indicating they are authorized to operate therapeutic equipment when they are not certified by the SCQSA. Existing R.61-64.5.3.3.6 is renumbered to R.61-64.5.3.3.11.

R.61-64.5.3.3.7 Text of existing subsection item was deleted and replaced by new text to permit student or resident physicians to apply ionizing radiation to humans without a certificate from the SCQSA as long as they are under the supervision of a licensed practitioner or a certified radiation therapist.

R.61-64.5.3.3.8 New subsection was added to require the registrant to display each operator's current certificate from the SCQSA. Existing R.61-64.5.3.3.8 was renumbered to R.61-64.5.3.3.12.

R.61-64.5.3.3.4 Existing subsection was renumbered to R.61-64.5.3.3.9 and revised to require registrants to ensure operators have received specific equipment and procedural training, and that such training records be maintained and available for Department review. Revisions also delete requirements for instruction due to being superseded by the requirements by the SCQSA. Existing subsection subitems R.61-64.5.3.3.4.1 through R.61-64.5.3.3.4.8 are deleted.

R.61-64.5.3.3.5 Existing subsection was renumbered to R.61-64.5.3.3.10 and revised to delete a reference to training as a radiation therapy technologist due to being superseded by the requirements by the SCQSA.

R.61-64.5.3.3.6 Existing subsection was renumbered to R.61-64.5.3.3.11. There are no other changes.

R.61-64.5.3.3.8 Existing subsection was renumbered to R.61-64.5.3.3.12. Subsection item R.61-64.5.3.3.12.1.1 was revised to renumber for grammatical conciseness. R.61-64.5.3.3.12.1.2 was revised to change numbering and delete reference to mrem since there are now other terms to refer to dose. R.61-64.5.3.3.12.5 was revised to renumber and delete a reference to "the specific facility to be operated" and to delete redundant wording.

R.61-64.5.3.3.9 Existing subsection was revised to change numbering to R.61-64.5.3.3.13. No other changes.

R.61-64.5.3.3.10 Existing subsection was revised to change numbering to R.61-64.5.3.3.14. No other changes.

Notice of Staff Informational Forum

Staff of the Department of Health and Environmental Control invite interested members of the public to attend a staff-conducted informational forum to be held on January 10, 2000, at 10:00 a.m. in the Peeples Auditorium, third floor of the Sims Building at the Department of Health and Environmental Control at 2600 Bull Street, Columbia, S.C. 29201.

Interested persons are also provided an opportunity to submit written comments to Pamela Dukes at South Carolina Department of Health and Environmental Control, Radiological Health Branch, 2600 Bull Street, Columbia, S.C. 29201. Written comments must be received no later than 5:00 p.m. January 10, 2000. Comments received by the deadline will be considered in formulating the final proposed amendment for public hearing before the Board in a Summary of Public Comments and Department Responses for consideration at the public hearing.

Copies of the proposed regulation for public notice and comment may be obtained by contacting Pamela Dukes at South Carolina Department of Health and Environmental Control, Radiological Health Branch, 2600 Bull Street, Columbia, S.C. 29201, or by calling (803)737-7400.

Notice of Board Public Hearing and Opportunity for Public Comment Pursuant to S.C. Code Sections 1-23-111:

Interested members of the public and regulated community are invited to make oral or written comments on the proposed regulation at a public hearing to be conducted by the Board of Health and Environmental Control at its regularly-scheduled meeting on February 10, 2000, to be held in Room 3420 (Board Room) of the Commissioner's Suite, third floor, Aycock Building, of the Department of Health and Environmental Control, 2600 Bull Street, Columbia, S.C. The board meeting commences at 10:00 a.m. at which time the board will consider items on its agenda in the order presented. The order for presentations for public hearing will be noted in the board's agenda to be published by the department ten days in advance of the meeting. Persons desiring to make oral comments at the hearing are asked to limit their statement to five minutes or less, and as a courtesy are asked to provide written copies of their presentation for the record.

Interested persons are also provided an opportunity to submit written comments on the proposed amendments by writing to Pamela Dukes at South Carolina Department of Health and Environmental Control, Radiological Health Branch, 2600 Bull Street, Columbia, S.C. 29201, or by calling (803)737-7400. Comments received by the deadline shall be submitted to the board in a Summary of Public Comments and Department Responses for consideration at the public hearing.

Copies of the proposed regulation for public hearing may be obtained by contacting Pamela Dukes at South Carolina Department of Health and Environmental Control, Radiological Health Branch, 2600 Bull Street, Columbia, S.C. 29201, or by calling (803)737-7400.

Preliminary Fiscal Impact Statement:

There will be minimal cost to the state and its political subdivisions with the implementation of the proposed amendments. The regulated community will be impacted if the current x-ray equipment operators are not licensed practitioners or are not certified by the American Registry of Radiologic Technologists. All persons who apply for certification must pay a yet to be determined fee to the South Carolina Radiation Quality Association. The added costs of certification and any training required to obtain or maintain certification are not due to or addressed by R.61-64. However, the Act does provide for resident physicians or students enrolled in and attending a school or college of medicine, osteopathy, chiropractic, podiatry, or radiologic technology. It also provides exceptions, upon written examination and the payment of an initial certification fee, for persons employed by a licensed

practitioner to take x-rays for a minimum of three years of the immediately preceding five years, and persons employed by a licensed practitioner to take x-rays during one of the past three years immediately before the Act's effective date of June 30, 1999.

Statement of Need and Reasonableness:

The statement of need and reasonableness was determined by staff analysis pursuant to S.C. Code Section 1-23-115(C)(1)-(3) and (9)-(11):

DESCRIPTION OF REGULATION: Amendment of Regulation 61-64, X-Rays (Title B), Rules and Regulations for Radiation Control.

Purpose: The department is proposing these amendments to R.61-64, X-Rays (Title B), to incorporate the requirements of Act No. A101 that amends Title 44 of the Code of Laws of South Carolina so as to enact the "Medical Radiation Health and Safety Act" and create the South Carolina Radiation Quality Standards Association. The act requires the department to promulgate regulations consistent with Chapter 74 of Title 44. The act establishes minimum standards of education and provides for the appropriate examination and certification of persons using x-ray equipment on humans for diagnostic and therapeutic purposes, thereby superceding the requirements currently outlined in R.61-64.4.2.3 and R.61-64.5.3.3. The proposed amendment will ensure the applicable areas of R.61-64 are consistent with the provisions in Act No. 101. Specific areas the Department seeks to address in the regulations include: requiring a registrant to ensure that operators of diagnostic and therapeutic x-ray equipment possess a valid, current certificate from the South Carolina Radiation Quality Standards Association; prohibiting a registrant from employing a person as an operator when certification has not been obtained; requiring operators to be under the direction and supervision of a licensed practitioner; requiring an operator who has been approved to display a current training certificate; maintaining of training records; and, assessing civil penalties for violating the aforementioned provisions. The department also seeks to add regulations to exempt dentists and their auxiliaries provided they meet the requirements of the South Carolina Dental Practice Act.

Legal Authority: The Rules and Regulations for Radiation Control (Title B) are authorized by the S.C. Code Section 13-7-45 *et seq*. and Supplement.

Plan for Implementation: The proposed amendments will make changes to and be incorporated into R.61-64 upon approval of the General Assembly and publication in the State Register. The proposed amendments will be implemented by providing the regulated community with copies of the regulation and a detailed explanation of the regulations, to include how the department will inspect facilities for compliance and enforcement action, if needed.

DETERMINATION OF NEED AND REASONABLENESS OF THE PROPOSED REGULATIONS BASED ON ALL FACTORS HEREIN AND EXPECTED BENEFITS:

The changes are needed to implement the requirement by Act No. A101 which requires the department to promulgate regulations consistent with Chapter 74 of Title 44. The Act establishes minimum standards of education and provides for the appropriate examination and certification of persons using x-ray equipment on humans for diagnostic and therapeutic purposes, thereby superceding the requirements currently outlined in R.61-64.4.2.3 and R.61-64.5.3.3.

The proposed changes are reasonable because they will be implemented with existing staff. The staff will be responsible for reviewing certificates during inspections, citing violations if a certificate is not present, taking appropriate action against facilities with uncertified operators, and investigating complaints regarding uncertified operators.

The expected benefits of the proposed regulatory changes are increased health and safety to the public due to increased training requirements, and increased accountability of the regulated community due to the requirement that they must ensure certified persons are operating the x-ray equipment.

DETERMINATION OF COSTS AND BENEFITS: There will be minimal cost to the state and its political subdivisions with the implementation of the proposed amendments. The regulated community will be impacted if the current x-ray equipment operators are not licensed practitioners or are not certified by the American Registry of Radiologic Technologists. All persons who apply for certification must pay a yet to be determined fee to the South Carolina Radiation Quality Association. The added costs of certification and any training required to obtain or maintain certification are not due to or addressed by R.61-64. However, the act does provide for resident physicians or students enrolled in and attending a school or college of medicine, osteopathy, chiropractic, podiatry, or radiologic technology. It also provides exceptions, upon written examination and the payment of an initial certification fee, for persons employed by a licensed practitioner to take x-rays for a minimum of three years of the immediately preceding five years, and persons employed by a licensed practitioner to take x-rays during one of the past three years immediately before the act's effective date of June 30, 1999.

UNCERTAINTIES OF ESTIMATES: The department is unsure of how many current x-ray operators will be required to be certified through the South Carolina Radiation Quality Standards Association.

EFFECT ON ENVIRONMENT AND PUBLIC HEALTH: There will be no effect upon the environment. The amendments will have a positive effect upon the public health of the citizens of the state due to increased training requirements.

DETRIMENTAL EFFECTS ON THE ENVIRONMENT AND PUBLIC HEALTH IF THE REGULATIONS ARE NOT IMPLEMENTED: There will be no detrimental effects on the environment if these changes are not implemented. The public health of the citizens would not be reduced over that which is present with the current regulations, but it would be increased with more stringent requirements for operator training.

Text:

The full text of this regulation is available on the South Carolina General Assembly Home Page: www.lpitr.state.sc.us. If you do not have access to the Internet, the text may be obtained from the promulgating agency.

Document No. 2484
COMMISSION ON HIGHER EDUCATION
CHAPTER 62
Statutory Authority: 1976 Code Section 59-103-45 (As Amended)

00-0 Closure, Reduction, Expansion, or Consolidation of an Institution

Preamble:

The General Assembly passed Act 359, which identified critical success factors for academic quality in the institutions of higher learning in the state and the performance indicators by which these success factors can be measured. The act included the requirement that the commission develop standards and measurement mechanisms for the critical success factors for these performance indicators. Regulations for this process are found in Chapter 62, Section 62-700 through 706). In addition, the General Assembly directed the commission to base the higher education funding formula on an institution's achievement of these standards and authorized the commission to reduce, expand, or consolidate any institutions that do not meet these standards. Beginning July 1, 1999, the commission is authorized to close institutions that do not meet these standards. Finally, the act required that the commission develop regulations detailing the process for the closure, reduction, expansion, or consolidation of an institution. The proposed regulations address the later requirement.

Notice of Public Hearing and Opportunity for Public Comment:

Interested members of the public and the regulated community are invited to make written comments on the proposed regulation by writing to Michael Smith at the S.C. Commission on Higher Education, 1333 Main Street, Suite 200, Columbia, SC. These comments should be received by Dr. Smith not later than December 15, 1999.

Interested persons are invited to make oral or written comments on the proposed regulation at a public hearing to be conducted by the Commission on Higher Education at its regularly scheduled meeting on January 6, 2000, to be held in the Main Conference Room of the Commission at 1333 Main Street, Suite 200, Columbia, SC. The commission meeting begins at 10:30 a.m. at which time the commission will consider items on its agenda in the order presented.

Preliminary Fiscal Impact Statement:

The Commission on Higher Education estimates that these will be no increased costs incurred by the State and its political subdivisions in complying with the proposed regulation.

Statement of Need and Reasonableness:

Description of Regulation: 62, Performance Benchmarks and Funding

Legal Authority: 1976 Code Sections 59-103-45

Plan for Implementation: The proposed regulation will take effect upon approval by the General Assembly and publication in the *State Register*.
Determination of Need and Reasonableness of the proposed regulation based on all factors herein and expected benefits:

The regulation is needed to clarify the requirements and processes associated with the closure, reduction, expansion or consolidation of an institution. The regulation details what level of performance would initiate the process associated with closure, reduction, expansion, or consolidation, and describes the requirements of each

step, including recommendations to the General Assembly. The steps in the process are designed to ensure due process for the entities involved.

Determination of Costs and Benefits:

Implementation of the regulations does not have any direct costs associated with them. Costs associated with the steps are focused on the costs associated with the development of a performance improvement plan. However, these costs should reflect sound business practices and should already be in place on each campus.

The estimated cost savings to the state for closure, reduction, expansion, or consolidation based on 1999 appropriation range from $0 to $736,302,546, the amount appropriated to the state's public colleges and universities.

Uncertainties of Estimates:

Estimates depend on whether an institution scores in the lowest possible performance funding score.

Effect on Environment and Public Health:

None

Detrimental Effects on the Environment and Public Health if the Regulations are Not Implemented:

None

Text:

The full text of this regulation is available on the South Carolina General Assembly Home Page: www.lpitr.state.sc.us. If you do not have access to the Internet, the text may be obtained from the promulgating agency.

Document No. 2485
DEPARTMENT OF INSURANCE
CHAPTER 69
Statutory Authority: 1976 Code Sections 38-3-110; 38-73-730; 38-73-735; 38-73-760; 1-23-10, *et seq*.

Preamble:

The South Carolina Department of Insurance proposes to repeal the Automobile Insurance Credit and Discount Plans, Regulation 69-13.2. This repeal is based on the passage of 1997 Act 154. The basis for this proposal is that there is no longer a need for uniform credit and discount plans because insurers can now establish their own plans in South Carolina as a result of the passage of 1997 Act 154. Act 154 established the new automobile insurance system effective March 1, 1999.

Notice of Public Hearing:

The Administrative Law Judge Division will conduct a public hearing for the purpose of receiving oral comments on January 13, 2000 at 2:00 in Hearing Room 1 at 1205 Pendleton Street, Columbia, South Carolina 29202. Interested persons should submit their views in writing to: Dean F. Kruger, South Carolina Department of Insurance, Post Office Box 100105, Columbia, South Carolina 29202-3105.

Text:
Regulation 69-13.2 Automobile Insurance Credit and Discount Plans is repealed.

Preliminary Fiscal Impact Statement:
No additional state funding is requested.

Statement of Need and Reasonableness:
This regulation is no longer necessary because of the passage of Act 154 of 1997.

Summary of Preliminary Assessment Report:
The proposed repeal of this regulation will not result in a substantial economic impact.

Document No. 2486
DEPARTMENT OF INSURANCE
CHAPTER 69
Statutory Authority: 1976 Code Sections 38-3-110; 38-73-730; 38-73-735; 38-73-760; 1-23-10, *et seq*.

Preamble:

The South Carolina Department of Insurance proposes to repeal the Refusal To Write, Nonrenewal and Cancellation of Insurance on Motor Vehicles, Regulation 69-13. This repeal is based on the passage of 1997 Act 154. The basis for this proposal is that the issues of refusing to write, nonrenewing and canceling insurance on motor vehicles have been addressed with the passage of 1997 Act 154. Act 154 established the new automobile insurance system effective March 1, 1999.

Notice of Public Hearing:

The Administrative Law Judge Division will conduct a public hearing for the purpose of receiving oral comments on January 13, 2000, at 4:00 in Hearing Room 1 at 1205 Pendleton Street, Columbia, South Carolina 29202. Interested persons should submit their views in writing to: Dean F. Kruger, South Carolina Department of Insurance, Post Office Box 100105, Columbia, South Carolina 29202-3105.

Text:

Regulation 69-13, Refusal To Write, Nonrenewal and Cancellation of Insurance on Motor Vehicles is repealed.

Preliminary Fiscal Impact Statement:

No additional state funding is requested.

Statement of Need and Reasonableness:

This regulation is no longer necessary because of the passage of Act 154 of 1997.

Summary of Preliminary Assessment Report:

The proposed repeal of this regulation will not result in a substantial economic impact.

Document No. 2487
DEPARTMENT OF INSURANCE
CHAPTER 69
Statutory Authority: 1976 Code Sections 38-3-110; 38-73-730; 38-73-735; 38-73-760; 1-23-10, *et seq*.

Preamble:

The South Carolina Department of Insurance proposes to repeal the South Carolina Merit Rating Plan, Regulation 69-13.1. This repeal is based on the passage of 1997 Act 154. The basis for this proposal is that there is no longer a need for a uniform merit rating plan because insurers can now establish their own merit rating plans as a result of the passage of 1997 Act 154. Act 154 established the new automobile insurance system effective March 1, 1999.

Notice of Public Hearing:

The Administrative Law Judge Division will conduct a public hearing for the purpose of receiving oral comments on January 13, 2000 at 11:00 in Hearing Room 1 at 1205 Pendleton Street, Columbia, South Carolina 29202. Interested persons should submit their views in writing to: Dean F. Kruger, South Carolina Department of Insurance, Post Office Box 100105, Columbia, South Carolina 29202-3105.

Text:
Regulation 69-13.1, South Carolina Merit Rating Plan is repealed.

Preliminary Fiscal Impact Statement:
No additional state funding is requested.

Statement of Need and Reasonableness:
This regulation is no longer necessary because of the passage of Act 154 of 1997.

Summary of Preliminary Assessment Report:
The proposed repeal of this regulation will not result in a substantial economic impact.

Document No. 2488
DEPARTMENT OF LABOR, LICENSING AND REGULATION
CONTRACTORS' LICENSING BOARD
CHAPTER 29
Statutory Authority: 1976 Code Sections; 40-11-60, 40-11-260, 40-11-410 and 40-1-70

Preamble:

The South Carolina Contractors' Licensing Board is drafting regulations that will add an examination requirement for a boiler classification; change process piping and public electrical utility classifications to conform with computerized records**;** specify a form for submission of owner-prepared financial statements; and clarify the General Contractors-Highway classification.

Section by Section Discussion:

Section 29-1. Examination Requirements; Classifications.
This regulation adds the classification of "boilers" to those requiring a technical examination prior to licensure, in accordance with Section 40-11-410(4)(o).

Section 29-10. Mechanical Contractors Licensure Requirements.
This regulation renames the designation for process piping classification from P1 and P2 to 1P and 2P, and for public electrical utility classifications from U1 and U2 to 1U and 2U in order to provide for consistency between the statute, the regulation, and the computer programming required for proper administration of the licensing program**.**

Section 29-11. Owner-Prepared Financial Statement.
This new regulation specifies a form for submission of owner-prepared financial statements, in order to provide uniformity of such statements permitted by law so as to allow for orderly licensing and renewal of licenses for contractors.

Section 29-12. Highway Incidental Classification.
This new regulation clarifies the General Contractors-Highway classification, so as to group five related classifications into one, designated HIGHWAY (HY), for ease of administration.

Notice of Public Hearing and Opportunity for Public Comment:

Should a hearing be requested pursuant to Section 1-23-110(b) of the 1976 S.C. Code, as amended, such hearing will be conducted at the Administrative Law Judge Division at 10 a.m. on Tuesday, January 11, 2000. Written comments may be directed to Ronald E. Galloway, Administrator, South Carolina Contractors' Licensing Board, Department of Labor, Licensing and Regulation, Post Office Box 11329, Columbia, South Carolina 29211-1329, no later than 5:00 p.m., on Monday December 27, 1999.

Preliminary Fiscal Impact Statement: There will be no additional cost incurred to the State or any political subdivision.

Statement of Need and Reasonableness: The need for revision to Regulation 29-1 is to provide for an examination for the boiler classification, pursuant to the recent statutory change to Section 40-11-410(4)(o). The need for revising Regulation 29-10 is to provide for consistency between the statute, the regulation, and the computer programming required for proper administration of the licensing program for process piping and public electrical utility classifications. New Regulation 29-11 is necessitated by the General Assembly's having determined that uniformity of owner-prepared financial statements permitted by law is necessary in order to allow for orderly licensing and renewal of licenses for contractors. New Regulation 29-12 is needed in order to group five related classifications into one, designated Highway (HY), for ease of administration.

DESCRIPTION OF REGULATION:

Purpose: To add a boiler classification to those required to pass a technical examination prior to licensure; to change the designations for process piping and public electrical utility classifications; to specify a form for submission of owner-prepared financial statements; and to clarify the General Contractors-Highway classification.

Legal Authority: Statutory Authority: 1976 Code**,** Title 40, Chapter 11, Section 60; Title 40, Chapter 11, Section 260; Title 40, Chapter 11, Section 410; and Title 40, Chapter 1, Section 70.

Plan for Implementation: An Emergency Regulation has been filed to specify the form for submission of owner-prepared financial statements; therefore, it is in effect at this time until January 26, 2000. These proposed permanent regulations will be implemented by staff immediately upon passage by the General Assembly by disseminating information to affected parties by newsletter and changing appropriate forms.

DETERMINATION OF NEED AND REASONABLENESS BASED ON ALL FACTORS HEREIN AND EXPECTED BENEFITS: The need for revision to Regulation 29-1 is to provide for an examination for the boiler classification, pursuant to recent statutory change to Section 40-11-410(4)(o). The need for revising Regulation 29-10 is to provide for consistency between the statute, the regulation, and the computer programming required for proper administration of the licensing program for process piping and public electrical utility classifications**.** New Regulation 29-11 is necessitated by the General Assembly's having determined that uniformity of owner-prepared financial statements permitted by law is necessary in order to allow for orderly licensing and renewal of licenses for contractors. New Regulation 29-12 is needed in order to group five related classifications into one, designated Highway (HY), for ease of administration.

DETERMINATION OF COSTS AND BENEFITS: There is no cost incurred by the State or any political subdivision.

UNCERTAINTIES OF ESTIMATES: There are no uncertainties of estimates concerning these regulations.

EFFECT ON THE ENVIRONMENT AND PUBLIC HEALTH: These regulations will have no effect on the environment and public health of this State.

DETRIMENTAL EFFECT ON THE ENVIRONMENT AND PUBLIC HEALTH IF THE REGULATION IS NOT IMPLEMENTED: These regulations will have no detrimental effect on the environment and public health of this State if the regulations are not implemented in this State.

Text:

The full text of this regulation is available on the South Carolina General Assembly Home Page: www.lpitr.state.sc.us. If you do not have access to the Internet, the text may be obtained from the promulgating agency.

DOCUMENT NO. 2489
DEPARTMENT OF LABOR, LICENSING AND REGULATION
BOARD OF FUNERAL SERVICE
CHAPTER 57
Statutory Authority: 1976 Code Section 40-19-05

Preamble:

The Board of Funeral Service is proposing to amend Regulation 57-04, 57-12, & 57-13. The changes would amend existing regulations to make minor corrections, clarify that fees cover an annual licensing period, and adjust requirements under the Code of Ethics.

Section by Section Discussion:

Regulation 57-04(C)
Corrects the name of the national board that accredits courses of studies in embalming.

Regulation 57-12(A)(2)
Clarifies that fees cover an annual licensing period.

Regulation 57-13(E)(2)
Deletes the requirement for a funeral director to contact a clergy prior to making funeral arrangements.

Notice of Public Hearing and Opportunity for Public Comment:

Should a hearing be requested pursuant to Section 1-23-110(b) of the 1976 Code, as amended, such hearing will be conducted at the Administrative Law Judge Division at 3 p.m. on Tuesday, January 11, 2000. Written comments may be directed to Lou Ann Pyatt, Administrator, S.C. Board of Funeral Service, Department of Labor, Licensing and Regulation, Post Office Box 11329, Columbia, South Carolina 29211-1329, no later than 5:00 p.m., Monday, December 27, 1999.

Preliminary Fiscal Impact Statement: There will be no increased costs to the State or its political subdivisions.

Statement of Need and Reasonableness:

DESCRIPTION OF REGULATION:

Purpose: To revise existing regulations by making minor changes/corrections to include clarifying the annual licensing period, and adjusting requirements under the Code of Ethics.

Legal Authority: Statutory Authority: 1976 Code Title 40, Chapter 19, Section 05.

Plan for Implementation: Administratively, the Board will implement the requirements set forth in the proposed amendments to the regulations by informing licensees through written communications and newsletters.

DETERMINATION OF NEED AND REASONABLENESS OF THE PROPOSED REGULATION BASED ON ALL FACTORS THEREIN AND EXPECTED BENEFITS: These regulations will further clarify licensing requirements.

DETERMINATION OF COSTS AND BENEFITS: These regulations will revise existing regulations by making minor changes/corrections to include clarifying the annual licensing period, and adjusting requirements under the Code of Ethics.

UNCERTAINTIES OF ESTIMATES: There are no uncertainties of estimates concerning these regulations.

EFFECT ON ENVIRONMENT AND PUBLIC HEALTH: These regulations will have no effect on the environment and public health of this State.

DETRIMENTAL EFFECT ON THE ENVIRONMENT AND PUBLIC HEALTH IF THE REGULATION IS NOT IMPLEMENTED: There will be no detrimental effect on the environment and public health of this State if these regulations are not implemented in this State.

Text:

The full text of this regulation is available on the South Carolina General Assembly Home Page: **www.lpitr.state.sc.us.** If you do not have access to the Internet, the text may be obtained from the promulgating agency.

Document No. 2474
DEPARTMENT OF REVENUE
CHAPTER 117
Statutory Authority: 1976 Code Section 12-4-320

Regulation: 117-8

Preamble:

The purpose of this proposal is to clarify the responsibilities of the Department of Revenue and the Comptroller General with respect to property taxation and fees in lieu of property taxes and to establish a set of agreed procedures for both agencies to follow in administering their respective areas of responsibility. This proposal is also designed to serve as a guide for county officials to use in interacting with these two agencies. The goal of the proposal is to provide consistent, accurate, and timely advice to state and local officials who depend upon the information in order to perform their duties and to deal with the public in a consistent manner.

Notice of Public Hearing:

The S.C. Department of Revenue has scheduled a public hearing before the Administrative Law Judge Division in the Edgar Brown Building (Second Floor) on the Capitol Complex in Columbia, South Carolina (1205 Pendleton Street) for January 25, 2000 at 9:00 a.m. if the requests for a hearing meet the requirements of Code Section 1-23-110(A)(3). The public hearing, if held, will address a proposal by the department to clarify the responsibilities of the Department of Revenue and the Comptroller General with respect to property taxation and fees in lieu of property taxes and to establish a set of agreed procedures for both agencies to follow in administering their respective areas of responsibility. The department will be asking the Administrative Law Judge Division, in accordance with S.C. Code Ann. 1-23-111 (Supp. 1996), to issue a report that the proposed regulation is needed and reasonable.

Comments:

All comments concerning this proposal should be mailed to the following address by December 28, 1999:

S.C. Department of Revenue
Administrative Division - Mr. Meredith Cleland
P.O. Box 125
Columbia, South Carolina 29214

Preliminary Fiscal Impact Statement:

There will be no impact on state or local political subdivisions expenditures in complying with this proposed legislation.

Statement of Need and Reasonableness:

The regulation is needed to reduce taxpayer uncertainty and local government uncertainty as to the appropriate statutory authority of each agency with respect to property taxation and fees in lieu of property taxes. The regulation is also reasonable in that it sets forth the jurisdiction of each agency by function.

Summary of the Preliminary Assessment Report:

The purpose of this proposal is to clarify the responsibilities of the Department of Revenue and the Comptroller General with respect to property taxation and fees in lieu of property taxes and to establish a set of agreed procedures for both agencies to follow in administering their respective areas of responsibility. The Department of

Revenue will implement this proposal in the same manner as it implements all other regulations. Any cost involved in this regulation would be negligible. Costs, in fact, should decline as less taxpayer confusion will lead to more voluntary compliance with the tax laws.

Preliminary Assessment Report:

Under the provisions of law governing the preliminary assessment report (Code Section 1-23-115), the SC Department of Revenue will address items (1) through (3) of Code Section 1-23-115(C) as follows:

1. The purpose of this proposal is to clarify the responsibilities of the Department of Revenue and the Comptroller General with respect to property taxation and fees in lieu of property taxes and to establish a set of agreed procedures for both agencies to follow in administering their respective areas of responsibility. The Department of Revenue will implement this proposal in the same manner as it implements all other regulations.

2. The regulation is needed to reduce taxpayer uncertainty and local government uncertainty as to the appropriate statutory authority of each agency with respect to property taxation and fees in lieu of property taxes. The regulation is also reasonable in that it sets forth the jurisdiction of each agency by function.

3. The regulation will benefit the public and local government since it will provide guidance as to the provisions of the law administered by each agency with respect to property taxation and fees in lieu of property taxes. Any cost involved in this regulation would be negligible.

Under the provisions of law governing the preliminary assessment report (Code Section 1-23-115), the SC Department of Revenue will address items (9) through (11) of Code Section 1-23-115(C) as follows:

9. There is very little uncertainty associated with estimating the benefits of this regulation. All individuals would be similarly treated by these provisions.

10. The proposed regulation would not have any effect on the environment and public health.

11. If the proposed regulation is approved, there would not be a detrimental effect on the environment and public health.

Text:

The full text of this regulation is available on the South Carolina General Assembly Home Page: **www.lpitr.state.sc.us.** If you do not have access to the Internet, the text may be obtained from the promulgating agency.

Document No. 2475
SOUTH CAROLINA STATE LIBRARY
CHAPTER 75
Statutory Authority: 1976 Code Section 60-1

75-1. Use of State Aid Funds

Preamble:

The South Carolina State Library proposes to revise the regulations used for the distribution of State Aid to County Libraries. The proposed revisions update State Aid regulations to accommodate advancements in library and information technology and provide increased flexibility and local discretion in the expenditure of funds. They address such issues as hiring of staff, automation and networking, staff training and long range planning. The regulations were last revised in 1980.

Notices of Drafting for the proposed changes were published in the State Register on September 24, 1999. No comments were received as a result of this notice. Public library directors are the primary audience for these regulations in their administration of state funding at the county level. They were given the opportunity to comment of these changes at a meeting held on August 11, 1999. All county public library directors attended this meeting. Their suggestions are incorporated in the proposed regulations.

Section-by-Section Discussion

These regulations contain only one section. Major changes from current regulations include:

Proposed regulations allow State Aid to be used for 100% of salaries of appropriate local staff, including part time staff. Current regulations limit state funding to 40% of specific full time salaried employees.

Proposed regulations remove the cap of state funding as a percentage of total public library funding. Current regulations limit state funding to 40% of total public library funding.

Proposed regulations allow state funding to be used for staff development and training, consultant services. Current regulations do not permit such expenditures.

Proposed regulations require public libraries to provide remote access to statewide databases administered by the State Library. This service was not available in 1980.

Proposed regulations require public libraries to develop long range plans. Current regulations do not require such a plan.

Proposed regulations expand the definition of library materials to include those in all formats. Current regulations only permit the expenditure of state funds on books, periodicals and audiovisual materials.

Proposed regulations authorize the State Library to waive regulations upon petition by a library system for a period not to exceed one year. There is no current authority for the State Library to do this.

Notice of Public Hearing and Opportunity for Public Comment:

Written comments may be directed to James B. Johnson, Jr., Director, South Carolina State Library, P. O. Box 11469, Columbia, South Carolina 29211, or e-mail Jim@Leo.scsl.state.sc.us no later than 5:00 p.m. on December 27, 1999. Should a public hearing be requested, such a hearing will be conducted on December 30, 1999 at the State Library.

Preliminary Fiscal Impact Statement:

There are no increased costs to the State or its political subdivisions.

Statement of Need and Reasonableness:

Description of Regulation: 75-1. Use of State Aid Funds

Purpose: The adoption of these revised regulations will provide public libraries more flexibility in the administration of state funding.

Legal Authority: The legal authority for Regulation 75-1 is Section 60-1, 1976 S.C. Code of Laws.

Plan for Implementation: The proposed changes will take effect upon approval by the General Assembly and publication in the State Register.

Text:

The full text of this regulation is available on the South Carolina General Assembly Home Page: **www.lpitr.state.sc.us.** If you do not have access to the Internet, the text may be obtained from the promulgating agency.

Document No. 2472
DEPARTMENT OF TRANSPORTATION
CHAPTER 63
Statutory Authority: 1976 Code Section 28-11-50

63-321 – 322 Relocation of Displaced Persons

Preamble:

The South Carolina Department of Transportation proposes to amend its regulations concerning relocation of displaced persons, 63-321 and 63-322, to conform with current federal regulations and set forth a new procedure for review and appeal of relocation assistance eligibility decisions. Under the new procedures, an initial review would be conducted by the SCDOT Executive Director and an appeal to the Administrative Law Judge Division could be taken from the executive director's decision.

A Notice of Drafting for the proposed amendments was published in the State Register on September 24, 1999.

Section-By-Section Discussion:

SECTION CITATION:	EXPLANATION OF CHANGE:
63-321	This section would be deleted in its entirety. It is outdated and unnecessary since the relocation benefit amounts are determined by federal regulation.
63-322 A	The words "Review and" were added in two placed in the last sentence.
63-322 B	The requirement that a request for review be submitted on an SCDOT form is replaced by a statement that a form may be requested from the department for use in filing a request for review. The time limit for filing a request for review is described more precisely.

63-322 C-D The former procedure for a hearing by a panel of SCDOT officials is replaced. Under the new procedures, an initial review would be conducted by the SCDOT Executive Director and an appeal to the Administrative Law Judge Division could be taken from the executive director's decision.

63-322 E A new section is added allowing a person appealing from a relocation assistance decision to be represented by legal counsel at their own expense. This section mirrors the federal regulations

Notice of Public Hearing and Opportunity for Public Comment

Should a public hearing be requested pursuant to Section 1-23-110(b) of the 1976 Code of Laws, as amended, such a hearing will be conducted at 955 Park Street, Columbia, South Carolina, on December 29, 1999. Written comments or requests for a hearing may be directed to Deborah Brooks Durden, Governmental Liaison, PO Box 191, Columbia, South Carolina 29202. To be considered, comments should be received no later than December 26, 1999.

Preliminary Fiscal Impact Statement:

The South Carolina Department of Transportation estimates that there will be no additional costs incurred by the State or its political subdivisions in complying with the proposed amendments.

Statement of Need and Reasonableness:

DESCRIPTION OF REGULATION 63-321. Relocation of Displaced Persons

Purpose of amendment: SCDOT proposes to repeal its regulation describing benefits allowable for moving expenses of persons displaced by highway construction. This regulation is inaccurate and unnecessary since the benefit payments are controlled by Federal regulations.

Legal Authority: The legal authority for regulation 63-321 is section 28-11-50, SC Code of Laws.

Plan for Implementation: The repeal of 63-321 will have no effect on the practices of SCDOT.

DESCRIPTION OF REGULATION 63-322: Review of Applications for Relocation Assistance Payments.

Purpose of Amendment: To amend the procedure for review and appeal of relocation assistance eligibility decisions.

Legal Authority: The legal authority for regulation 63-322 is section 28-11-50, SC Code of Laws.

Plan for Implementation: The proposed amendments will take effect upon approval by the General Assembly and publication in the *State Register*.

DETERMINATION OF NEED AND REASONABLENESS OF PROPOSED REGULATIONS BASED ON ALL FACTORS HEREIN AND EXPECTED BENEFITS:

The proposed amendments will benefit the public by deleting confusing and outdated information from the regulations and by establishing a review and appeal procedure designed to handle appeals in an expeditious and fair manner while promoting public confidence in the process.

DETERMINATION OF COSTS AND BENEFITS: There will be no costs imposed by these changes to the State. The Administrative Law Judge Division can absorb these appeals (approximately two per year) into their existing work load.

UNCERTAINTIES OF ESTIMATES: None.

EFFECT ON ENVIRONMENTAL AND PUBLIC HEALTH: None.

DETRIMENTAL EFFECTS ON ENVIRONMENTAL AND PUBLIC HEALTH IF THE REGULATIONS ARE NOT IMPLEMENTED: None.

Text:

The full text of this regulation is available on the South Carolina General Assembly Home Page: **www.lpitr.state.sc.us.** If you do not have access to the Internet, the text may be obtained from the promulgating agency.

Document No. 2473
DEPARTMENT OF TRANSPORTATION
CHAPTER 63
Statutory Authority: 1976 Code Section 28-11-50

63-300 – 309 Contractor Prequalification, Disqualification and Suspension

Preamble:

The South Carolina Department of Transportation proposes to amend its regulations concerning Contractor Prequalification, Disqualification and Suspension to eliminate the procedure for classification and rating of contractors based on net liquid assets. In the future, financial responsibility of contractors will be assured through the bonding process. The new regulations will also amend the procedure for review and appeal of a disqualification or suspension of a contractor. Under the amended regulations, the SCDOT Executive Director will conduct an initial review and issue a decision. An appeal from that decision may be taken to the Administrative Law Judge Division.

A Notice of Drafting for the proposed amendments was published in the State Register on September 24, 1999.

SECTION-BY-SECTION DISCUSSION:

EXPLANATION OF CHANGE:

63-300	All references to classifications and ratings deleted.
63-301	References to classifications, ratings, and furnishing financial records deleted.
63-302	Provides for a certificate to be furnished to prequalified contractors.
63-303	Requirement that the sworn statement of the contractor include a statement of assets is deleted and the requirement for a description of the contractor's equipment is amended to include leased equipment.
63-304	References to classifications deleted.
63-305 - 308	References to ratings and classifications deleted.
63-306(E)	Procedure for disqualification and suspension amended to include civil sanctions and to provide for an appeal of an agency decision to the Administrative Law Judge Division.

Notice of Public Hearing and Opportunity for Public Comment:

Should a public hearing be requested pursuant to Section 1-23-110(b) of the 1976 Code of Laws, as amended, such a hearing will be conducted at 955 Park Street, Columbia, South Carolina, on December 28, 1999. Written comments or requests for a hearing may be directed to Deborah Brooks Durden, Governmental Liaison, P.O. Box 191, Columbia, South Carolina 29202. To be considered, comments should be received no later than December 26, 1999.

Preliminary Fiscal Impact Statement

The South Carolina Department of Transportation estimates that there will be no additional costs incurred by the State or its political subdivisions in complying with the proposed amendments.

Statement of Need and Reasonableness:

DESCRIPTION OF REGULATION 63-300 - 309. Contractor Prequalification, Disqualification, and Suspension.

Purpose of Amendments: To revise the standards for certifying contractors who are eligible to bid on SCDOT construction projects to remove the requirement for a financial statement and to revise the procedure for appeal of an agency decision to disqualify or suspend a contractor.

Legal Authority: The legal authority for regulation 63-300-309 is section 57-3-110, SC Code of Laws.

Plan for Implementation: The proposed amendments will take effect on approval by the General Assembly and publication in the *State Register*.

DETERMINATION OF NEED AND REASONABLENESS OF PROPOSED REGULATIONS BASED ON ALL FACTORS HEREIN AND EXPECTED BENEFITS:

The proposed amendments will benefit the public by saving costs for what is currently a redundant process. SCDOT will rely on required bonding to assure the financial ability of the contractor to perform the contract. The proposed amendments to the procedure for review and appeal of disqualification or suspension of a contractor will benefit the public by instituting an efficient and fair procedure for review and appeal while promoting public confidence in the fairness of the process.

DETERMINATION OF COSTS AND BENEFITS:

There will be no costs to the State imposed by these changes. The Administrative Law Judge Division can absorb any appeals which may occur into their existing work load. SCDOT rarely receives appeals of this nature..

Text:
The full text of this regulation is available on the South Carolina General Assembly Home Page: **www.lpitr.state.sc.us.** If you do not have access to the Internet, the text may be obtained from the promulgating agency.

Filed: October 15, 1999, 8:30 am

Document No. 2476
DEPARTMENT OF LABOR, LICENSING AND REGULATION
CONTRACTORS' LICENSING BOARD
CHAPTER 29
Statutory Authority: 1976 Code Section 40-11-60; 40-11-260

Emergency Situation:

The General Assembly has determined that uniformity of owner-prepared financial statements permitted by law is necessary in order to allow for orderly licensing and renewal of licenses for contractors. Accordingly, a form is required to be established by regulation. It is, therefore, imperative that a form for such statements be specified by regulation and distributed immediately, so that contractors will be able to submit such forms in a timely manner, allowing them to provide professional services to the public without interruption.

Text:

29-11. Owner-Prepared Financial Statement.
The latest revision of a financial balance sheet form (FBS) issued by the department must be completed by an owner filing an owner-prepared financial statement. The department will furnish this form to all applicants for initial licensing or renewal of license in the applicable group limitations. The form must contain assets, liabilities and total net worth of the licensee, in addition to other pertinent information requested by the department.

Statement of Need and Reasonableness: The need to immediately develop and distribute a form is imperative in order to aid in the licensing and renewal process without disrupting the provision of contractors' services to consumers.

DESCRIPTION OF REGULATION: Regulation 29-11 specifies the information to be captured on a financial balance sheet form (FBS) to be used for owner-prepared financial statements. The regulation also addresses the distribution of the form.

Purpose: The proposed new regulation provides a uniform means for reporting financial information related to licensees who are not required to have their financial statements prepared by a public accountant or CPA.

Legal Authority: Statutory Authority: 1976 Code Title 40, Chapter 11, Section 60; and Title 40, Chapter 11, Section 260(A)(4)(b), (c), and (d).

Plan for Implementation: All applicants for initial licensure in certain group limitations, and renewing licensees in those group limitations will be mailed a financial balance sheet form (FBS) with their application packages or renewal forms.

DETERMINATION OF NEED AND REASONABLENESS BASED ON ALL FACTORS HEREIN AND EXPECTED BENEFITS: The need to immediately develop and distribute a form is imperative in order to aid in the licensing and renewal process without disrupting the provision of contractors' services to consumers.

DETERMINATION OF COSTS AND BENEFITS: There will be no additional cost concerning this regulation. The expected benefit is less cost for the agency to process applications.

UNCERTAINTIES OF ESTIMATES: There are no uncertainties of estimates concerning this regulation.

EFFECT ON THE ENVIRONMENT AND PUBLIC HEALTH: This regulation will have no effect on the environment and public health of this State.

DETRIMENTAL EFFECT ON THE ENVIRONMENT AND PUBLIC HEALTH IF THE REGULATION IS NOT IMPLEMENTED: This regulation will have no detrimental effect on the environment and public health of this State if the regulation is not implemented in this State.

Filed: October 29, 1999, 8:30 am

Document No. 2478
DEPARTMENT OF LABOR, LICENSING AND REGULATION
MANUFACTURED HOUSING BOARD
CHAPTER 19
Statutory Authority: 1976 Code Section 40-1-50, 40-29-50 and 40-29-110

Emergency Situation:

The South Carolina Manufactured Housing Board has determined that the current fee charged for examination by the board is not sufficient to cover the costs of the examinations provided by the vendor, Experior Assessments, Inc. Therefore, it is imperative that the fee be changed as soon as possible in order to continue to allow qualified applicants to be properly licensed so as to provide professional services to the public.

Text:

19-425.26. Fees.

C. When applicable, the examination fee is not to exceed fifty dollars ($50.00).

Statement of Need and Reasonableness: The need to immediately change the examination fee is imperative in order to prevent disruption in providing reliable and valid examinations for manufactured housing candidates for licensure who must be determined minimally competent to properly perform their duties as licensees prior to working with the public.

DESCRIPTION OF REGULATION: Regulation 19-425.26. C. is revised by striking the reference to an application fee and changing the examination fee to reflect the actual cost for examining candidates using a testing vendor, rather than in-house testing.

Purpose: The proposed regulation will delete obsolete language and allow a reasonable fee for examinations.

Legal Authority: Statutory Authority: 1976 Code Title 40, Chapter 1, Section 50 (D); Title 40, Chapter 29, Section 50 (14); and Title 40, Chapter 29, Section 110 (D).

Plan for Implementation: All applicants in the process of applying for retaking a failed examination will be afforded the opportunity to be examined at the current fee in place at the time of issuance of a one-year letter of eligibility. All applicants for initial examination will be required to pay the new fee.

DETERMINATION OF NEED AND REASONABLENESS ON ALL FACTORS HEREIN AND EXPECTED BENEFITS: The need to immediately establish a new fee is imperative in order to prevent disruption in providing reliable and valid examinations for manufactured housing candidates for licensure who must be determined minimally competent to properly perform their duties as licensees prior to working with the public.

DETERMINATION OF COSTS AND BENEFITS: There will be no additional cost regarding this regulation. The expected benefit to the public is that licensees who are examined with valid and reliable instruments of measurement will better ensure that the public is dealing with competent licensees.

UNCERTAINTIES OF ESTIMATES: There are no uncertainties of estimates concerning this regulation.

EFFECT ON THE ENVIRONMENT AND PUBLIC HEALTH: This regulation will have no effect on the environment and public health of this State.

DETRIMENTAL EFFECT ON THE ENVIRONMENT AND PUBLIC HEALTH IF THE REGULATION IS NOT IMPLEMENTED: There will be no detrimental effect on the environment and public health if this regulation is not implemented in this State.

Filed: October 21, 1999, 11:00 am

Document No. 2477
DEPARTMENT OF NATURAL RESOURCES
CHAPTER 123
Statutory Authority: 1976 Code Section 50-11-2200

Emergency Situation:

This amended regulation sets seasons, bag limits and methods of hunting and taking of wildlife on Wildlife Management Areas. The current regulations on the Francis Marion Hunt Unit do not prohibit catching and transporting feral hogs alive except during Special Feral Hog Hunts. Hogs are being captured with dogs, transported to other areas on the Francis Marion and released in an attempt to establish new areas to hunt feral hogs. The habitat damage by feral hogs are creating problems in planting and managing wildlife openings on the Francis Marion and causing problems for private landowners with hogs causing damage to agricultural plantings.

123-40 Hunt Units and Wildlife Management Area Regulations

1.2(G) Francis Marion National Forest

Feral Hog Hunting	It is unlawful to transport a feral hog alive within the Francis Marion Hunt Unit.

Document No. 2442
DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL
CHAPTER 61
Statutory Authority: S.C. Code Section 48-1-30 through 48-1-60.

61-62.68. Chemical Accident Prevention Provisions.

Synopsis:

The United States Environmental Protection Agency (USEPA) has promulgated a final rule for amendments to the *Accidental Release Prevention Requirements; Risk Management Programs Under Clean Air Act Section 112 (r)(7)*. These amendments were published as a final rule in the Federal Register on January 6, 1999, (64 FR 964) and May 26, 1999, (64 FR 28695) under 40 CFR Part 68. With this action, the USEPA has amended the rule to: add four mandatory and five optional risk management plan (RMP) data elements, establish specific procedures for protecting confidential business information when submitting RMPs, and replace the use of Standard Industrial Classification (SIC) codes with the North American Industry Classification System (NAICS) codes. In addition, the amendments revise the worst-case release scenario analysis for flammable substances and make technical corrections and clarifications.

The Department amended R.61-62.68, *Chemical Accident Prevention Provisions,* of the Air Pollution Control Regulations and Standards, R.61-62, by incorporating these revisions. Since the revisions were promulgated to comply with Federal law, neither a fiscal impact statement nor an assessment report was required. See Discussion below and Statement of Need and Reasonableness herein.

Discussion of Revisions:

SECTION CITATION:	EXPLANATION OF CHANGE:
R.61-62.68.1 - R.61-62.68.220	Adds the word "Section" to each section title for the purposes of clarification.
R.61-62.68.3(v)	Adds definition for NAICS.
R.61-62.68.3(v-ii)	Existing definitions are renumbered.
R.61-62.68.3(jj)	Deletes definition for SIC.
R.61-62.68.10(d)(1)	The SIC codes are deleted and replaced with NAICS codes.
R.61-62.68.25(e)	Amended to read "flammable gases" instead of "flammables".
	Other amendments for clarification.
R.61-62.68.25(e)(1) and (e)(2)	New language added pertaining to the worst-case release scenario for flammable gases.
R.61-62.68.25(f), (f)(1) and (f)(2)	New language added pertaining to the worst-case release scenario for flammable liquids.
R.61-62.68.25(g) through (i)	Existing paragraphs (f),(g), and (h) are renumbered as (g), (h), and (i).
R.61-62.68.42(d)(3)	Amended to require that mixtures containing regulated toxic substances provide the percentage concentration by weight of the substance.

R.61-62.68.42(d)(4)	Adds requirement that data on NAICS codes be provided.
R.61-62.68.42(d)(4-10)	Existing paragraphs are renumbered.
R.61-62.68.58(a)	Amended for clarification.
R.61-62.68.79(a)	Amended for clarification.
R.61-62.68.130(b)	Revises table 4 by deleting duplicate column of CAS numbers.
R.61-62.68.150(e)	Adds new paragraph on where confidential business information can be found.
R.61-62.68.151	Deletes section reservation and adds new section explaining what information may not be claimed as confidential and what information should be submitted with the claim.
R.61-62.68.152	Adds new section on how to substantiate a claim of confidential business information.
R.61-62.68.153-154	Reserves these two sections.
R.61-62.68.160(b)(1)	Revised to require more data on latitude and longitude.
R.61-62.68.160(b)(7)	Revised to replace requirement for SIC code with NAICS code.
R.61-62.68.160(b)(12)	Revised to require that Title V permit number be provided.
R.61-62.68.160(b)(14)-(18)	Adds five optional data requirements.
R.61-62.68.165(b)(2)	Adds requirement for submission of data on percentage weight of chemicals.
R.61-62.68.165(b)(2)-(13)	Renumbered.
R.61-62.68.170(b)	Revised to replace SIC codes with NAICS codes.
R.61-62.68.175(b)	Revised to replace SIC codes with NAICS codes.
R.61-62.68.180(b)	Revised for clarification.

Text of Amendment:

R.61-62.68 will be replaced in its entirety to read:

SOUTH CAROLINA
DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

AIR POLLUTION CONTROL REGULATIONS AND STANDARDS

REGULATION NO. 61-62.68
CHEMICAL ACCIDENT PREVENTION PROVISIONS

SUBPART A - GENERAL

Section 68.1 Scope.

This part sets forth the list of regulated substances and thresholds, the requirements for owners or operators of stationary sources concerning the prevention of accidental releases, and the State accidental release prevention programs approved under section 112(r) of the Act. The list of substances, threshold quantities, and accident prevention regulations promulgated under this part do not limit in any way the general duty provisions under section 112(r)(1) of the Act.

Section 68.2 [Reserved].

Section 68.3 Definitions.

Terms used in this part that are not defined below or in Regulation 61-62.1, Section I, have the meaning given to them in the Clean Air Act and in 40 CFR Part 63, subpart A.

(a) "Accidental Release" means an unanticipated emission of a regulated substance or other extremely hazardous substance into the ambient air from a stationary source.

(b) "Administrative controls" mean written procedural mechanisms used for hazard control.

(c) "AIChE/CCPS" means the American Institute of Chemical Engineers/ Center for Chemical Process Safety.

(d) "API" means the American Petroleum Institute.

(e) "Article" means a manufactured item, as defined under 29 CFR 1910.1200(b), that if formed to a specific shape or design during manufacture, that has end use functions dependent in whole or in part upon the shape or design during end use, and that does not release or otherwise result in exposure to a regulated substance under normal conditions of processing and use.

(f) "ASME" means the American Society of Mechanical Engineers.

(g) "CAS" means the Chemical Abstracts Service.

(h) "Catastrophic release" means a major uncontrolled emission, fire, or explosion, involving one or more regulated substances that presents imminent and substantial endangerment to public health and the environment.

(i) "Classified information" means "classified information" as defined in the Classified Information Procedures Act, 18 U.S.C. App. 3, section 1(a) as "any information or material that has been determined by the United States

Government pursuant to an executive order, statute, or regulation, to require protection against unauthorized disclosure for reasons of national security."

(j) "Condensate" means hydrocarbon liquid separated from natural gas that condenses due to changes in temperature, pressure, or both, and remains liquid at standard conditions.

(k) "Covered process" means a process that has a regulated substance present in more than a threshold quantity as determined under Section 68.115.

(l) "Crude oil" means any naturally occurring, unrefined petroleum liquid.

(m) "Environmental receptor" means natural areas such as national or state parks, forests, or monuments; officially designated wildlife sanctuaries, preserves, refuges, or areas; and Federal wilderness areas, that could be exposed at any time to toxic concentrations, radiant heat, or overpressure greater than or equal to the endpoints provided in Section 68.22(a), as a result of an accidental release and that can be identified on local U. S. Geological Survey maps.

(n) "Hot work" means work involving electric or gas welding, cutting, brazing, or similar flame or spark-producing operations.

(o) "Field gas" means gas extracted from a production well before the gas enters a natural gas processing plant.

(p) "Injury" means any effect on a human that results either from direct exposure to toxic concentrations; radiant heat; or overpressures from accidental releases or from the direct consequences of a vapor cloud explosion (such as flying glass, debris, and other projectiles) from an accidental release and that requires medical treatment or hospitalization.

(q) "Major change" means introduction of a new process, process equipment, or regulated substance, an alteration of process chemistry that results in any change to safe operating limits, or other alteration that introduces a new hazard.

(r) "Mechanical integrity" means the process of ensuring that process equipment is fabricated from the proper materials of construction and is properly installed, maintained, and replaced to prevent failures and accidental releases.

(s) "Medical treatment" means treatment, other than first aid, administered by a physician or registered professional personnel under standing orders from a physician.

(t) "Mitigation or mitigation system" means specific activities, technologies, or equipment designed or deployed to capture or control substances upon loss of containment to minimize exposure of the public or the environment. Passive mitigation means equipment, devices, or technologies that function without human, mechanical, or other energy input. Active mitigation means equipment, devices, or technologies that need human, mechanical, or other energy input to function.

(u) "Natural gas processing plant (gas plant)" means any processing site engaged in the extraction of natural gas liquids from field gas, fractionation of mixed natural gas liquids to natural gas products, or both, classified as North American Industrial Classification System (NAICS) code 211112 (previously Standard Industrial Classification (SIC) code 1321).

(v) "NAICS" means North American Industry Classification System.

(w) "NFPA" means the National Fire Protection Association.

(x) "Offsite" means areas beyond the property boundary of the stationary source, and areas within the property boundary to which the public has routine and unrestricted access during or outside business hours.

(y) "OSHA" means the U.S. Occupational Safety and Health Administration.

(z) "Owner or operator" means any person who owns, leases, operates, controls, or supervises a stationary source.

(aa) "Petroleum refining process unit" means a process unit used in an establishment primarily engaged in petroleum refining as defined in NAICS code 32411 for petroleum refining (formerly SIC code 2911) and used for the following: Producing transportation fuels (such as gasoline, diesel fuels, and jet fuels), heating fuels (such as kerosene, fuel gas distillate, and fuel oils), or lubricants; separating petroleum; or separating, cracking, reacting, or reforming intermediate petroleum streams. Examples of such units include, but are not limited to, petroleum based solvent units, alkylation units, catalytic hydrotreating, catalytic hydrorefining, catalytic hydrocracking, catalytic reforming, catalytic cracking, crude distillation, lube oil processing, hydrogen production, isomerization, polymerization, thermal processes, and blending, sweetening, and treating processes. Petroleum refining process units include sulfur plants.

(bb) "Population" means the public.

(cc) "Process" means any activity involving a regulated substance including any use, storage, manufacturing, handling, or onsite movement of such substances, or combination of these activities. For the purposes of this definition, any group of vessels that are interconnected, or separate vessels that are located such that a regulated substance could be involved in a potential release, shall be considered a single process.

(dd) "Produced water" means water extracted from the earth from an oil or natural gas production well, or that is separated from oil or natural gas after extraction.

(ee) "Public" means any person except employees or contractors at the stationary source.

(ff) "Public receptor" means offsite residences, institutions (e.g., schools, hospitals), industrial, commercial, and office buildings, parks, or recreational areas inhabited or occupied by the public at any time without restriction by the stationary source where members of the public could be exposed to toxic concentrations, radiant heat, or overpressure, as a result of an accidental release.

(gg) "Regulated substance" means any substance listed pursuant to section 112(r)(3) of the Clean Air Act as amended, in 68.130.

(hh) "Replacement in kind" means a replacement that satisfies the design specifications.

(ii) "RMP" means the risk management plan required under subpart G of this part.

(jj) "Stationary source" means any buildings, structures, equipment, installations, or substance emitting stationary activities which belong to the same industrial group, which are located on one or more contiguous properties, which are under the control of the same person (or persons under common control), and from which an accidental release may occur. A stationary source includes transportation containers used for storage not incident to transportation and transportation containers connected to equipment at a stationary source for loading or unloading. Transportation includes, but is not limited to, transportation subject to oversight or regulation under 49 CFR parts 192, 193, or 195, or a state natural gas or hazardous liquid program for which the state has in effect a certification to DOT under 49 U.S.C. section 60105. The term stationary source does not apply to transportation, including storage incident to transportation, of any regulated substance or any other extremely hazardous substance under the provisions of this part. A stationary source does not include naturally occurring hydrocarbon reservoirs. Properties shall not be considered contiguous solely because of a railroad or pipeline right-of-way.

(kk) "Threshold quantity" means the quantity specified for regulated substances pursuant to section 112(r)(5) of the Clean Air Act as amended, listed in 68.130 and determined to be present at a stationary source as specified in 68.115 of this part.

(ll) "Typical meteorological conditions" means the temperature, wind speed, cloud cover, and atmospheric stability class, prevailing at the site based on data gathered at or near the site or from a local meteorological station.

(mm) "USDOT" means the United States Department of Transportation.

(nn) "Vessel" means any reactor, tank, drum, barrel, cylinder, vat, kettle, boiler, pipe, hose, or other container.

(oo) "Worst-case release" means the release of the largest quantity of a regulated substance from a vessel or process line failure that results in the greatest distance to an endpoint defined in Section 68.22(a).

Section 68.4-9 [Reserved]

Section 68.10 Applicability.

(a) An owner or operator of a stationary source that has more than a threshold quantity of a regulated substance in a process, as determined under Section 68.115, shall comply with the requirements of this part no later than the latest of the following dates:

(1) June 21, 1999;

(2) Three years after the date on which a regulated substance is first listed under Section 68.130; or

(3) The date on which a regulated substance is first present above a threshold quantity in a process.

(b) Program 1 eligibility requirements. A covered process is eligible for Program 1 requirements as provided in Section 68.12(b) if it meets all of the following requirements:

(1) FOR THE FIVE YEARS PRIOR TO THE SUBMISSION OF AN RMP, THE PROCESS HAS NOT HAD AN ACCIDENTAL RELEASE OF A REGULATED SUBSTANCE WHERE EXPOSURE TO THE SUBSTANCE, ITS REACTION PRODUCTS, OVERPRESSURE GENERATED BY AN EXPLOSION INVOLVING THE SUBSTANCE, OR RADIANT HEAT GENERATED BY A FIRE INVOLVING THE SUBSTANCE LED TO ANY OF THE FOLLOWING OFFSITE:

(i) Death;

(ii) Injury; or

(iii) Response or restoration activities for an exposure of an environmental receptor;

(2) The distance to a toxic or flammable endpoint for a worst-case release assessment conducted under subpart B and Section 68.25 is less than the distance to any public receptor, as defined in Section 68.30; and

(3) Emergency response procedures have been coordinated between the stationary source and local emergency planning and response organizations.

(c) Program 2 eligibility requirements. A covered process is subject to Program 2 requirements if it does not meet the eligibility requirements of either paragraph (b) or paragraph (d) of this section.

(d) Program 3 eligibility requirements. A covered process is subject to Program 3 if the process does not meet the requirements of paragraph (b) of this section, and if either of the following conditions is met:

(1) THE PROCESS IS IN NAICS CODE 32211, 32411, 32511, 325181, 325188, 325192, 325199, 325211, 325311, OR 32532; OR

(2) The process is subject to the OSHA process safety management standard, 29 CFR 1910.119.

(e) If at any time a covered process no longer meets the eligibility criteria of its Program level, the owner or operator shall comply with the requirements of the new Program level that applies to the process and update the RMP as provided in Section 68.190.

(f) The provisions of this part shall not apply to an Outer Continental Shelf (OCS) source, as defined in 40 CFR 55.2.

Section 68.11 [Reserved]

Section 68.12 General requirements.

(a) General requirements. The owner or operator of a stationary source subject to this part shall submit a single RMP, as provided in Secs. 68.150 to 68.185. The RMP shall include a registration that reflects all covered processes.

(b) Program 1 requirements. In addition to meeting the requirements of paragraph (a) of this section, the owner or operator of a stationary source with a process eligible for Program 1, as provided in Section 68.10(b), shall:

(1) ANALYZE THE WORST-CASE RELEASE SCENARIO FOR THE PROCESS(ES), AS PROVIDED IN SECTION 68.25; DOCUMENT THAT THE NEAREST PUBLIC RECEPTOR IS BEYOND THE DISTANCE TO A TOXIC OR FLAMMABLE ENDPOINT DEFINED IN SECTION 68.22(A); AND SUBMIT IN THE RMP THE WORST-CASE RELEASE SCENARIO AS PROVIDED IN SECTION 68.165;

(2) Complete the five-year accident history for the process as provided in Section 68.42 of this part and submit it in the RMP as provided in Section 68.168;

(3) Ensure that response actions have been coordinated with local emergency planning and response agencies; and

(4) Certify in the RMP the following: "Based on the criteria in Section 68.10, the distance to the specified endpoint for the worst-case accidental release scenario for the following process(es) is less than the distance to the nearest public receptor: [list process(es)]. Within the past five years, the process(es) has (have) had no accidental release that caused offsite impacts provided in the risk management program rule (Sec. 68.10(b)(1)). No additional measures are necessary to prevent offsite impacts from accidental releases. In the event of fire, explosion, or a release of a regulated substance from the process(es), entry within the distance to the specified endpoints may pose a danger to public emergency responders. Therefore, public emergency responders should not enter this area except as arranged with the emergency contact indicated in the RMP. The undersigned certifies that, to the best of my knowledge, information, and belief, formed after reasonable inquiry, the information submitted is true, accurate, and complete. [Signature, title, date signed]."

(c) Program 2 requirements. In addition to meeting the requirements of paragraph (a) of this section, the owner or operator of a stationary source with a process subject to Program 2, as provided in Section68.10(c), shall:

(1) Develop and implement a management system as provided in Section 68.15;

(2) Conduct a hazard assessment as provided in Secs. 68.20 through 68.42;

(3) IMPLEMENT THE PROGRAM 2 PREVENTION STEPS PROVIDED IN SECS. 68.48 THROUGH 68.60 OR IMPLEMENT THE PROGRAM 3 PREVENTION STEPS PROVIDED IN SECS. 68.65 THROUGH 68.87;

(4) Develop and implement an emergency response program as provided in Secs. 68.90 to 68.95; and

(5) Submit as part of the RMP the data on prevention program elements for Program 2 processes as provided in Section 68.170.

(d) Program 3 requirements. In addition to meeting the requirements of paragraph (a) of this section, the owner or operator of a stationary source with a process subject to Program 3, as provided in Section 68.10(d) shall:

(1) Develop and implement a management system as provided in Section 68.15;

(2) Conduct a hazard assessment as provided in Secs. 68.20 through 68.42;

(3) Implement the prevention requirements of Secs. 68.65 through 68.87;

(4) Develop and implement an emergency response program as provided in Secs. 68.90 to 68.95 of this part; and

(5) Submit as part of the RMP the data on prevention program elements for Program 3 processes as provided in Section 68.175.

Section 68.13-14 [Reserved]

Section 68.15 Management.

(a) The owner or operator of a stationary source with processes subject to Program 2 or Program 3 shall develop a management system to oversee the implementation of the risk management program elements.

(b) The owner or operator shall assign a qualified person or position that has the overall responsibility for the development, implementation, and integration of the risk management program elements.

(c) When responsibility for implementing individual requirements of this part is assigned to persons other than the person identified under paragraph (b) of this section, the names or positions of these people shall be documented and the lines of authority defined through an organization chart or similar document.

Section 68.16-19 [Reserved]

SUBPART B - HAZARD ASSESSMENT

Section 68.20 Applicability.

THE OWNER OR OPERATOR OF A STATIONARY SOURCE SUBJECT TO THIS PART SHALL PREPARE A WORST-CASE RELEASE SCENARIO ANALYSIS AS PROVIDED IN SECTION 68.25 OF THIS PART AND COMPLETE THE FIVE-YEAR ACCIDENT HISTORY AS PROVIDED IN SECTION 68.42. THE OWNER OR OPERATOR OF A PROGRAM 2 AND 3 PROCESS MUST COMPLY WITH ALL SECTIONS IN THIS SUBPART FOR THESE PROCESSES.

Section 68.21 [Reserved]

Section 68.22 Offsite consequence analysis parameters.

(a) Endpoints. For analyses of offsite consequences, the following endpoints shall be used:

(1) TOXICS. THE TOXIC ENDPOINTS PROVIDED IN APPENDIX A OF THIS PART.

(2) Flammables. The endpoints for flammables vary according to the scenarios studied:

(i) Explosion. An overpressure of 1 psi.

(ii) Radiant heat/exposure time. A radiant heat of 5 kw/m^2 for 40 seconds.

(iii) Lower flammability limit. A lower flammability limit as provided in NFPA documents or other generally recognized sources.

(b) Wind speed/atmospheric stability class. For the worst-case release analysis, the owner or operator shall use a wind speed of 1.5 meters per second and F atmospheric stability class. If the owner or operator can demonstrate that local meteorological data applicable to the stationary source show a higher minimum wind speed or less stable atmosphere at all times during the previous three years, these minimums may be used. For analysis of alternative scenarios, the owner or operator may use the typical meteorological conditions for the stationary source.

(c) Ambient temperature/humidity. For worst-case release analysis of a regulated toxic substance, the owner or operator shall use the highest daily maximum temperature in the previous three years and average humidity for the site, based on temperature/humidity data gathered at the stationary source or at a local meteorological station; an owner or operator using the RMP Offsite Consequence Analysis Guidance may use 25 degrees Celsius and 50 percent humidity as values for these variables. For analysis of alternative scenarios, the owner or operator may use typical temperature/humidity data gathered at the stationary source or at a local meteorological station.

(d) Height of release. The worst-case release of a regulated toxic substance shall be analyzed assuming a ground level (0 feet) release. For an alternative scenario analysis of a regulated toxic substance, release height may be determined by the release scenario.

(e) Surface roughness. The owner or operator shall use either urban or rural topography, as appropriate. Urban means that there are many obstacles in the immediate area; obstacles include buildings or trees. Rural means there are no buildings in the immediate area and the terrain is generally flat and unobstructed.

(f) Dense or neutrally buoyant gases. The owner or operator shall ensure that tables or models used for dispersion analysis of regulated toxic substances appropriately account for gas density.

(g) Temperature of released substance. For worst case, liquids other than gases liquified by refrigeration only shall be considered to be released at the highest daily maximum temperature, based on data for the previous three years appropriate for the stationary source, or at process temperature, whichever is higher. For alternative scenarios, substances may be considered to be released at a process or ambient temperature that is appropriate for the scenario.

Section 68.23-24 [Reserved]

Section 68.25 Worst-case release scenario analysis.

(a) The owner or operator shall analyze and report in the RMP:

(1) For Program 1 processes, one worst-case release scenario for each Program 1 process;

(2) For Program 2 and 3 processes:

(i) One worst-case release scenario that is estimated to create the greatest distance in any direction to an endpoint provided in Appendix A of this part resulting from an accidental release of regulated toxic substances from covered processes under worst-case conditions defined in Section 68.22;

(ii) One worst-case release scenario that is estimated to create the greatest distance in any direction to an endpoint defined in Section 68.22(a) resulting from an accidental release of regulated flammable substances from covered processes under worst-case conditions defined in Section 68.22; and

(III) ADDITIONAL WORST-CASE RELEASE SCENARIOS FOR A HAZARD CLASS IF A WORST-CASE RELEASE FROM ANOTHER COVERED PROCESS AT THE STATIONARY SOURCE POTENTIALLY AFFECTS PUBLIC RECEPTORS DIFFERENT FROM THOSE POTENTIALLY AFFECTED BY THE WORST-CASE RELEASE SCENARIO DEVELOPED UNDER PARAGRAPHS (A)(2)(I) OR (A)(2)(II) OF THIS SECTION.

(b) Determination of worst-case release quantity. The worst-case release quantity shall be the greater of the following:

(1) For substances in a vessel, the greatest amount held in a single vessel, taking into account administrative controls that limit the maximum quantity; or

(2) FOR SUBSTANCES IN PIPES, THE GREATEST AMOUNT IN A PIPE, TAKING INTO ACCOUNT ADMINISTRATIVE CONTROLS THAT LIMIT THE MAXIMUM QUANTITY.

(c) Worst-case release scenario - toxic gases.

(1) For regulated toxic substances that are normally gases at ambient temperature and handled as a gas or as a liquid under pressure, the owner or operator shall assume that the quantity in the vessel or pipe, as determined under paragraph (b) of this section, is released as a gas over 10 minutes. The release rate shall be assumed to be the total quantity divided by 10 unless passive mitigation systems are in place.

(2) For gases handled as refrigerated liquids at ambient pressure:

(i) If the released substance is not contained by passive mitigation systems or if the contained pool would have a depth of 1 centimeter or less, the owner or operator shall assume that the substance is released as a gas in 10 minutes;

(ii) If the released substance is contained by passive mitigation systems in a pool with a depth greater than 1 centimeter, the owner or operator may assume that the quantity in the vessel or pipe, as determined under paragraph (b) of this section, is spilled instantaneously to form a liquid pool. The volatilization rate (release rate) shall be calculated at the boiling point of the substance and at the conditions specified in paragraph (d) of this section.

(d) Worst-case release scenario - toxic liquids.

(1) FOR REGULATED TOXIC SUBSTANCES THAT ARE NORMALLY LIQUIDS AT AMBIENT TEMPERATURE, THE OWNER OR OPERATOR SHALL ASSUME THAT THE QUANTITY IN THE VESSEL OR PIPE, AS DETERMINED UNDER PARAGRAPH (B) OF THIS

SECTION, IS SPILLED INSTANTANEOUSLY TO FORM A LIQUID POOL.

(i) The surface area of the pool shall be determined by assuming that the liquid spreads to 1 centimeter deep unless passive mitigation systems are in place that serve to contain the spill and limit the surface area. Where passive mitigation is in place, the surface area of the contained liquid shall be used to calculate the volatilization rate.

(ii) If the release would occur onto a surface that is not paved or smooth, the owner or operator may take into account the actual surface characteristics.

(2) The volatilization rate shall account for the highest daily maximum temperature occurring in the past three years, the temperature of the substance in the vessel, and the concentration of the substance if the liquid spilled is a mixture or solution.

(3) The rate of release to air shall be determined from the volatilization rate of the liquid pool. The owner or operator may use the methodology in the RMP Offsite Consequence Analysis Guidance or any other publicly available techniques that account for the modeling conditions and are recognized by industry as applicable as part of current practices. Proprietary models that account for the modeling conditions may be used provided the owner or operator allows the Department access to the model and describes model features and differences from publicly available models to local emergency planners upon request.

(E) WORST-CASE RELEASE SCENARIO - FLAMMABLE GASES. THE OWNER OR OPERATOR SHALL ASSUME THAT THE QUANTITY OF THE SUBSTANCE, AS DETERMINED UNDER PARAGRAPH (B) OF THIS SECTION AND THE PROVISIONS BELOW, VAPORIZES RESULTING IN A VAPOR CLOUD EXPLOSION. A YIELD FACTOR OF 10 PERCENT OF THE AVAILABLE ENERGY RELEASED IN THE EXPLOSION SHALL BE USED TO DETERMINE THE DISTANCE TO THE EXPLOSION ENDPOINT IF THE MODEL USED IS BASED ON TNT-EQUIVALENT METHODS.

(1) FOR REGULATED FLAMMABLE SUBSTANCES THAT ARE NORMALLY GASES AT AMBIENT TEMPERATURE AND HANDLED AS A GAS OR AS A LIQUID UNDER PRESSURE, THE OWNER OR OPERATOR SHALL ASSUME THAT THE QUANTITY IN THE VESSEL OR PIPE, AS DETERMINED UNDER PARAGRAPH (B) OF THIS SECTION, IS RELEASED AS A GAS OVER 10 MINUTES. THE TOTAL QUANTITY SHALL BE ASSUMED TO BE INVOLVED IN THE VAPOR CLOUD EXPLOSION.

(2) FOR FLAMMABLE GASES HANDLED AS REFRIGERATED LIQUIDS AT AMBIENT PRESSURE:

(I) IF THE RELEASED SUBSTANCE IS NOT CONTAINED BY PASSIVE MITIGATION SYSTEMS OR IF THE CONTAINED POOL WOULD HAVE A DEPTH OF ONE CENTIMETER OR LESS, THE OWNER OR OPERATOR SHALL ASSUME THAT THE TOTAL QUANTITY OF THE SUBSTANCE IS RELEASED AS A GAS IN 10 MINUTES, AND THE TOTAL QUANTITY WILL BE INVOLVED IN THE VAPOR CLOUD EXPLOSION.

(ii) If the released substance is contained by passive mitigation systems in a pool with a depth greater than 1 centimeter, the owner or operator may assume that the quantity in the vessel or pipe, as determined under paragraph (b) of this section, is spilled instantaneously to form a liquid pool. The volatilization rate (release rate) shall be calculated at the boiling point of the substance and at the conditions specified in paragraph (d) of this section. The owner or operator shall assume that the quantity which becomes vapor in the first 10 minutes is involved in the vapor cloud explosion.

(f) Worst-case release scenario - flammable liquids. The owner or operator shall assume that the quantity of the substance, as determined under paragraph (b) of this section and the provisions below, vaporizes resulting in a vapor cloud explosion. A yield factor of 10 percent of the available energy released in the explosion shall be used to determine the distance to the explosion endpoint if the model used is based on TNT equivalent methods.

(1) FOR REGULATED FLAMMABLE SUBSTANCES THAT ARE NORMALLY LIQUIDS AT AMBIENT TEMPERATURE, THE OWNER OR OPERATOR SHALL ASSUME THAT THE ENTIRE QUANTITY IN THE VESSEL OR PIPE, AS DETERMINED UNDER PARAGRAPH (B) OF THIS SECTION, IS SPILLED INSTANTANEOUSLY TO FORM A LIQUID POOL. FOR LIQUIDS AT TEMPERATURES BELOW THEIR ATMOSPHERIC BOILING POINT, THE VOLATILIZATION RATE SHALL BE CALCULATED AT THE CONDITIONS SPECIFIED IN PARAGRAPH (D) OF THIS SECTION.

(2) THE OWNER OR OPERATOR SHALL ASSUME THAT THE QUANTITY WHICH BECOMES VAPOR IN THE FIRST 10 MINUTES IS INVOLVED IN THE VAPOR CLOUD EXPLOSION.

(g) Parameters to be applied. The owner or operator shall use the parameters defined in Section 68.22 to determine distance to the endpoints. The owner or operator may use the methodology provided in the RMP Offsite Consequence Analysis Guidance or any commercially or publicly available air dispersion modeling techniques, provided the techniques account for the modeling conditions and are recognized by industry as applicable as part of current practices. Proprietary models that account for the modeling conditions may be used provided the owner or operator allows the Department access to the model and describes model features and differences from publicly available models to local emergency planners upon request.

(h) Consideration of passive mitigation. Passive mitigation systems may be considered for the analysis of worst case provided that the mitigation system is capable of withstanding the release event triggering the scenario and would still function as intended.

(i) Factors in selecting a worst-case scenario. Notwithstanding the provisions of paragraph (b) of this section, the owner or operator shall select as the worst case for flammable regulated substances or the worst case for regulated toxic substances, a scenario based on the following factors if such a scenario would result in a greater distance to an endpoint defined in Section 68.22(a) beyond the stationary source boundary than the scenario provided under paragraph (b) of this section:

(1) Smaller quantities handled at higher process temperature or pressure; and

(2) Proximity to the boundary of the stationary source.

Section 68.26-27 [Reserved]

Section 68.28 Alternative release scenario analysis.

(a) The number of scenarios. The owner or operator shall identify and analyze at least one alternative release scenario for each regulated toxic substance held in a covered process(es) and at least one alternative release scenario to represent all flammable substances held in covered processes.

(b) Scenarios to consider.

(1) For each scenario required under paragraph (a) of this section, the owner or operator shall select a scenario:

(i) That is more likely to occur than the worst-case release scenario under Section 68.25; and

(ii) That will reach an endpoint offsite, unless no such scenario exists.

(2) Release scenarios considered should include, but are not limited to, the following, where applicable:

(i) Transfer hose releases due to splits or sudden hose uncoupling;

(II) PROCESS PIPING RELEASES FROM FAILURES AT FLANGES, JOINTS, WELDS, VALVES AND VALVE SEALS, AND DRAINS OR BLEEDS;

(iii) Process vessel or pump releases due to cracks, seal failure, or drain, bleed, or plug failure;

(iv) Vessel overfilling and spill, or overpressurization and venting through relief valves or rupture disks; and

(v) Shipping container mishandling and breakage or puncturing leading to a spill.

(c) Parameters to be applied. The owner or operator shall use the appropriate parameters defined in Section 68.22 to determine distance to the endpoints. The owner or operator may use either the methodology provided in the RMP Offsite Consequence Analysis Guidance or any commercially or publicly available air dispersion modeling techniques, provided the techniques account for the specified modeling conditions and are recognized by industry as applicable as part of current practices. Proprietary models that account for the modeling conditions may be used provided the owner or operator allows the Department access to the model and describes model features and differences from publicly available models to local emergency planners upon request.

(d) Consideration of mitigation. Active and passive mitigation systems may be considered provided they are capable of withstanding the event that triggered the release and would still be functional.

(e) Factors in selecting scenarios. The owner or operator shall consider the following in selecting alternative release scenarios:

(1) The five-year accident history provided in Section 68.42; and

(2) Failure scenarios identified under Secs. 68.50 or 68.67.

Section 68.29 [Reserved]

Section 68.30 Defining offsite impacts - population.

(a) The owner or operator shall estimate in the RMP the population within a circle with its center at the point of the release and a radius determined by the distance to the endpoint defined in Section 68.22(a).

(b) Population to be defined. Population shall include residential population. The presence of institutions (schools, hospitals, prisons), parks and recreational areas, and major commercial, office, and industrial buildings shall be noted in the RMP.

(c) Data sources acceptable. The owner or operator may use the most recent Census data, or other updated information, to estimate the population potentially affected.

(d) Level of accuracy. Population shall be estimated to two significant digits.

Section 68.31-32 [Reserved]

Section 68.33 Defining offsite impacts - environment.

(a) The owner or operator shall list in the RMP environmental receptors within a circle with its center at the point of the release and a radius determined by the distance to the endpoint defined in Section 68.22(a) of this part.

(b) Data sources acceptable. The owner or operator may rely on information provided on local U.S. Geological Survey maps or on any data source containing U.S.G.S. data to identify environmental receptors.

Section 68.34-35 [Reserved]

Section 68.36 Review and update.

(a) The owner or operator shall review and update the offsite consequence analyses at least once every five years.

(b) If changes in processes, quantities stored or handled, or any other aspect of the stationary source might reasonably be expected to increase or decrease the distance to the endpoint by a factor of two or more, the owner or operator shall complete a revised analysis within six months of the change and submit a revised risk management plan as provided in Section 68.190.

Section 68.37-38 [Reserved]

Section 68.39 Documentation.

The owner or operator shall maintain the following records on the offsite consequence analyses:

(a) For worst-case scenarios, a description of the vessel or pipeline and substance selected as worst case, assumptions and parameters used, and the rationale for selection; assumptions shall include use of any administrative controls and any passive mitigation that were assumed to limit the quantity that could be released. Documentation shall include the anticipated effect of the controls and mitigation on the release quantity and rate.

(b) For alternative release scenarios, a description of the scenarios identified, assumptions and parameters used, and the rationale for the selection of specific scenarios; assumptions shall include use of any administrative controls and any mitigation that were assumed to limit the quantity that could be released. Documentation shall include the effect of the controls and mitigation on the release quantity and rate.

(c) Documentation of estimated quantity released, release rate, and duration of release.

(d) Methodology used to determine distance to endpoints.

(e) Data used to estimate population and environmental receptors potentially affected.

Section 68.40-41 [Reserved]

Section 68.42 Five-year accident history.

(a) The owner or operator shall include in the five-year accident history all accidental releases from covered processes that resulted in deaths, injuries, or significant property damage on site, or known offsite deaths, injuries, evacuations, sheltering in place, property damage, or environmental damage.

(b) Data required. For each accidental release included, the owner or operator shall report the following information:

(1) Date, time, and approximate duration of the release;

(2) Chemical(s) released;

(3) Estimated quantity released in pounds and, for mixtures containing regulated toxic substances, percentage concentration by weight of the released regulated toxic substance in the liquid mixture;

(4) Five- or six-digit NAICS code that most closely corresponds to the process;

(5) The type of release event and its source;

(6) Weather conditions, if known;

(7) On-site impacts;

(8) Known offsite impacts;

(9) Initiating event and contributing factors if known;

(10) Whether offsite responders were notified if known; and

(11) Operational or process changes that resulted from investigation of the release.

(c) Level of accuracy. Numerical estimates may be provided to two significant digits.

Section 68.43-47 [Reserved]

SUBPART C - PROGRAM 2 PREVENTION PROGRAM

Section 68.48 Safety information.

(a) The owner or operator shall compile and maintain the following up-to-date safety information related to the regulated substances, processes, and equipment:

(1) Material Safety Data Sheets that meet the requirements of 29 CFR 1910.1200(g);

(2) Maximum intended inventory of equipment in which the regulated substances are stored or processed;

(3) Safe upper and lower temperatures, pressures, flows, and compositions;

(4) Equipment specifications; and

(5) Codes and standards used to design, build, and operate the process.

(b) The owner or operator shall ensure that the process is designed in compliance with recognized and generally accepted good engineering practices. Compliance with Federal or State regulations that address industry-specific safe design or with industry-specific design codes and standards may be used to demonstrate compliance with this paragraph.

(c) The owner or operator shall update the safety information if a major change occurs that makes the information inaccurate.

Section 68.49 [Reserved]

Section 68.50 Hazard review.

(a) The owner or operator shall conduct a review of the hazards associated with the regulated substances, process, and procedures. The review shall identify the following:

(1) The hazards associated with the process and regulated substances;

(2) Opportunities for equipment malfunctions or human errors that could cause an accidental release;

(3) The safeguards used or needed to control the hazards or prevent equipment malfunction or human error; and

(4) Any steps used or needed to detect or monitor releases.

(b) The owner or operator may use checklists developed by persons or organizations knowledgeable about the process and equipment as a guide to conducting the review. For processes designed to meet industry standards or Federal or State design rules, the hazard review shall, by inspecting all equipment, determine whether the process is designed, fabricated, and operated in accordance with the applicable standards or rules.

(c) The owner or operator shall document the results of the review and ensure that problems identified are resolved in a timely manner.

(d) The owner or operator shall update the review at least once every five years. The owner or operator shall also conduct reviews whenever a major change in the process occurs; all issues identified in the review shall be resolved before startup of the changed process.

Section 68.51 [Reserved]

Section 68.52 Operating procedures.

(a) The owner or operator shall prepare written operating procedures that provide clear instructions or steps for safely conducting activities associated with each covered process consistent with the safety information for that process. Operating procedures or instructions provided by equipment manufacturers or developed by persons or organizations knowledgeable about the process and equipment may be used as a basis for a stationary source's operating procedures.

(b) The procedures shall address the following:

(1) Initial startup;

(2) Normal operations;

(3) Temporary operations;

(4) Emergency shutdown and operations;

(5) Normal shutdown;

(6) Startup following a normal or emergency shutdown or a major change that requires a hazard review;

(7) Consequences of deviations and steps required to correct or avoid deviations; and

(8) Equipment inspections.

(c) The owner or operator shall ensure that the operating procedures are updated, if necessary, whenever a major change occurs and prior to startup of the changed process.

Section 68.53 [Reserved]

Section 68.54 Training.

(a) The owner or operator shall ensure that each employee presently operating a process, and each employee newly assigned to a covered process have been trained or tested competent in the operating procedures provided in Section 68.52 that pertain to their duties. For those employees already operating a process on June 21, 1999, the owner or operator may certify in writing that the employee has the required knowledge, skills, and abilities to safely carry out the duties and responsibilities as provided in the operating procedures.

(b) Refresher training. Refresher training shall be provided at least every three years, and more often if necessary, to each employee operating a process to ensure that the employee understands and adheres to the current operating procedures of the process. The owner or operator, in consultation with the employees operating the process, shall determine the appropriate frequency of refresher training.

(c) The owner or operator may use training conducted under Federal or State regulations or under industry-specific standards or codes or training conducted by covered process equipment vendors to demonstrate compliance with this section to the extent that the training meets the requirements of this section.

(d) The owner or operator shall ensure that operators are trained in any updated or new procedures prior to startup of a process after a major change.

Section 68.55 [Reserved]

Section 68.56 Maintenance.

(a) The owner or operator shall prepare and implement procedures to maintain the on-going mechanical integrity of the process equipment. The owner or operator may use procedures or instructions provided by covered process equipment vendors or procedures in Federal or State regulations or industry codes as the basis for stationary source maintenance procedures.

(b) The owner or operator shall train or cause to be trained each employee involved in maintaining the on-going mechanical integrity of the process. To ensure that the employee can perform the job tasks in a safe manner, each such employee shall be trained in the hazards of the process, in how to avoid or correct unsafe conditions, and in the procedures applicable to the employee's job tasks.

(c) Any maintenance contractor shall ensure that each contract maintenance employee is trained to perform the maintenance procedures developed under paragraph (a) of this section.

(d) The owner or operator shall perform or cause to be performed inspections and tests on process equipment. Inspection and testing procedures shall follow recognized and generally accepted good engineering practices. The frequency of inspections and tests of process equipment shall be consistent with applicable manufacturers' recommendations, industry standards or codes, good engineering practices, and prior operating experience.

Section 68.57 [Reserved]

Section 68.58 Compliance audits.

(a) The owner or operator shall certify that he or she has evaluated compliance with the provisions of this subpart at least every three years to verify that the procedures and practices developed under the rule are adequate and are being followed.

(b) The compliance audit shall be conducted by at least one person knowledgeable in the process.

(c) The owner or operator shall develop a report of the audit findings.

(d) The owner or operator shall promptly determine and document an appropriate response to each of the findings of the compliance audit and document that deficiencies have been corrected.

(e) The owner or operator shall retain the two (2) most recent compliance audit reports. This requirement does not apply to any compliance audit report that is more than five years old.

Section 68.59 [Reserved]

Section 68.60 Incident investigation.

(a) The owner or operator shall investigate each incident which resulted in, or could reasonably have resulted in a catastrophic release of a regulated substance.

(b) The owner or operator shall initiate an incident investigation as promptly as possible, but not later than 48 hours following the incident.

(c) The owner or operator shall prepare a summary at the conclusion of the investigation which includes at a minimum:

(1) Date of incident;

(2) Date investigation began;

(3) A description of the incident;

(4) The factors that contributed to the incident; and,

(5) ANY RECOMMENDATIONS RESULTING FROM THE INVESTIGATION.

(d) The owner or operator shall promptly address and resolve the investigation findings and recommendations. Resolutions and corrective actions shall be documented.

(e) The owner or operator shall ensure that the findings are reviewed with all affected personnel whose job tasks are affected by the findings.

(f) The owner or operator shall retain the investigation summaries for five years.

Section 68.61-64 [Reserved]

SUBPART D - PROGRAM 3 PREVENTION PROGRAM

Section 68.65 Process safety information.

(a) In accordance with the schedule set forth in Section 68.67, the owner or operator shall complete a compilation of written process safety information before conducting any process hazard analysis required by the rule. The compilation of written process safety information is to enable the owner or operator and the employees involved in operating the process to identify and understand the hazards posed by those processes involving regulated substances. This process safety information shall include information pertaining to the hazards of the regulated

substances used or produced by the process, information pertaining to the technology of the process, and information pertaining to the equipment in the process.

(b) Information pertaining to the hazards of the regulated substances in the process. This information shall consist of at least the following:

(1) Toxicity information;

(2) Permissible exposure limits;

(3) Physical data;

(4) Reactivity data;

(5) Corrosivity data;

(6) Thermal and chemical stability data; and

(7) Hazardous effects of inadvertent mixing of different materials that could foreseeably occur.

MATERIAL SAFETY DATA SHEETS MEETING THE REQUIREMENTS OF 29 CFR 1910.1200(G) MAY BE USED TO COMPLY WITH THIS REQUIREMENT TO THE EXTENT THEY CONTAIN THE INFORMATION REQUIRED BY THIS SUBPARAGRAPH.

(c) Information pertaining to the technology of the process.

(1) INFORMATION CONCERNING THE TECHNOLOGY OF THE PROCESS SHALL INCLUDE AT LEAST THE FOLLOWING:

(i) A block flow diagram or simplified process flow diagram;

(ii) Process chemistry;

(iii) Maximum intended inventory;

(iv) Safe upper and lower limits for such items as temperatures, pressures, flows or compositions; and,

(v) An evaluation of the consequences of deviations.

(2) Where the original technical information no longer exists, such information may be developed in conjunction with the process hazard analysis in sufficient detail to support the analysis.

(d) Information pertaining to the equipment in the process.

(1) Information pertaining to the equipment in the process shall include:

(i) Materials of construction;

(ii) Piping and instrument diagrams (P&ID's);

(iii) Electrical classification;

(iv) Relief system design and design basis;

(v) Ventilation system design;

(vi) Design codes and standards employed;

(vii) Material and energy balances for processes built after June 21, 1999; and

(viii) Safety systems (e.g. interlocks, detection or suppression systems).

(2) The owner or operator shall document that equipment complies with recognized and generally accepted good engineering practices.

(3) For existing equipment designed and constructed in accordance with codes, standards, or practices that are no longer in general use, the owner or operator shall determine and document that the equipment is designed, maintained, inspected, tested, and operating in a safe manner.

Section 68.66 [Reserved]

Section 68.67 Process hazard analysis.

(a) The owner or operator shall perform an initial process hazard analysis (hazard evaluation) on processes covered by this part. The process hazard analysis shall be appropriate to the complexity of the process and shall identify, evaluate, and control the hazards involved in the process. The owner or operator shall determine and document the priority order for conducting process hazard analyses based on a rationale which includes such considerations as extent of the process hazards, number of potentially affected employees, age of the process, and operating history of the process. The process hazard analysis shall be conducted as soon as possible, but not later than June 21, 1999. Process hazards analyses completed to comply with 29 CFR 1910.119(e) are acceptable as initial process hazards analyses. These process hazard analyses shall be updated and revalidated, based on their completion date.

(b) The owner or operator shall use one or more of the following methodologies that are appropriate to determine and evaluate the hazards of the process being analyzed.

(1) What-If;

(2) Checklist;

(3) What-If/Checklist;

(4) Hazard and Operability Study (HAZOP);

(5) Failure Mode and Effects Analysis (FMEA);

(6) Fault Tree Analysis; or

(7) An appropriate equivalent methodology.

(c) The process hazard analysis shall address:

(1) The hazards of the process;

(2) The identification of any previous incident which had a likely potential for catastrophic consequences;

(3) Engineering and administrative controls applicable to the hazards and their interrelationships such as appropriate application of detection methodologies to provide early warning of releases. (Acceptable detection methods might include process monitoring and control instrumentation with alarms, and detection hardware such as hydrocarbon sensors.);

(4) Consequences of failure of engineering and administrative controls;

(5) Stationary source siting;

(6) Human factors; and

(7) A qualitative evaluation of a range of the possible safety and health effects of failure of controls.

(d) A team with expertise in engineering and process operations shall perform the process hazard analysis. The team shall include at least one employee who has experience and knowledge specific to the process being evaluated. Also, one member of the team must be knowledgeable in the specific process hazard analysis methodology being used.

(e) The owner or operator shall establish a system to promptly address the team's findings and recommendations; assure that the recommendations are resolved in a timely manner and that the resolution is documented; document what actions are to be taken; complete actions as soon as possible; develop a written schedule of when these actions are to be completed; communicate the actions to operating, maintenance and other employees whose work assignments are in the process and who may be affected by the recommendations or actions.

(f) A team meeting the requirements in paragraph (d) of this section shall, at least every five (5) years after the completion of the initial process hazard analysis, updated and revalidate the process hazard analysis to assure that the process hazard analysis is consistent with the current process. Updated and revalidated process hazard analyses completed to comply with 29 CFR 1910.119(e) are acceptable to meet the requirements of this paragraph.

(g) The owner or operator shall retain process hazards analyses and updates or revalidations for each process covered by this section, as well as the documented resolution of recommendations described in paragraph (e) of this section for the life of the process.

Section 68.68 [Reserved]

Section 68.69 Operating procedures.

(a) The owner or operator shall develop and implement written operating procedures that provide clear instructions for safely conducting activities involved in each covered process consistent with the process safety information and shall address at least the following elements.

(1) Steps for each operating phase:

(i) Initial startup;

(ii) Normal operations;

(iii) Temporary operations;

(iv) Emergency shutdown including the conditions under which emergency shutdown is required, and the assignment of shutdown responsibility to qualified operators to ensure that emergency shutdown is executed in a safe and timely manner.

(v) Emergency operations;

(vi) Normal shutdown; and,

(vii) Startup following a turnaround, or after an emergency shutdown.

(2) Operating limits:

(i) Consequences of deviation; and

(ii) Steps required to correct or avoid deviation.

(3) Safety and health considerations:

(i) Properties of, and hazards presented by, the chemicals used in the process;

(ii) Precautions necessary to prevent exposure, including engineering controls, administrative controls, and personal protective equipment;

(iii) Control measures to be taken if physical contact or airborne exposure occurs;

(iv) Quality control for raw materials and control of hazardous chemical inventory levels; and,

(v) Any special or unique hazards.

(4) Safety systems and their functions.

(b) Operating procedures shall be readily accessible to employees who work in or maintain a process.

(c) The operating procedures shall be reviewed as often as necessary to assure that they reflect current operating practice, including changes that result from changes in process chemicals, technology, and equipment, and changes to stationary sources. The owner or operator shall certify annually that these operating procedures are current and accurate.

(d) The owner or operator shall develop and implement safe work practices to provide for the control of hazards during operations such as lockout/tagout; confined space entry; opening process equipment or piping; and control over entrance into a stationary source by maintenance, contractor, laboratory, or other support personnel. These safe work practices shall apply to employees and contractor employees.

Section 68.70 [Reserved]

Section 68.71 Training.

(a) Initial training.

(1) Each employee presently involved in operating a process, and each employee before being involved in operating a newly assigned process, shall be trained in an overview of the process and in the operating procedures as specified in Section 68.69. The training shall include emphasis on the specific safety and health hazards, emergency operations including shutdown, and safe work practices applicable to the employee's job tasks.

(2) In lieu of initial training for those employees already involved in operating a process on June 21, 1999 an owner or operator may certify in writing that the employee has the required knowledge, skills, and abilities to safely carry out the duties and responsibilities as specified in the operating procedures.

(b) Refresher training. Refresher training shall be provided at least every three years, and more often if necessary, to each employee involved in operating a process to assure that the employee understands and adheres to the current operating procedures of the process. The owner or operator, in consultation with the employees involved in operating the process, shall determine the appropriate frequency of refresher training.

(c) Training documentation. The owner or operator shall ascertain that each employee involved in operating a process has received and understood the training required by this paragraph. The owner or operator shall prepare a record which contains the identity of the employee, the date of training, and the means used to verify that the employee understood the training.

Section 68.72 [Reserved]

Section 68.73 Mechanical integrity.

(a) Application. Paragraphs (b) through (f) of this section apply to the following process equipment:

(1) Pressure vessels and storage tanks;

(2) Piping systems (including piping components such as valves);

(3) Relief and vent systems and devices;

(4) Emergency shutdown systems;

(5) Controls (including monitoring devices and sensors, alarms, and interlocks) and,

(6) Pumps.

(b) Written procedures. The owner or operator shall establish and implement written procedures to maintain the on-going integrity of process equipment.

(c) Training for process maintenance activities. The owner or operator shall train each employee involved in maintaining the on-going integrity of process equipment in an overview of that process and its hazards and in the procedures applicable to the employee's job tasks to assure that the employee can perform the job tasks in a safe manner.

(d) Inspection and testing.

(1) Inspections and tests shall be performed on process equipment.

(2) Inspection and testing procedures shall follow recognized and generally accepted good engineering practices.

(3) The frequency of inspections and tests of process equipment shall be consistent with applicable manufacturers' recommendations and good engineering practices, and more frequently if determined to be necessary by prior operating experience.

(4) The owner or operator shall document each inspection and test that has been performed on process equipment. The documentation shall identify the date of the inspection or test, the name of the person who

performed the inspection or test, the serial number or other identifier of the equipment on which the inspection or test was performed, a description of the inspection or test performed, and the results of the inspection or test.

(e) Equipment deficiencies. The owner or operator shall correct deficiencies in equipment that are outside acceptable limits (defined by the process safety information in Section 68.65) before further use or in a safe and timely manner when necessary means are taken to assure safe operation.

(f) Quality assurance.

(1) In the construction of new plants and equipment, the owner or operator shall assure that equipment as it is fabricated is suitable for the process application for which it will be used.

(2) Appropriate checks and inspections shall be performed to assure that equipment is installed properly and consistent with design specifications and the manufacturer's instructions.

(3) The owner or operator shall assure that maintenance materials, spare parts and equipment are suitable for the process application for which they will be used.

Section 68.74 [Reserved]

Section 68.75 Management of change.

(a) The owner or operator shall establish and implement written procedures to manage changes (except for "replacements in kind") to process chemicals, technology, equipment, and procedures; and, changes to stationary sources that affect a covered process.

(b) The procedures shall assure that the following considerations are addressed prior to any change:

(1) The technical basis for the proposed change;

(2) Impact of change on safety and health;

(3) Modifications to operating procedures;

(4) Necessary time period for the change; and,

(5) Authorization requirements for the proposed change.

(c) Employees involved in operating a process and maintenance and contract employees whose job tasks will be affected by a change in the process shall be informed of, and trained in, the change prior to start-up of the process or affected part of the process.

(d) If a change covered by this paragraph results in a change in the process safety information required by Section 68.65 of this part, such information shall be updated accordingly.

(e) If a change covered by this paragraph results in a change in the operating procedures or practices required by Section 68.69, such procedures or practices shall be updated accordingly.

Section 68.76 [Reserved]

Section 68.77 Pre-startup review.

(A) THE OWNER OR OPERATOR SHALL PERFORM A PRE-STARTUP SAFETY REVIEW FOR

NEW STATIONARY SOURCES AND FOR MODIFIED STATIONARY SOURCES WHEN THE MODIFICATION IS SIGNIFICANT ENOUGH TO REQUIRE A CHANGE IN THE PROCESS SAFETY INFORMATION.

(b) The pre-startup safety review shall confirm that prior to the introduction of regulated substances to a process:

(1) Construction and equipment is in accordance with design specifications;

(2) Safety, operating, maintenance, and emergency procedures are in place and are adequate;

(3) For new stationary sources, a process hazard analysis has been performed and recommendations have been resolved or implemented before startup; and modified stationary sources meet the requirements contained in management of change, Section 68.75.

(4) Training of each employee involved in operating a process has been completed.

Section 68.78 [Reserved]

Section 68.79 Compliance audits.

(a) The owner or operator shall certify that he or she has evaluated compliance with the provisions of this subpart at least every three years to verify that the procedures and practices developed under this subpart are adequate and are being followed.

(b) The compliance audit shall be conducted by at least one person knowledgeable in the process.

(c) A report of the findings of the audit shall be developed.

(d) The owner or operator shall promptly determine and document an appropriate response to each of the findings of the compliance audit, and document that deficiencies have been corrected.

(e) The owner or operator shall retain the two (2) most recent compliance audit reports.

Section 68.80 [Reserved]

Section 68.81 Incident investigation.

(a) The owner or operator shall investigate each incident which resulted in, or could reasonably have resulted in a catastrophic release of a regulated substance.

(b) An incident investigation shall be initiated as promptly as possible, but not later than 48 hours following the incident.

(c) An incident investigation team shall be established and consist of at least one person knowledgeable in the process involved, including a contract employee if the incident involved work of the contractor, and other persons with appropriate knowledge and experience to thoroughly investigate and analyze the incident.

(d) A report shall be prepared at the conclusion of the investigation which includes at a minimum:

(1) Date of incident;

(2) Date investigation began;

(3) A description of the incident;

(4) The factors that contributed to the incident; and,

(5) Any recommendations resulting from the investigation.

(e) The owner or operator shall establish a system to promptly address and resolve the incident report findings and recommendations. Resolutions and corrective actions shall be documented.

(f) The report shall be reviewed with all affected personnel whose job tasks are relevant to the incident findings including contract employees where applicable.

(g) Incident investigation reports shall be retained for five years.

Section 68.82 [Reserved]

Section 68.83 Employee participation.

(a) The owner or operator shall develop a written plan of action regarding the implementation of the employee participation required by this section.

(b) The owner or operator shall consult with employees and their representatives on the conduct and development of process hazards analyses and on the development of the other elements of process safety management in this rule.

(c) The owner or operator shall provide to employees and their representatives access to process hazard analyses and to all other information required to be developed under this rule.

Section 68.84 [Reserved]

Section 68.85 Hot work permit.

(a) The owner or operator shall issue a hot work permit for hot work operations conducted on or near a covered process.

(b) The permit shall document that the fire prevention and protection requirements in 29 CFR 1910.252(a) have been implemented prior to beginning the hot work operations; it shall indicate the date(s) authorized for hot work, and identify the object on which hot work is to be performed. The permit shall be kept on file until completion of the hot work operations.

Section 68.86 [Reserved]

Section 68.87 Contractors.

(A) APPLICATION. THIS SECTION APPLIES TO CONTRACTORS PERFORMING MAINTENANCE OR REPAIR, TURNAROUND, MAJOR RENOVATION, OR SPECIALTY WORK ON OR ADJACENT TO A COVERED PROCESS. IT DOES NOT APPLY TO CONTRACTORS PROVIDING INCIDENTAL SERVICES WHICH DO NOT INFLUENCE PROCESS SAFETY, SUCH AS JANITORIAL WORK, FOOD AND DRINK SERVICES, LAUNDRY, DELIVERY OR OTHER SUPPLY SERVICES.

(b) Owner or operator responsibilities:

(1) The owner or operator, when selecting a contractor, shall obtain and evaluate information regarding the contract owner or operator's safety performance and programs.

(2) The owner or operator shall inform contract owner or operator of the known potential fire, explosion, or toxic release hazards related to the contractor's work and the process.

(3) The owner or operator shall explain to the contract owner or operator the applicable provisions of subpart E of this part.

(4) The owner or operator shall develop and implement safe work practices consistent with Section 68.69(d), to control the entrance, presence, and exit of the contract owner or operator and contract employees in covered process areas.

(5) The owner or operator shall periodically evaluate the performance of the contract owner or operator in fulfilling their obligations as specified in paragraph (c) of this section.

(c) Contract owner or operator responsibilities.

(1) The contract owner or operator shall assure that each contract employee is trained in the work practices necessary to safely perform his or her job.

(2) The contract owner or operator shall assure that each contract employee is instructed in the known potential fire, explosion, or toxic release hazards related to his or her job and the process, and the applicable provisions of the emergency action plan.

(3) The contract owner or operator shall document that each contract employee has received and understood the training required by this section. The contract owner or operator shall prepare a record which contains the identity of the contract employee, the date of training, and the means used to verify that the employee understood the training.

(4) The contract owner or operator shall assure that each contract employee follows the safety rules of the stationary source including the safe work practices required by Section 68.69(d).

(5) The contract owner or operator shall advise the owner or operator of any unique hazards presented by the contract owner or operator's work, or of any hazards found by the contract owner or operator's work.

Section 68.88-89 [Reserved]

SUBPART E - EMERGENCY RESPONSE

Section 68.90 Applicability.

(a) Except as provided in paragraph (b) of this section, the owner or operator of a stationary source with Program 2 and Program 3 processes shall comply with the requirements of Section 68.95.

(b) The owner or operator of stationary source whose employees will not respond to accidental releases of regulated substances need not comply with Section 68.95 of this part provided that they meet the following:

(1) For stationary sources with any regulated toxic substance held in a process above the threshold quantity, the stationary source is included in the community emergency response plan developed under 42 U.S.C. 11003;

(2) For stationary sources with only regulated flammable substances held in a process above the threshold quantity, the owner or operator has coordinated response actions with the local fire department; and

(3) Appropriate mechanisms are in place to notify emergency responders when there is a need for a response.

Section 68.91-94 [Reserved]

Section 68.95 Emergency response program.

(a) The owner or operator shall develop and implement an emergency response program for the purpose of protecting public health and the environment. Such program shall include the following elements:

(1) An emergency response plan, which shall be maintained at the stationary source and contain at least the following elements:

(i) Procedures for informing the public and local emergency response agencies about accidental releases;

(ii) Documentation of proper first-aid and emergency medical treatment necessary to treat accidental human exposures; and

(iii) Procedures and measures for emergency response after an accidental release of a regulated substance;

(2) Procedures for the use of emergency response equipment and for its inspection, testing, and maintenance;

(3) Training for all employees in relevant procedures; and

(4) Procedures to review and update, as appropriate, the emergency response plan to reflect changes at the stationary source and ensure that employees are informed of changes.

(b) A written plan that complies with other Federal contingency plan regulations or is consistent with the approach in the National Response Team's Integrated Contingency Plan Guidance ("One Plan") and that, among other matters, includes the elements provided in paragraph (a) of this section, shall satisfy the requirements of this section if the owner or operator also complies with paragraph (c) of this section.

(c) The emergency response plan developed under paragraph (a)(1) of this section shall be coordinated with the community emergency response plan developed under 42 U.S.C. 11003. Upon request of the local emergency planning committee or emergency response officials, the owner or operator shall promptly provide to the local emergency response officials information necessary for developing and implementing the community emergency response plan.

Section 68.96-99 [Reserved]

SUBPART F - REGULATED SUBSTANCES FOR ACCIDENTAL RELEASE PREVENTION

Section 68.100 Purpose.

This subpart designates substances to be listed under sections 112(r)(3), (4), and (5) of the Clean Air Act, as amended and identifies their threshold quantities.

Section 68.101-114 [Reserved]

Section 68.115 Threshold determination.

(a) A threshold quantity of a regulated substance listed in ə 68.130 is present at a stationary source if the total quantity of the regulated substance contained in a process exceeds the threshold.

(b) For the purposes of determining whether more than a threshold quantity of a regulated substance is present at the stationary source, the following exemptions apply:

(1) Concentrations of a regulated toxic substance in a mixture. If a regulated substance is present in a mixture and the concentration of the substance is below one percent by weight of the mixture, the amount of the substance in the mixture need not be considered when determining whether more than a threshold quantity is present at the stationary source. Except for oleum, toluene 2,4-diisocyanate, toluene 2,6-diisocyanate, and toluene diisocyanate (unspecified isomer), if the concentration of the regulated substance in the mixture is one percent or greater by weight, but the owner or operator can demonstrate that the partial pressure of the regulated substance in the mixture (solution) under handling or storage conditions in any portion of the process is less than 10 millimeters of mercury (mm Hg), the amount of the substance in the mixture in that portion of the process need not be considered when determining whether more than a threshold quantity is present at the stationary source. The owner or operator shall document this partial pressure measurement or estimate.

(2) Concentrations of a regulated flammable substance in a mixture.

(i) General provision. If a regulated substance is present in a mixture and the concentration of the substance is below one percent by weight of the mixture, the mixture need not be considered when determining whether more than a threshold quantity of the regulated substance is present at the stationary source. Except as provided in paragraph (b)(2) (ii) and (iii) of this section, if the concentration of the substance is one percent or greater by weight of the mixture, then, for purposes of determining whether a threshold quantity is present at the stationary source, the entire weight of the mixture shall be treated as the regulated substance unless the owner or operator can demonstrate that the mixture itself does not have a National Fire Protection Association flammability hazard rating of 4. The demonstration shall be in accordance with the definition of flammability hazard rating 4 in the NFPA 704, Standard System for the Identification of the Hazards of Materials for Emergency Response, National Fire Protection Association, Quincy, MA, 1996 (available from the National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02269-9101). Boiling point and flash point shall be defined and determined in accordance with NFPA 30, Flammable and Combustible Liquids Code, National Fire Protection Association, Quincy, MA, 1996 (available from the National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02269-9101). The owner or operator shall document the National Fire Protection Association flammability hazard rating.

(II) GASOLINE. REGULATED SUBSTANCES IN GASOLINE, WHEN IN DISTRIBUTION OR RELATED STORAGE FOR USE AS FUEL FOR INTERNAL COMBUSTION ENGINES, NEED NOT BE CONSIDERED WHEN DETERMINING WHETHER MORE THAN A THRESHOLD QUANTITY IS PRESENT AT A STATIONARY SOURCE.

(iii) Naturally occurring hydrocarbon mixtures. Prior to entry into a natural gas processing plant or a petroleum refining process unit, regulated substances in naturally occurring hydrocarbon mixtures need not be considered when determining whether more than a threshold quantity is present at a stationary source. Naturally occurring hydrocarbon mixtures include any combination of the following: condensate, crude oil, field gas, and produced water, each as defined in Section 68.3 of this part.

(3) ARTICLES. REGULATED SUBSTANCES CONTAINED IN ARTICLES NEED NOT BE CONSIDERED WHEN DETERMINING WHETHER MORE THAN A THRESHOLD QUANTITY IS PRESENT AT THE STATIONARY SOURCE.

(4) USES. REGULATED SUBSTANCES, WHEN IN USE FOR THE FOLLOWING PURPOSES, NEED NOT BE INCLUDED IN DETERMINING WHETHER MORE THAN A THRESHOLD QUANTITY IS PRESENT AT THE STATIONARY SOURCE:

(i) Use as a structural component of the stationary source;

(ii) Use of products for routine janitorial maintenance;

(III) USE BY EMPLOYEES OF FOODS, DRUGS, COSMETICS, OR OTHER PERSONAL ITEMS CONTAINING THE REGULATED SUBSTANCE; AND

(IV) USE OF REGULATED SUBSTANCES PRESENT IN PROCESS WATER OR NONCONTACT COOLING WATER AS DRAWN FROM THE ENVIRONMENT OR MUNICIPAL SOURCES, OR USE OF REGULATED SUBSTANCES PRESENT IN AIR USED EITHER AS COMPRESSED AIR OR AS PART OF COMBUSTION.

(5) ACTIVITIES IN LABORATORIES. IF A REGULATED SUBSTANCE IS MANUFACTURED, PROCESSED, OR USED IN A LABORATORY AT A STATIONARY SOURCE UNDER THE SUPERVISION OF A TECHNICALLY QUALIFIED INDIVIDUAL AS DEFINED IN 40 CFR 720.3(EE), THE QUANTITY OF THE SUBSTANCE NEED NOT BE CONSIDERED IN DETERMINING WHETHER A THRESHOLD QUANTITY IS PRESENT. THIS EXEMPTION DOES NOT APPLY TO:

(i) Specialty chemical production;

(ii) Manufacture, processing, or use of substances in pilot plant scale operations; and

(III) ACTIVITIES CONDUCTED OUTSIDE THE LABORATORY.

Section 68.116-124 [Reserved]

Section 68.125 Exemptions.

AGRICULTURAL NUTRIENTS. AMMONIA USED AS AN AGRICULTURAL NUTRIENT, WHEN HELD BY FARMERS, IS EXEMPT FROM ALL PROVISIONS OF THIS PART.

Section 68.126-129 [Reserved]

Section 68.130 List of substances.

(a) Regulated toxic and flammable substances under section 112(r) of the Clean Air Act are the substances listed in Tables 1, 2, 3, and 4. Threshold quantities for listed toxic and flammable substances are specified in the tables.

(b) The basis for placing toxic and flammable substances on the list of regulated substances are explained in the notes to the list.

TABLE 1 TO 68.130 -

TABLE 1 - LIST OF REGULATED TOXIC SUBSTANCES AND THRESHOLD QUANTITIES FOR ACCIDENTAL RELEASE PREVENTION
[Alphabetical Order - 77 Substances]

Chemical Name	CAS Number	Threshold Quantity (lbs)	Basis for Listing
Acrolein [2- Propenal]	107–02–8	5,000	b
Acrylonitrile [2- Propenenitrile]	107–13–1	20,000	b

TABLE 1 - LIST OF REGULATED TOXIC SUBSTANCES AND THRESHOLD QUANTITIES FOR ACCIDENTAL RELEASE PREVENTION
[Alphabetical Order - 77 Substances]

Chemical Name	CAS Number	Threshold Quantity (lbs)	Basis for Listing
Acrylyl chloride [2-Propenoyl chloride]	814–68–6	5,000	b
Allyl alcohol [2- Propen-l-ol]	107–18–61	15,000	b
Allylamine [2- Propen-l-amine]	107–11–9	10,000	b
Ammonia (anhydrous)	7664–41–7	10,000	a, b
Ammonia (conc. 20% or greater)	7664–41–7	20,000	a, b
Arsenous trichloride	7784–34–1	15,000	b
Arsine	7784–42–1	1,000	b
Boron trichloride [Borane, trichloro-]	10294–34–5	5,000	b
Boron trifluoride [Borane, trifluoro-]	7637–07–2	5,000	b
Boron trifluoride compound with methyl ether (1:1) [Boron, trifluoro [oxybis [metane]]-, T-4-	353–42–4	15,000	b
Bromine	7726–95–6	10,000	a, b
Carbon disulfide	75–15–0	20,000	b
Chlorine	7782–50–5	2,500	a, b
Chlorine dioxide [Chlorine oxide (ClO_2)]	10049–04–4	1,000	c
Chloroform [Methane, trichloro-]	67–66–3	20,000	b
Chloromethyl ether [Methane, oxybis[chloro-]	542–88–1	1,000	b
Chloromethyl methyl ether [Methane, chloromethoxy-]	107–30–2	5,000	b
Crotonaldehyde [2-Butenal]	4170–30–3	20,000	b
Crotonaldehyde, (E)- [2-Butenal, (E)-]	123–73–9	20,000	b
Cyanogen chloride	506–77–4	10,000	c
Cyclohexylamine [Cyclohexanamine]	108–91–8	15,000	b
Diborane	19287–45–7	2,500	b
Dimethyldichlorosilane [Silane, dichlorodimethyl-]	75–78–5	5,000	b
1,1- Dimethylhydrazine [Hydrazine, 1,1-dimethyl-]	57–14–7	15,000	b
Epichlorohydrin [Oxirane, (chloromethyl)-]	106–89–8	20,000	b

TABLE 1 - LIST OF REGULATED TOXIC SUBSTANCES AND THRESHOLD QUANTITIES FOR ACCIDENTAL RELEASE PREVENTION
[Alphabetical Order - 77 Substances]

Chemical Name	CAS Number	Threshold Quantity (lbs)	Basis for Listing
Ethylenediamine [1,2- Ethanediamine]	107–15–3	20,000	b
Ethyleneimine [Aziridine]	151–56–4	10,000	b
Ethylene oxide [Oxirane]	75–21–8	10,000	a, b
Fluorine	7782–41–4	1,000	b
Formaldehyde (solution)	50–00–0	15,000	b
Furan	110–00–9	5,000	b
Hydrazine	302–01–2	15,000	b
Hydrochloric acid (conc. 37% or greater)	7647–01–0	15,000	d
Hydrocyanic acid	74–90–8	2,500	a, b
Hydrogen chloride (anhydrous) [Hydrochloric acid]	7647–01–0	5,000	a
Hydrogen fluoride/ Hydrofluoric acid (conc. 50% or greater) [Hydrofluoric acid]	7664–39–3	1,000	a, b
Hydrogen selenide	7783–07–5	500	b
Hydrogen sulfide	7783–06–4	10,000	a, b
Iron, pentacarbonyl- [Iron carbonyl (Fe(CO)5), 5-11)-]	13463–40–6	2,500	b
Isobutyronitrile [Propanenitrile, 2-methyl-]	78–82–0	20,000	b
Isopropyl chloroformate [Carbonochloridic acid, 1-methylethyl ester]	108–23–6	15,000	b
Methacrylonitrile [2- Propenenitrile, 2-methyl-]	126–98–7	10,000	b
Methyl chloride [Methane, chloro-]	74–87–3	10,000	a
Methyl chloroformate [Carbonochloridic acid, methylester]	79–22–1	5,000	b
Methyl hydrazine [Hydrazine, methyl-]	60–34–4	15,000	b
Methyl isocyanate [Methane, isocyanato-]	624–83–9	10,000	a, b
Methyl mercaptan [Methanethiol]	74–93–1	10,000	b
Methyl thiocyanate [Thiocyanic acid, methyl ester]	556–64–9	20,000	b
Methyltrichlorosilane [Silane, trichloromethyl-]	75–79–6	5,000	b
Nickel carbonyl	13463–39–3	1,000	b

TABLE 1 - LIST OF REGULATED TOXIC SUBSTANCES AND THRESHOLD QUANTITIES FOR ACCIDENTAL RELEASE PREVENTION
[Alphabetical Order - 77 Substances]

Chemical Name	CAS Number	Threshold Quantity (lbs)	Basis for Listing
Nitric acid (conc. 80% or greater)	7697–37–2	15,000	b
Nitric oxide [Nitrogen oxide (NO)]	10102–43–9	10,000	b
Oleum (Fuming Sulfuric acid) [Sulfuric acid, mixture with sulfur trioxide] [1]	8014–95–7	10,000	e
Peracetic acid [Ethaneperoxoic acid]	79–21–0	10,000	b
Perchloromethyl- mercaptan [Methanesulfenyl chloride, trichloro-]	594–42–3	10,000	b
Phosgene [Carbonic dichloride]	75–44–5	500	a, b
Phosphine	7803–51–2	5,000	b
Phosphorus oxychloride [Phosphoryl chloride]	10025–87–3	5,000	b
Phosphorus trichloride [Phosphorous trichloride]	7719–12–2	15,000	b
Piperidine	110–89–4	15,000	b
Propionitrile [Propanenitrile]	107–12–0	10,000	b
Propyl chloroformate [Carbonochloridic acid, propylester]	109–61–5	15,000	b
Propyleneimine [Aziridine, 2- methyl-]	75–55–8	10,000	b
Propylene oxide [Oxirane, methyl-]	75–56–9	10,000	b
Sulfur dioxide (anhydrous)	7446–09–5	5,000	a, b
Sulfur tetrafluoride [Sulfur fluoride (SF4), (T-4)-]	7783–60–0	2,500	b
Sulfur trioxide	7446–11–9	10,000	a, b
Tetramethyllead [Plumbane, tetramethyl-]	75–74–1	10,000	b
Tetranitromethane [Methane, tetranitro-]	509–14–8	10,000	b
Titanium tetrachloride [Titanium chloride (TiCl4) (T-4)-]	7550–45–0	2,500	b
Toluene 2,4- diisocyanate [Benzene, 2,4-diisocyanato-1- methyl-] [1]	584–84–9	10,000	a
Toluene 2,6- diisocyanate [Benzene, 1,3-diisocyanato-2- methyl-] [1]	91–08–7	10,000	a
Toluene diisocyanate (unspecified isomer) [Benzene,	26471–62–5	10,000	a

TABLE 1 - LIST OF REGULATED TOXIC SUBSTANCES AND THRESHOLD QUANTITIES FOR ACCIDENTAL RELEASE PREVENTION
[Alphabetical Order - 77 Substances]

Chemical Name	CAS Number	Threshold Quantity (lbs)	Basis for Listing
1,3- diisocyanatomethyl-] [1]			
Trimethylchlorosilane [Silane, chlorotrimethyl-]	75–77–4	10,000	b
Vinyl acetate monomer [Acetic acid ethenyl ester]	108–05–4	15,000	b

[1] The mixture exemption in Section 68.115(b)(1) does not apply to the substance

NOTE: Basis for Listing:
a Mandated for listing by Congress
b On EHS list, vapor pressure 10 mmHg or greater
c Toxic gas
d Toxicity of hydrogen chloride, potential to release hydrogen chloride, and history of accidents
e Toxicity of sulfur trioxide and sulfuric acid, potential to release sulfur trioxide, and history of accidents

TABLE 2 TO 68.130 -

TABLE 2 - LIST OF REGULATED TOXIC SUBSTANCES AND THRESHOLD QUANTITIES FOR ACCIDENTAL RELEASE PREVENTION
[CAS Number Order - 77 Substances]

CAS Number	Chemical Name	Threshold Quantity (lbs)	Basis for Listing
50–00–0	Formaldehyde (solution)	15,000	b
57–14–7	1,1-Dimethylhydrazine [Hydrazine, 1,1-dimethyl-]	15,000	b
60–34–4	Methyl hydrazine [Hydrazine, methyl-]	15,000	b
67–66–3	Chloroform [Methane, trichloro-]	20,000	b
74–87–3	Methyl chloride [Methane, chloro-]	10,000	a
74–90–8	Hydrocyanic acid	2,500	a, b
74–93–1	Methyl mercaptan [Methanethiol]	10,000	b
75–15–0	Carbon disulfide	20,000	b
75–21–8	Ethylene oxide [Oxirane]	10,000	a, b
75–44–5	Phosgene [Carbonic dichloride]	500	a, b
75–55–8	Propyleneimine [Aziridine, 2-methyl-]	10,000	b
75–56–9	Propylene oxide [Oxirane, methyl-]	10,000	b
75–74–1	Tetramethyllead [Plumbane, tetramethyl-]	10,000	b

TABLE 2 - LIST OF REGULATED TOXIC SUBSTANCES AND THRESHOLD QUANTITIES FOR ACCIDENTAL RELEASE PREVENTION
[CAS Number Order - 77 Substances]

CAS Number	Chemical Name	Threshold Quantity (lbs)	Basis for Listing
75–77–4	Trimethylchlorosilane [Silane, chlorotrimethyl-]	10,000	b
75–78–5	Dimethyldichlorosilane [Silane, dichlorodimethyl-]	5,000	b
75–79–6	Methyltrichlorosilane [Silane, trichloromethyl-]	5,000	b
78–82–0	Isobutyronitrile [Propanenitrile, 2-methyl-]	20,000	b
79–21–0	Peracetic acid [Ethaneperoxoic acid]	10,000	b
79–22–1	Methyl chloroformate [Carbonochloridic acid, methylester]	5,000	b
91–08–7	Toluene 2,6-diisocyanate [Benzene, 1,3-diisocyanato-2-methyl-][1]	10,000	a
106–89–8	Epichlorohydrin [Oxirane, (chloromethyl)-]	20,000	b
107–02–8	Acrolein [2-Propenal]	5,000	b
107–11–9	Allylamine [2-Propen-1-amine]	10,000	b
107–12–0	Propionitrile [Propanenitrile]	10,000	b
107–13–1	Acrylonitrile [2-Propenenitrile]	20,000	b
107–15–3	Ethylenediamine [1,2-Ethanediamine]	20,000	b
107–18–6	Allyl alcohol [2-Propen-1-ol]	15,000	b
107–30–2	Chloromethyl methyl ether [Methane, chloromethoxy-]	5,000	b
108–05–4	Vinyl acetate monomer [Acetic acid ethenyl ester]	15,000	b
108–23–6	Isopropyl chloroformate [Carbonochloridic acid, 1-methylethyl ester]	15,000	b
108–91–8	Cyclohexylamine [Cyclohexanamine]	15,000	b
109–61–5	Propyl chloroformate [Carbonochloridic acid, propylester]	15,000	b
110–00–9	Furan	5,000	b
110–89–4	Piperidine	15,000	b
123–73–9	Crotonaldehyde, (E)- [2-Butenal, (E)-]	20,000	b
126–98–7	Methacrylonitrile [2-Propenenitrile, 2-methyl-]	10,000	b
151–56–4	Ethyleneimine [Aziridine]	10,000	b

TABLE 2 - LIST OF REGULATED TOXIC SUBSTANCES AND THRESHOLD QUANTITIES FOR ACCIDENTAL RELEASE PREVENTION
[CAS Number Order - 77 Substances]

CAS Number	Chemical Name	Threshold Quantity (lbs)	Basis for Listing
302–01–2	Hydrazine	15,000	b
353–42–4	Boron trifluoride compound with methyl ether (1:1) [Boron, trifluoro[oxybis[methane]]-, T-4-	15,000	b
506–77–4	Cyanogen chloride	10,000	c
509–14–8	Tetranitromethane [Methane, tetranitro-]	10,000	b
542–88–1	Chloromethyl ether [Methane, oxybis[chloro-]	1,000	b
556–64–9	Methyl thiocyanate [Thiocyanic acid, methyl ester]	20,000	b
584–84–9	Toluene 2,4-diisocyanate [Benzene, 2,4-diisocyanato-1-methyl-][1]	10,000	a
594–42–3	Perchloromethylmercaptan [Methanesulfenyl chloride, trichloro-]	10,000	b
624–83–9	Methyl isocyanate [Methane, isocyanato-]	10,000	a, b
814–68–6	Acrylyl chloride [2-Propenoyl chloride]	5,000	b
4170–30–3	Crotonaldehyde [2-Butenal]	20,000	b
7446–09–5	Sulfur dioxide (anhydrous)	5,000	a, b
7446–11–9	Sulfur trioxide	10,000	a, b
7550–45–0	Titanium tetrachloride [Titanium chloride (TiCl4) (T-4)-]	2,500	b
7637–07–2	Boron trifluoride [Borane, trifluoro-]	5,000	b
7647–01–0	Hydrochloric acid (conc. 37% or greater)	15,000	d
7647–01–0	Hydrogen chloride (anhydrous) [Hydrochloric acid]	5,000	a
7664–39–3	Hydrogen fluoride/Hydrofluoric acid (conc. 50% or greater) [Hydrofluoric acid]	1,000	a, b
7664–41–7	Ammonia (anhydrous)	10,000	a, b
7664–41–7	Ammonia (conc. 20% or greater)	20,000	a, b
7697–37–2	Nitric acid (conc. 80% or greater)	15,000	b
7719–12–2	Phosphorus trichloride [Phosphorous trichloride]	15,000	b
7726–95–6	Bromine	10,000	a, b

TABLE 2 - LIST OF REGULATED TOXIC SUBSTANCES AND THRESHOLD QUANTITIES FOR ACCIDENTAL RELEASE PREVENTION
[CAS Number Order - 77 Substances]

CAS Number	Chemical Name	Threshold Quantity (lbs)	Basis for Listing
7782–41–4	Fluorine	1,000	b
7782–50–5	Chlorine	2,500	a, b
7783–06–4	Hydrogen sulfide	10,000	a, b
7783–07–5	Hydrogen selenide	500	b
7783–60–0	Sulfur tetrafluoride [Sulfur fluoride (SF4), (T-4)-]	2,500	b
7784–34–1	Arsenous trichloride	15,000	b
7784–42–1	Arsine	1,000	b
7803–51–2	Phosphine	5,000	b
8014–95–7	Oleum (Fuming Sulfuric acid) [Sulfuric acid, mixture with sulfur trioxide][1]	10,000	e
10025–87–3	Phosphorus oxychloride [Phosphoryl chloride]	5,000	b
10049–04–4	Chlorine dioxide [Chlorine oxide (ClO_2)]	1,000	c
10102–43–9	Nitric oxide [Nitrogen oxide (NO)]	10,000	b
10294–34–5	Boron trichloride [Borane, trichloro-]	5,000	b
13463–39–3	Nickel carbonyl	1,000	b
13463–40–6	Iron, pentacarbonyl- [Iron carbonyl (Fe(CO)5), (TB-5-11)-]	2,500	b
19287–45–7	Diborane	2,500	b
26471–62–5	Toluene diisocyanate (unspecified isomer) [Benzene, 1,3-diisocyanatomethyl- 1][1]	10,000	a

[1] The mixture exemption in Section 68.115(b)(1) does not apply to the substance

NOTE: Basis for Listing:
a Mandated for listing by Congress
b On EHS list, vapor pressure 10 mmHg or greater
c Toxic gas
d Toxicity of hydrogen chloride, potential to release hydrogen chloride, and history of accidents
e Toxicity of sulfur trioxide and sulfuric acid, potential to release sulfur trioxide, and history of accidents

TABLE 3 TO 68.130 -

TABLE 3 - LIST OF REGULATED FLAMMABLE SUBSTANCES AND THRESHOLD QUANTITIES FOR ACCIDENTAL RELEASE PREVENTION
[Alphabetical Order - 63 Substances]

Chemical Name	CAS Number	Threshold Quantity (lbs)	Basis for Listing
Acetaldehyde	75–07–0	10,000	g
Acetylene [Ethyne]	74–86–2	10,000	f
Bromotrifluorethylene [Ethene, bromotrifluoro-]	598–73–2	10,000	f
1,3-Butadiene	106–99–0	10,000	f
Butane	106–97–8	10,000	f
1-Butene	106–98–9	10,000	f
2-Butene	107–01–7	10,000	f
Butene	25167–67–3	10,000	f
2-Butenecis	590–18–1	10,000	f
2-Butenetrans [2-Butene, (E)]	624–64–6	10,000	f
Carbon oxysulfide [Carbon oxide sulfide (COS)]	463–58–1	10,000	f
Chlorine monoxide [Chlorine oxide]	7791–21–1	10,000	f
2-Chloropropylene [1-Propene, 2-chloro-]	557–98–2	10,000	g
1-Chloropropylene [1-Propene, 1-chloro-]	590–21–6	10,000	g
Cyanogen [Ethanedinitrile]	460–19–5	10,000	f
Cyclopropane	75–19–4	10,000	f
Dichlorosilane [Silane, dichloro-]	4109–96–0	10,000	f
Difluoroethane [Ethane, 1,1-difluoro-]	75–37–6	10,000	f
Dimethylamine [Methanamine, Nmethyl-]	124–40–3	10,000	f
2,2-Dimethylpropane [Propane, 2,2-dimethyl-]	463–82–1	10,000	f
Ethane	74–84–0	10,000	f
Ethyl acetylene [1-Butyne]	107–00–6	10,000	f
Ethylamine [Ethanamine]	75–04–7	10,000	f
Ethyl chloride [Ethane, chloro-]	75–00–3	10,000	f
Ethylene [Ethene]	74–85–1	10,000	f
Ethyl ether [Ethane, 1,1'-oxybis-]	60–29–7	10,000	g

TABLE 3 - LIST OF REGULATED FLAMMABLE SUBSTANCES AND THRESHOLD QUANTITIES FOR ACCIDENTAL RELEASE PREVENTION
[Alphabetical Order - 63 Substances]

Chemical Name	CAS Number	Threshold Quantity (lbs)	Basis for Listing
Ethyl mercaptan [Ethanethiol]	75–08–1	10,000	g
Ethyl nitrite [Nitrous acid, ethyl ester]	109–95–5	10,000	f
Hydrogen	1333–74–0	10,000	f
Isobutane [Propane, 2-methyl]	75–28–5	10,000	f
Isopentane [Butane, 2-methyl-]	78–78–4	10,000	g
Isoprene [1,3-Butadinene, 2-methyl-]	78–79–5	10,000	g
Isopropylamine [2-Propanamine]	75–31–0	10,000	g
Isopropyl chloride [Propane, 2-chloro-]	75–29–6	10,000	g
Methane	74–82–8	10,000	f
Methylamine [Methanamine]	74–89–5	10,000	f
3-Methyl-1-butene	563–45–1	10,000	f
2-Methyl-1-butene	563–46–2	10,000	g
Methyl ether [Methane, oxybis-]	115–10–6	10,000	f
Methyl formate [Formic acid, methyl ester]	107–31–3	10,000	g
2-Methylpropene [1-Propene, 2-methyl-]	115–11–7	10,000	f
1,3-Pentadinene	504–60–9	10,000	f
Pentane	109–66–0	10,000	g
1-Pentene	109–67–1	10,000	g
2-Pentene, (E)-	646–04–8	10,000	g
2-Pentene, (Z)-	627–20–3	10,000	g
Propadiene [1,2-Propadiene]	463–49–0	10,000	f
Propane	74–98–6	10,000	f
Propylene [1-Propene]	115–07–1	10,000	f
Propyne [1-Propyne]	74–99–7	10,000	f
Silane	7803–62–5	10,000	f
Tetrafluoroethylene [Ethene, tetrafluoro-]	116–14–3	10,000	f

TABLE 3 - LIST OF REGULATED FLAMMABLE SUBSTANCES AND THRESHOLD QUANTITIES FOR ACCIDENTAL RELEASE PREVENTION
[Alphabetical Order - 63 Substances]

Chemical Name	CAS Number	Threshold Quantity (lbs)	Basis for Listing
Tetramethylsilane [Silane, tetramethyl-]	75–76–3	10,000	g
Trichlorosilane [Silane, trichloro-]	10025–78–2	10,000	g
Trifluorochloroethylene [Ethene, chlorotrifluoro-]	79–38–9	10,000	f
Trimethylamine [Methanamine, N,N-dimethyl-]	75–50–3	10,000	f
Vinyl acetylene [1-Buten-3-yne]	689–97–4	10,000	f
Vinyl chloride [Ethene, chloro-]	75–01–4	10,000	a, f
Vinyl ethyl ether [Ethene, ethoxy-]	109–92–2	10,000	g
Vinyl fluoride [Ethene, fluoro-]	75–02–5	10,000	f
Vinylidene chloride [Ethene, 1,1-dichloro-]	75–35–4	10,000	g
Vinylidene fluoride [Ethene, 1,1-difluoro-]	75–38–7	10,000	f
Vinyl methyl ether [Ethene, methoxy-]	107–25–5	10,000	f

NOTE: Basis for Listing:
a Mandated for listing by Congress
f Flammable gas
g Volatile flammable liquid

TABLE 4 TO 68.130 -

TABLE 4 - LIST OF REGULATED FLAMMABLE SUBSTANCES AND THRESHOLD
QUANTITIES FOR ACCIDENTAL RELEASE PREVENTION
[CAS Number Order - 63 Substances]

CAS No	Chemical name	Threshold quantity (lbs)	Basis for listing
60–29–7	Ethyl ether [Ethane, 1,1' -oxybis-]	10,000	g
74–82–8	Methane	10,000	f
74–84–0	Ethane	10,000	f
74–85–1	Ethylene [Ethene]	10,000	f
74–86–2	Acetylene [Ethyne]	10,000	f

TABLE 4 - LIST OF REGULATED FLAMMABLE SUBSTANCES AND THRESHOLD
QUANTITIES FOR ACCIDENTAL RELEASE PREVENTION
[CAS Number Order - 63 Substances]

CAS No	Chemical name	Threshold quantity (lbs)	Basis for listing
74–89–5	Methylamine [Methanamine]	10,000	f
74–98–6	Propane	10,000	f
74–99–7	Propyne [1-Propyne]	10,000	f
75–00–3	Ethyl chloride [Ethane, chloro-]	10,000	f
75–01–4	Vinyl chloride [Ethene, chloro-]	10,000	a, f
75–02–5	Vinyl fluoride [Ethene, fluoro-]	10,000	f
75–04–7	Ethylamine [Ethanamine]	10,000	f
75–07–0	Acetaldehyde	10,000	g
75–08–1	Ethyl mercaptan [Ethanethiol]	10,000	g
75–19–4	Cyclopropane	10,000	f
75–28–5	Isobutane [Propane, 2-methyl]	10,000	f
75–29–6	Isopropyl chloride [Propane, 2-chloro-]	10,000	g
75–31–0	Isopropylamine [2-Propanamine]	10,000	g
75–35–4	Vinylidene chloride [Ethene, 1,1-dichloro-]	10,000	g
75–37–6	Difluoroethane [Ethane, 1,1-difluoro-]	10,000	f
75–38–7	Vinylidene fluoride [Ethene, 1,1-difluoro-]	10,000	f
75–50–3	Trimethylamine [Methanamine, N, N-dimethyl-]	10,000	f
75–76–3	Tetramethylsilane [Silane, tetramethyl-]	10,000	g
78–78–4	Isopentane [Butane, 2-methyl-]	10,000	g
78–79–5	Isoprene [1,3,-Butadiene, 2-methyl-]	10,000	g
79–38–9	Trifluorochloroethylene [Ethene, chlorotrifluoro-]	10,000	f
106–97–8	Butane	10,000	f
106–98–9	1-Butene	10,000	f
106–99–0	1,3-Butadiene	10,000	f
107–00–6	Ethyl acetylene [1-Butyne	10,000	f

TABLE 4 - LIST OF REGULATED FLAMMABLE SUBSTANCES AND THRESHOLD QUANTITIES FOR ACCIDENTAL RELEASE PREVENTION
[CAS Number Order - 63 Substances]

CAS No	Chemical name	Threshold quantity (lbs)	Basis for listing
107–01–7	2-Butene	10,000	f
107–25–5	Vinyl methyl ether [Ethene, methoxy-]	10,000	f
107–31–3	Methyl formate [Formic acid, methyl ester]	10,000	g
109–66–0	Pentane	10,000	g
109–67–1	1-Pentene	10,000	g
109–92–2	Vinyl ethyl ether [Ethene, ethoxy-]	10,000	g
109–95–5	Ethyl nitrite [Nitrous acid, ethyl ester]	10,000	f
115–07–1	Propylene [1-Propene]	10,000	f
115–10–6	Methyl ether [Methane, oxybis-]	10,000	f
115–11–7	2-Methylpropene [1-Propene, 2-methyl-]	10,000	f
116–14–3	Tetrafluoroethylene [Ethene, tetrafluoro-]	10,000	f
124–40–3	Dimethylamine [Methanamine, N-methyl-]	10,000	f
460–19–5	Cyanogen [Ethanedinitrile]	10,000	f
463–49–0	Propadiene [1,2-Propadiene]	10,000	f
463–58–1	Carbon oxysulfide [Carbon oxide sulfide (COS)]	10,000	f
463–82–1	2,2-Dimethylpropane [Propane, 2,2-dimethyl-]	10,000	f
504–60–9	1,3-Pentadiene	10,000	f
557–98–2	2-Chloropropylene [1-Propene, 2-chloro-]	10,000	g
563–45–1	3-Methyl-1-butene	10,000	f
563–46–2	2-Methyl-1-butene	10,000	g
590–18–1	2-Butene-cis	10,000	f
590–21–6	1-Chloropropylene [1-Propene, 1-chloro-]	10,000	g
598–73–2	Bromotrifluorethylene [Ethene, bromotrifluoro-]	10,000	f
624–64–6	2-Butene-trans [2-Butene, (E)]	10,000	f

TABLE 4 - LIST OF REGULATED FLAMMABLE SUBSTANCES AND THRESHOLD QUANTITIES FOR ACCIDENTAL RELEASE PREVENTION [CAS Number Order - 63 Substances]

CAS No	Chemical name	Threshold quantity (lbs)	Basis for listing
627–20–3	2-Pentene, (Z)-	10,000	g
646–04–8	2-Pentene, (E)-	10,000	g
689–97–4	Vinyl acetylene [1-Buten-3-yne]	10,000	f
1333–74–0	Hydrogen	10,000	f
4109–96–0	Dichlorosilane [Silane, dichloro-]	10,000	f
7791–21–1	Chlorine monoxide [Chlorine oxide]	10,000	f
7803–62–5	Silane	10,000	f
10025–78–2	Trichlorosilane [Silane,trichloro-]	10,000	g
25167–67–3	Butene	10,000	f

Note: Basis for Listing:
a Mandated for listing by Congress
f Flammable gas
g Volatile flammable liquid

Section 68.131-149 [Reserved]

SUBPART G - RISK MANAGEMENT PLAN

Section 68.150 Submission.

(a) The owner or operator shall submit a single RMP that includes the information required by Secs. 68.155 through 68.185 for all covered processes. The RMP shall be submitted in a method and format to a central point as specified by EPA prior to June 21, 1999.

(b) The owner or operator shall submit the first RMP no later than the latest of the following dates:

(1) June 21, 1999;

(2) Three years after the date on which a regulated substance is first listed under Section 68.130; or

(3) The date on which a regulated substance is first present above a threshold quantity in a process.

(c) Subsequent submissions of RMPs shall be in accordance with Section 68.190.

(d) Notwithstanding the provisions of Sections 68.155 to 68.190, the RMP shall exclude classified information. Subject to appropriate procedures to protect such information from public disclosure, classified data or

information excluded from the RMP may be made available in a classified annex to the RMP for review by Federal and Department representatives who have received the appropriate security clearances.

(e) Procedures for asserting that information submitted in the RMP is entitled to protection as confidential business information are set forth in Sections 68.151 and 68.152.

Section 68.151 Assertion of claims of confidential business information.

(a) Except as provided in paragraph (b) of this section, an owner or operator of a stationary source required to report or otherwise provide information under this part may make a claim of confidential business information for any such information that meets the criteria set forth in 40 CRF 2.301.

(b) Notwithstanding the provisions of 40 CFR Part 2, an owner or operator of a stationary source subject to this part may not claim as confidential business information the following information:

(1) REGISTRATION DATA REQUIRED BY SECTION 68.160(B)(1) THROUGH (B)(6) AND (B)(8), (B)(10) THROUGH (B)(13) AND NAICS CODE AND PROGRAM LEVEL OF THE PROCESS SET FORTH IN SECTION 68.160(B)(7);

(2) OFFSITE CONSEQUENCE ANALYSIS DATA REQUIRED BY SECTION 68.165(B)(4), (B)(9), (B)(10), (B)(11), AND (B)(12);

(3) Accident history data required by Section 68.168;

(4) Prevention program data required by Section 68.170(b), (d), (e)(1), (f) through (k);

(5) Prevention program data required by Section 68.175(b), (d), (e)(1), (f) through (p); and

(6) EMERGENCY RESPONSE PROGRAM DATA REQUIRED BY SECTION 68.180.

(c) Notwithstanding the procedures specified in 40 CFR Part 2, an owner or operator asserting a claim of CBI with respect to information contained in its RMP, shall submit to EPA at the time it submits the RMP the following:

(1) The information claimed confidential, provided in a format to be specified by EPA;

(2) A sanitized (redacted) copy of the RMP, with the notation "CBI" substituted for the information claimed confidential, except that a generic category or class name shall be substituted for any chemical name or identity claimed confidential; and

(3) The document or documents substantiating each claim of confidential business information, as described in Section 68.152.

Section 68.152 Substantiating claims of confidential business information.

(a) An owner or operator claiming that information is confidential business information must substantiate that claim by providing documentation that demonstrates that the claim meets the substantive criteria set forth in 40 CFR 2.301.

(b) Information that is submitted as part of the substantiation may be claimed confidential by marking it as confidential business information. Information not so marked will be treated as public and may be disclosed without notice to the submitter. If information that is submitted as part of the substantiation is claimed confidential, the owner or operator must provide a sanitized and unsanitized version of the substantiation.

(c) The owner, operator, or senior official with management responsibility of the stationary source shall sign a certification that the signer has personally examined the information submitted and that based on inquiry of the persons who compiled the information, the information is true, accurate, and complete, and that those portions of the substantiation claimed as confidential business information would, if disclosed, reveal trade secrets or other confidential business information.

Section 68.153-154 [Reserved]

Section 68.155 Executive summary.

THE OWNER OR OPERATOR SHALL PROVIDE IN THE RMP AN EXECUTIVE SUMMARY THAT INCLUDES A BRIEF DESCRIPTION OF THE FOLLOWING ELEMENTS:

(a) The accidental release prevention and emergency response policies at the stationary source;

(b) The stationary source and regulated substances handled;

(c) The worst-case release scenario(s) and the alternative release scenario(s), including administrative controls and mitigation measures to limit the distances for each reported scenario;

(d) The general accidental release prevention program and chemical- specific prevention steps;

(e) The five-year accident history;

(f) The emergency response program; and

(g) Planned changes to improve safety.

Section 68.156-159 [Reserved]

Section 68.160 Registration.

(a) The owner or operator shall complete a single registration form and include it in the RMP. The form shall cover all regulated substances handled in covered processes.

(b) The registration shall include the following data:

(1) STATIONARY SOURCE NAME, STREET, CITY, COUNTY, STATE, ZIP CODE, LATITUDE AND LONGITUDE, METHOD FOR OBTAINING LATITUDE AND LONGITUDE, AND DESCRIPTION OF LOCATION THAT LATITUDE AND LONGITUDE REPRESENT;

(2) The stationary source Dun and Bradstreet number;

(3) Name and Dun and Bradstreet number of the corporate parent company;

(4) The name, telephone number, and mailing address of the owner or operator;

(5) THE NAME AND TITLE OF THE PERSON OR POSITION WITH OVERALL RESPONSIBILITY FOR RMP ELEMENTS AND IMPLEMENTATION;

(6) The name, title, telephone number, and 24-hour telephone number of the emergency contact;

(7) FOR EACH COVERED PROCESS, THE NAME AND CAS NUMBER OF EACH REGULATED SUBSTANCE HELD ABOVE THE THRESHOLD QUANTITY IN THE PROCESS, THE MAXIMUM QUANTITY OF EACH REGULATED SUBSTANCE OR MIXTURE IN THE PROCESS (IN POUNDS) TO TWO SIGNIFICANT DIGITS, THE FIVE- OR SIX-DIGIT NAICS CODE THAT MOST CLOSELY CORRESPONDS TO THE PROCESS, AND THE PROGRAM LEVEL OF THE PROCESS;

(8) The stationary source EPA identifier;

(9) The number of full-time employees at the stationary source;

(10) Whether the stationary source is subject to 29 CFR 1910.119;

(11) Whether the stationary source is subject to 40 CFR part 355;

(12) If the stationary source has a CAA Title V operating permit, the permit number;

(13) THE DATE OF THE LAST SAFETY INSPECTION OF THE STATIONARY SOURCE BY A FEDERAL, STATE, OR LOCAL GOVERNMENT AGENCY AND THE IDENTITY OF THE INSPECTING ENTITY;

(14) Source or Parent Company E-mail Address (Optional);

(15) Source Homepage address (Optional);

(16) Phone number at the source for public inquiries (Optional);

(17) Local Emergency Planning Committee (Optional); and

(18) OSHA VOLUNTARY PROTECTION PROGRAM STATUS (OPTIONAL).

Section 68.161-164 [Reserved]

Section 68.165 Offsite consequence analysis.

(a) The owner or operator shall submit in the RMP information:

(1) One worst-case release scenario for each Program 1 process; and

(2) FOR PROGRAM 2 AND 3 PROCESSES, ONE WORST-CASE RELEASE SCENARIO TO REPRESENT ALL REGULATED TOXIC SUBSTANCES HELD ABOVE THE THRESHOLD QUANTITY AND ONE WORST-CASE RELEASE SCENARIO TO REPRESENT ALL REGULATED FLAMMABLE SUBSTANCES HELD ABOVE THE THRESHOLD QUANTITY. IF ADDITIONAL WORST-CASE SCENARIOS FOR TOXICS OR FLAMMABLES ARE REQUIRED BY SECTION 68.25(A)(2)(III), THE OWNER OR OPERATOR SHALL SUBMIT THE SAME INFORMATION ON THE ADDITIONAL SCENARIO(S). THE OWNER OR OPERATOR OF PROGRAM 2 AND 3 PROCESSES SHALL ALSO SUBMIT INFORMATION ON ONE ALTERNATIVE RELEASE SCENARIO FOR EACH REGULATED TOXIC SUBSTANCE HELD ABOVE THE THRESHOLD QUANTITY AND ONE ALTERNATIVE RELEASE SCENARIO TO REPRESENT ALL REGULATED FLAMMABLE SUBSTANCES HELD ABOVE THE THRESHOLD QUANTITY.

(b) The owner or operator shall submit the following data:

(1) Chemical name;

(2) Percentage weight of the chemical in a liquid mixture (toxics only);

(3) Physical state (toxics only);

(4) Basis of results (give model name if used);

(5) Scenario (explosion, fire, toxic gas release, or liquid spill and vaporization);

(6) Quantity released in pounds;

(7) Release rate;

(8) Release duration;

(9) Wind speed and atmospheric stability class (toxics only);

(10) Topography (toxics only);

(11) Distance to endpoint;

(12) Public and environmental receptors within the distance;

(13) Passive mitigation considered; and

(14) Active mitigation considered (alternative releases only);

Section 68.166-167 [Reserved]

Section 68.168 Five-year accident history.

THE OWNER OR OPERATOR SHALL SUBMIT IN THE RMP THE INFORMATION REQUIRED BY SECTION 68.42(B) ON EACH ACCIDENT COVERED BY SECTION 68.42(A).

Section 68.169 [Reserved]

Section 68.170 Prevention program/Program 2.

(a) For each Program 2 process, the owner or operator shall provide in the RMP the information indicated in paragraphs (b) through (k) of this section. If the same information applies to more than one covered process, the owner or operator may provide the information only once, but shall indicate to which processes the information applies.

(b) The five- or six-digit NAICS code that most closely corresponds to the process.

(c) The name(s) of the chemical(s) covered.

(d) The date of the most recent review or revision of the safety information and a list of Federal or State regulations or industry- specific design codes and standards used to demonstrate compliance with the safety information requirement.

(e) The date of completion of the most recent hazard review or update.

(1) The expected date of completion of any changes resulting from the hazard review;

(2) Major hazards identified;

(3) Process controls in use;

(4) Mitigation systems in use;

(5) Monitoring and detection systems in use; and

(6) CHANGES SINCE THE LAST HAZARD REVIEW.

(f) The date of the most recent review or revision of operating procedures.

(g) The date of the most recent review or revision of training programs;

(1) The type of training provided--classroom, classroom plus on the job, on the job; and

(2) THE TYPE OF COMPETENCY TESTING USED.

(h) The date of the most recent review or revision of maintenance procedures and the date of the most recent equipment inspection or test and the equipment inspected or tested.

(i) The date of the most recent compliance audit and the expected date of completion of any changes resulting from the compliance audit.

(j) The date of the most recent incident investigation and the expected date of completion of any changes resulting from the investigation.

(k) The date of the most recent change that triggered a review or revision of safety information, the hazard review, operating or maintenance procedures, or training.

Section 68.171-174 [Reserved]

Section 68.175 Prevention program/Program 3.

(a) For each Program 3 process, the owner or operator shall provide the information indicated in paragraphs (b) through (p) of this section. If the same information applies to more than one covered process, the owner or operator may provide the information only once, but shall indicate to which processes the information applies.

(b) The five- or six-digit NAICS code that most closely corresponds to the process.

(c) The name(s) of the substance(s) covered.

(d) The date on which the safety information was last reviewed or revised.

(e) The date of completion of the most recent Process Hazard Analysis(PHA) or update and the technique used.

(1) The expected date of completion of any changes resulting from the PHA;

(2) Major hazards identified;

(3) Process controls in use;

(4) Mitigation systems in use;

(5) Monitoring and detection systems in use; and

(6) CHANGES SINCE THE LAST PHA.

(f) The date of the most recent review or revision of operating procedures.

(g) The date of the most recent review or revision of training programs;

(1) The type of training provided - classroom, classroom plus on the job, on the job; and

(2) THE TYPE OF COMPETENCY TESTING USED.

(h) The date of the most recent review or revision of maintenance procedures and the date of the most recent equipment inspection or test and the equipment inspected or tested.

(i) The date of the most recent change that triggered management of change procedures and the date of the most recent review or revision of management of change procedures.

(j) The date of the most recent pre-startup review.

(k) The date of the most recent compliance audit and the expected date of completion of any changes resulting from the compliance audit;

(l) The date of the most recent incident investigation and the expected date of completion of any changes resulting from the investigation;

(m) The date of the most recent review or revision of employee participation plans;

(n) The date of the most recent review or revision of hot work permit procedures;

(o) The date of the most recent review or revision of contractor safety procedures; and

(p) The date of the most recent evaluation of contractor safety performance.

Section 68.176-179 [Reserved]

Section 68.180 Emergency response program.

(a) The owner or operator shall provide in the RMP the following information:

(1) Whether he or she has a written emergency response plan;

(2) WHETHER THE PLAN INCLUDES SPECIFIC ACTIONS TO BE TAKEN IN RESPONSE TO AN ACCIDENTAL RELEASE OF A REGULATED SUBSTANCE;

(3) Whether the plan includes procedures for informing the public and local agencies responsible for responding to accidental releases;

(4) Whether the plan includes information on emergency health care;

(5) The date of the most recent review or update of the emergency response plan; and

(6) The date of the most recent emergency response training for employees.

(b) The owner or operator shall provide the name and telephone number of the local agency with which emergency response activities and the emergency response plan is coordinated.

(c) The owner or operator shall list other Federal or State emergency plan requirements to which the stationary source is subject.

Section 68.181-184 [Reserved]

Section 68.185 Certification.

(a) For Program 1 processes, the owner or operator shall submit in the RMP the certification statement provided in Section 68.12(b)(4).

(b) For all other covered processes, the owner or operator shall submit in the RMP a single certification that, to the best of the signer's knowledge, information, and belief formed after reasonable inquiry, the information submitted is true, accurate, and complete.

Section 68.186-189 [Reserved]

Section 68.190 Updates.

(a) The owner or operator shall review and update the RMP as specified in paragraph (b) of this section and submit it in a method and format to a central point specified by EPA prior to June 21, 1999.

(b) The owner or operator of a stationary source shall revise and update the RMP submitted under Section 68.150 as follows:

(1) WITHIN FIVE YEARS OF ITS INITIAL SUBMISSION OR MOST RECENT UPDATE REQUIRED BY PARAGRAPHS (B)(2) THROUGH (B)(7) OF THIS SECTION, WHICHEVER IS LATER.

(2) No later than three years after a newly regulated substance is first listed by EPA;

(3) No later than the date on which a new regulated substance is first present in an already covered process above a threshold quantity;

(4) No later than the date on which a regulated substance is first present above a threshold quantity in a new process;

(5) Within six months of a change that requires a revised PHA or hazard review;

(6) Within six months of a change that requires a revised offsite consequence analysis as provided in Section 68.36; and

(7) Within six months of a change that alters the Program level that applied to any covered process.

(c) If a stationary source is no longer subject to this part, the owner or operator shall submit a revised registration to EPA within six months indicating that the stationary source is no longer covered.

Section 68.191-199 [Reserved]

SUBPART H - OTHER REQUIREMENTS

Section 68.200 Recordkeeping.

The owner or operator shall maintain records supporting the implementation of this part for five years unless otherwise provided in subpart D of this part.

Section 68.201-209 [Reserved]

Section 68.210 Availability of information to the public.

(a) The RMP required under subpart G of this part shall be available to the public under 42 U.S.C. 7414(c).

(b) The disclosure of classified information by the Department of Defense or other Federal agencies or contractors of such agencies shall be controlled by applicable laws, regulations, or executive orders concerning the release of classified information.

Section 68.211-214 [Reserved]

Section 68.215 Permit content and Department requirements.

(a) These requirements apply to any stationary source subject to 61-62.68 and 61-62.70. The 61-62.70 permit for the stationary source shall contain:

(1) A statement listing this part as an applicable requirement;

(2) Conditions that require the source owner or operator to submit:

(i) A compliance schedule for meeting the requirements of this part by the date provided in Section 68.10(a) or;

(ii) As part of the compliance certification submitted under section 61-62.70.6(c)(5), a certification statement that the source is in compliance with all requirements of this part, including the registration and submission of the RMP.

(b) The owner or operator shall submit any additional relevant information requested by the Department.

(c) For 61-62.70 permits issued prior to the deadline for registering and submitting the RMP and which do not contain permit conditions described in paragraph (a) of this section, the owner or operator or the Department shall initiate permit revision or reopening according to the procedures of section 61-62.70.7 to incorporate the terms and conditions consistent with paragraph (a) of this section.

(d) The Department will, at a minimum:

(1) VERIFY THAT THE SOURCE OWNER OR OPERATOR HAS REGISTERED AND SUBMITTED AN RMP OR A REVISED PLAN WHEN REQUIRED BY THIS PART;

(2) Verify that the source owner or operator has submitted a source certification or in its absence has submitted a compliance schedule consistent with paragraph (a)(2) of this section;

(3) For some or all of the sources subject to this section, use one or more mechanisms such as, but not limited to, a completeness check, source audits, record reviews, or facility inspections to ensure that permitted sources are in compliance with the requirements of this part; and

(4) Initiate enforcement action based on paragraphs (d)(1) and (d)(2) of this section as appropriate.

Section 68.216-219 [Reserved]

Section 68.220 Audits.

(a) The State may partially delegate the authority to implement and enforce the requirements of this section to a State agency or agencies other than the Department. An up-to-date copy of any delegation instrument will be maintained by the Department. The Department may enter a written agreement with the Administrator under which EPA will implement and enforce the requirements of this section.

(b) In addition to inspections for the purpose of regulatory development and enforcement of the Act, the Department, or the agency designated by delegation or agreement under paragraph (a) of this section, will periodically audit RMP's submitted under subpart G of this part to review the adequacy of such RMP's and require revisions of RMP's when necessary to ensure compliance with subpart G of this part.

(c) The Department, or the agency designated by delegation or agreement, will select stationary sources for audits based on any of the following criteria:

(1) Accident history of the stationary source;

(2) Accident history of other stationary sources in the same industry;

(3) Quantity of regulated substances present at the stationary source;

(4) Location of the stationary source and its proximity to the public and environmental receptors;

(5) The presence of specific regulated substances;

(6) The hazards identified in the RMP; and

(7) A plan providing for neutral, random oversight.

(d) Exemption from audits. A stationary source with a Star or Merit ranking under OSHA's voluntary protection program shall be exempt from audits under paragraph (b)(2) and (b)(7) of this section.

(e) The owner or operator of a stationary source subject to this part shall provide the Department, or the agency designated by delegation or agreement, access to the stationary source, supporting documentation, and any area where an accidental release could occur.

(f) Based on the audit, the Department, or the agency designated by delegation or agreement, may issue the owner or operator of a stationary source a written preliminary determination of necessary revisions to the stationary source's RMP to ensure that the RMP meets the criteria of subpart G of this part. The preliminary determination will include an explanation for the basis for the revisions, reflecting industry standards and guidelines (such as AIChE/ CCPS guidelines and ASME and API standards) to the extent that such standards and guidelines are applicable, and will include a timetable for their implementation.

(g) Written response to a preliminary determination.

(1) THE OWNER OR OPERATOR SHALL RESPOND IN WRITING TO A PRELIMINARY DETERMINATION MADE IN ACCORDANCE WITH PARAGRAPH (E) OF THIS SECTION. THE RESPONSE SHALL STATE THE OWNER OR OPERATOR WILL IMPLEMENT THE REVISIONS CONTAINED IN THE PRELIMINARY DETERMINATION IN ACCORDANCE WITH THE TIMETABLE INCLUDED IN THE PRELIMINARY DETERMINATION OR SHALL STATE THAT THE OWNER OR OPERATOR REJECTS THE REVISIONS IN WHOLE OR IN PART. FOR EACH REJECTED REVISION, THE OWNER OR OPERATOR SHALL EXPLAIN THE BASIS FOR REJECTING SUCH REVISION. SUCH EXPLANATION MAY INCLUDE SUBSTITUTE REVISIONS.

(2) The owner or operator shall provide written response in accordance with paragraph (f)(1) to the Department, or the agency designated by delegation or agreement, within 90 days of issuance of the preliminary determination or a shorter period of time as the Department, or the agency designated by delegation or agreement, specifies in the preliminary determination as necessary to protect public health and the environment. Prior to the written response being due and upon written request from the owner or operator, the Department, or the agency designated by delegation or agreement, may provide in writing additional time for the response to be received.

(h) After providing the owner or operator an opportunity to respond under paragraph (f) of this section, the Department, or the agency designated by delegation or agreement, may issue the owner or operator a written final determination of necessary revisions to the stationary source's RMP. The final determination may adopt or modify the revisions contained in the preliminary determination under paragraph (e) of this section or may adopt or modify the substitute revisions provided in the response under paragraph (f) of this section. A final determination that adopts a revision rejected by the owner or operator shall include an explanation of the basis for the revision. A final determination that fails to adopt a substitute revision provided under paragraph (f) of this section shall include an explanation of the basis for finding such substitute revision unreasonable.

(i) Thirty days after completion of the actions detailed in the implementation schedule set in the final determination under paragraph (g) of this section, the owner or operator shall be in violation of subpart G of this part and this section unless the owner or operator revises the RMP prepared under subpart G of this part as required by the final determination, and submits the revised RMP as required under Section 68.150.

(j) The public shall have access to the preliminary determinations, responses, and final determinations under this section in a manner consistent with Section 68.210.

(k) Nothing in this section shall preclude, limit, or interfere in any way with the authority of EPA, the Department, or the agency designated by delegation or agreement, to exercise its enforcement, investigatory, and information gathering authorities concerning this part under other State or Federal Statutes.

Appendix A to part 68 -

Appendix A - Table of Toxic Endpoints [As defined in Section 68.22 of this part]		
CAS Number	Chemical Name	Toxic endpoint (mg/L)
107-02-8	Acrolein [2-Propenal]	0.0011
107-13-1	Acrylonitrile [2-Propenenitrile]	0.076
814-68-6	Acrylyl chloride [2-Propenoyl chloride]	0.00090
107-18-6	Allyl alcohol [2-Propen-1-ol]	0.036
107-11-9	Allylamine [2-Propen-1-amine]	0.0032
7664-41-7	Ammonia (anhydrous)	0.14
7664-41-7	Ammonia (conc. 20% or greater)	0.14
7784-34-1	Arsenous trichloride	0.010
7784-42-1	Arsine	0.0019
10294-34-5	Boron trichloride [Borane, trichloro-]	0.010
7637-07-2	Boron trifluoride [Borane, trifluoro-]	0.028
353-42-4	Boron trifluoride compound with methyl ether (1:1) [Boron, trifluoro[oxybis[methane]]-, T-4	0.023
7726-95-6	Bromine	0.0065
75-15-0	Carbon disulfide	0.16
7782-50-5	Chlorine	0.0087
10049-04-4	Chlorine dioxide [Chlorine oxide (ClO_2)]	0.0028
67-66-3	Chloroform [Methane, trichloro-]	0.49
542-88-1	Chloromethyl ether [Methane, oxybis[chloro-]	0.00025
107-30-2	Chloromethyl methyl ether [Methane, chloromethoxy-]	0.0018
4170-30-3	Crotonaldehyde [2-Butenal]	0.029
123-73-9	Crotonaldehyde, (E)-, [2-Butenal, (E)-]	0.029
506-77-4	Cyanogen chloride	0.030
108-91-8	Cyclohexylamine [Cyclohexanamine]	0.16
19287-45-7	Diborane	0.0011
75-78-5	Dimethyldichlorosilane [Silane, dichlorodimethyl-]	0.026

Appendix A - Table of Toxic Endpoints [As defined in Section 68.22 of this part]		
CAS Number	Chemical Name	Toxic endpoint (mg/L)
57-14-7	1,1-Dimethylhydrazine [Hydrazine, 1,1-dimethyl-]	0.012
106-89-8	Epichlorohydrin [Oxirane, (chloromethyl)-]	0.076
107-15-3	Ethylenediamine [1,2-Ethanediamine]	0.49
151-56-4	Ethyleneimine [Aziridine]	0.018
75-21-8	Ethylene oxide [Oxirane]	0.090
7782-41-4	Fluorine	0.0039
50-00-0	Formaldehyde (solution)	0.012
110-00-9	Furan	0.0012
302-01-2	Hydrazine	0.011
7647-01-0	Hydrochloric acid (conc. 37% or greater)	0.030
74-90-8	Hydrocyanic acid	0.011
7647-01-0	Hydrogen chloride (anhydrous) [Hydrochloric acid]	0.030
7664-39-3	Hydrogen fluoride/Hydrofluoric acid (conc. 50% or greater) [Hydrofluoric acid]	0.016
7783-07-5	Hydrogen selenide	0.00066
7783-06-4	Hydrogen sulfide	0.042
13463-40-6	Iron, pentacarbonyl- [Iron carbonyl (Fe(CO)5), (TB-5-11)-]	0.00044
78-82-0	Isobutyronitrile [Propanenitrile, 2-methyl-]	0.14
108-23-6	Isopropyl chloroformate [Carbonochloride acid, 1- methylethyl ester]	0.10
126-98-7	Methacrylonitrile [2-Propenenitrile, 2-methyl-]	0.0027
74-87-3	Methyl chloride [Methane, chloro-]	0.82
79-22-1	Methyl chloroformate [Carbonochloridic acid, methylester]	0.0019
60-34-4	Methyl hydrazine [Hydrazine, methyl-]	0.0094
624-83-9	Methyl isocyanate [Methane, isocyanato-]	0.0012
74-93-1	Methyl mercaptan [Methanethiol]	0.049
556-64-9	Methyl thiocyanate [Thiocyanic acid, methyl ester]	0.085
75-79-6	Methyltrichlorosilane [Silane, trichloromethyl-]	0.018

Appendix A - Table of Toxic Endpoints
[As defined in Section 68.22 of this part]

CAS Number	Chemical Name	Toxic endpoint (mg/L)
13463-39-3	Nickel carbonyl	0.00067
7697-37-2	Nitric acid (conc. 80% or greater)	0.026
10102-43-9	Nitric oxide [Nitrogen oxide (NO)]	0.031
8014-95-7	Oleum (Fuming Sulfuric acid) [Sulfuric acid, mixture with sulfur trioxide]	0.010
79-21-0	Peracetic acid [Ethaneperoxoic acid]	0.0045
594-42-3	Perchloromethylmercaptan [Methanesulfenyl chloride, trichloro-]	0.0076
75-44-5	Phosgene [Carbonic dichloride]	0.00081
7803-51-2	Phosphine	0.0035
10025-87-3	Phosphorus oxychloride [Phosphoryl chloride]	0.0030
7719-12-2	Phosphorus trichloride [Phosphorous trichloride]	0.028
110-89-4	Piperidine	0.022
107-12-0	Propionitrile [Propanenitrile]	0.0037
109-61-5	Propyl chloroformate [Carbonochloridic acid, propylester]	0.010
75-55-8	Propyleneimine [Aziridine, 2-methyl-]	0.12
75-56-9	Propylene oxide [Oxirane, methyl-]	0.59
7446-09-5	Sulfur dioxide (anhydrous)	0.0078
7783-60-0	Sulfur tetrafluoride [Sulfur fluoride (SF4), (T-4)-].	0.0092
7446-11-9	Sulfur trioxide	0.010
75-74-1	Tetramethyllead [Plumbane, tetramethyl-]	0.0040
509-14-8	Tetranitromethane [Methane, tetranitro-]	0.0040
7750-45-0	Titanium tetrachloride [Titanium chloride (TiCl4)(T-4)-].	0.020
584-84-9	Toluene 2,4-diisocyanate [Benzene, 2,4-diisocyanato-1-methyl-]	0.0070
91-08-7	Toluene 2,6-diisocyanate [Benzene, 1,3-diisocyanato-2-methyl-].	0.0070
26471-62-5	Toluene diisocyanate (unspecified isomer) [Benzene,1,3-diisocyanatomethyl-]	0.0070
75-77-4	Trimethylchlorosilane [Silane, chlorotrimethyl-]	0.050

Appendix A - Table of Toxic Endpoints [As defined in Section 68.22 of this part]		
CAS Number	Chemical Name	Toxic endpoint (mg/L)
108-05-4	Vinyl acetate monomer [Acetic acid ethenyl ester]	0.26

Statement of Need and Reasonableness

This statement of need and reasonableness was determined by staff analysis pursuant to S.C. Code Section 1-23-115(C)(1)-(3) and (9)-(11).

DESCRIPTION OF REGULATION:

Purpose: The amendment will incorporate revisions to 40 CFR Part 68. The amendment will add four mandatory and five optional risk management plan (RMP) data elements and establish specific procedures for protecting confidential business information when submitting RMPs. In addition, the amendment will replace the use of Standard Industrial Classification (SIC) codes with the North American Industry Classification System (NAICS) codes. Finally, the amendments will revise the worst-case release scenario analysis for regulated flammable substances and make technical corrections and clarifications.

Legal Authority: The legal authority for R. 61-62 is Sections 48-1-30 through 48-1-60, S.C. Code of Laws.

Plan for Implementation: The amendment will take effect upon promulgation by the Board and publication in the *State Register*. The Department has been and will continue to perform outreach to the regulated community concerning the requirements of this rule. Once promulgated, copies of the regulation will be provided to the regulated community.

DETERMINATION OF NEED AND REASONABLENESS OF THE REGULATION BASED ON ALL FACTORS HEREIN AND EXPECTED BENEFITS:

In the Clean Air Act (CAA) Amendments of 1990, Congress added subsection (r) to CAA Section 112 for the prevention of chemical accidents. Under Section 112(r), owners and operators of stationary sources who produce, process, handle, or store extremely hazardous substances have a general duty to initiate specific activities to prevent and mitigate accidental releases. The Act required the USEPA to promulgate a list of regulated substances as well as threshold quantities of the substances and develop reasonable regulations and guidance to provide for the prevention and detection of accidental releases and for responses to such releases. On January 31, 1994, the USEPA promulgated 40 CFR Part 68, *Chemical Accident Prevention Provisions* listing the regulated substances and threshold quantities. In addition, the Federal rule mandated operating requirements for applicable sources. The Federal rule was revised on June 20, 1996; August 25, 1997; and January 6, 1998. The Department incorporated the Federal requirements into the State air quality regulations by creating Regulation 61-62.68, *Chemical Accident Prevention Provisions*. The Board approved the regulation on August 13, 1998, and it became effective upon publication in the *State Register* on August 28, 1998. On January 6, 1999, and May 26, 1999, the USEPA promulgated further amendments to 40 CFR Part 68. The Department has amended Regulation 61-62.68, *Chemical Accident Prevention Provisions*, to incorporate these revisions. This amendment will comply with Federal law.

DETERMINATION OF COSTS AND BENEFITS:

This regulation consists primarily of technical amendments and corrections to the existing *Chemical Accident Prevention Provisions* regulation. The bulk of the revisions are administrative, such as the change in the use of

the industry classification system. In addition, the amendment establishes procedures to protect confidential business information. This last provision is optional and is designed to assist facilities with concerns about confidentiality. Finally, with respect to the amendments to the worst-case release scenario analysis, the revision does not require additional reporting elements in the risk management plan. Rather, it merely provides an alternative approach for sources already subject to the rule. Therefore, it is the Department's belief that there will be no increased cost to the regulated community as a result of these amendments. Nor will there be any increased cost to the State or its political subdivisions resulting from these amendments. According to information contained in the Federal Register on January 6, 1999 [64 FR 964], the USEPA has determined that the total nationwide capital costs for this amendment is zero and the annual nationwide cost is less than $1 million.

UNCERTAINTIES OF ESTIMATES:

See explanation above.

EFFECT ON ENVIRONMENT AND PUBLIC HEALTH

See explanation above.

DETRIMENTAL EFFECT ON THE ENVIRONMENT AND PUBLIC HEALTH IF THE REGULATIONS ARE NOT IMPLEMENTED:

See explanation above.

Document No. 2443
DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL
CHAPTER 61
Statutory Authority: 1976 Code Ann. Section 44-56-30

R. 61-79. Hazardous Waste Management Regulations

Synopsis:

The Department has amended Regulation 61-79 to adopt federal amendments through June 30, 1998. Adoption of federal amendments will ensure federal compliance.

The United States Environmental Protection Agency (EPA) promulgates amendments to 40 CFR 124, 260 through 266, 268, 270, and 273 throughout each calendar year. Recent amendments include clarification, guidance and technical amendments regarding organic air emission standards for tanks, surface impoundments and containers ("CC"); Land Disposal Regulations Phase IV, second half, to include Soil Treatment Standards; the RCRA Comparable/Syngas Fuel Exclusion; and the addition of waste codes for organobromine production wastes. These rules and other amendments were published in the Federal Register between July 1, 1997, and June 30, 1998. These amendments appeared at 62 FR 37694-699, 7/14/97; 62 FR 45568-4557, 8/28/97; 62 FR 63458-463, 12/1/97; 62 FR 64504-64509, 12/5/97; 62 FR 64636-64671, 12/8/97; 63 FR 18504-18751, 4/15/98; 63 FR 24596-24628 and; 63 FR 35147-35150, 5/4/98 and 6/29/98; 63 FR 24963-24969, 5/6/98; 63 FR 28556-28753 and 63 FR 31266, 5/26/98 and 6/8/98; 63 FR 33782 - 33829, 6/19/98. The Department has also made minor corrections to previous amendments. These amendments and corrections have been promulgated to comply with federal law. Neither a fiscal impact statement nor an assessment report is required.

Changes were made to conform R. 61-79 with federal amendments to 40 CFR 124 through 273 as of June 30, 1998.

Description of Revisions

Section Citation	**Description of Change:**
260.11(a)(11)	Replace; SW-846 has been updated
261.1(b)(2)(i)	Replace; clarifies when materials may be a solid waste
261.2(c)(3) and table following 261.2	Replace; reflect exclusions at 261.4(a)(15) and (16)
261.2(e)(1)(iii)	Replace; facilitate reclamation of certain metals
261.2(e)(2)(iv)	Replace; to add class of materials which are solid waste
261.2(f)	Replace; insert reference to Subtitle C of RCRA
261.3(a), (a)(1) and (2)(i)	Replace; stylistic changes
261.3(a)(2)(v) and (v)(A) and (B)	Add; adopt rebuttable presumption for used oil

261.4(a)(9)(iii) and (iii)(A)(B)(C)(D)(E); add (a)(15)(16) and (17)	Add; facilitate reuse of certain wastes by exclusion
261.4(b)(7)(i) and (ii); add 261.4(b)(7)(iii)	Replace and add text for the exclusion of spent wood preserving solutions
261.32 K140 in alphanumeric order, after K136	Add newly listed waste K140, organobromine production waste
261.33 U408, in alphanumeric order, after U011	Add newly listed waste U408, organobromine production waste
261.38	Add new comparable/syngas fuel exclusion
261 Appendix VII in alphanumeric order (after K136)	Add K140, organobromine production waste
261 Appendix VIII in alphabetic order (after Trillate)	Add 2,4,6-Tribromophenol.
264.15(b)(4)	Replace; clarifications and amendments to organic air emission standards
264.73(b)(6)	Replace; clarifications and amendments to organic air emission standards
264.143(f)(10), 264.145(f)(11), and 264.151(g)	Replace to correct federal citation cross references
264.1030(b)(3)	Replace; clarifications and amendments to organic air emission standards
264.1030(c)	Replace; clarifications and amendments to organic air emission standards
264.1030(d)	Add and reserve
264.1030(e)	Add; clarifications and amendments to organic air emission standards
264.1031 definition of "In light service"	Replace; clarifications and amendments to organic air emission standards
264.1033(a)(2)	Revise (a)(2) to (a)(2)(i) and (a)(2)(ii); clarifications and amendments to organic air emission standards
264.1033(a)(2)(iii) and (iv)	Add; clarifications and amendments to organic air emission standards
264.1034(b) and (f)	Replace; clarifications and amendments to organic air emission standards
264.1050(b)(3); (c)(f) and (g)	Replace; reserve (g); clarifications and amendments to organic air emission standards
264.1060(a); (b)(1)-(4)	Replace (a); add (b)(1-(4); clarifications and amendments to organic air emission standards

264.1062(b)(2) and (3)	Replace; clarifications and amendments to organic air emission standards
264.1064(g)(6)	Replace; clarifications and amendments to organic air emission standards
264.1064(m)	Replace; clarifications and amendments to organic air emission standards
264.1080(b) and (c)	Replace; clarifications and amendments to organic air emission standards
264.1080(e)	Add and reserve
264.1082(b)	Replace; clarifications and amendments to organic air emission standards
264.1082(c)(2)(ix)(A) and (B)	Replace; clarifications and amendments to organic air emission standards
264.1082(c)(3) and (4)(ii)	Replace; clarifications and amendments to organic air emission standards
264.1083(a)(2) and (b)(1)	Replace; clarifications and amendments to organic air emission standards
264.1084(c)(2)(iii) and (iii)(B), adding (B)(1) and (2)	Replace; add; clarifications and amendments to organic air emission standards
264.1084(e)(4)	Add; clarifications and amendments to organic air emission standards
264.1084(f)(3)(i)(D)(4) and (f)(3)(iii)	Replace; clarifications and amendments to organic air emission standards
264.1084(f)(4) and (j)(2)(iii)	Add; clarifications and amendments to organic air emission standards
264.1085(b)(2)	Replace; clarifications and amendments to organic air emission standards
264.1085(d)(1)(iii), (d)(2)(i)(B) and add (e)(2)(iii)	Replace; add; clarifications and amendments to organic air emission standards
264.1086(c)(2) and (c)(4)(i), (d)(4)(i) and (g)	Replace; clarifications and amendments to organic air emission standards
264.1087(c)(3)(ii) and (c)(7)	Replace; clarifications and amendments to organic air emission standards
264.1089(a), (b)(1)(ii)(B), and (f)(1); add (j) and (j)(1) and (2)	Replace; add; clarifications and amendments to organic air emission standards
265.15(b)(4)	Replace; clarifications and amendments to organic air emission standards
265.73(b)(6)	Replace; clarifications and amendments to organic air emission standards

265.1030(b)(3)	Replace; clarifications and amendments to organic air emission standards
265.1030(c) and (d)	Add both; reserve (c); clarifications and amendments to organic air emission standards
265.1033(a)(2)(i) through (iv)	Add; clarifications and amendments to organic air emission standards
265.1050(b)(3)	Replace; clarifications and amendments to organic air emission standards
265.1060	Replace; renumber lead in to an (a) and add (b)(1) through (4); clarifications and amendments to organic air emission standards
265.1062(b)(2) and (3)	Replace; clarifications and amendments to organic air emission standards
265.1064 (m)	Replace; clarifications and amendments to organic air emission standards
265.1080	Replace (b)(1) and (c); add (e) and reserve; clarifications and amendments to organic air emission standards
265.1082(a) through (d)	Replace; retain (b)(2)(ii) and (iii); clarifications and amendments to organic air emission standards
265.1083(b), (c)(2)(ix)(A) and (B), (c)(3) and (c)(4)(ii)	Replace; clarifications and amendments to organic air emission standards
265.1084 (a)(2), (a)(3)(ii)(B), (a)(3)(iii)(F),(a)(3)(iii)(G), (a)(3)(iii)(G)(1)	Replace; clarifications and amendments to organic air emission standards; retain (a)(3)(iii)(F)(1) and (2), and (a)(3)(iii)(G)(2)
265.1084(a)(3)(iv), make lead in (A) and amend (A), and replace three of the six definitions within the following equation	Replace; clarifications and amendments to organic air emission standards
265.1084(a)(3)(iv)(B), (B)(1) and (2), and (a)(3)(v)	Add; clarifications and amendments to organic air emission standards
265.1084(a)(4)(iv)	Replace; clarifications and amendments to organic air emission standards
265.1084(b)(1) and (b)(3)(ii)(B) and (B)(iii) and (b)(3)(F) and (G) and (b)(3)(iv) and three of the six definitions following the equation; add (b)(3)(v)	Replace; add; clarifications and amendments to organic air emission standards
265.1084(b)(8)(iii)	Move the equation for mass removal rate from below “where” to above “where” to clarify organic air emission standards
265.1084(b)(9)(iv) and move the equation for mass removal	Replace; move equation for mass removal from below “where” to above “where”; clarifications and amendments to organic air emission standards

265.1084(d)(5)(ii)	Replace; clarifications and amendments to organic air emission standards
265.1085(c)(2)(iii) and (iii)(B) and add (c)(2)(iii)(B)(1) and (2)	Replace; add; clarifications and amendments to organic air emission standards
265.1085(e)(4)	Add; clarifications and amendments to organic air emission standards
265.1085 (f)(3)(i)(D)(4) and add (f)(4)	Replace; clarifications and amendments to organic air emission standards
265.1085(j)(2)(iii)	Add clarifications and amendments to organic air emission standards
265.1086(b)(2) and (d)(1)(iii)	Replace; clarifications and amendments to organic air emission standards
265.1086(d)(1)(iv)(2)(i)(B)	Replace; clarifications and amendments to organic air emission standards
265.1086(e)(2)(iii)	Add; clarifications and amendments to organic air emission standards
265.1087(c)(4)(i)	Replace; clarifications and amendments to organic air emission standards
265.1087(d)(3)(v)(4)(i)	Replace; clarifications and amendments to organic air emission standards
265.1087(g)	Replace; clarifications and amendments to organic air emission standards
265.1088(c)(3)(ii)	Replace; clarifications and amendments to organic air emission standards
265.1088(c)(7)	Replace; clarifications and amendments to organic air emission standards
265.1090 (b)(1)(ii)(B), and (f)(1)	Replace; clarifications and amendments to organic air emission standards
265.1090(j) and (j)(1) and (2)	Add; clarifications and amendments to organic air emission standards
Appendix VI to 265	Replace; amend title; clarifications and amendments to organic air emission standards
268.1(e)(5)	Delete; reflect new Land Disposal Restriction (LDR) provisions
268.2(i); (k)	Replace (i); add (k); reflect new LDR definition
268.3(d)	Add; clarify LDR provision regarding impermissible dilution
268.4(a)(2)(ii) and (iii)	Replace; clarifies and corrects LDR provision regarding surface impoundments

268.7(a)(1) and (2); add (2)(i) and (ii)	Replace; add; determination and recordkeeping requirements for generators, treaters and disposal facilities
268.7(a)(3) and (3)(ii) and (4) and Generator Paperwork Requirements Table 268.7(a)(4)	Replace; determination and recordkeeping requirements for generators, treaters and disposal facilities
268.7(a)(5)(6)(7) and certification after (9)(i); add (10)	Replace; add; reflect provision for small quantity generators with tolling agreements
268.7(b)(1) and (2) and (3) and Treatment Facility Paperwork Requirements Table 268.7	Replace; determination and recordkeeping requirements for generators, treaters and disposal facilities
268.7(b)(4) with a two-paragraph certification; add 268.7(b)(4)(iv) and (v)	Replace; determination and recordkeeping requirements for generators, treaters and disposal facilities
268.7(b)(5) and (6)	Replace; LDR corrections
268.7(e)(1)(and (2)	Add; determination and recordkeeping requirements for generators, treaters and disposal facilities
268.33, .34, .35, and .36 for specific new waste specific prohibitions	Add specific new waste-specific prohibitions for metal wastes and mineral processing wastes; reserve .35 and .36
268.40(e)	Replace
268.40(h)	Add new LDR provisions for D001 through D011
268.40 Table "Treatment Standards for Hazardous Wastes"	Replace; reflects new treatment standards for LDR mineral processing wastes D001 through D043; adds two waste streams and makes numerous corrections
268.42 lead in and (a)	Replace lead in and (a); delete (a)(1) and (2) and (3) (retain 268.42(a)Table 1); to make LDR corrections
268.44(a), and (1) and (2)	Replace(a); add (1) and (2); clarifications of standards for hazardous waste LDR treatment variances
268.44(d) (e), (h); (h)(1); (h)(2) through (5); (m); (p)	Replace 268.44(d) (e) and (h); add (h)(1) through (5); replace (m); continue to reserve (n); remove (p); amend variances from a treatment standard
268.45(d)(3) and (4)	Replace; clarifies new treatment standards
268.48 Universal Treatment Standards Table, including footnotes	Replace; reflect new LDR treatment standards
268.49 (a) through (e)	Add; alternative LDR treatment standards for contaminated soil; reflects determination and recordkeeping requirements for generators, treaters

	and disposal facilities
270.3(d)	Replace, updating name change
270.14(b)(5)	Replace, incorporating note; clarifications and amendments to organic air emission standards
270.42(j)	Add; new syngas/hazardous waste combustor standards
Appendix I to 270.42, L.9.	Add "classification of permit Modification" at L.9.; new syngas/hazardous waste combustor standards regarding incinerators, boilers and industrial furnaces
270.62(d)	Replace to reflect requirement regarding submittal of trial burn results
270.72(a)(6); (b)(8)	Replace; add; new syngas/hazardous waste combustor standards

Instructions: Amend R.61-79 as instructed with each individual amendment provided with the text of the amendments below.

Text of Amendments:

The following sections have been addded, deleted, or replaced. All other sections of R.61-79 will remain.

Replace 260.11(a)(11)

260.11 References.

(a) (11) "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846 [Third Edition (November, 1986), as amended by Updates I, (July, 1992), II (September, 1994), IIA (August, 1993), IIB (January, 1995) and III]. The Third Edition of SW-846 and Updates I, II, IIA, IIB, and III (document number 955-001-00000-1) are available from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402, (202) 512-1800. Copies of the Third Edition and its updates are also available from the National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, VA 22161, (703) 4874650.

Replace 261.1(b)(2)(i)

261.1 Purpose and scope.

(b) (2) (i) In the case of SCHWMA 44-56-90 and sections 3007 and 3013, the Department has reason to believe that the material may be a solid waste within the meaning of section 44-56-20(6) of the S.C. Code of Laws of 1976, as amended or a solid waste within the meaning of section 1004(27) of RCRA and a hazardous waste within the meaning of section 1004(5) of RCRA; or (11/90)

Replace 261.2(c)(3) and table following 261.2

261.2 Definition of solid waste.

(c) (3) Reclaimed. Materials noted with an "x" in column 3 of Table 1 are solid wastes when reclaimed (except as provided under 261.4(a)(16)). Materials noted with an "x" in column 3 of Table 1

are not solid wastes when reclaimed (except as provided under 261.4(a)(15)).

Replace the following table after (c)(4):

261.2 TABLE 1 - Summary of Definitions of Solid Waste

[Note: The terms "spent materials," "sludges," "by-products," and "scrap metal" are defined in 261.1.]	Use Constituting Disposal 261.2(c)(1) (1)	Energy Recovery/Fuel 261.2(c)(2) (2)	Reclamation 261.2(c)(3)(except as provided in 261.4(a)(16)for mineral processing secondary metals) (3)	Speculative Accumulation 261.2(c)(4) (4)
Spent Materials	(x)	(x)	(x)	(x)
Sludges (listed in Section 261.31 or .32)	(x)	(x)	(x)	(x)
Sludges exhibiting a characteristic of hazardous waste	(x)	(x)	-----	(x)
By-products (listed in Section 261.31 or .32)	(x)	(x)	(x)	(x)
By-products exhibiting a characteristic of hazardous waste	(x)	(x)	-----	(x)
Commercial chemical products listed in Section 261.33	(x)	(x)	-----	-----
Scrap metal other than excluded scrap metal (see 261.1(c)(9))	(x)	(x)	(x)	(x)

Replace 261.2(e)(1)(iii); replace 261.2(e)(2)(iv); replace 261.2(f)

(e) (1) (iii) In cases where the materials are generated and reclaimed within the primary mineral processing industry, the conditions of the exclusion found at 261.4(a)(16) apply rather than this provision.

(2) (iv) Materials listed in paragraphs (d)(1) and (d)(2) of this section. (12/93)

(f) Documentation of claims that materials are not solid wastes or are conditionally exempt from regulation. Respondents in actions to enforce regulations implementing the SC Hazardous Waste Management Act Sections 44-56-10 et seq. and Subtitle C of RCRA who raise a claim that a certain material is not a solid waste, or is conditionally exempt from regulation, must demonstrate that there is a known market or disposition for the material, and that they meet the terms of the exclusion or exemption. In doing so, they must provide appropriate documentation (such as contracts showing that a second person uses the material as an ingredient in a production process) to demonstrate that the material is not a waste, or is exempt from regulation. In addition, owners or operators of facilities claiming that they actually are recycling materials must show that they have the necessary equipment to do so (revised 12/93).

Replace 261.3(a), (a)(1) and (2)(i)

261.3 Definition of hazardous waste.

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

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

(2) It meets any of the following criteria:

(i) It exhibits any of the characteristics of hazardous waste identified in subpart C of this part. However, any mixture of a waste from the extraction, beneficiation, and processing of ores and minerals excluded under 261.4(b)(7) and any other solid waste exhibiting a characteristic of hazardous waste under subpart C is a hazardous waste only if it exhibits a characteristic that would not have been exhibited by the excluded waste alone if such mixture had not occurred, or if it continues to exhibit any of the characteristics exhibited by the non-excluded wastes prior to mixture. Further, for the purposes of applying the Toxicity Characteristic to such mixtures, the mixture is also a hazardous waste if it exceeds the maximum concentration for any contaminant listed in table I to 261.24 that would not have been exceeded by the excluded waste alone if the mixture had not occurred, or if it continues to exceed the maximum concentration for any contaminant exceeded by the nonexempt waste prior to mixture. (11/90; 12/93)

Add 261.3(a)(2)(v)&(v)(A)&(B)

261.3 (a) (2) (v) Rebuttable presumption for used oil. Used oil containing more than 1000 ppm total halogens is presumed to be a hazardous waste because it has been mixed with halogenated hazardous waste listed in subpart D of part 261 of this chapter. Persons may rebut this presumption by demonstrating that the used oil does not contain hazardous waste (for example, by using an analytical method from SW-846, Third Edition, to show that the used oil does not contain significant concentrations of halogenated hazardous constituents listed in appendix VIII of part 261 of this chapter). EPA Publication SW-846, Third Edition, is available for the cost of $110.00 from the Government Printing Office, Superintendent of Documents, PO Box 371954, Pittsburgh, PA 15250-7954. 202-783-3238 (document number 955-001-00000-1).

(A)The rebuttable presumption does not apply to metalworking oils/fluids containing chlorinated paraffins, if they are processed, through a tolling agreement, to reclaim metalworking oils/fluids. The presumption does apply to metalworking oils/fluids if such oils/fluids are recycled in any other manner, or disposed.

(B)The rebuttable presumption does not apply to used oils contaminated with chlorofluorocarbons (CFCs) removed from refrigeration units where the CFCs are destined for reclamation. The rebuttable presumption does apply to used oils contaminated with CFCs that have been mixed with used oil from sources other than refrigeration units.

Add 261.4(a)(9)(iii)&(iii)(A)(B)(C)(D)(E); add (a)(15)(16) and (17)

261.4 Exclusions

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

(9) (iii) Prior to reuse, the wood preserving wastewaters and spent wood preserving solutions described in paragraphs (a)(9)(i) and (a)(9)(ii) of this section, so long as they meet all of the following conditions:

(A)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 purpose;

(B) Prior to reuse, the wastewaters and spent wood preserving solutions are managed to prevent release to either land or groundwater or both;

(C) Any unit used to manage wastewaters and/or spent wood preserving solutions prior to reuse can be visually or otherwise determined to prevent such releases;

(D) Any drip pad used to manage the wastewaters and/or spent wood preserving solutions prior to reuse complies with the standards in part 265, subpart W of this chapter, regardless of whether the plant generates a total of less than 100 kg/month of hazardous waste; and

(E) Prior to operating pursuant to this exclusion, the plant owner or operator submits to the appropriate Department a one-time notification 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 regulation." The plant must maintain a copy of that document in its on-site records for a period of no less than 3 years from the date specified in the notice. The exclusion applies only so long as the plant meets all of the conditions. If the plant goes out of compliance with any condition, it may apply to the appropriate Department for reinstatement. Department may reinstate the exclusion upon finding that the plant has returned to compliance with all conditions and that violations are not likely to recur.

(15) Condensates derived from the overhead gases from kraft mill steam strippers that are used to comply with 40 CFR 63.446(e). The exemption applies only to combustion at the mill generating the condensates.

(16) Secondary materials (i.e., sludges, by-products, and spent materials as defined in 261.1) (other than hazardous wastes listed in subpart D of this part) generated within the primary mineral processing industry from which minerals, acids, cyanide, water or other values are recovered by mineral processing, provided that:

(i) The secondary material is legitimately recycled to recover minerals, acids, cyanide, water or other values;

(ii) The secondary material is not accumulated speculatively;

(iii) Except as provided in paragraph (a)(16)(iv) of this section, the secondary material is stored in tanks, containers, or buildings meeting the following minimum integrity standards: a building must 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 may have partially earthen floors provided the secondary material is stored on the non-earthen portion), and have a roof suitable for diverting rainwater away from the foundation; a tank must be free standing, not be a surface impoundment (as defined in 260.10), and be manufactured of a material suitable for containment of its contents; a container must be free standing and be manufactured of a material suitable for containment of its contents. If tanks or containers contain any particulate which may be subject to wind dispersal, the owner/operator must operate these units in a manner which controls fugitive dust. Tanks, containers, and buildings must be designed, constructed and operated to prevent significant releases to the environment of these materials.

(iv) The Department may make a site-specific determination, after public review and comment, that only solid mineral processing secondary materials may be placed on pads, rather than in tanks, containers, or buildings. Solid mineral processing secondary materials do not contain any free liquid. The decision-maker must affirm that pads are designed, constructed and operated to prevent significant releases of the secondary material into the environment. Pads must provide the same degree of containment afforded by the non-RCRA tanks, containers and buildings eligible for exclusion.

(A)The decision-maker must also consider if storage on pads poses the potential for significant releases via groundwater, surface water, and air exposure pathways. Factors to be considered for assessing the groundwater, surface water, air exposure pathways are: the volume and physical and chemical properties of the secondary material, including its potential for migration off 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.

(B) Pads must meet the following minimum standards: be designed of non-earthen material that is compatible with the chemical nature of the mineral processing secondary material, capable of withstanding physical stresses associated with placement and removal, have run on/runoff controls, be operated in a manner which controls fugitive dust, and have integrity assurance through inspections and maintenance programs.

(C) Before making a determination under this paragraph, the Department must provide notice and the opportunity for comment to all persons potentially interested in the determination. This can be accomplished by placing notice of this action in major local newspapers, or broadcasting notice over local radio stations.

(v) The owner or operator provides a notice to the Department identifying the following information: the types of materials to be recycled; the type and location of the storage units and recycling processes; and the annual quantities expected to be placed in land-based units. This notification must be updated when there is a change in the type of materials recycled or the location of the recycling process.

(vi) For purposes of 261.4(b)(7), mineral processing secondary materials must be the result of mineral processing and may not include any listed hazardous wastes. Listed hazardous wastes and characteristic hazardous wastes generated by non-mineral processing industries are not eligible for the conditional exclusion from the definition of solid waste.

(17) Comparable fuels or comparable syngas fuels (i.e., comparable/syngas fuels) that meet the requirements of 261.38 [Note: Feds erroneously cite this as (16)]

Replace 261.4(b)(7)(i) & (ii); add 261.4(b)(iii)

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

(7) (i) For the purposes of 261.4(b)(7), beneficiation of ores and minerals is restricted to the following activities: crushing; grinding; washing; dissolution; crystallization; filtration; sorting; sizing; drying; sintering; pelletizing; briquetting; calcining to remove water and/or carbon dioxide; roasting, autoclaving, and/or chlorination in preparation for leaching (except where the roasting (and/or autoclaving and/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. (12/92)

(ii) For the purposes of 261.4(b)(7), solid waste from the processing of ores and minerals includes 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) A residue derived from co-processing mineral processing secondary materials with normal beneficiation raw materials remains excluded under paragraph (b) of this section if the owner or operator:
(A) Processes at least 50 percent by weight normal beneficiation raw materials; and,
(B) Legitimately reclaims the secondary mineral processing materials.

Add 261.32 K140 in alphanumeric order, after K136

261.32 Hazardous wastes from specific sources.
The following solid wastes are listed hazardous wastes from specific sources unless they are excluded under 260.20 and 260.22 and listed in appendix IX (revised 12/92, 5/96).

Add in alphanumeric order, after K136

Industry & EPA hazardous waste #	261.32 Hazardous Wastes from specific sources Hazardous waste (Table revised 9/98)	Hazard code
K140	Floor sweepings, off-specification product and spent filter media from the production of 2,4,6-tribromophenol.	(T)

Add 261.33 U408, in alphanumeric order, after U011

261.33 Discarded commercial chemical products, off-specification species, container residues, and spill residues thereof. (amended 11/90)

Section 261.33(f) (11/90; 12/92; 12/93; 5/96, 9/98)

Add in alphanumeric order, after U011:

U408 118-79-6 2,4,6-tribromophenol.

Add new provision at 261.38

261.38 Comparable/Syngas Fuel Exclusion.--Wastes that meet the following comparable/syngas fuel requirements are not solid wastes:
(a) Comparable fuel specifications.
(1) Physical specifications.
(i) Heating value. The heating value must exceed 5,000 BTU/lbs. (11,500 J/g).

(ii) Viscosity. The viscosity must not exceed: 50 cs, as-fired.

(2) Constituent specifications. For compounds listed below, the specification levels and, where non-detect is the specification, minimum required detection limits are: [see Table 1].

(b) Synthesis gas fuel specification.--Synthesis gas fuel (i.e., syngas fuel) that is generated from hazardous waste must:

(1) Have a minimum Btu value of 100 Btu/Scf;

(2) contain less than 1 ppmv of total halogen;

(3) contain less than 300 ppmv of total nitrogen other than diatomic nitrogen (N_2);

(4) contain less than 200 ppmv of hydrogen sulfide; and

(5) Contain less than 1 ppmv of each hazardous constituent in the target list of Appendix VIII constituents of this part.

Table 1: Detection and Detection Limit Values for Comparable Fuel Specification

Chemical Name	CAS Number	Concentration Limit (mg/kg at 10,000 BTU/lb)	Minimum Required Detection Limit (mg/kg)
Total Nitrogen as N	na	4900	-
Total Halogens as Cl	na	540	-
Total Organic Halogens as Cl	na	25 or individual halogenated organics listed below	-
Polychlorinated biphenyls, total [Arocolors, total][a]	1336-36-3	non-detect	1.4
Cyanide, total	57-12-5	non-detect	1.0
Metals			
Antimony, total	7440-36-0	7.9	-
Arsenic, total	7440-38-2	0.23	-
Barium, total	7440-39-3	23	-
Beryllium, total	7440-41-7	1.2	-
Cadmium, total	7440-43-9	1.2	-
Chromium, total	7440-47-3	2.3	-
Cobalt	7440-48-4	4.6	-
Lead, total	7439-92-1	31	-
Manganese	7439-96-5	1.2	-
Mercury, total	7439-97-6	0.24	-
Nickel, total	7440-02-0	58	-
Selenium, total	7782-49-2	0.15	-
Silver, total	7440-22-4	2.3	-
Thallium, total	7440-28-0	23	-
Hydrocarbons			
Benzo[a]anthracene	56-55-3	1100	-
Benzene	71-43-2	4100	-
Benzo[b]fluoranthene	205-99-2	960	-
Benzo[k]fluoranthene	207-08-9	1900	-
Benzo[a]pyrene	50-32-8	960	-
Chrysene	218-01-9	1400	-
Dibenzo[a,h]anthracene	53-70-3	960	-
7,12-Dimethylbenz[a]anthracene	57-97-6	1900	-
Fluoranthene	206-44-0	1900	-
Indeno(1,2,3-cd)pyrene	193-39-5	960	-
3-Methylcholanthrene	56-49-5	1900	-

Chemical Name	CAS Number	Concentration Limit (mg/kg at 10,000 BTU/lb)	Minimum Required Detection Limit (mg/kg)
Naphthalene	91-20-3	3200	-
Toluene	108-88-3	36000	-
Oxygenates			
Acetophenone	98-86-2	1900	-
Acrolein	107-02-8	37	-
Allyl alcohol	107-18-6	30	-
Bis(2-ethylhexyl)phthalate [Di-2-ethylhexyl phthalate]	117-81-7	1900	-
Butyl benzyl phthalate	85-68-7	1900	-
o-Cresol [2-Methyl phenol]	95-48-7	220	-
m-Cresol [3-Methyl phenol]	108-39-4	220	-
p-Cresol [4-Methyl phenol]	106-44-5	220	-
Di-n-butyl phthalate	84-74-2	1900	-
Diethyl phthalate	84-66-2	1900	-
2,4-Dimethylphenol	105-67-9	1900	-
Dimethyl phthalate	131-11-3	1900	-
Di-n-octyl phthalate	117-84-0	960	-
Endothall	145-73-3	100	-
Ethyl methacrylate	97-63-2	37	-
2-Ethoxyethanol [Ethylene glycol monoethyl ether]	110-80-5	100	-
Isobutyl alcohol	78-83-1	37	-
Isosafrole	120-58-1	1900	-
Methyl ethyl ketone [2-Butanone]	78-93-3	37	-
Methyl methacrylate	80-62-6	37	-
1,4-Naphthoquinone	130-15-4	1900	-
Phenol	108-95-2	1900	-
Propargyl alcohol [2-Propyn-l-ol]	107-19-7	30	-
Safrole	94-59-7	1900	-
Sulfonated Organics			
Carbon disulfide	75-15-0	non-detect	37
Disulfoton	298-04-4	non-detect	1900
Ethyl methanesulfonate	62-50-0	non-detect	1900
Methyl methanesulfonate	66-27-3	non-detect	1900
Phorate	298-02-2	non-detect	1900
1,3-Propane sultone	1120-71-4	non-detect	100
Tetraethyldithiopyrophosphate [Sulfotepp]	3689-24-5	non-detect	1900
Thiophenol [Benzenethiol]	108-98-5	non-detect	30
O,O,O-Triethyl phosphorothioate	126-68-1	non-detect	1900
Nitrogenated Organics			
Acetonitrile [Methyl cyanide]	75-05-8	non-detect	37
2-Acetylaminofluorene [2-AAF]	53-96-3	non-detect	1900
Acrylonitrile	107-13-1	non-detect	37
4-Aminobiphenyl	92-67-1	non-detect	1900
4-Aminopyridine	504-24-5	non-detect	100
Aniline	62-53-3	non-detect	1900
Benzidine	92-87-5	non-detect	1900
Dibenz[a,j]acridine	224-42-0	non-detect	1900

Chemical Name	CAS Number	Concentration Limit (mg/kg at 10,000 BTU/lb)	Minimum Required Detection Limit (mg/kg)
O,O-Diethyl O-pyrazinyl phophoro- thioate [Thionazin]	297-97-2	non-detect	1900
Dimethoate	60-51-5	non-detect	1900
p-(Dimethylamino)azobenzene [4-Dimethylaminoazobenzene]	60-11-7	non-detect	1900
3,3'-Dimethylbenzidine	119-93-7	non-detect	1900
α,α-Dimethylphenethylamine	122-09-8	non-detect	1900
3,3'-Dimethoxybenzidine	119-90-4	non-detect	100
1,3-Dinitrobenzene [m-Dinitrobenzene]	99-65-0	non-detect	1900
4,6-Dinitro-o-cresol	534-52-1	non-detect	1900
2,4-Dinitrophenol	51-28-5	non-detect	1900
2,4-Dinitrotoluene	121-14-2	non-detect	1900
2,6-Dinitrotoluene	606-20-2	non-detect	1900
Dinoseb [2-sec-Butyl-4,6-dinitrophenol]	88-85-7	non-detect	1900
Diphenylamine	122-39-4	non-detect	1900
Ethyl carbamate [Urethane]	51-79-6	non-detect	100
Ethylenethiourea (2- Imidazolidinethione)	96-45-7	non-detect	110
Famphur	52-85-7	non-detect	1900
Methacrylonitrile	126-98-7	non-detect	37
Methapyrilene	91-80-5	non-detect	1900
Methomyl	16752-77-5	non-detect	57
2-Methyllactonitrile [Acetone cyanohydrin]	75-86-5	non-detect	100
Methyl parathion	298-00-0	non-detect	1900
MNNG (N-Metyl-N-nitroso-N'-nitroguanidine)	70-25-7	non-detect	110
1-Naphthylamine, [α-Naphthylamine]	134-32-7	non-detect	1900
2-Naphthylamine, [β-Naphthylamine]	91-59-8	non-detect	1900
Nicotine	54-11-5	non-detect	100
4-Nitroaniline, [p-Nitroaniline]	100-01-6	non-detect	1900
Nitrobenzene	98-95-3	non-detect	1900
p-Nitrophenol, [p-Nitrophenol]	100-02-7	non-detect	1900
5-Nitro-o-toluidine	99-55-8	non-detect	1900
N-Nitrosodi-n-butylamine	924-16-3	non-detect	1900
N-Nitrosodiethylamine	55-18-5	non-detect	1900
N-Nitrosodiphenylamine, [Diphenylnitrosamine]	86-30-6	non-detect	1900
N-Nitroso-N-methylethylamine	10595-95-6	non-detect	1900
N-Nitrosomorpholine	59-89-2	non-detect	1900
N-Nitrosopiperidine	100-75-4	non-detect	1900
N-Nitrosopyrrolidine	930-55-2	non-detect	1900
2-Nitropropane	79-46-9	non-detect	30
Parathion	56-38-2	non-detect	1900
Phenacetin	62-44-2	non-detect	1900
1,4-Phenylene diamine, [p-Phenylenediamine]	106-50-3	non-detect	1900
N-Phenylthiourea	103-85-5	non-detect	57

Chemical Name	CAS Number	Concentration Limit (mg/kg at 10,000 BTU/lb)	Minimum Required Detection Limit (mg/kg)
2-Picoline [alpha-Picoline]	109-06-8	non-detect	1900
Propythioracil [6-Propyl-2-thiouracil]	51-52-5	non-detect	100
Pyridine	110-86-1	non-detect	1900
Strychnine	57-24-9	non-detect	100
Thioacetamide	62-55-5	non-detect	57
Thiofanox	39196-18-4	non-detect	100
Thiourea	62-56-6	non-detect	57
Toluene-2,4-diamine [2,4-Diaminotoluene]	95-80-7	non-detect	57
Toluene-2,6-diamine [2,6-Diaminotoluene]	823-40-5	non-detect	57
o-Toluidine	95-53-4	non-detect	2200
p-Toluidine	106-49-0	non-detect	100
1,3,5-Trinitrobenzene, [sym-Trinitobenzene]	99-35-4	non-detect	2000
Halogenated Organics[b]			
Allyl chloride	107-05-1	non-detect	37
Aramite	140-57-8	non-detect	1900
Benzal chloride [Dichloromethyl benzene]	98-87-3	non-detect	100
Benzyl chloride	100-44-77	non-detect	100
Bis(2-chloroethyl)ether [Dichloroethyl ether]	111-44-4	non-detect	1900
Bromoform [Tribromomethane]	75-25-2	non-detect	37
Bromomethane [Methyl bromide]	74-83-9	non-detect	37
4-Bromophenyl phenyl ether [p-Bromo diphenyl ether]	101-55-3	non-detect	1900
Carbon tetrachloride	56-23-5	non-detect	37
Chlordane	57-74-9	non-detect	14
p-Chloroaniline	106-47-8	non-detect	1900
Chlorobenzene	108-90-7	non-detect	37
Chlorobenzilate	510-15-6	non-detect	1900
p-Chloro-m-cresol	59-50-7	non-detect	1900
2-Chloroethyl vinyl ether	110-75-8	non-detect	37
Chloroform	67-66-3	non-detect	37
Chloromethane [Methyl chloride]	74-87-3	non-detect	37
2-Chloronaphthalene [beta-Chloronaphthalene]	91-58-7	non-detect	1900
2-Chlorophenol [o-Chlorophenol]	95-57-8	non-detect	1900
Chloroprene [2-Chloro-1,3-butadiene]	1126-99-8	non-detect	37
2,4-D [2,4-Dichlorophenoxyacetic acid]	94-75-7	non-detect	7.0
Diallate	2303-16-4	non-detect	1900
1,2-Dibromo-3-chloropropane	96-12-8	non-detect	37
1,2-Dichlorobenzene [o-Dichlorobenzene]	95-50-1	non-detect	1900
1,3-Dichlorobenzene [m-Dichlorobenzene]	541-73-1	non-detect	1900
1,4-Dichlorobenzene [p-Dichlorobenzene]	106-46-7	non-detect	1900
3,3'-Dichlorobenzidine	91-94-1	non-detect	1900
Dichlorodifluoromethane [CFC-12]	75-71-8	non-detect	37

Chemical Name	CAS Number	Concentration Limit (mg/kg at 10,000 BTU/lb)	Minimum Required Detection Limit (mg/kg)
1,2-Dichloroethane [Ethylene dichloride]	107-06-2	non-detect	37
1,1-Dichloroethylene [Vinylidene chloride]	75-35-4	non-detect	37
Dichloromethoxy ethane [Bis(2-chloroethoxy)methane	111-91-1	non-detect	1900
2,4-Dichlorophenol	120-83-2	non-detect	1900
2,6-Dichlorophenol	87-65-0	non-detect	1900
1,2-Dichloropropane [Propylene dichloride]	78-87-5	non-detect	37
cis-1,3-Dichloropropylene	10061-01-5	non-detect	37
trans-1,3-Dichloropropylene	10061-02-6	non-detect	37
1,3-Dichloro-2-propanol	96-23-1	non-detect	30
Endosulfan I	959-98-8	non-detect	1.4
Endosulfan II	33213-65-9	non-detect	1.4
Endrin	72-20-8	non-detect	1.4
Endrin aldehyde	7421-93-4	non-detect	1.4
Endrin Ketone	53494-70-5	non-detect	1.4
Epichlorohydrin [1-Chloro-2,3-epoxy propane]	106-89-8	non-detect	30
Ethylidene dichloride [1,1-Dichloroethane]	75-34-3	non-detect	37
2-Fluoroacetamide	640-19-7	non-detect	100
Heptachlor	76-44-8	non-detect	1.4
Heptachlor epoxide	1024-57-3	non-detect	2.8
Hexachlorobenzene	118-74-1	non-detect	1900
Hexachloro-1,3-butadiene [Hexachlorobutadiene]	87-68-3	non-detect	1900
Hexachlorocyclopentadiene	77-47-4	non-detect	1900
Hexachloroethane	67-72-1	non-detect	1900
Hexachlorophene	70-30-4	non-detect	1000
Hexachloropropene [Hexachloropropylene]	1888-71-7	non-detect	1900
Isodrin	465-73-6	non-detect	1900
Kepone [Chlordecone]	143-50-0	non-detect	3600
Lindane [gamma-Hexachlorocyclohexane] [gamma-BHC]	58-89-9	non-detect	1.4
Methylene chloride [Dichloromethane]	75-09-2	non-detect	37
4,4'-methylene-bis(2-chloroaniline)	101-14-4	non-detect	100
Methyl iodide [Iodomethane]	74-88-4	non-detect	37
Pentachlorobenzene	608-93-5	non-detect	1900
Pentachloroethane	76-01-7	non-detect	37
Pentachloronitrobenzene [PCNB] [Quintobenzene] [Quintozene]	82-68-8	non-detect	1900
Pentachlorophenol	87-86-5	non-detect	1900
Pronamide	23950-58-5	non-detect	1900
Silvex [2,4,5-Trichlorophenoxypropionic acid]	93-72-1	non-detect	7.0

Chemical Name	CAS Number	Concentration Limit (mg/kg at 10,000 BTU/lb)	Minimum Required Detection Limit (mg/kg)
2,3,7,8-Tetrachlorodibenzo-p-dioxin [2,3,7,8-TCDD]	1746-01-6	non-detect	30
1,2,4,5-Tetrachlorobenzene	95-94-3	non-detect	1900
1,1,2,2-Tetrachloroethane	79-34-5	non-detect	37
Tetrachloroethylene [Perchloroethylene]	127-18-4	non-detect	37
2,3,4,6-Tetrachlorophenol	58-90-2	non-detect	1900
1,2,4-Trichlorobenzene	120-82-1	non-detect	1900
1,1,1-Trichloroethane [Methyl chloroform]	71-55-6	non-detect	37
1,1,2-Trichloroethane [Vinyl trichloride]	79-00-5	non-detect	37
Trichloroethylene	79-01-6	non-detect	37
Trichlorofluoromethane [Trichlormonofluoromethane]	75-69-4	non-detect	37
2,4,5-Trichlorophenol	95-95-4	non-detect	1900
2,4,6-Trichlorophenol	88-06-2	non-detect	1900
1,2,3-Trichloropropane	96-18-4	non-detect	37
Vinyl Chloride	75-01-4	non-detect	37

[a] - absence of PCBs can also be demonstrated by using appropriate screening methods, e.g., immunoassay kit for PCB in oils (Method 4020) or colorimetric analysis for PCBs in oil (Method 9079).

[b] - Some minimum required detection limits are above the total halogen limit of 540 ppm. The detection limits reflect what was achieved during EPA testing and analysis and also analytical
complexity associated with measuring all halogen compounds on Appendix VIII at low levels. EPA recognizes that in practice the presence of these compounds will be functionally limited by the molecular weight and the total halogen limit of 540 ppm.

(c) Implementation. Waste that meets the comparable or syngas fuel specifications provided by paragraphs (a) or (b) of this section (these constituent levels must be achieved by the comparable fuel when generated, or as a result of treatment or blending, as provided in (3) or (4) below) is excluded from the definition of solid waste provided that the following requirements are met:

(1) Notices--For purposes of this section, the person claiming and qualifying for the exclusion is called the comparable/syngas fuel generator and the person burning the comparable/syngas fuel is called the comparable/syngas burner. The person who generates the comparable fuel or syngas fuel must claim and certify to the exclusion.

(i) State RCRA and CAA Directors in Authorized States or Regional RCRA and CAA Directors in Unauthorized States.--

(A) The generator must submit a one-time notice to the Regional or State RCRA and CAA Directors, in whose jurisdiction the exclusion is being claimed and where the comparable/syngas fuel will be burned, certifying compliance with the conditions of the exclusion and providing documentation as required by paragraph (C);

(B) If the generator is a company that generates comparable/syngas fuel at more than one facility, the generator shall specify at which sites the comparable/syngas fuel will be generated;

(C) A comparable/syngas fuel generator's notification to the Directors must contain the following items:

(1) the name, address, and RCRA ID number of the person/facility claiming the exclusion;

(2) the applicable EPA Hazardous Waste Codes for the hazardous waste;

(3) name and address of the units, meeting the requirements of 261.38(c)(2), that will burn the comparable/syngas fuel; and

(4) the following statement is signed and submitted by the person claiming the exclusion or his authorized representative: "Under penalty of criminal and civil prosecution for making or submitting false statements, representations, or omissions, I certify that the requirements of 261.38 have been met for all waste

identified in this notification. Copies of the records and information required at 261.38(c)(10) are available at the comparable/syngas fuel generator's facility. Based on my inquiry of the individuals immediately responsible for obtaining the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

(ii) Public Notice.--Prior to burning an excluded comparable/syngas fuel, the burner must publish in a major newspaper of general circulation local to the site where the fuel will be burned, a notice entitled "Notification of Burning a Comparable/Syngas Fuel Excluded Under the Resource Conservation and Recovery Act" containing the following information:

(A) name, address, and RCRA ID number of the generating facility;

(B) name and address of the unit(s) that will burn the comparable/syngas fuel;

(C) a brief, general description of the manufacturing, treatment, or other process generating the comparable/syngas fuel;

(D) an estimate of the average and maximum monthly and annual quantity of the waste claimed to be excluded; and

(E) name and mailing address of the Regional or State Directors to whom the claim was submitted.

(2)Burning.--The comparable/syngas fuel exclusion for fuels meeting the requirements of paragraphs (a) or (b) and (c)(1) applies only if the fuel is burned in the following units that also shall be subject to Federal/State/local air emission requirements, including all applicable CAA MACT requirements:

(i) Industrial furnaces as defined in 260.10 of this chapter;

(ii) Boilers, as defined in 260.10 of this chapter, that are further defined as follows:

(A) Industrial boilers located on the site of a facility engaged in a manufacturing process where substances are transformed into new products, including the component parts of products, by mechanical or chemical processes; or

(B) Utility boilers used to produce electric power, steam, heated or cooled air, or other gases or fluids for sale;

(iii) Hazardous waste incinerators subject to regulation under Subpart O of parts 264 or 265 of this chapter or applicable CAA MACT standards.

(3)Blending to Meet the Viscosity Specification.--A hazardous waste blended to meet the viscosity specification shall:

(i) as generated and prior to any blending, manipulation, or processing meet the constituent and heating value specifications of (a)(1)(i) and (a)(2);

(ii) be blended at a facility that is subject to the applicable requirements of parts 264 and 265, or 262.34; and

(iii) not violate the dilution prohibition of 261.38(c)(6).

(4)Treatment to Meet the Comparable Fuel Exclusion Specifications.

(i) A hazardous waste may be treated to meet the exclusion specifications of (a)(1) and (2) provided the treatment:

(A) destroys or removes the constituent listed in the specification or raises the heating value by removing or destroying hazardous constituents or materials;

(B) is performed at a facility that is subject to the applicable requirements of parts 264 and 265, or 262.34; and

(C) does not violate the dilution prohibition of 261.38(c)(6).

(ii) Residuals resulting from the treatment of a hazardous waste listed in Subpart D of this part to generate a comparable fuel remain a hazardous waste.

(5)Generation of a Syngas Fuel.

(i) A syngas fuel can be generated from the processing of hazardous wastes to meet the exclusion specifications of 261.38(b) provided the processing:

(A) destroys or removes the constituent listed in the specification or raises the heating value by removing or destroying constituents or materials;

(B) is performed at a facility that is subject to the applicable requirements of parts 264 and 265, or 262.34 or is an exempt recycling unit pursuant to 261.6(c); and

(C) does not violate the dilution prohibition of 261.38(c)(6).

(ii) Residuals resulting from the treatment of a hazardous waste listed in Subpart D of this part to generate a syngas fuel remain a hazardous waste.

(6)Dilution Prohibition for Comparable and Syngas Fuels.--No generator, transporter, handler, or owner or operator of a treatment, storage, or disposal facility shall in any way dilute a hazardous waste to meet the exclusion specifications of (a)(1)(i), (a)(2) or (b) of this section.

(7)Waste Analysis Plans. The generator of a comparable/syngas fuel shall develop and follow a written waste analysis plan which describes the procedures for sampling and analysis of the hazardous waste to be excluded. The waste analysis plan shall be developed in accordance with the applicable sections of the "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" (SW-846). The plan shall be followed and retained at the facility excluding the waste.

(i) At a minimum, the plan must specify:

(A) the parameters for which each hazardous waste will be analyzed and the rationale for the selection of those parameters;

(B) the test methods which will be used to test for these parameters;

(C) the sampling method which will be used to obtain a representative sample of the waste to be analyzed;

(D) the frequency with which the initial analysis of the waste will be reviewed or repeated to ensure that the analysis is accurate and up to date; and

(E) if process knowledge is used in the waste determination, any information prepared by the generator in making such determination.

(ii) The waste analysis plan shall also contain records of the following:

(A) the dates and times waste samples were obtained, and the dates the samples were analyzed;

(B) the names and qualifications of the person(s) who obtained the samples;

(C) a description of the temporal and spatial locations of the samples;

(D) the name and address of the laboratory facility at which analyses of the samples were performed;

(E) a description of the analytical methods used, including any clean-up and sample preparation methods;

(F) all quantitation limits achieved and all other quality control results for the analysis (including method blanks, duplicate analyses, matrix spikes, etc.), laboratory quality assurance data, and description of any deviations from analytical methods written in the plan or from any other activity written in the plan which occurred;

(G) all laboratory results demonstrating that the exclusion specifications have been met for the waste; and

(H) all laboratory documentation that support the analytical results, unless a contract between the claimant and the laboratory provides for the documentation to be maintained by the laboratory for the period specified in 261.38(c)(11) and also provides for the availability of the documentation to the claimant upon request.

(iii) Syngas fuel generators shall submit for approval, prior to performing sampling, analysis, or any management of a syngas fuel as an excluded waste, a waste analysis plan containing the elements of (i) above to the appropriate regulatory authority. The approval of waste analysis plans must be stated in writing and received by the facility prior to sampling and analysis to demonstrate the exclusion of a syngas. The approval of the waste analysis plan may contain such provisions and conditions as the regulatory authority deems appropriate.

(8)Comparable Fuel Sampling and Analysis.

(i) General. For each waste for which an exclusion is claimed, the generator of the hazardous waste must test for all the constituents on appendix VIII to this part, except those that the generator determines, based on testing or knowledge, should not be present in the waste. The generator is required to document the basis of each determination that a constituent should not be present. The generator may not determine that any of the following categories of constituents should not be present:

(A) a constituent that triggered the toxicity characteristic for the waste constituents that were the basis of the listing of the waste stream, or constituents for which there is a treatment standard for the waste code in 268.40;

(B) a constituent detected in previous analysis of the waste;

(C) constituents introduced into the process that generates the waste; or

(D) constituents that are byproducts or side reactions to the process that generates the waste.

Note: Any claim under this section must be valid and accurate for all hazardous constituents; a determination not to test for a hazardous constituent will not shield a generator from liability should that constituent later be found in the waste above the exclusion specifications.

(ii) For each waste for which the exclusion is claimed where the generator of the comparable/syngas fuel is not the original generator of the hazardous waste, the generator of the comparable/syngas fuel may not use process knowledge pursuant to (i) above and must test to determine that all of the constituent specifications of 261.38(a)(2) and 261.38(b) have been met.

(iii) The comparable/syngas fuel generator may use any reliable analytical method to demonstrate that no constituent of concern is present at concentrations above the specification levels. It is the responsibility of the generator to ensure that the sampling and analysis are unbiased, precise, and representative of the waste. For the waste to be eligible for exclusion, a generator must demonstrate that:

(A) each constituent of concern is not present in the waste above the specification level at the 95% upper confidence limit around the mean; and

(B) the analysis could have detected the presence of the constituent at or below the specification level at the 95% upper confidence limit around the mean.

(iv) Nothing in this paragraph preempts, overrides or otherwise negates the provision in 262.11 of this chapter, which requires any person who generates a solid waste to determine if that waste is a hazardous waste.

(v)In an enforcement action, the burden of proof to establish conformance with the exclusion specification shall be on the generator claiming the exclusion.

(vi) The generator must conduct sampling and analysis in accordance with their waste analysis plan developed under (7) above.

(vii) Syngas fuel and comparable fuel that has not been blended in order to meet the kinematic viscosity specifications shall be analyzed as generated.

(viii) If a comparable fuel is blended in order to meet the kinematic viscosity specifications, the generator shall:

(A) analyze the fuel as generated to ensure that it meets the constituent and heating value specifications; and

(B) after blending, analyze the fuel again to ensure that the blended fuel continues to meet all comparable/syngas fuel specifications.

(ix) Excluded comparable/syngas fuel must be re-tested, at a minimum, annually and must be retested after a process change that could change the chemical or physical properties of the waste.

(9)Speculative Accumulation. Any persons handling a comparable/syngas fuel are subject to the speculative accumulation test under 261.2(c)(4).

(10) Records. The generator must maintain records of the following information on-site:

(i) all information required to be submitted to the implementing authority as part of the notification of the claim:

(A) the owner/operator name, address, and RCRA facility ID number of the person claiming the exclusion;

(B) the applicable EPA Hazardous Waste Codes for each hazardous waste excluded as a fuel; and

(C) the certification signed by the person claiming the exclusion or his authorized representative.

(ii) a brief description of the process that generated the hazardous waste and process that generated the excluded fuel, if not the same;

(iii) an estimate of the average and maximum monthly and annual quantities of each waste claimed to be excluded;

(iv) documentation for any claim that a constituent is not present in the hazardous waste as required under 261.38(c)(8)(i);

(v)the results of all analyses and all detection limits achieved as required under 261.38(c)(8);

(vi) if the excluded waste was generated through treatment or blending, documentation as required under section 261.38(c)(3) or (4);

(vii) if the waste is to be shipped off-site, a certification from the burner as required under section 261.38(c)(12);

(viii) A waste analysis plan and the results of the sampling and analysis that includes the following:

(A) the dates and times waste samples were obtained, and the dates the samples were analyzed;

(B) the names and qualifications of the person(s) who obtained the samples;

(C) a description of the temporal and spatial locations of the samples;

(D) the name and address of the laboratory facility at which analyses of the samples were performed;

(E) a description of the analytical methods used, including any clean-up and sample preparation methods;

(F) all quantitation limits achieved and all other quality control results for the analysis (including method blanks, duplicate analyses, matrix spikes, etc.), laboratory quality assurance data, and description of any deviations from analytical methods written in the plan or from any other activity written in the plan which occurred;

(G) all laboratory analytical results demonstrating that the exclusion specifications have been met for the waste; and

(H) all laboratory documentation that support the analytical results, unless a contract between the claimant and the laboratory provides for the documentation to be maintained by the laboratory for the period specified in 261.38(c)(11) and also provides for the availability of the documentation to the claimant upon request; and

(ix) If the generator ships comparable/syngas fuel off-site for burning, the generator must retain for each shipment the following information on-site:

(A) the name and address of the facility receiving the comparable/syngas fuel for burning;

(B) the quantity of comparable/syngas fuel shipped and delivered;

(C) the date of shipment or delivery;

(D) a cross-reference to the record of comparable/syngas fuel analysis or other information used to make the determination that the comparable/syngas fuel meets the specifications as required under 261.38(c)(8); and

(E) a one-time certification by the burner as required under 261.38(c)(12).

(11) Records Retention. Records must be maintained for the period of three years. A generator must maintain a current waste analysis plan during that three year period.

(12) Burner certification. Prior to submitting a notification to the State and Regional Directors, a comparable/syngas fuel generator who intends to ship their fuel off-site for burning must obtain a one-time written, signed statement from the burner:

(i) certifying that the comparable/syngas fuel will only be burned in an industrial furnace or boiler, utility boiler, or hazardous waste incinerator, as required under paragraph (c)(2);

(ii) identifying the name and address of the units that will burn the comparable/syngas fuel; and

(iii) certifying that the state in which the burner is located is authorized to exclude wastes as comparable/syngas fuel under the provisions of 261.38.

(13) Ineligible Waste Codes. Wastes that are listed because of presence of dioxins or furans, as set out in Appendix VII of Part 261, are not eligible for this exclusion, and any fuel produced from or otherwise containing these wastes remains a hazardous waste subject to full Subtitle C regulation.

Add in 261 Appendix VII in alphanumeric order (after K139)

261 APPENDIX VII - BASIS FOR LISTING HAZARDOUS WASTE

Add in alphanumeric order (after K136)

EPA Hazardous Waste No.	Hazardous constituents for which listed
K140	2,4,6-Tribromophenol.

Add in 261 Appendix VIII in alphabetic order (after Trillate)

261 APPENDIX VIII - HAZARDOUS CONSTITUENTS

Add in alphabetic order (after Trillate)

Common Name	Chemical abstracts name	Chemical Abstracts Number
2,4,6-Tribromophenol.	Tribromophenol.,2,4,6-	118-79-6

Replace 264.15(b)(4)

264.15 General inspection requirements.

(b)(4)The frequency of inspection may vary for the items on the schedule. However, the frequency should be based on the rate of deterioration of the equipment and the probability of an environmental or human health incident if the deterioration, malfunction, or any operator error goes undetected between inspections. Areas subject to spills, such as loading and unloading areas, must be inspected daily when in use. At a minimum, the inspection schedule must include the items and frequencies called for in 264.174, 264.193, 264.194, 264.195, 264.226, 264.253, 264.254, 264.278, 264.303, 264.347, 264.602, 264.1033, 264.1052, 264.1053, 264.1058, and 264.1083 through 264.1089, where applicable. (12/92; 12/93, 9/98)

Replace 264.73(b)(6)

264.73 Operating record.

(b)The following information must be recorded, as it becomes available, and maintained in the operating record until closure of the facility:

(6)Monitoring, testing or analytical data, and corrective action where required by subpart F of this part and 264.19, 264.191, 264.193, 264.195, 264.222, 264.223, 264.226, 264.252 through 264.254, 264.276, 264.278, 264.280, 264.302 through 264.304, 264.309, 264.347, 264.602, 264.1034(c) through 264.1034(f), 264.1035, 264.1063(c) through 264.1063(i), 264.1064, and 264.1082 through 264.1090.

Replace 264.143(f)(10), 264.145(f)(11), and 264.151

264.143Financial assurance for closure.

(f) Financial test and corporate guarantee for closure.

(10) An owner or operator may meet the requirements of this section by obtaining a written guarantee. The guarantor must be the direct or higher-tier parent corporation of the owner or operator, a firm whose parent corporation is also the parent corporation of the owner or operator, or a firm with a "substantial business relationship" with the owner or operator. The guarantor must meet the requirements for owners or operators in paragraphs (f)(1) through (8) of this section and must comply with the terms of the corporate guarantee. The wording of the corporate guarantee must be identical to the wording specified in 264.151(h). The certified copy of the guarantee must accompany the items sent to the Department as specified in paragraph (f)(3) of this section. One of these items must be the letter from the guarantor's chief financial officer. If the guarantor's parent corporation is also the parent corporation of the owner or operator, the letter must describe the value received in consideration of the guarantee. If the guarantor is a firm with a "substantial business relationship" with the owner or operator, this letter must describe this "substantial business relationship" and the value received in consideration of the guarantee. The terms of the corporate guarantee must provide that: (revised 12/93)

264.145 Financial assurance for postclosure care.

(f) Financial test and corporate guarantee for postclosure care.

(11) An owner or operator may meet the requirements for this section by obtaining a written guarantee. The guarantor must be the direct or higher-tier parent corporation of the owner or operator, a firm whose parent corporation is also the parent corporation of the owner or operator, or a firm with a "substantial business relationship" with the owner or operator. The guarantor must meet the requirements for owners or operators in paragraphs (f)(1) through (9) of this section and must comply with the terms of the guarantee. The wording of the guarantee must be identical to the wording specified in 264.151(h). A certified copy of the guarantee must accompany the items sent to the Department as specified in paragraph (f)(3) of this section. One of these items must be the letter from the guarantors chief financial officer. If the guarantors parent corporation is also the parent corporation of the owner or operator, the letter must describe the value received in consideration of the guarantee. If the guarantor is a firm with a "substantial business relationship" with the owner or operator, this letter must describe this "substantial business relationship" and the value received in consideration of the guarantee. The terms of the guarantee must provide that: (revised 12/93)

264.151 Wording of the instruments.

(g) A letter from the chief financial officer, as specified in 264.147(f) or 265.147(f), must be worded as noted in 264.151 Appendix G, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted. (revised 12/93)

Replace 264.1030(b)(3); replace 264.1030(c); add and reserve 264.1030(d); add 264.1030(e)

264.1030 Applicability.

(b)Except for 264.1034, paragraphs (d) and (e), this subpart applies to process vents associated with distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operations that manage hazardous wastes with organic concentrations of at least 10 ppmw, if these operations are conducted in one of the following:

(3)A unit that is exempt from permitting under the provisions of 262.34(a) (i.e., a 90-day tank or container) and is not a recycling unit under the provisions of 261.6. (9/98)

(c)For the owner and operator of a facility subject to this subpart and who received a final permit under RCRA section 3005 prior to December 6, 1996, the requirements of this subpart shall be incorporated into the permit when the permit is reissued in accordance with the requirements of 124.15 or reviewed in accordance with the requirements of 270.50(d). Until such date when the owner and operator receives a final permit incorporating the requirements of this subpart, the owner and operator is subject to the requirements of 265, subpart AA.

[NOTE: The requirements of 264.1032 through 264.1036 apply to process vents on hazardous waste recycling units previously exempt under 261.6(c)(1). Other exemptions under 261.4 and 264.1(g) are not affected by these requirements.(9/98)

(d)Reserved

(e)The requirements of this subpart do not apply to the process vents at a facility where the facility owner or operator certifies that all of the process vents that would otherwise be subject to this subpart are equipped with and operating air emission controls in accordance with the process vent requirements of an applicable Clean Air Act regulation codified under 40 CFR part 60, part 61, or part 63. The documentation of compliance under regulations at 40 CFR part 60, part 61, or part 63 shall be kept with, or made readily available with, the facility operating record.

Replace 264.1031 definition of "In light service"

264.1031 Definitions

In light liquid service means that the piece of equipment contains or contacts a waste stream where the vapor pressure of one or more of the organic components in the stream is greater than 0.3 kilopascals (kPa) at 20 EC, the total concentration of the pure components having a vapor pressure greater than 0.3 kPa at 20 EC is equal to or greater than 20 percent by weight, and the fluid is a liquid at operating conditions.

Revise 264.1033(a)(2) to (a)(2)(i) and (a)(2)(ii); **add 264.1033(a)(2)(iii)&(iv)**

264.1033 Standards: Closed-vent systems and control devices.

(a) (1)Owners or operators of closed-vent systems and control devices used to comply with provisions of this part shall comply with the provisions of this section.

(2)(i) The owner or operator of an existing facility who cannot install a closed-vent system and control device to comply with the provisions of this subpart on the effective date that the facility becomes subject to the provisions of this subpart must prepare an implementation schedule that includes dates by which the closed-vent system and control device will be installed and in operation. The controls must be installed as soon as possible, but the implementation schedule may allow up to 30 months after the effective date that the facility becomes subject to this subpart for installation and startup.

(ii) Any unit that begins operation after December 21, 1990, and is subject to the provisions of this subpart when operation begins, must comply with the rules immediately (i.e., must have control devices installed and operating on startup of the affected unit); the 30-month implementation schedule does not apply.

(iii) The owner or operator of any facility in existence on the effective date of a statutory or EPA regulatory amendment that renders the facility subject to this subpart shall comply with all requirements of this subpart as soon as practicable but no later than 30 months after the amendment's effective date. When control equipment required by this subpart can not be installed and begin operation by the effective date of the

amendment, the facility owner or operator shall prepare an implementation schedule that includes the following information: Specific calendar dates for award of contracts or issuance of purchase orders for the control equipment, initiation of on-site installation of the control equipment, completion of the control equipment installation, and performance of any testing to demonstrate that the installed equipment meets the applicable standards of this subpart. The owner or operator shall enter the implementation schedule in the operating record or in a permanent, readily available file located at the facility.

(iv) Owners and operators of facilities and units that become newly subject to the requirements of this subpart after December 8, 1997, due to an action other than those described in paragraph (a)(2)(iii) of this section must comply with all applicable requirements immediately (i.e., must have control devices installed and operating on the date the facility or unit becomes subject to this subpart; the 30-month implementation schedule does not apply).

Replace 264.1034(b)&(f)

264.1034 Test methods and procedures.

(b)When a closed-vent system is tested for compliance with no detectable emissions, as required in 264.1033 (l) of this subpart, the test shall comply with the following requirements:

(f) When an owner or operator and the Department do not agree on whether a distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operation manages a hazardous waste with organic concentrations of at least 10 ppmw based on knowledge of the waste, the procedures in Method 8260 of SW-846 (incorporated by reference under 260.11) may be used to resolve the dispute. (9/98)

Replace 264.1050(b)(3); **replace 264.1050(c)(f)&(g)**

264.1050 Applicability.

(b)Except as provided in 264.1064(k), this subpart applies to equipment that contains or contacts hazardous wastes with organic concentrations of at least 10 percent by weight that are managed in one of the following: (9/98)

(2)A unit (including a hazardous waste recycling unit) that is not exempt from permitting under the provisions of 262.34(a) (i.e., a hazardous waste recycling unit that is not a "90-day " tank or container) and that is located at a hazardous waste management facility otherwise subject to the permitting requirements of part 270, or

(3)A unit that is exempt from permitting under the provisions of 262.34(a) (i.e., a "90-day" tank or container) and is not a recycling unit under the provisions of 261.6.

(c)For the owner or operator of a facility subject to this subpart and who received a final permit under RCRA section 3005 prior to December 6, 1996, the requirements of this subpart shall be incorporated into the permit when the permit is reissued in accordance with the requirements of 124.15 or reviewed in accordance with the requirements of 270.50(d). Until such date when the owner or operator receives a final permit incorporating the requirements of this subpart, the owner or operator is subject to the requirements of part 265, subpart BB.

(f) Equipment that contains or contacts hazardous waste with an organic concentration of at least 10 percent by weight for less than 300 hours per calendar year is excluded from the requirements of 264.1052 through 264.1060 of this subpart if it is identified, as required in 264.1064(g)(6) of this subpart. (9/98)

(g)[Reserved] (note is retained)

Replace 264.1060(a); add (b)(1)-(4)

264.1060 Standards: Closed vent systems and control devices.

(a)Owners and operators of closed-vent systems and control devices subject to this subpart shall comply with the provisions of 264.1033 of this part.

(b)(1)The owner or operator of an existing facility who cannot install a closed-vent system and control device to comply with the provisions of this subpart on the effective date that the facility becomes subject to the provisions of this subpart must prepare an implementation schedule that includes dates by which the closed-vent system and control device will be installed and in operation. The controls must be installed as soon as possible, but the implementation schedule may allow up to 30 months after the effective date that the facility becomes subject to this subpart for installation and startup.

(2)Any unit that begins operation after December 21, 1990, and is subject to the provisions of this subpart when operation begins, must comply with the rules immediately (i.e., must have control devices installed and operating on startup of the affected unit); the 30-month implementation schedule does not apply.

(3)The owner or operator of any facility in existence on the effective date of a statutory or EPA regulatory amendment that renders the facility subject to this subpart shall comply with all requirements of this subpart as soon as practicable but no later than 30 months after the amendment's effective date. When control equipment required by this subpart can not be installed and begin operation by the effective date of the amendment, the facility owner or operator shall prepare an implementation schedule that includes the following information: Specific calendar dates for award or contracts or issuance of purchase orders for the control equipment, initiation of on-site installation of the control equipment, completion of the control equipment installation, and performance of any testing to demonstrate that the installed equipment meets the applicable standards of this subpart. The owner or operator shall enter the implementation schedule in the operating record or in a permanent, readily available file located at the facility.

(4)Owners and operators of facilities and units that become newly subject to the requirements of this subpart after December 8, 1997, due to an action other than those described in paragraph (b)(3) of this section must comply with all applicable requirements immediately (i.e., must have control devices installed and operating on the date the facility or unit becomes subject to this subpart; the 30-month implementation schedule does not apply).

Replace 264.1062(b)(2)&(3)

264.1062 Alternative standards for valves in gas/vapor service or in light liquid service: skip period leak detection and repair.

(b)(1)An owner or operator shall comply with the requirements for valves, as described in 264.1057, except as described in paragraphs (b)(2) and (b)(3) of this section.

(2)After two consecutive quarterly leak detection periods with the percentage of valves leaking equal to or less than 2 percent, an owner or operator may begin to skip one of the quarterly leak detection periods (i.e., monitor for leaks once every six months) for the valves subject to the requirements in 264.1057 of this subpart.

(3) After five consecutive quarterly leak detection periods with the percentage of valves leaking equal to or less than 2 percent, an owner or operator may begin to skip three of the quarterly leak detection periods (i.e., monitor for leaks once every year) for the valves subject to the requirements in 264.1057 of this subpart.

Replace 264.1064(g)(6); **replace 264.1064(m)**

264.1064 Recordkeeping requirements.

(g)The following information pertaining to all equipment subject to the requirements in 264.1052 through 264.1060 shall be recorded in a log that is kept in the facility operating record:

(6)Identification, either by list or location (area or group) of equipment that contains or contacts hazardous waste with an organic concentration of at least 10 percent by weight for less than 300 hours per calendar year. (9/98)

(m) The owner or operator of a facility with equipment that is subject to this subpart and to regulations at 40 CFR part 60, part 61, or part 63 may elect to determine compliance with this subpart either by documentation pursuant to 264.1064 of this subpart, or by documentation of compliance with the regulations at 40 CFR part 60, part 61, or part 63 pursuant to the relevant provisions of the regulations at 40 part 60, part 61, or part 63. The documentation of compliance under regulations at 40 CFR part 60, part 61, or part 63 shall be kept with or made readily available with the facility operating record.

Replace 264.1080(b)&(c); **add and reserve 264.1080(e)**

264.1080 Applicability.

(b)The requirements of this subpart do not apply to the following waste management units at the facility:

(1)A waste management unit that holds hazardous waste placed in the unit before December 6, 1996, and in which no hazardous waste is added to the unit on or after December 6, 1996.

(c)For the owner and operator of a facility subject to this subpart who received a final permit under RCRA section 3005 prior to December 6, 1996, the requirements of this subpart shall be incorporated into the permit when the permit is reissued in accordance with the requirements of 124.15 of this chapter or reviewed in accordance with the requirements of 270.50(d) of this chapter. Until such date when the permit is reissued in accordance with the requirements of 124.15 or reviewed in accordance with the requirements of 270.50(d), the owner and operator is subject to the requirements of part 265, subpart CC.

(e)[Reserved]

Replace 264.1082(b); replace 264.1082(c)(2)(ix)(A)&(B); replace 264.1082(c)(3) and (4)(ii)

264.1082 Standards: General.

(b)The owner or operator shall control air pollutant emissions from each hazardous waste management unit in accordance with standards specified in 264.1084 through 264.1087 of this subpart, as applicable to the hazardous waste management unit, except as provided for in paragraph (c) of this section.

(c)A tank, surface impoundment, or container is exempt from standards specified in 264.1084 through 264.1087 of this subpart, as applicable, provided that the waste management unit is one of the following:

(2)(ix) (A) If Method 25D in 40 CFR part 60, appendix A is used for the analysis, one-half the blank value determined in the method at section 4.4 of Method 25D in 40 CFR part 60, appendix A, or a value of 25 ppmw, whichever is less.

(B) If any other analytical method is used, one-half the sum of the limits of detection established for each organic constituent in the waste that has a Henry's law constant value at least 0.1

mole-fraction-in-the-gas-phase/mole-fraction-in-the-liquid-phase (0.1 Y/X) [which can also be expressed as 1.8 x 10^{-6} atmospheres/gram-mole/m^3] at 25 degrees Celsius.

(3)A tank or surface impoundment used for biological treatment of hazardous waste in accordance with the requirements of paragraph (c)(2)(iv) of this section.

(4)A tank, surface impoundment, or container for which all hazardous waste placed in the unit either:

(ii) The organic hazardous constituents in the waste have been treated by the treatment technology established by the EPA for the waste in 268.42(a), or have been removed or destroyed by an equivalent method of treatment approved by EPA pursuant to 268.42(b).

Replace 264.1083(a)(2) and (b)(1);

264.1083 Waste determination procedures.

(a)Waste determination procedure to determine average volatile organic (VO) concentration of a hazardous waste at the point of waste origination.

(2) For a waste determination that is required by paragraph (a)(1) of this section, the average VO concentration of a hazardous waste at the point of waste origination shall be determined in accordance with the procedures specified in) 265.1084(a)(2) through (a)(4).

(b)Waste determination procedures for treated hazardous waste.

(1)An owner or operator shall perform the applicable waste determinations for each treated hazardous waste placed in waste management units exempted under the provisions of 264.1082(c)(2)(i) through (c)(2)(vi) of this subpart from using air emission controls in accordance with standards specified in 264.1084 through 264.1087 of this subpart, as applicable to the waste management unit.

Replace 264.1084(c)(2)(iii) and (iii)(B), adding (B)(1)&(2); add 264.1084(e)(4); replace 264.1084(f)(3)(i)(D)(4) and (f)(3)(iii); add 264.1084(f)(4) and (j)(2)(iii)

264.1084 Standards: Tanks.

(c)Owners and operators controlling air pollutant emissions from a tank using Tank Level 1 controls shall meet the requirements specified in paragraphs (c)(1) through (c)(4) of this section:

(2)The tank shall be equipped with a fixed roof designed to meet the following specifications:

(iii) Each opening in the fixed roof, and any manifold system associated with the fixed roof, shall be either:

(B) Connected by a closed-vent system that is vented to a control device. The control device shall remove or destroy organics in the vent stream, and shall be operating whenever hazardous waste is managed in the tank, except as provided for in paragraphs (c)(2)(iii)(B) (1) and (2) of this section.

(1)During periods when it is necessary to provide access to the tank for performing the activities of paragraph (c)(2)(iii)(B)(2) of this section, venting of the vapor headspace underneath the fixed roof to the control device is not required, opening of closure devices is allowed, and removal of the fixed roof is allowed. Following completion of the activity, the owner or operator shall promptly secure the closure device in the closed position or reinstall the cover, as applicable, and resume operation of the control device.

(2)During periods of routine inspection, maintenance, or other activities needed for normal operations, and for removal of accumulated sludge or other residues from the bottom of the tank.

(e)The owner or operator who controls air pollutant emissions from a tank using a fixed roof with an internal floating roof shall meet the requirements specified in paragraphs (e)(1) through (e)(3) of this section.

(4)Safety devices, as defined in 265.1081, may be installed and operated as necessary on any tank complying with the requirements of paragraph (e)of this section.

(f) The owner or operator who controls air pollutant emissions from a tank using an external floating roof shall meet the requirements specified in paragraphs (f)(1) through (f)(3) of this section.

(3)(i) (D) (4)The total gap area shall be calculated by adding the gap surface areas determined for each identified gap location for the primary seal and the secondary seal individually, and then dividing the sum for each seal type by the nominal diameter of the tank. These total gap areas for the primary seal and secondary seal are then compared to the respective standards for the seal type as specified in paragraph (f)(1)(ii) of this section.

(3)(iii) Prior to each inspection required by paragraph (f)(3)(i) or (f)(3)(ii) of this section, the owner or operator shall notify the Department in advance of each inspection to provide the Department with the opportunity to have an observer present during the inspection. The owner or operator shall notify the Department of the date and location of the inspection as follows:

(4)Safety devices, as defined in 265.1081, may be installed and operated as necessary on any tank complying with the requirements of paragraph (f) of this section.

(j) The owner or operator shall transfer hazardous waste to a tank subject to this section in accordance with the following requirements:

(2)The requirements of paragraph (j)(1) of this section do not apply when transferring a hazardous waste to the tank under any of the following conditions:

(iii) The hazardous waste meets the requirements of 264.1082(c)(4) of this subpart.

Replace 264.1085(b)(2); **replace 264.1085(d)(1)(iii), (d)(2)(i)(B) and add (e)(2)(iii)**

264.1085 Standards: Surface impoundments.

(b)The owner or operator shall control air pollutant emissions from the surface impoundment by installing and operating either of the following:

(2)A cover that is vented through a closed-vent system to a control device in accordance with the provisions specified in paragraph (d) of this section.

(d)The owner or operator who controls air pollutant emissions from a surface impoundment using a cover vented to a control device shall meet the requirements specified in paragraphs (d)(1) through (d)(3) of this section.

(1)The surface impoundment shall be covered by a cover and vented directly through a closed-vent system to a control device in accordance with the following requirements:

(iii) The cover and its closure devices shall be made of suitable materials that will minimize exposure of the hazardous waste to the atmosphere, to the extent practical, and will maintain the integrity of the cover and closure devices throughout their intended service life. Factors to be considered when selecting the materials of construction and designing the cover and closure devices shall include: Organic vapor permeability; the effects of any contact with the liquid or its vapors managed in the surface impoundment; the effects of outdoor exposure to

wind, moisture, and sunlight; and the operating practices used for the surface impoundment on which the cover is installed.

(2)Whenever a hazardous waste is in the surface impoundment, the cover shall be installed with each closure device secured in the closed position and the vapor headspace underneath the cover vented to the control device except as follows:

(i) (B) To remove accumulated sludge or other residues from the bottom of the surface impoundment.

(e)The owner or operator shall transfer hazardous waste to a surface impoundment subject to this section in accordance with the following requirements:

(2)(iii) The hazardous waste meets the requirements of 264.1082(c)(4) of this subpart.

Replace 264.1086(c)(2) and (c)(4)(i), (d)(4)(i) and (g)

264.1086 Containers

(c)Container Level 1 standards.

(2)A container used to meet the requirements of paragraph (c)(1)(ii)or (c)(1)(iii) of this section shall be equipped with covers and closure devices, as applicable to the container, that are composed of suitable materials to minimize exposure of the hazardous waste to the atmosphere and to maintain the equipment integrity for as long as the container is in service. Factors to be considered in selecting the materials of construction and designing the cover and closure devices shall include: Organic vapor permeability; the effects of contact with the hazardous waste or its vapor managed in the container; the effects of outdoor exposure of the closure device or cover material to wind, moisture, and sunlight; and the operating practices for which the container is intended to be used.

(4)The owner or operator of containers using Container Level 1 controls shall inspect the containers and their covers and closure devices as follows:

(i) In the case when a hazardous waste already is in the container at the time the owner or operator first accepts possession of the container at the facility and the container is not emptied within 24 hours after the container is accepted at the facility (i.e., does not meet the conditions for an empty container as specified in 261.7(b)), the owner or operator shall visually inspect the container and its cover and closure devices to check for visible cracks, holes, gaps, or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position. The container visual inspection shall be conducted on or before the date that the container is accepted at the facility (i.e., the date the container becomes subject to the subpart CC container standards). For purposes of this requirement, the date of acceptance is the date of signature that the facility owner or operator enters on Item 20 of the Uniform Hazardous Waste Manifest in the appendix to part 262 (Forms 8700-22 and 8700-22A), as required under subpart E of this part, at 264.71. If a defect is detected, the owner or operator shall repair the defect in accordance with the requirements of paragraph (c)(4)(iii) of this section.

(d)Container Level 2 standards.

(4)The owner or operator of containers using Container Level 2 controls shall inspect the containers and their covers and closure devices as follows:

(i) In the case when a hazardous waste already is in the container at the time the owner or operator first accepts possession of the container at the facility and the container is not emptied within 24 hours after the container is accepted at the facility (i.e., does not meet the conditions for an empty container as specified in

261.7(b)), the owner or operator shall visually inspect the container and its cover and closure devices to check for visible cracks, holes, gaps, or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position. The container visual inspection shall be conducted on or before the date that the container is accepted at the facility (i.e., the date the container becomes subject to the subpart CC container standards). For purposes of this requirement, the date of acceptance is the date of signature that the facility owner or operator enters on Item 20 of the Uniform Hazardous Waste Manifest in the appendix to part 262 (Forms 8700-22 and 8700-22A), as required under subpart E of this part, at 264.71. If a defect is detected, the owner or operator shall repair the defect in accordance with the requirements of paragraph (d)(4)(iii) of this section.

(g) To determine compliance with the no detectable organic emissions requirement of paragraph (d)(1)(ii) of this section, the procedure specified in 264.1083(d) of this subpart shall be used.

Replace 264.1087(c)(3)(ii) and (c)(7)

264.1087 Standards: Closed-vent systems and control devices.

(c) The control device shall meet the following requirements:

(3) The owner or operator using a carbon adsorption system to comply with paragraph (c)(1) of this section shall operate and maintain the control device in accordance with the following requirements:

(ii) All carbon that is a hazardous waste and that is removed from the control device shall be managed in accordance with the requirements of 264.1033(n), regardless of the average volatile organic concentration of the carbon.

(7) The closed-vent system and control device shall be inspected and monitored by the owner or operator in accordance with the procedures specified in 264.1033(f)(2) and 264.1033(l). The readings from each monitoring device required by 264.1033(f)(2) shall be inspected at least once each operating day to check control device operation. Any necessary corrective measures shall be immediately implemented to ensure the control device is operated in compliance with the requirements of this section.

Replace 264.1089(a), (b)(1)(ii)(B), and (f)(1); add (j) and (j)(1)&(2)

264.1089 Recordkeeping requirements.

(a) Each owner or operator of a facility subject to requirements of this subpart shall record and maintain the information specified in paragraphs (b) through (j) of this section, as applicable to the facility. Except for air emission control equipment design documentation and information required by paragraphs (i) and (j) of this section, records required by this section shall be maintained in the operating record for a minimum of 3 years. Air emission control equipment design documentation shall be maintained in the operating record until the air emission control equipment is replaced or otherwise no longer in service. Information required by paragraphs (i) and (j) of this section shall be maintained in the operating record for as long as the waste management unit is not using air emission controls specified in 264.1084 through 264.1087 of this subpart in accordance with the conditions specified in 264.1080(d) or 264.1080(b)(7) of this subpart, respectively.

(b)(1)(ii)(B) For each defect detected during the inspection: The location of the defect, a description of the defect, the date of detection, and corrective action taken to repair the defect. In the event that repair of the defect is delayed in accordance with the requirements of 264.1084 of this subpart, the owner or operator shall also record the reason for the delay and the date that completion of repair of the defect is expected.

(f) The owner or operator of a tank, surface impoundment, or container exempted from standards in accordance with the provisions of 264.1082(c) of this subpart shall prepare and maintain the following records, as applicable:

(1)For tanks, surface impoundments, and containers exempted under the hazardous waste organic concentration conditions specified in 264.1082(c)(1) or 264.1082(c)(2)(i) through (c)(2)(vi) of this subpart, the owner or operator shall record the information used for each waste determination (e.g., test results, measurements, calculations, and other documentation) in the facility operating log. If analysis results for waste samples are used for the waste determination, then the owner or operator shall record the date, time, and location that each waste sample is collected in accordance with applicable requirements of 264.1083 of this subpart.

(j) For each hazardous waste management unit not using air emission controls specified in 264.1084 through 264.1087 of this subpart in accordance with the requirements of 264.1080 (b)(7) of this subpart, the owner and operator shall record and maintain the following information:

(1)Certification that the waste management unit is equipped with and operating air emission controls in accordance with the requirements of an applicable Clean Air Act regulation codified under part 60, part 61, or part 63.

(2)Identification of the specific requirements codified under 40 CFR part 60, part 61, or part 63 with which the waste management unit is in compliance.

Replace 265.15(b)(4)

265.15 General inspection requirements.

(b)(4) The frequency of inspection may vary for the items on the schedule. However, the frequency should be based on the rate of deterioration of the equipment and the probability of an environmental or human health incident if the deterioration, malfunction, or any operator error goes undetected between inspections. Areas subject to spills, such as loading and unloading areas, must be inspected daily when in use. At a minimum, the inspection schedule must include the items and frequencies called for in 265.174, 265.193, 265.195, 265.226, 265.260, 265.278, 265.304, 265.347, 265.377, 265.403, 265.1033, 265.1052, 265.1053, 265.1058, and 265.1084 through 265.1090 of this part, where applicable.

Replace 265.73(b)(6)

265.73 Operating record.

(b)The following information must be recorded, as it becomes available, and maintained in the

(6)Monitoring, testing or analytical data, and corrective action where required by subpart F of this part and by 265.19, 265.90, 265.94, 265.191, 265.193, 265.195, 265.222, 265.223, 265.226, 265.255, 265.259, 265.260, 265.276, 265.278, 265.280(d)(1), 265.302 through 265.304, 265.347, 265.377, 265.1034(c) through 265.1034(f), 265.1035, 265.1063(d) through 265.1063(i), 265.1064, and 265.1083 through 265.1090.
[Comment: As required by 265.94, monitoring data at disposal facilities must be kept throughout the postclosure period.] (revised 12/92)

Replace 265.1030(b)(3); add 265.1030(c)&(d)

265.1030 Applicability.

(b)(3)A unit that is exempt from permitting under the provisions of 262.34(a) (i.e., a “90-day” tank or container) and is not a recycling unit under the requirements of 261.6.

(c)Reserved

(d)The requirements of this subpart do not apply to the process vents at a facility where the facility owner or operator certifies that all of the process vents that would otherwise be subject to this subpart are equipped with and operating air emission controls in accordance with the process vent requirements of an applicable Clean Air Act regulation codified under 40 CFR part 60, part 61, or part 63. The documentation of compliance under regulations at 40 CFR part 60, part 61, or part 63 shall be kept with, or made readily available with, the facility operating record.

Add 265.1033(a)(2)(i) through (iv)

265.1033 Standards: Closed-vent systems and control devices.

(a)(2)(i) The owner or operator of an existing facility who cannot install a closed-vent system and control device to comply with the provisions of this subpart on the effective date that the facility becomes subject to the requirements of this subpart must prepare an implementation schedule that includes dates by which the closed-vent system and control device will be installed and in operation. The controls must be installed as soon as possible, but the implementation schedule may allow up to 30 months after the effective date that the facility becomes subject to this subpart for installation and startup.

(ii) Any unit that begins operation after December 21, 1990, and is subject to the requirements of this subpart when operation begins, must comply with the rules immediately (i.e., must have control devices installed and operating on startup of the affected unit); the 30-month implementation schedule does not apply.

(iii) The owner or operator of any facility in existence on the effective date of a statutory or EPA regulatory amendment that renders the facility subject to this subpart shall comply with all requirements of this subpart as soon as practicable but no later than 30 months after the amendment's effective date. When control equipment required by this subpart cannot be installed and begin operation by the effective date of the amendment, the facility owner or operator shall prepare an implementation schedule that includes the following information: Specific calendar dates for award of contracts or issuance of purchase orders for the control equipment, initiation of on-site installation of the control equipment, completion of the control equipment installation, and performance of any testing to demonstrate that the installed equipment meets the applicable standards of this subpart. The owner or operator shall enter the implementation schedule in the operating record or in a permanent, readily available file located at the facility.

(iv) Owners and operators of facilities and units that become newly subject to the requirements of this subpart after December 8, 1997, due to an action other than those described in paragraph (a)(2)(iii) of this section must comply with all applicable requirements immediately (i.e., must have control devices installed and operating on the date the facility or unit becomes subject to this subpart; the 30-month implementation schedule does not apply).

Replace 265.1050(b)(3)

265.1050 Applicability.

(b)(3)A unit that is exempt from permitting under the provisions of 262.34(a) (i.e., a "90-day" tank or container) and is not a recycling unit under the provisions of 261.6. (9/98)

Replace 265.1060 and renumber lead in to (a); add (b)(1) through (4)

265.1060 Standards: Closed-vent systems and control devices.

(a)Owners and operators of closed-vent systems and control devices subject to this subpart shall comply with the provisions of 265.1033 of this part.

(b)(1)The owner or operator of an existing facility who can not install a closed-vent system and control device to comply with the provisions of this subpart on the effective date that the facility becomes subject to the provisions of this subpart must prepare an implementation schedule that includes dates by which the closed-vent system and control device will be installed and in operation. The controls must be installed as soon as possible, but the implementation schedule may allow up to 30 months after the effective date that the facility becomes subject to this subpart for installation and startup.

(2)Any units that begin operation after December 21, 1990, and are subject to the provisions of this subpart when operation begins, must comply with the rules immediately (i.e., must have control devices installed and operating on startup of the affected unit); the 30-month implementation schedule does not apply.

(3)The owner or operator of any facility in existence on the effective date of a statutory or EPA regulatory amendment that renders the facility subject to this subpart shall comply with all requirements of this subpart as soon as practicable but no later than 30 months after the amendment's effective date. When control equipment required by this subpart can not be installed and begin operation by the effective date of the amendment, the facility owner or operator shall prepare an implementation schedule that includes the following information: Specific calendar dates for award of contracts or issuance of purchase orders for the control equipment, initiation of on-site installation of the control equipment, completion of the control equipment installation, and performance of any testing to demonstrate that the installed equipment meets the applicable standards of this subpart. The owner or operator shall enter the implementation schedule in the operating record or in a permanent, readily available file located at the facility.

(4)Owners and operators of facilities and units that become newly subject to the requirements of this subpart after December 8, 1997 due to an action other than those described in paragraph (b)(3) of this section must comply with all applicable requirements immediately (i.e., must have control devices installed and operating on the date the facility or unit becomes subject to this subpart; the 30-month implementation schedule does not apply).

Replace 265.1062(b)(2) and (3)

265.1062 Alternative standards for valves in gas/vapor service or in light liquid service: skip period leak detection and repair.

(b)(2)After two consecutive quarterly leak detection periods with the percentage of valves leaking equal to or less than 2 percent, an owner or operator may begin to skip one of the quarterly leak detection periods (i.e., monitor for leaks once every six months) for the valves subject to the requirements in 265.1057 of this subpart.

(3)After five consecutive quarterly leak detection periods with the percentage of valves leaking equal to or less than 2 percent, an owner or operator may begin to skip three of the quarterly leak detection periods (i.e., monitor for leaks once every year) for the valves subject to the requirements in 265.1057 of this subpart.

Replace 265.1064 (m)

265.1064 Recordkeeping requirements.

(m) The owner or operator of any facility with equipment that is subject to this subpart and to leak detection, monitoring, and repair requirements under regulations at 40 CFR part 60, part 61, or part 63 may elect to determine compliance with this subpart either by documentation pursuant to 265.1064 of this subpart, or by documentation of compliance with the regulations at 40 CFR part 60, part 61, or part 63 pursuant to the relevant provisions of the regulations at 40 part 60, part 61, or part 63. The documentation of compliance under regulation at 40 CFR part 60 , part 61, or part 63 shall be kept with or made readily available with the facility operating record.

Replace 265.1080(b)(1) and (c); add and reserve (e)

265.1080 Applicability.

(b)(1)A waste management unit that holds hazardous waste placed in the unit before December 6, 1996, and in which no hazardous waste is added to the unit on or after December 6, 1996.

(c)For the owner and operator of a facility subject to this subpart who has received a final permit under RCRA section 3005 prior to October 6, 1996, the following requirements apply:

(e)[Reserved]

Replace 265.1082(a) through (d); except to retain (b)(2)(ii) & (iii)

265.1082 Schedule for implementation of air emission standards.

(a)Owners or operators of facilities existing on December 6, 1996 and subject to subparts I, J, and K of this part shall meet the following requirements:

(1)Install and begin operation of all control equipment or waste management units required to comply with this subpart and complete modifications of production or treatment processes to satisfy exemption criteria in accordance with 265.1083(c) of this subpart by December 6, 1996, except as provided for in paragraph (a)(2) of this section.

(2)When control equipment or waste management units required to comply with this subpart cannot be installed and in operation or modifications of production or treatment processes to satisfy exemption criteria in accordance with 265.1083(c) of this subpart cannot be completed by December 6, 1996, the owner or operator shall:

(i) Install and begin operation of the control equipment and waste management units, and complete modifications of production or treatment processes as soon as possible but no later than December 8, 1997.

(ii) Prepare an implementation schedule that includes the following information: specific calendar dates for award of contracts or issuance of purchase orders for control equipment, waste management units, and production or treatment process modifications; initiation of on-site installation of control equipment or waste management units, and modifications of production or treatment processes; completion of control equipment or waste management unit installation, and production or treatment process modifications; and performance of testing to demonstrate that the installed equipment or waste management units, and modified production or treatment processes meet the applicable standards of this subpart.

(iii) For facilities subject to the recordkeeping requirements of 265.73 of this part, the owner or operator shall enter the implementation schedule specified in paragraph (a)(2)(ii) of this section in the operating record no later than December 6, 1996.

(iv) For facilities not subject to 265.73 of this part, the owner or operator shall enter the implementation schedule specified in paragraph (a)(2)(ii) of this section in a permanent, readily available file located at the facility no later than December 6, 1996.

(b)Owners or operators of facilities and units in existence on the effective date of a statutory or regulatory amendment that renders the facility subject to subparts I, J, or K of this part shall meet the following requirements:

(1)Install and begin operation of control equipment or waste management units required to comply with this subpart, and complete modifications of production or treatment processes to satisfy exemption criteria of 265.1083(c) of this subpart by the effective date of the amendment, except as provided for in paragraph (b)(2) of this section.

(2)When control equipment or waste management units required to comply with this subpart cannot be installed and begin operation, or when modifications of production or treatment processes to satisfy exemption criteria of 265.1083(c) of this subpart cannot be completed by the effective date of the amendment, the owner or operator shall:

(i) Install and begin operation of the control equipment or waste management unit, and complete modification of production or treatment processes as soon as possible but no later than 30 months after the effective date of the amendment.

(c)Owners and operators of facilities and units that become newly subject to the requirements of this subpart after December 8, 1997 due to an action other than those described in paragraph (b) of this section must comply with all applicable requirements immediately (i.e., must have control devices installed and operating on the date the facility or unit becomes subject to this subpart; the 30-month implementation schedule does not apply).

(d)The Department may elect to extend the implementation date for control equipment at a facility, on a case by case basis, to a date later than December 8, 1997, when special circumstances that are beyond the facility owner's or operator's control delay installation or operation of control equipment, and the owner or operator has made all reasonable and prudent attempts to comply with the requirements of this subpart.

Replace 265.1083(b), (c)(2)(ix)(A)&(B), (c)(3) and (c)(4)(ii)

265.1083 Standards: General.

(b)The owner or operator shall control air pollutant emissions from each hazardous waste management unit in accordance with standards specified in 265.1085 through 265.1088 of this subpart, as applicable to the hazardous waste management unit, except as provided for in paragraph (c) of this section.

(c)A tank, surface impoundment, or container is exempt from standards specified in 265.1085 through 265.1088 of this subpart, as applicable, provided that the waste management unit is one of the following:

(2)(ix) (A) If Method 25D in 40 CFR part 60, appendix A is used for the analysis, one-half the blank value determined in the method at section 4.4 of Method 25D in 40 CFR part 60, appendix A, or a value of 25 ppmw, whichever is less.

(B) If any other analytical method is used, one-half the sum of the limits of detection established for each organic constituent in the waste that has a Henry's law constant value at least 0.1 mole-fraction-in-the-gas-phase/mole-fraction-in-the-liquid-phase (0.1 Y/X) [which can also be expressed as 1.8 x 10^{-6} atmospheres/gram-mole/m^3] at 25 degrees Celsius.

(3)A tank or surface impoundment used for biological treatment of hazardous waste in accordance with the requirements of paragraph (c)(2)(iv) of this section.

(4)A tank, surface impoundment, or container for which all hazardous waste placed in the unit either:

(ii) The organic hazardous constituents in the waste have been treated by the treatment technology established by the EPA for the waste in 268.42(a), or have been removed or destroyed by an equivalent method of treatment approved by EPA pursuant to 268.42(b).

Replace 265.1084 (a)(2), (a)(3)(ii)(B), (a)(3)(iii)(F),(a)(3)(iii)(G), (a)(3)(iii)(G)(1) [retain (a)(3)(iii)(F)(1) and (2) and (G)(2)]; replace 265.1084(a)(3)(iv), make lead in (A) and amend, and replace three of the six definitions within the subsequent equation; add 265.1084(a)(3)(iv)(B), (B)(1)&(2), and (a)(3)(v); replace 265.1084(a)(4)(iv)

265.1084 Waste determination procedures.

(a) Waste determination procedure to determine average volatile organic (VO) concentration of a hazardous waste at the point of waste origination.

(2) For a waste determination that is required by paragraph (a)(1) of this section, the average VO concentration of a hazardous waste at the point of waste origination shall be determined using either direct measurement as specified in paragraph (a)(3) of this section or by knowledge as specified in paragraph (a)(4) of this section.

(3)(ii) (B) A sufficient number of samples, but no less than four samples, shall be collected and analyzed for a hazardous waste determination. The average of the four or more sample results constitutes a waste determination for the waste stream. One or more waste determinations may be required to represent the complete range of waste compositions and quantities that occur during the entire averaging period due to normal variations in the operating conditions for the source or process generating the hazardous waste stream. Examples of such normal variations are seasonal variations in waste quantity or fluctuations in ambient temperature.

(iii) (F) Method 8260 in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846 (incorporated by reference - refer to 260.11(a) of this chapter). Maintain a formal quality assurance program consistent with the requirements of Method 8260. The quality assurance program shall include the following elements:

(G) Method 8270 in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846 (incorporated by reference - refer to 260.11(a) of this chapter). Maintain a formal quality assurance program consistent with the requirements of Method 8270. The quality assurance program shall include the following elements:

(1) Documentation of site-specific procedures to minimize the loss of compounds due to volatilization, biodegradation, reaction, or sorption during the sample collection, storage, preparation, introduction, and analysis steps.

(iv) Calculations.

(A) The average VO concentration (C) on a mass-weighted basis shall be calculated by using the results for all waste determinations conducted in accordance with paragraphs (a)(3) (ii) and (iii) of this section and the following equation:

[Note: following the formula to determine average VO concentration, the following definitions are amended, the others are not amended:]

i = Individual waste determination "i" of the hazardous waste.

n = Total number of waste determinations of the hazardous waste conducted for the averaging period (not to exceed 1 year).

C_i = Measured VO concentration of waste determination "i" as determined in accordance with the requirements of paragraph (a)(3)(iii) of this section (i.e. the average of the four or more samples specified in paragraph (a)(3)(ii)(B) of this section), ppmw.

(B) For the purpose of determining C_i, for individual waste samples analyzed in accordance with paragraph (a)(3)(iii) of this section, the owner or operator shall account for VO concentrations determined to be below the limit of detection of the analytical method by using the following VO concentration:

(1)If Method 25D in 40 CFR part 60, Appendix A is used for the analysis, one-half the blank value determined in the method at section 4.4 of Method 25D in 40 CFR part 60, appendix A.

(2)If any other analytical method is used, one-half the sum of the limits of detection established for each organic constituent in the waste that has a Henry's law constant values at least 0.1 mole-fraction-in-the-gas-phase/mole-fraction-in-the-liquid-phase (0.1 Y/X) [which can also be expressed as 1.8×10^{-6} atmospheres/gram-mole/m^3] at 25 degrees Celsius.

(v)Provided that the test method is appropriate for the waste as required under paragraph (a)(3)(iii) of this section, the Department will determine compliance based on the test method used by the owner or operator as recorded pursuant to 265.1090(f)(1) of this subpart.

(4)Use of owner or operator knowledge to determine average VO concentration of a hazardous waste at the point of waste origination.

(iv) In the event that the Department and the owner or operators disagree on a determination of the average VO concentration for a hazardous waste stream using knowledge, then the results from a determination of average VO concentration using direct measurement as specified in paragraph (a)(3) of this section shall be used to establish compliance with the applicable requirements of this subpart. The Department may perform or request that the owner or operator perform this determination using direct measurement. The owner or operator may choose one or more appropriate methods to analyze each collected sample in accordance with the requirements of paragraph (a)(3)(iii) of this section.

Replace 265.1084(b)(1)&(b)(3)(ii)(B) &(B)(iii)& (b)(3)(F)&(G)&(b)(3)(iv)& three of the six definitions following the equation; add (b)(3)(v); move the equation for mass removal rate from below "where" to above "where" after 265.1084(b)(8)(iii); replace 265.1084(b)(9)(iv) and move the equation for mass removal from below "where" to above "where"

265.1084 (b)(1)An owner or operator shall perform the applicable waste determination for each treated hazardous waste placed in a waste management unit exempted under the provisions of 265.1083(c)(2)(i) through (c)(2)(vi) of this subpart from using air emission controls in accordance with standards specified in 265.1085 through 265.1088 of this subpart, as applicable to the waste management unit.

(3)Procedure to determine the average VO concentration of a hazardous waste at the point of waste treatment.

(ii) Sampling. Samples of the hazardous waste stream shall be collected at the point of waste treatment in a manner such that volatilization of organics contained in the waste and in the subsequent sample is minimized and an adequately representative sample is collected and maintained for analysis by the selected method.

(B) A sufficient number of samples, but no less than four samples, shall be collected and analyzed for a hazardous waste determination. The average of the four or more sample results constitutes a waste determination for the waste stream. One or more waste determinations may be required to represent the complete range of waste compositions and quantities that occur during the entire averaging period due to normal variations in the operating conditions for the source or process generating the hazardous waste stream. Examples of such normal variations are seasonal variations in waste quantity or fluctuations in ambient temperature.

(iii) Analysis. Each collected sample shall be prepared and analyzed in accordance with one or more of the methods listed in paragraphs (b)(3)(iii)(A) through (b)(3)(iii)(I) of this section, including appropriate quality assurance and quality control (QA/QC) checks and use of target compounds for calibration. When the owner or operator is making a waste determination for a treated hazardous waste that is to be compared to an average VO concentration at the point of waste origination or the point of waste entry to the treatment system, to determine if the conditions of 264.1082(c)(2)(i) through (c)(2)(vi) of this part, or 265.1083(c)(2)(i) through (c)(2)(vi) of this subpart are met, then the waste samples shall be prepared and analyzed using the same method or methods as were used in making the initial waste determinations at the point of waste origination or at the point of entry to the treatment system. If Method 25D in 40 CFR part 60, appendix A is not used, then one or more methods should be chosen that are appropriate to ensure that the waste determination accounts for and reflects all organic compounds in the waste with Henry's law constant values at least 0.1 mole-fraction-in-the-gas-phase/mole-fraction-in-the-liquid-phase (0.1 Y/X) [which can also be expressed as 1.8 x 10^{-6} atmospheres/gram-mole/m^3] at 25 degrees Celsius. Each of the analytical methods listed in paragraphs (b)(3)(iii)(B) through (b)(3)(iii)(G) of this section has an associated list of approved chemical compounds, for which EPA considers the method appropriate for measurement. If an owner or operator uses Method 624, 625, 1624 , or 1625 in 40 CFR part 136, appendix A to analyze one or more compounds that are not on that method's published list, the Alternative Test Procedure contained in 40 CFR 136.4 and 136.5 must be followed. If an owner or operator uses Method 8260 or 8270 in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846, (incorporated by reference - refer to 260.11(a) of this chapter) to analyze one or more compounds that are not on that method's published list, the procedures in paragraph (b)(3)(iii)(H) of this section must be followed. At the owner or operator's discretion, the concentration of each individual chemical constituent measured in the waste by a method other than Method 25D may be corrected to the concentration had it been measured using Method 25D by multiplying the measured concentration by the constituent-specific adjustment factor (f_{m25D}) as specified in paragraph (b)(4)(iii) of this section. Constituent-specific adjustment factors (f_{m25D}) can be obtained by contacting the Waste and Chemical Processes Group, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711.

(F) Method 8260 in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, "Publication SW-846 (incorporated by reference - refer to 260.11(a) of this chapter). Maintain a formal quality assurance program consistent with the requirements of Method 8260. The quality assurance program shall include the following elements:

(G) Method 8270 in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846, (incorporated by reference - refer to 260.11(a) of this chapter). Maintain a formal quality assurance program consistent with the requirements of Method 8270. The quality assurance program shall include the following elements:

(iv) Calculations. The average VO concentration (C) on a mass-weighted basis shall be calculated by using the results for all waste determinations conducted in accordance with paragraphs (b)(3)(ii) and (iii) of this section and the following equation:

(Equation omitted; only amended definitions follow, previous definitions are retained unless amended.)

Where

i=Individual waste determination "i" of the hazardous waste.

n=Total number of waste determinations of the hazardous waste conducted for the averaging period (not to exceed 1 year).

C_i=Measured VO concentration of waste determination "i" as determined in accordance with the requirements of paragraph (b)(3)(iii) of this section (i.e. the average of the four or more samples specified in paragraph (b)(3)(ii)(B) of this section), ppmw.

(v)Provided that the test method is appropriate for the waste as required under paragraph (b)(3)(iii) of this section, compliance shall be determined based on the test method used by the owner or operator as recorded pursuant to 265.1090(f)(1) of this subpart.

(8)Procedure to determine the actual organic mass removal rate (MR) for a treated hazardous waste.

(iii) The MR shall be calculated by using the mass flow rate determined in accordance with the requirements of paragraph (b)(8)(ii) of this section and the following equation:

$MR=E_b-E_a$

Where: ....

[other definitions remain]

(9)Procedure to determine the actual organic mass biodegradation rate (MR_{bio}) for a treated hazardous waste.

(iv) The MR_{bio} shall be calculated by using the mass flow rates and fraction of organic biodegraded determined in accordance with the requirements of paragraphs (b)(9)(ii) and (b)(9)(iii) of this section, respectively, and the following equation:

$MR_{bio}=E_b \times F_{bio}$

Where:

MR_{bio}=Actual organic mass biodegradation rate, kg/hr.

E_b=Waste organic mass flow entering process as determined in accordance with the requirements of paragraph (b)(5)(iv) of this section, kg/hr.

F_{bio}=Fraction of organic biodegraded as determined in accordance with the requirements of paragraph (b)(9)(iii) of this section.

Replace 265.1084(d)(5)(ii)

265.1084 (d)Procedure for determining no detectable organic emissions for the purpose of complying with this subpart:

(5)Calibration gases shall be as follows:

(ii) A mixture of methane or n-hexane and air at a concentration of approximately, but less than 10,000 ppmv. methane or n-hexane.

Replace 265.1085(c)(2)(iii)&(iii)(B)& add (c)(2)(iii)(B)(1)&(2)

265.1085 Standards: Tanks.

(c)Owners and operators controlling air pollutant emissions from a tank using Tank Level 1 controls shall meet the requirements specified in paragraphs (c)(1) through (c)(4) of this section:

(2)The tank shall be equipped with a fixed roof designed to meet the following specifications:

(iii) Each opening in the fixed roof , and any manifold system associated with the fixed roof, shall be either:

(B) Connected by a closed-vent system that is vented to a control device. The control device shall remove or destroy organics in the vent stream, and shall be operating whenever hazardous waste is managed in the tank, except as provided for in paragraphs (c)(2)(iii)(B)(1) and (2) of this section.

(1)During periods it is necessary to provide access to the tank for performing the activities of paragraph (c)(2)(iii)(B)(2) of this section, venting of the vapor headspace underneath the fixed roof to the control device is not required, opening of closure devices is allowed, and removal of the fixed roof is allowed. Following completion of the activity, the owner or operator shall promptly secure the closure device in the closed position or reinstall the cover, as applicable, and resume operation of the control device.

(2)During periods of routine inspection, maintenance, or other activities needed for normal operations, and for the removal of accumulated sludge or other residues from the bottom of the tank.

Add 265.1085(e)(4); replace 265.1085 (f)(3)(i)(D)(4) and add (f)(4); add 265.1085(j)(2)(iii)

265.1085 (e)The owner or operator who controls air pollutant emissions from a tank using a fixed-roof with an internal floating roof shall meet the requirements specified in paragraphs (e)(1) through (e)(3) of this section.

(4)Safety devices, as defined in 265.1081 of this subpart, may be installed and operated as necessary on any tank complying with the requirements of paragraph (e) of this section.

(f) The owner or operator who controls air pollutant emissions from a tank using an external floating roof shall meet the requirements specified in paragraphs (f)(1) through (f)(3) of this section.

(3)The owner or operator shall inspect the external floating roof in accordance with the procedures specified as follows:

(i) (D) (4)The total gap area shall be calculated by adding the gap surface areas determined for each identified gap location for the primary seal and the secondary seal individually, and then dividing the sum for each seal type by the nominal diameter of the tank. These total gap areas for the primary seal and secondary seal are then compared to the respective standards for the seal type as specified in paragraph (f)(1)(ii) of this section.

(4)Safety devices, as defined in 265.1081, may be installed and operated as necessary on any tank complying with the requirements of paragraph (f) of this section.

(j) The owner or operator shall transfer hazardous waste to a tank subject to this section in accordance with the following requirements:

(2)The requirements of paragraph (j)(1) of this section do not apply when transferring a hazardous waste to the tank under any of the following conditions:

(iii) The hazardous waste meets the requirements of 265.1083(c)(4) of this subpart.

Replace 265.1086(b)(2)&(d)(1)(iii); Replace 265.1086(d)(1)(iv)(2)(i)(B); **add 265.1086(e)(2)(iii)**

265.1086 Standards: surface impoundments.

(b)The owner or operator shall control air pollutant emissions from the surface impoundment by installing and operating either of the following:

(2)A cover that is vented through a closed-vent system to a control device in accordance with the requirements specified in paragraph (d) of this section.

(d)The owner or operator who controls air pollutant emissions from a surface impoundment using a cover vented to a control device shall meet the requirements specified in paragraphs (d)(1) through (d)(3) of this section.

(1)The surface impoundment shall be covered by a cover and vented directly through a closed-vent system to a control device in accordance with the following requirements:

(iii) The cover and its closure devices shall be made of suitable materials that will minimize exposure of the hazardous waste to the atmosphere, to the extent practical, and will maintain the integrity of the cover and closure devices throughout their intended service life. Factors to be considered when selecting the materials of construction and designing the cover and closure devices shall include: Organic vapor permeability; the effects of any contact with the liquid or its vapors managed in the surface impoundment; the effects of outdoor exposure to wind, moisture, and sunlight; and the operating practices used for the surface impoundment on which the cover is installed.

(iv) The closed-vent system and control device shall be designed and operated in accordance with the requirements of 265.1088 of this subpart.

(2)Whenever a hazardous waste is in the surface impoundment, the cover shall be installed with each closure device secured in the closed position and the vapor headspace underneath the cover vented to the control device except as follows:

(i) Venting to the control device is not required, and opening of closure devices or removal of the cover is allowed at the following times:

(B) To remove accumulated sludge or other residues from the bottom of the surface impoundment.

(e)The owner or operator shall transfer hazardous waste to a surface impoundment subject to this section in accordance with the following requirements:

(2)The requirements of paragraph (e)(1) of this section do not apply when transferring a hazardous waste to the surface impoundment under either of the following conditions:

(iii) The hazardous waste meets the requirements of 265.1083(c)(4) of this subpart.

Replace 265.1087(c)(4)(i); replace 265.1087(d)(3)(v)(4)(i); replace 265.1087(g)

265.1087 Container Level 1 standards.

(c)(4)The owner or operator of containers using Container Level 1 controls shall inspect the containers and their covers and closure devices as follows:

(i) In the case when a hazardous waste already is in the container at the time the owner or operator first accepts possession of the container at the facility and the container is not emptied within 24 hours after the container is accepted at the facility (i.e., does not meet the conditions for an empty container as specified in 261.7(b)), the owner or operator shall visually inspect the container and its cover and closure devices to check for visible cracks, holes, gaps, or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position. The container visual inspection shall be conducted on or before the date that the container is accepted at the facility (i.e., the date the container becomes subject to the subpart CC container standards). For purposes of this requirement, the date of acceptance is the date of signature that the

facility owner or operator enters on Item 20 of the Uniform Hazardous Waste Manifest in the appendix to part 262 (EPA Forms 8700-22 and 8700-22A, as required under subpart E of this part, at 265.71. If a defect is detected, the owner or operator shall repair the defect in accordance with the requirements of paragraph (c)(4)(iii) of this section.

(d)Container Level 2 standards.

(3)Whenever a hazardous waste is in a container using Container Level 2 controls, the owner or operator shall install all covers and closure devices for the container, and secure and maintain each closure device in the closed position except as follows:

(v)Opening of a safety device, as defined in 265.1081 of this subpart, is allowed at any time conditions require doing so to avoid an unsafe condition.

(4)The owner or operator of containers using Container Level 2 controls shall inspect the containers and their covers and closure devices as follows:

(i) In the case when a hazardous waste already is in the container at the time the owner or operator first accepts possession of the container at the facility and the container is not emptied within 24 hours after the container is accepted at the facility (i.e., does not meet the conditions for an empty container as specified in 261.7(b)) , the owner or operator shall visually inspect the container and its cover and closure devices to check for visible cracks, holes, gaps, or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position. The container visual inspection shall be conducted on or before the date that the container is accepted at the facility (i.e., the date the container becomes subject to the subpart CC container standards). For purposes of this requirement, the date of acceptance is the date of signature that the facility owner or operator enters on Item 20 of the Uniform Hazardous Waste Manifest in the appendix to part 262 (Forms 8700-22 and 8700-22A), as required under subpart E of this part, at 265.71. If a defect is detected, the owner or operator shall repair the defect in accordance with the requirements of paragraph (d)(4)(iii) of this section.

(g) To determine compliance with the no detectable organic emissions requirements of paragraph (d)(1)(ii) of this section, the procedure specified in 265.1084(d) of this subpart shall be used.

Replace 265.1088(c)(3)(ii); replace 265.1088(c)(7)

265.1088 Standards: Closed-vent Systems and Control Devices

(c)(3)The owner or operator using a carbon adsorption system to comply with paragraph (c)(1) of this section shall operate and maintain the control device in accordance with the following requirements:

(ii) All carbon that is a hazardous waste and that is removed from the control device shall be managed in accordance with the requirements of 265.1033(m), regardless of the average volatile organic concentration of the carbon.

(7)The closed-vent system and control device shall be inspected and monitored by the owner or operator in accordance with the procedures specified in 265.1033(f)(2) and 265.1033(k). The readings from each monitoring device required by 265.1033(f)(2) shall be inspected at least once each operating day to check control device operation. Any necessary corrective measures shall be immediately implemented to ensure the control device is operated in compliance with the requirements of this section.

Replace 265.1090 (b)(1)(ii)(B), and (f)(1); add 265.1090(j) and (j)(1)&(2)

265.1090 Recordkeeping Requirements

(b)(1)(ii)(B) For each defect detected during the inspection, The location of the defect, a description of the defect, the date of detection, and corrective action taken to repair the defect. In the event that repair of the defect is delayed in accordance with the provisions of 265.1085 of this subpart, the owner or operator shall also record the reason for the delay and the date that completion of repair of the defect is expected.

(f) The owner or operator of a tank, surface impoundment, or container exempted from standards in accordance with the provisions of 265.1083(c) of this subpart shall prepare and maintain the following records, as applicable:

(1)For tanks, surface impoundments, or containers exempted under the hazardous waste organic concentration conditions specified in 265.1083(c)(1)or 265.1084(c)(2)(i) through (c)(2)(vi) of this subpart, the owner or operator shall record the information used for each waste determination (e.g., test results, measurements, calculations, and other documentation) in the facility operating log. If analysis results for waste samples are used for the waste determination, then the owner or operator shall record the date, time, and location that each waste sample is collected in accordance with applicable requirements of 265.1084 of this subpart.

(j) For each hazardous waste management unit not using air emission controls specified in 265.1085 through 265.1088 of this subpart in accordance with the provisions of 265.1080(b)(7) of this subpart, the owner and operator shall record and maintain the following information:

(1) Certification that the waste management unit is equipped with and operating air emission controls in accordance with the requirements of an applicable Clean Air Act regulation codified under 40 CFR part 60, part 61, or part 63.

(2) Identification of the specific requirements codified under 40 CFR part 60, part 61, or part 63 with which the waste management unit is in compliance.

Replace Appendix VI to 265, amend title

APPENDIX VI to PART 265 - COMPOUNDS WITH HENRY'S LAW CONSTANT LESS THAN 0.1 Y/X

COMPOUND NAME	CAS NO.
Acetaldol	107-89-1
Acetamide	60-35-5
2-Acetylaminofluorene	53-96-3
3-Acetyl-5-hydroxypiperidine	
3-Acetylpiperidine	618-42-8
1-Acetyl-2-thiourea	591-08-2
Acrylamide	79-06-1
Acrylic acid	79-10-7
Adenine	73-24-5
Adipic acid	124-04-9
Adiponitrile	111-69-3
Alachlor	15972-60-8
Aldicarb	116-06-3
Ametryn	834-12-8
4-Aminobiphenyl	92-67-1
4-Aminopyridine	504-24-5
Aniline	62-53-3

o-Anisidine	90-04-0
Anthraquinone	84-65-1
Atrazine	1912-24-9
Benzenearsonic acid	98-05-5
Benzenesulfonic acid	98-11-3
Benzidine	92-87-5
Benzo(a)anthracene	56-55-3
Benzo(k)fluoranthene	207-08-9
Benzoic acid	65-85-0
Benzo(g,h,i)perylene	191-24-2
Benzo(a)pyrene	50-32-8
Benzyl alcohol	100-51-6
gamma-BHC	58-89-9
Bis(2-ethylhexyl)phthalate	117-81-7
Bromochloromethyl acetate	
Bromoxynil	1689-84-5
Butyric acid	107-92-6
Caprolactam (hexahydro-2H-azepin-2-one)	105-60-2
Catechol (o-dihydroxybenzene)	120-80-9
Cellulose	9004-34-6
Cell wall	
Chlorhydrin (3-Chloro-1,2-propanediol)	96-24-2
Chloroacetic acid	79-11-8
2-Chloroacetophenone	93-76-5
p-Chloroaniline	106-47-8
p-Chlorobenzophenone	134-85-0
Chlorobenzilate	510-15-6
p-Chloro-m-cresol (6-chloro-m-cresol)	59-50-7
3-Chloro-2,5-diketopyrrolidine	
Chloro-1,2-ethane diol	
4-Chlorophenol	106-48-9
Chlorophenol polymers (2-chlorophenol & 4-chlorophenol)	95-57-8 & 106-48-9
1-(o-Chlorophenyl)thiourea	5344-82-1
Chrysene	218-01-9
Citric acid	77-92-9
Creosote	8001-58-9
m-Cresol	108-39-4
o-Cresol	95-48-7
p-Cresol	106-44-5
Cresol (mixed isomers)	1319-77-3
4-Cumylphenol	27576-86
Cyanide	57-12-5
4-Cyanomethyl benzoate	
Diazinon	333-41-5
Dibenzo(a,h)anthracene	53-70-3
Dibutylphthalate	84-74-2
2,5-Dichloroaniline (N,N'-dichloroaniline)	95-82-9
2,6-Dichlorobenzonitrile11	1194-65-6
2,6-Dichloro-4-nitroaniline	99-30-9
2,5-Dichlorophenol	333-41-5
3,4-Dichlorotetrahydrofuran	3511-19
Dichlorvos (DDVP)	62737
Diethanolamine	111-42-2

N,N-Diethylaniline	91-66-7
Diethylene glycol	111-46-6
Diethylene glycol dimethyl ether (dimethyl Carbitol)	111-96-6
Diethylene glycol monobutyl ether (butyl Carbitol)	112-34-5
Diethylene glycol monoethyl ether acetate (Carbitol acetate)	112-15-2
Diethylene glycol monoethyl ether (Carbitol Cellosolve)	111-90-0
Diethylene glycol monomethyl ether (methyl Carbitol)	111-77-3
N,N'-Diethylhydrazine	1615-80-1
Diethyl (4-methylumbelliferyl) thionophosphate	299-45-6
Diethyl phosphorothioate	126-75-0
N,N'-Diethylpropionamide	15299-99-7
Dimethoate	60-51-5
2,3-Dimethoxystrychnidin-10-one	357-57-3
4-Dimethylaminoazobenzene	60-11-7
7,12-Dimethylbenz(a)anthracene	57-97-6
3,3-Dimethylbenzidine	119-93-7
Dimethylcarbamoyl chloride	79-44-7
Dimethyldisulfide	624-92-0
Dimethylformamide	68-12-2
1,1-Dimethylhydrazine	57-14-7
Dimethylphthalate	131-11-3
Dimethylsulfone	67-71-0
Dimethylsulfoxide	67-68-5
4,6-Dinitro-o-cresol	534-52-1
1,2-Diphenylhydrazine	122-66-7
Dipropylene glycol (1,1'-oxydi-2-propanol)	110-98-5
Endrin	72-20-8
Epinephrine	51-43-4
mono-Ethanolamine	141-43-5
Ethyl carbamate (urethane)	5-17-96
Ethylene glycol	107-21-1
Ethylene glycol monobutyl ether (butyl Cellosolve)	111-76-2
Ethylene glycol monoethyl ether (Cellosolve)	110-80-5
Ethylene glycol monoethyl ether acetate (Cellosolve acetate)	111-15-9
Ethylene glycol monomethyl ether (methyl Cellosolve)	109-86-4
Ethylene glycol monophenyl ether (phenyl Cellosolve)	122-99-6
Ethylene glycol monopropyl ether (propyl Cellosolve)	2807-30-9
Ethylene thiourea (2-imidazolidinethione)	9-64-57
4-Ethylmorpholine	100-74-3
3-Ethylphenol	620-17-7
Fluoroacetic acid, sodium salt	62-74-8
Formaldehyde	50-00-0
Formamide	75-12-7
Formic acid	64-18-6
Fumaric acid	110-17-8
Glutaric acid	110-94-1
Glycerin (Glycerol)	56-81-5
Glycidol	556-52-5
Glycinamide	598-41-4
Glyphosate	1071-83-6
Guthion	86-50-0
Hexamethylene-1,6-diisocyanate (1,6-diisocyanatohexane)	822-06-0
Hexamethyl phosphoramide.	680-31-9

Hexanoic acid	142-62-1
Hydrazine	302-01-2
Hydrocyanic acid	74-90-8
Hydroquinone	123-31-9
Hydroxy-2-propionitrile (hydracrylonitrile)	109-78-4
Indeno (1,2,3-cd) pyrene	193-39-5
Lead acetate	301-04-2
Lead subacetate (lead acetate, monobasic)	1335-32-6
Leucine	61-90-5
Malathion	121-75-5
Maleic acid	110-16-7
Maleic anhydride	108-31-6
Mesityl oxide	141-79-7
Methane sulfonic acid	75-75-2
Methomyl	16752-77-5
p-Methoxyphenol	150-76-5
Methyl acrylate	96-33-3
4,4'-Methylene-bis-(2-chloroaniline)	101-14-4
4,4'-Methylenediphenyl diisocyanate (diphenyl methane diisocyanate)	101-68-8
4,4'-Methylenedianiline	101-77-9
Methylene diphenylamine (MDA)	
5-Methylfurfural	620-02-0
Methylhydrazine	60-34-4
Methyliminoacetic acid	
Methyl methane sulfonate	66-27-3
1-Methyl-2-methoxyaziridine	
Methylparathion	298-00-0
Methyl sulfuric acid (sulfuric acid, dimethyl ester)	77-78-1
4-Methylthiophenol	106-45-6
Monomethylformamide (N-methylformamide)	123-39-7
Nabam	142-59-6
alpha-Naphthol	90-15-3
beta-Naphthol	135-19-3
alpha-Naphthylamine	134-32-7
beta-Naphthylamine	91-59-8
Neopentyl glycol (dimethylolpropane)	126-30-7
Niacinamide	98-92-0
o-Nitroaniline	88-74-4
Nitroglycerin	55-63-0
2-Nitrophenol	88-75-5
4-Nitrophenol	100-02-7
N-Nitrosodimethylamine	62-75-9
Nitrosoguanidine	674-81-7
N-Nitroso-n-methylurea	684-93-5
N-Nitrosomorpholine (4-nitrosomorpholine)	59-89-2
Oxalic acid	144-62-7
Parathion	56-38-2
Pentaerythritol	115-77-5
Phenacetin	62-44-2
Phenol	108-95-2
Phenylacetic acid	103-82-2
m-Phenylene diamine	108-45-2
o-Phenylene diamine	95-54-5

p-Phenylene diamine	106-50-3
Phenyl mercuric acetate	62-38-4
Phorate	298-02-2
Phthalic anhydride	85-44-9
alpha-Picoline (2-methyl pyridine)	109-06-8
1,3-Propane sulfone	1120-71-4
beta-Propiolactone	57-57-8
Proporur (Baygon)	
Propylene glycol	57-55-6
Pyrene	129-00-0
Pyridinium bromide	39416-48-3
Quinoline	91-22-5
Quinone (p-benzoquinone)	106-51-4
Resorcinol	108-46-3
Simazine	122-34-9
Sodium acetate	127-09-3
Sodium formate	141-53-7
Strychnine	57-24-9
Succinic acid	110-15-6
Succinimide	123-56-8
Sulfanilic acid	121-47-1
Terephthalic acid	100-21-0
Tetraethyldithiopyrophosphate	3689-24-5
Tetraethylenepentamine	112-57-2
Thiofanox	39196-18-4
Thiosemicarbazide	79-19-6
2,4-Toluenediamine	95-80-7
2,6-Toluenediamine	823-40-5
3,4-Toluenediamine	496-72-0
2,4-Toluene diisocyanate	584-84-9
p-Toluic acid	99-94-5
m-Toluidine	108-44-1
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1
Triethanolamine	102-71-6
Triethylene glycol dimethyl ether	
Tripropylene glycol	24800-44-0
Warfarin	81-81-2
3,4-Xylenol (3,4-dimethylphenol)	95-65-8

Delete 268.1(e)(5)

268.1 Purpose, scope and applicability.

(e) The following hazardous wastes are not subject to any provision of part 268:

(5) Reserved

Replace 268.2(i); add (k)

268.2 Definitions applicable in this part.
When used in this part the following terms have the meanings given below: (amended 11/90)

(i) Underlying hazardous constituent means any constituent listed in 268.48, Table UTS - Universal Treatment Standards, except fluoride, selenium, sulfides, vanadium, and zinc, which can reasonably be expected to be present at the point of generation of the hazardous waste at a concentration above the constituent-specific UTS treatment standards. (12/93, 5/96, 9/98)

(k)Soil means unconsolidated earth material composing the superficial geologic strata (material overlying bedrock), consisting of clay, silt, sand, or gravel size particles as classified by the U.S. Soil Conservation Service, or a mixture of such materials with liquids, sludges or solids which is inseparable by simple mechanical removal processes and is made up primarily of soil by volume based on visual inspection.

Add 268.3(d)

268.3 Dilution prohibited as a substitute for treatment.

(d)It is a form of impermissible dilution, and therefore prohibited, to add iron filings or other metallic forms of iron to lead-containing hazardous wastes in order to achieve any land disposal restriction treatment standard for lead. Lead-containing wastes include D008 wastes (wastes exhibiting a characteristic due to the presence of lead), all characteristic wastes containing lead as an underlying hazardous constituent, listed wastes containing lead as a regulated constituent, and hazardous media containing any of the aforementioned lead-containing wastes.

Replace 268.4(a)(2)(ii)&(iii)

268.4 Treatment surface impoundment exemption.

(a) Wastes which are otherwise prohibited from land disposal under this part may be treated in a surface impoundment or series of impoundments provided that: (amended 11/90)

(2)The following conditions are met: (amended 11/90)

(ii) Removal. The following treatment residues (including any liquid waste) must be removed at least annually: residues which do not meet the treatment standards promulgated under subpart D of this part; residues which do not meet the prohibition levels established under subpart C of this part or imposed by statute (where no treatment standards have been established); residues which are from the treatment of wastes prohibited from land disposal under subpart C of this part (where no treatment standards have been established and no prohibition levels apply); or residues from managing listed wastes which are not delisted under 260.22. If the volume of liquid flowing through the impoundment or series of impoundments annually is greater than the volume of the impoundment or impoundments, this flow-through constitutes removal of the supernatant for the purpose of this requirement.

(iii) Subsequent management. Treatment residues may not be placed in any other surface impoundment for subsequent management.

Replace 268.7(a)(1)&(2); add (2)(i)&(ii); replace 268.7(a)(3)&(3)(ii)&(4) and Generator Paperwork Requirements Table 268.7(a)(4)

268.7 Testing, tracking, and recordkeeping requirements for generators, treaters, and disposal facilities. (11/90, 5/96, 9/98)

(a) Requirements for generators:

(1) A generator of hazardous waste must determine if the waste has to be treated before it can be land disposed. This is done by determining if the hazardous waste meets the treatment standards in 268.40, 268.45, or 268.49. This determination can be made in either of two ways: testing the waste or using knowledge of the waste. If the generator tests the waste, testing would normally determine the total concentration of hazardous constituents, or the concentration of hazardous constituents in an extract of the waste obtained using test method 1311 in "Test Methods of Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846, as referenced in 260.11 of this chapter, depending on whether the treatment standard for the waste is expressed as a total concentration or concentration of hazardous constituent in the waste's extract. In addition, some hazardous wastes must be treated by particular treatment methods before they can be land disposed and some soils are contaminated by such hazardous wastes. These treatment standards are also found in 268.40, and are described in detail in 268.42, Table 1. These wastes, and soils contaminated with such wastes, do not need to be tested (however, if they are in a waste mixture, other wastes with concentration level treatment standards would have to be tested). If a generator determines they are managing a waste or soil contaminated with a waste, that displays a hazardous characteristic of ignitability, corrosivity, reactivity, or toxicity, they must comply with the special requirements of 268.9 of this part in addition to any applicable requirements in this section.

(2) If the waste or contaminated soil does not meet the treatment standard: With the initial shipment of waste to each treatment or storage facility, the generator must send a one-time written notice to each treatment or storage facility receiving the waste, and place a copy in the file. The notice must include the information in column "268.7(a)(2)" of the Generator Paperwork Requirements Table in 268.7(a)(4). No further notification is necessary until such time that the waste or facility change, in which case a new notification must be sent and a copy placed in the generator's file.

(i) For contaminated soil, the following certification statement should be included, signed by an authorized representative:

I certify under penalty of law that I personally have examined this contaminated soil and it [does/does not] contain listed hazardous waste and [does/does not] exhibit a characteristic of hazardous waste and requires treatment to meet the soil treatment standards as provided by 268.49(c).

(ii) [Reserved]

(3) If the waste or contaminated soil meets the treatment standard at the original point of generation:

(ii) For contaminated soil, with the initial shipment of wastes to each treatment, storage, or disposal facility , the generator must send a one-time written notice to each facility receiving the waste and place a copy in the file. The notice must include the information in " 268.7(a)(3) of the Generator Paperwork Requirements Table in 268.7(a)(4).

(4) For reporting, tracking, and recordkeeping when exceptions allow certain wastes or contaminated soil that do not meet the treatment standards to be land disposed: There are certain exemptions from the requirement that hazardous wastes or contaminated soil meet treatment standards before they can be land disposed. These include, but are not limited to case-by-case extensions under 268.5, disposal in a no-migration unit under 268.6, or a national capacity variance or case-by-case capacity variance under subpart C of this part. If a generator's

waste is so exempt, then with the initial shipment of waste, the generator must send a one-time written notice to each land disposal facility receiving the waste. The notice must include the information indicated in column "268.7(a)(4)" of the Generator Paperwork Requirements Table below. If the waste changes, the generator must send a new notice to the receiving facility, and place a copy in their files.(11/90, 12/92; 5/96, 9/98)

Generator Paperwork Requirements Table 268.7(a)(4) (9/98)

Required information	268.7 (a)(2)	268.7 (a)(3)	268.7 (a)(4)	268.7 (a)(9)
1. EPA Hazardous Waste and Manifest numbers and Manifest Number of first shipment	x	x	x	x
2. Statement: this waste is not prohibited from land disposal			x	
3. The waste is subject to the LDRs. The constituents of concern for F001-F005, and F039, and underlying hazardous constituents in characteristic wastes, unless the waste will be treated and monitored for all constituents. If all constituents will be treated and monitored, there is no need to put them all on the LDR notice	x	x		
4. The notice must include the applicable wastewater/nonwastewater category (see 268.2(d) and (f)) and subdivisions made within a waste code based on waste-specific criteria (such as D003 reactive cyanide)	x	x		
5. Waste analysis data (when available)	x	x	x	
6. Date the waste is subject to the prohibition			x	
7. For hazardous debris, when treating with the alternative treatment technologies provided by 268.45: the contaminants subject to treatment, as described in 268.45(b); and an indication that these contaminants are being treated to comply with 268.45	x		x	
8. For contaminated soil subject to LDRs as provided in 268.49(a) the constituents subject to treatment as described in 268.49(d) and the following statement: This contaminated soil (does/does not) contain listed hazardous waste and (does/does not) exhibit a characteristic of hazardous waste and [is subject to/complies with] the soil treatment standards as provided by 268.49(c) or the universal treatment standards	x			
9. A certification is needed (see applicable section for exact wording)		x		x

Replace 268.7(a)(5)(6)(7) and (9)(i); add (10)

268.7(a) (5)If a generator is managing and treating prohibited waste or contaminated soil in tanks, containers, or containment buildings regulated under 262.34 to meet applicable LDR treatment standards found at 268.40, the generator must develop and follow a written waste analysis plan which describes the procedures they will carry out to comply with the treatment standards. (Generators treating hazardous debris under the alternative treatment standards of Table 1, 268.45, however, are not subject to these waste analysis requirements.) The plan must be kept on site in the generator's records, and the following requirements must be met: (12/92, 12/93, 9/98)

(6)If a generator determines that the waste or contaminated soil is restricted based solely on his knowledge of the waste, all supporting data used to make this determination must be retained on-site in the generator's files. If a generator determines that the waste is restricted based on testing this waste or an extract developed using the test method 1311 in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW846, as referenced in 260.11 of this chapter, and all waste analysis data must be retained on-site in the generator's files.
(9/98)

(7)If a generator determines that he is managing a prohibited waste that is excluded from the definition of hazardous or solid waste or is exempted from Subtitle C regulation under 261.2 through 261.6 subsequent to the point of generation (including deactivated characteristic hazardous wastes managed in wastewater treatment systems subject to the Clean Water Act (CWA) as specified at 261.4(a)(2), or are CWA equivalent), or are managed in an underground injection well regulated by R.61-9 and R.61-68), he must place a one-time notice

describing such generation, subsequent exclusion from the definition of hazardous or solid waste or exemption from RCRA Subtitle C regulation, and the disposition of the waste, in the facility's on-site files.

(9)(i) "I certify under penalty of law that I personally have examined and am familiar with the waste and that the lab pack contains only wastes that have not been excluded under appendix IV to part 268 and that this lab pack will be sent to a combustion facility in compliance with the alternative treatment standards for lab packs at 268.42(c). I am aware that there are significant penalties for submitting a false certification, including the possibility of fine or imprisonment."

(10) Small quantity generators with tolling agreements pursuant to 262.20(e) must comply with the applicable notification and certification requirements of paragraph (a) of this section for the initial shipment of the waste subject to the agreement. Such generators must retain on-site a copy of the notification and certification, together with the tolling agreement, for at least three years after termination or expiration of the agreement. The three-year record retention period is automatically extended during the course of any unresolved enforcement action regarding the regulated activity or as requested by the Department.

Replace 268.7(b)(1)&(2)&(3) and Treatment Facility Paperwork Requirements Table 268.7

268.7(b)Treatment facilities must test their wastes according to the frequency specified in their waste analysis plans as required by 264.13 (for permitted TSDs) or 265.13 (for interim status facilities). Such testing must be performed as provided in paragraphs (b)(1), (b)(2) and (b)(3) of this section. (9/98)

(1)For wastes or contaminated soil with treatment standards expressed in the waste extract (TCLP), the owner or operator of the treatment facility must test an extract of the treatment residues, using test method 1311 (the Toxicity Characteristic Leaching Procedure, described in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846 as incorporated by reference in 260.11 of this chapter) to assure that the treatment residues extract meet the applicable treatment standards.
(9/98)

(2)For wastes or contaminated soil with treatment standards expressed as concentrations in the waste, the owner or operator of the treatment facility must test the treatment residues (not an extract of such residues) to assure that they meet the applicable treatment standards.
(9/98)

(3)A one-time notice must be sent with the initial shipment of waste or contaminated soil to the land disposal facility. A copy of the notice must be placed in the treatment facility's file.
(9/98)

TREATMENT FACILITY PAPERWORK REQUIREMENTS TABLE 268.7(9/98)

Required Information	268.7(b)
1. EPA Hazardous Waste and Manifest numbers and Manifest Number of first shipment	x
2. The waste is subject to the LDRs. The constituents of concern for F001-F005 and F039 and underlying constituents in characteristic wastes, unless the wastes will be treated and monitored for all constituents. If all constituents will be treated and monitored, there is no need to put them all on the LDR notice	x
3. The notice must include the applicable wastewater/nonwastewater category (see 268.2(d) and (f) and subdivisions made within a waste code based on waste-specific criteria (such as D003 reactive cyanide).	x
4. Waste analysis data (when available)	x
5. For contaminated soil subject to LDRs as provided in 268.49(a), the constituents subject to treatment as described in 268.49(d) and the following statement: "This contaminated soil [does/does not] exhibit a characteristic of hazardous waste and [is subject to/complies with] the soil treatment standards as provided by 268.49(c)	x
6. A certification statement is needed (see applicable section for exact wording)	x

Replace 268.7(b)(4) with a two-paragraph certification; add 268.7(b)(4)(iv)&(v)

268.7(b)(4) The treatment facility must submit a one-time certification signed by an authorized representative with the initial shipment of waste or treatment residue of a restricted waste to the land disposal facility. A certification is also necessary for contaminated soil and it must state:

"I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification and believe that it has been maintained and operated properly so as to comply with treatment standards specified in 268.49 without impermissible dilution of the prohibited wastes. I am aware there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."

"I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification. Based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the treatment process has been operated and maintained properly so as to comply with the treatment standards specified in 268.40 without impermissible dilution of the prohibited waste. I am aware there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment. (12/93, (9/98)"

(iv) For characteristic wastes that are subject to the treatment standards in 268.40 (other than those expressed as a required method of treatment) that are reasonably expected to contain underlying hazardous constituents as defined in 268.2(i); are treated on-site to remove the hazardous characteristic; and are then sent off-site for treatment of underlying hazardous constituents, the certification must state the following:

"I certify under penalty of law that the waste has been treated in accordance with the requirements of 268.40 to remove the hazardous characteristic. This decharacterized waste contains underlying hazardous constituents that require further treatment to meet universal treatment standards. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."

(v) For characteristic wastes that contain underlying hazardous constituents as defined 268.2(i) that are treated on-site to remove the hazardous characteristic to treat underlying hazardous constituents to levels in 268.48 Universal Treatment Standards, the certification must state the following:

"I certify under penalty of law that the waste has been treated in accordance with the requirements of 268.40 to remove the hazardous characteristic and that underlying hazardous constituents, as defined in 268.2(i) have been treated on-site to meet the 268.48 Universal Treatment Standards. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."

Replace 268.7(b)(5)&(6)

(5) If the waste or treatment residue will be further managed at a different treatment or, storage, or disposal facility, the treatment, storage, or disposal facility sending the waste or treatment residue offsite must comply with the notice and certification requirements applicable to generators under this section. (9/98)

(6) Where the wastes are recyclable materials used in a manner constituting disposal subject to the provisions of 268.20(b) regarding treatment standards and prohibition levels, the owner or operator of a treatment facility (i.e., the recycler) is not required to notify the receiving facility, pursuant to paragraph (b)(3) of this section. With each shipment of such wastes the owner or operator of the recycling facility must submit a certification described in paragraph (b)(4) of this section, and a notice which includes the information listed in paragraph (b)(3) of this section (except the manifest number) to the Department. The recycling facility also must keep records of the name and location of each entity receiving the hazardous waste-derived product.

Add 268.7(e)(1)(&(2)

268.7 (e) Generators and treaters who first receive from EPA or an authorized state a determination that a given contaminated soil subject to LDRs as provided in 268.49(a) no longer contains a listed hazardous waste and generators and treaters who first determine that a contaminated soil subject to LDRs as provided in 268.49(a) no longer exhibits a characteristic of hazardous waste must:

(1) Prepare a one-time only documentation of these determinations including all supporting information; and,

(2) Maintain that information in the facility files and other records for a minimum of three years.

Add a new 268.33, .34, .35, and .36 for specific new waste specific prohibitions

268.33 Waste-specific prohibitions - organobromine wastes.

(a) Effective November 4, 1998, the waste specified in 261.32 as EPA Hazardous Wastes Numbers K140, and in 261.33 as EPA Hazardous waste number U408 are prohibited from land disposal. In addition, soils and debris contaminated with these wastes, radioactive wastes mixed with these hazardous wastes, and soils and debris contaminated with these radioactive mixed wastes, are prohibited from land disposal.

(b) The requirements of paragraphs (a) and (b) of this section do not apply if:

(1) The wastes meet the applicable treatment standards specified in subpart D of this part;

(2) Persons have been granted an exemption from a prohibition pursuant to a petition under 268.6, with respect to those wastes and units covered by the petition;

(3) The wastes meet the applicable treatment standards established pursuant to a petition granted under 268.44;

(4) Hazardous debris that has met treatment standards in 268.40 or in the alternative treatment standards in 268.45; or

(5) Persons have been granted an extension to the effective date of a prohibition pursuant to 268.5, with respect to these wastes covered by the extension.

(c) To determine whether a hazardous waste identified in this section exceeds the applicable treatment standards specified in 268.40, the initial generator must test a sample of the waste extract or the entire waste, depending on whether the treatment standards are expressed as concentrations in the waste extract or the waste, or the generator may use knowledge of the waste. If the waste contains constituents (including underlying hazardous constituents in characteristic wastes that have been diluted to remove the characteristic) in excess of the applicable Universal Treatment Standard levels of 268.48, the waste is prohibited from land disposal, and all requirements of this part 268 are applicable, except as otherwise specified.

268.34 Waste specific prohibitions - toxicity characteristic metal wastes.

(a) Effective August 24, 1998, the following wastes are prohibited from land disposal: the wastes specified in Part 261 as EPA Hazardous Waste numbers D004 - D011 that are newly identified (i.e. wastes, soil, or debris identified as hazardous by the Toxic Characteristic Leaching Procedure but not the Extraction Procedure), and waste, soil, or debris from mineral processing operations that is identified as hazardous by the specifications at Part 261.

(b) Effective May 26, 2000, the following wastes are prohibited from land disposal: newly identified characteristic wastes from elemental phosphorus processing; radioactive wastes mixed with EPA Hazardous

wastes D004 - D011 that are newly identified (i.e. wastes, soil, or debris identified as hazardous by the Toxic Characteristic Leaching Procedure but not the Extraction Procedure); or mixed with newly identified characteristic mineral processing wastes, soil, or debris.

(c) Between May 26, 1998 and May 26, 2000, newly identified characteristic wastes from elemental phosphorus processing, radioactive waste mixed with D004 - D011 wastes that are newly identified (i.e. wastes, soil, or debris identified as hazardous by the Toxic Characteristic Leaching Procedure but not the Extraction Procedure), or mixed with newly identified characteristic mineral processing wastes, soil, or debris may be disposed in a landfill or surface impoundment only if such unit is in compliance with the requirements specified in 268.5(h)(2) of this part.

(d) The requirements of paragraphs (a) and (b) of this section do not apply if:

(1) The wastes meet the applicable treatment standards specified in subpart D of this part;

(2) Persons have been granted an exemption from a prohibition pursuant to a petition under 268.6, with respect to those wastes and units covered by the petition;

(3) The wastes meet the applicable alternate treatment standards established pursuant to a petition granted under 268.44; or

(4) Persons have been granted an extension to the effective date of a prohibition pursuant to 268.5, with respect to these wastes covered by the extension.

(e) To determine whether a hazardous waste identified in this section exceeds the applicable treatment standards specified in 268.40, the initial generator must test a sample of the waste extract or the entire waste, depending on whether the treatment standards are expressed as concentrations in the waste extract or the waste, or the generator may use knowledge of the waste. If the waste contains constituents (including underlying hazardous constituents in characteristic wastes) in excess of the applicable Universal Treatment Standard levels of 268.48 of this part, the waste is prohibited from land disposal, and all requirements of part 268 are applicable, except as otherwise specified.

268.35 [Reserved]

268.36 [Reserved]

Replace 268.40(e)

268.40 Applicability of treatment standards. (amended 11/90; 5/96)

(e) For characteristic wastes (D001 - D043) that are subject to treatment standards in the following table "Treatment Standards for Hazardous Wastes," and are not managed in a wastewater treatment system that is regulated under the Clean Water Act (CWA), all underlying hazardous constituents (as defined in 268.2(i)) must meet Universal Treatment Standards, found in 268.48, Table, Universal Treatment Standards, prior to land disposal. as defined in 268.2(c) of this part. (5/96, 9/98)

Treatment Standards for Hazardous Wastes [Note to codifiers: Several federal errors are corrected and K140 and U408 are added.]

Note: The treatment standards that heretofore appeared in tables in 268.41, 268.42, and 268.43 of this part have been consolidated into the table "Treatment Standards for Hazardous Wastes" in this section.

Add new 268.40(h)

268.42(h) Prohibited D004-D011 mixed radioactive wastes and mixed radioactive listed wastes containing metal constituents, that were previously treated by stabilization to the treatment standards in effect at that time and then put into storage, do not have to be re-treated to meet treatment standards in this section prior to land disposal.

REPLACE TABLE 268.40, RETAINING TITLE "TREATMENT STANDARDS FOR HAZARDOUS WASTES," ADDING K140 AND U408, AND MAKING NUMEROUS CORRECTIONS.

TREATMENT STANDARDS FOR HAZARDOUS WASTES NOTE: NA means not applicable					
		REGULATED HAZARDOUS CONSTITUENT		WASTEWATERS	NONWASTEWATERS
WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
D001 [9]	Ignitable Characteristic Wastes, except for the 261.21(a)(1) High TOC Subcategory.	NA	NA	DEACT and meet 268.48 standards[8]; or RORGS; or CMBST	DEACT and meet 268.48 standards[8]; or RORGS; or CMBST
	High TOC Ignitable Characteristic Liquids Subcategory based on 40 CFR 261.21(a)(1) - Greater than or equal to 10% total organic carbon. (Note: This subcategory consists of nonwastewaters only.)	NA	NA	NA	RORGS; CMBST; or POLYM
D002 [9]	Corrosive Characteristic Wastes.	NA	NA	DEACT and meet 268.48 standards[8]	DEACT and meet 268.48 standards[8]
D002, D004, D005, D006, D007, D008, D009, D010, D011	Radioactive high level wastes generated during the reprocessing of fuel rods. (Note: This subcategory consists of nonwastewaters only.)	Corrosivity (pH)	NA	NA	HLVIT
		Arsenic	7440-38-2	NA	HLVIT
		Barium	7440-39-3	NA	HLVIT
		Cadmium	7440-43-9	NA	HLVIT
		Chromium (Total)	7440-47-3	NA	HLVIT
		Lead	7439-92-1	NA	HLVIT
		Mercury	7439-97-6	NA	HLVIT
		Selenium	7782-49-2	NA	HLVIT
		Silver	7440-22-4	NA	HLVIT
D003 [9]	Reactive Sulfides Subcategory based on 261.23(a)(5).	NA	NA	DEACT	DEACT

TREATMENT STANDARDS FOR HAZARDOUS WASTES NOTE: NA means not applicable					
		REGULATED HAZARDOUS CONSTITUENT		WASTEWATERS	NONWASTEWATERS
WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
	Explosives Subcategory based on 261.23(a)(6), (7), and (8).	NA	NA	DEACT and meet 268.48 standards[8]	DEACT and meet 268.48 standards[8]
	Unexploded ordnance and other explosive devices which have been the subject of an emergency response.	NA	NA	DEACT	DEACT
	Other Reactives Subcategory based on 261.23(a)(1).	NA	NA	DEACT and meet 268.48 standards[8]	DEACT and meet 268.48 standards[8]
	Water Reactive Subcategory based on 261.23(a)(2), (3), and (4). (Note: This subcategory consists of nonwastewaters only.)	NA	NA	NA	DEACT and meet 268.48 standards[8]
	Reactive Cyanides Subcategory based on 261.23(a)(5).	Cyanides (Total)[7]	57-12-5	Reserved	590
		Cyanides (Amenable)[7]	57-12-5	0.86	30
D004 [9]	Wastes that exhibit, or are expected to exhibit, the characteristic of toxicity for arsenic based on the toxicity characteristic leaching procedure (TCLP) in SW846.	Arsenic	7440-38-2	1.4 and meet 268.48 standards[8]	5.0 mg/l TCLP and meet 268.48 standards[8]
D005 [9]	Wastes that exhibit, or are expected to exhibit, the characteristic of toxicity for barium based on the toxicity characteristic leaching procedure (TCLP) in SW846.	Barium	7440-39-3	1.2 and meet 268.48 standards[8]	21 mg/l TCLP and meet 268.48 standards[8]
D006 [9]	Wastes that exhibit, or are expected to exhibit, the characteristic of toxicity for cadmium based on the toxicity characteristic leaching procedure (TCLP) in SW846.	Cadmium	7440-43-9	0.69 and meet 268.48 standards[8]	0.11 mg/l TCLP and meet 268.48 standards[8]
	Cadmium Containing Batteries Subcategory. (Note: This subcategory consists of nonwastewaters only.)	Cadmium	7440-43-9	NA	RTHRM
D007 [9]	Wastes that exhibit, or are expected to exhibit, the	Chromium (Total)	7440-47-3	2.77	0.60 mg/l TCLP

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		REGULATED HAZARDOUS CONSTITUENT		WASTEWATERS	NONWASTEWATERS
WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
	characteristic of toxicity for chromium based on the toxicity characteristic leaching procedure (TCLP) in SW846.			and meet 268.48 standards[8]	and meet 268.48 standards[8]
D008 [9]	Wastes that exhibit, or are expected to exhibit, the characteristic of toxicity for lead based on the toxicity characteristic leaching procedure (TCLP) in SW846.	Lead	7439-92-1	0.69 and meet 268.48 standards[8]	0.75 mg/l TCLP and meet 268.48 standards[8]
	Lead Acid Batteries Subcategory (Note: This standard only applies to lead acid batteries that are identified as RCRA hazardous wastes and that are not excluded elsewhere from regulation under the land disposal restrictions of 40 CFR 268 or exempted under other EPA regulations (see 40 CFR 266.80). This subcategory consists of nonwastewaters only.)	Lead	7439-92-1	NA	RLEAD
	Radioactive Lead Solids Subcategory (Note: these lead solids include, but are not limited to, all forms of lead shielding and other elemental forms of lead. These lead solids do not include treatment residuals such as hydroxide sludges, other wastewater treatment residuals, or incinerator ashes that can undergo conventional pozzolanic stabilization, nor do they include organo-lead materials that can be incinerated and stabilized as ash. This subcategory consists of nonwastewaters only.)	Lead	7439-92-1	NA	MACRO
D009 [9]	Nonwastewaters that exhibit, or are expected to exhibit, the characteristic of toxicity for mercury based on the toxicity characteristic leaching procedure (TCLP) in SW846; and contain greater than or equal to 260 mg/kg total mercury that also contain organics and are not incinerator residues. (High Mercury-Organic Subcategory)	Mercury	7439-97-6	NA	IMERC; OR RMERC

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		REGULATED HAZARDOUS CONSTITUENT		WASTEWATERS	NONWASTEWATERS
WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
	Nonwastewaters that exhibit, or are expected to exhibit, the characteristic of toxicity for mercury based on the toxicity characteristic leaching procedure (TCLP) in SW846; and contain greater than or equal to 260 mg/kg total mercury that are inorganic, including incinerator residues and residues from RMERC. (High Mercury-Inorganic Subcategory)	Mercury	7439-97-6	NA	RMERC
	Nonwastewaters that exhibit, or are expected to exhibit, the characteristic of toxicity for mercury based on the toxicity characteristic leaching procedure (TCLP) in SW846; and contain less than 260 mg/kg total mercury and that are residues from RMERC only. (Low Mercury Subcategory)	Mercury	7439-97-6	NA	0.20 mg/l TCLP and meet 268.48 standards[8]
	All other nonwastewaters that exhibit, or are expected to exhibit, the characteristic of toxicity for mercury based on the toxicity characteristic leaching procedure (TCLP) in SW846; and contain less than 260 mg/kg total mercury and that are not residues from RMERC. (Low Mercury Subcategory)	Mercury	7439-97-6	NA	0.025 mg/l TCLP and meet 268.48 standards[8]
	All D009 wastewaters.	Mercury	7439-97-6	0.15 and meet 268.48 standards[8]	NA
	Elemental mercury contaminated with radioactive materials. (Note: This subcategory consists of nonwastewaters only.)	Mercury	7439-97-6	NA	AMLGM
	Hydraulic oil contaminated with Mercury Radioactive Materials Subcategory. (Note: This subcategory consists of nonwastewaters only.)	Mercury	7439-97-6	NA	IMERC
D010 [9]	Wastes that exhibit, or are expected to exhibit, the characteristic of toxicity for selenium based on the toxicity characteristic leaching procedure (TCLP) in SW846.	Selenium	7782-49-2	0.82 and meet 268.48 standards[8]	5.7 mg/l TCLP and meet 268.48 standards[8]

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WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
D011 [9]	Wastes that exhibit, or are expected to exhibit, the characteristic of toxicity for silver based on the toxicity characteristic leaching procedure (TCLP) in SW846.	Silver	7440-22-4	0.43 and meet 268.48 standards[8]	0.14 mg/l TCLP and meet 268.48 standards[8]
D012 [9]	Wastes that are TC for Endrin based on the TCLP in SW846 Method 1311.	Endrin	72-20-8	BIODG; or CMBST	0.13 and meet 268.48 standards[8]
		Endrin aldehyde	7421-93-4	BIODG; or CMBST	0.13 and meet 268.48 standards[8]
D013 [9]	Wastes that are TC for Lindane based on the TCLP in SW846 Method 1311.	alpha-BHC	319-84-6	CARBN; or CMBST	0.066 and meet 268.48 standards[8]
		beta-BHC	319-85-7	CARBN; or CMBST	0.066 and meet 268.48 standards[8]
		delta-BHC	319-86-8	CARBN; or CMBST	0.066 and meet 268.48 standards[8]
		gamma-BHC (Lindane)	58-89-9	CARBN; or CMBST	0.066 and meet 268.48 standards[8]
D014 [9]	Wastes that are TC for Methoxychlor based on the TCLP in SW846 Method 1311.	Methoxychlor	72-43-5	WETOX or CMBST	0.18 and meet 268.48 standards[8]
D015 [9]	Wastes that are TC for Toxaphene based on the TCLP in SW846 Method 1311.	Toxaphene	8001-35-2	BIODG or CMBST	2.6 and meet 268.48 standards[8]

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WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
D016 [9]	Wastes that are TC for 2,4-D (2,4-Dichlorophenoxyacetic acid) based on the TCLP in SW846 Method 1311.	2,4-D (2,4-Dichlorophenoxyacetic acid)	94-75-7	CHOXD, BIODG, or CMBST	10 and meet 268.48 standards[8]
D017 [9]	Wastes that are TC for 2,4,5-TP (Silvex) based on the TCLP in SW846 Method 1311.	2,4,5-TP (Silvex)	93-72-1	CHOXD or CMBST	7.9 and meet 268.48 standards[8]
D018 [9]	Wastes that are TC for Benzene based on the TCLP in SW846 Method 1311.	Benzene	71-43-2	0.14 and meet 268.48 standards[8]	10 and meet 268.48 standards[8]
D019 [9]	Wastes that are TC for Carbon tetrachloride based on the TCLP in SW846 Method 1311.	Carbon tetrachloride	56-23-5	0.057 and meet 268.48 standards[8]	6.0 and meet 268.48 standards[8]
D020 [9]	Wastes that are TC for Chlordane based on the TCLP in SW846 Method 1311.	Chlordane (alpha and gamma isomers)	57-74-9	0.0033 and meet 268.48 standards[8]	0.26 and meet 268.48 standards[8]
D021 [9]	Wastes that are TC for Chlorobenzene based on the TCLP in SW846 Method 1311.	Chlorobenzene	108-90-7	0.057 and meet 268.48 standards[8]	6.0 and meet 268.48 standards[8]
D022 [9]	Wastes that are TC for Chloroform based on the TCLP in SW846 Method 1311.	Chloroform	67-66-3	0.046 and meet 268.48 standards[8]	6.0 and meet 268.48 standards[8]
D023 [9]	Wastes that are TC for o-Cresol based on the TCLP in SW846 Method 1311.	o-Cresol	95-48-7	0.11 and meet 268.48 standards[8]	5.6 and meet 268.48 standards[8]
D024 [9]	Wastes that are TC for m-Cresol based on the TCLP in SW846 Method 1311.	m-Cresol (difficult to distinguish from p-cresol)	108-39-4	0.77 and meet 268.48 standards[8]	5.6 and meet 268.48 standards[8]

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WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
D025 [9]	Wastes that are TC for p-Cresol based on the TCLP in SW846 Method 1311.	p-Cresol (difficult to distinguish from m-cresol)	106-44-5	0.77 and meet 268.48 standards[8]	5.6 and meet 268.48 standards[8]
D026 [9]	Wastes that are TC for Cresols (Total) based on the TCLP in SW846 Method 1311.	Cresol-mixed isomers (Cresylic acid)(sum of o-, m-, and p-cresol concentrations)	1319-77-3	0.88 and meet 268.48 standards[8]	11.2 and meet 268.48 standards[8]
D027 [9]	Wastes that are TC for p-Dichlorobenzene based on the TCLP in SW846 Method 1311.	p-Dichlorobenzene (1,4-Dichlorobenzene)	106-46-7	0.090 and meet 268.48 standards[8]	6.0 and meet 268.48 standards[8]
D028 [9]	Wastes that are TC for 1,2-Dichloroethane based on the TCLP in SW846 Method 1311.	1,2-Dichloroethane	107-06-2	0.21 and meet 268.48 standards[8]	6.0 and meet 268.48 standards[8]
D029 [9]	Wastes that are TC for 1,1-Dichloroethylene based on the TCLP in SW846 Method 1311.	1,1-Dichloroethylene	75-35-4	0.025 and meet 268.48 standards[8]	6.0 and meet 268.48 standards[8]
D030 [9]	Wastes that are TC for 2,4-Dinitrotoluene based on the TCLP in SW846 Method 1311.	2,4-Dinitrotoluene	121-14-2	0.32 and meet 268.48 standards[8]	140 and meet 268.48 standards[8]
D031 [9]	Wastes that are TC for Heptachlor based on the TCLP in SW846 Method 1311.	Heptachlor	76-44-8	0.0012 and meet 268.48 standards[8]	0.066 and meet 268.48 standards[8]
		Heptachlor epoxide	1024-57-3	0.016 and meet 268.48 standards[8]	0.066 and meet 268.48 standards[8]
D032 [9]	Wastes that are TC for Hexachlorobenzene based on the TCLP in SW846 Method 1311.	Hexachlorobenzene	118-74-1	0.055 and meet 268.48 standards[8]	10 and meet 268.48 standards[8]

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WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
D033 [9]	Wastes that are TC for Hexachlorobutadiene based on the TCLP in SW846 Method 1311.	Hexachlorobutadiene	87-68-3	0.055 and meet 268.48 standards[8]	5.6 and meet 268.48 standards[8]
D034 [9]	Wastes that are TC for Hexachloroethane based on the TCLP in SW846 Method 1311.	Hexachloroethane	67-72-1	0.055 and meet 268.48 standards[8]	30 and meet 268.48 standards[8]
D035 [9]	Wastes that are TC for Methyl ethyl ketone based on the TCLP in SW846 Method 1311.	Methyl ethyl ketone	78-93-3	0.28 and meet 268.48 standards[8]	36 and meet 268.48 standards[8]
D036 [9]	Wastes that are TC for Nitrobenzene based on the TCLP in SW846 Method 1311.	Nitrobenzene	98-95-3	0.068 and meet 268.48 standards[8]	14 and meet 268.48 standards[8]
D037 [9]	Wastes that are TC for Pentachlorophenol based on the TCLP in SW846 Method 1311.	Pentachlorophenol	87-86-5	0.089 and meet 268.48 standards[8]	7.4 and meet 268.48 standards[8]
D038 [9]	Wastes that are TC for Pyridine based on the TCLP in SW846 Method 1311.	Pyridine	110-86-1	0.014 and meet 268.48 standards[8]	16 and meet 268.48 standards[8]
D039 [9]	Wastes that are TC for Tetrachloroethylene based on the TCLP in SW846 Method 1311.	Tetrachloroethylene	127-18-4	0.056 and meet 268.48 standards[8]	6.0 and meet 268.48 standards[8]
D040 [9]	Wastes that are TC for Trichloroethylene based on the TCLP in SW846 Method 1311.	Trichloroethylene	79-01-6	0.054 and meet 268.48 standards[8]	6.0 and meet 268.48 standards[8]
D041 [9]	Wastes that are TC for 2,4,5-Trichlorophenol based on the TCLP in SW846 Method 1311.	2,4,5-Trichlorophenol	95-95-4	0.18 and meet 268.48 standards[8]	7.4 and meet 268.48 standards[8]

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WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
D042 [9]	Wastes that are TC for 2,4,6-Trichlorophenol based on the TCLP in SW846 Method 1311.	2,4,6-Trichlorophenol	88-06-2	0.035 and meet 268.48 standards[8]	7.4 and meet 268.48 standards[8]
D043 [9]	Wastes that are TC for Vinyl chloride based on the TCLP in SW846 Method 1311.	Vinyl chloride	75-01-4	0.27 and meet 268.48 standards[8]	6.0 and meet 268.48 standards[8]
F001, F002, F003, F004, & F005	F001, F002, F003, F004 and/or F005 solvent wastes that contain any combination of one or more of the following spent solvents: acetone, benzene, n-butyl alcohol, carbon disulfide, carbon tetrachloride, chlorinated fluorocarbons, chlorobenzene, o-cresol, m-cresol, p-cresol, cyclohexanone, o-dichlorobenzene, 2-ethoxyethanol, ethyl acetate, ethyl benzene, ethyl ether, isobutyl alcohol, methanol, methylene chloride, methyl ethyl ketone, methyl isobutyl ketone, nitrobenzene, 2-nitropropane, pyridine, tetrachloroethylene, toluene, 1,1,1-trichloroethane, 1,1,2-trichloroethane, 1,1,2-trichloro-1,2,2-trifluoroethane, trichloroethylene, trichloromonofluoromethane, and/or xylenes [except as specifically noted in other subcategories]. See further details of these listings in 261.31	Acetone	67-64-1	0.28	160
		Benzene	71-43-2	0.14	10
		n-Butyl alcohol	71-36-3	5.6	2.6
		Carbon disulfide	75-15-0	3.8	NA
		Carbon tetrachloride	56-23-5	0.057	6.0
		Chlorobenzene	108-90-7	0.057	6.0
		o-Cresol	95-48-7	0.11	5.6
		m-Cresol (difficult to distinguish from p-cresol)	108-39-4	0.77	5.6
		p-Cresol (difficult to distinguish from m-cresol)	106-44-5	0.77	5.6
		Cresol-mixed isomers (Cresylic acid) (sum of o-, m-, and p-cresol concentrations)	1319-77-3	0.88	11.2
		Cyclohexanone	108-94-1	0.36	NA

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		Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
		o-Dichlorobenzene	95-50-1	0.088	6.0
		Ethyl acetate	141-78-6	0.34	33
		Ethyl benzene	100-41-4	0.057	10
		Ethyl ether	60-29-7	0.12	160
		Isobutyl alcohol	78-83-1	5.6	170
		Methanol	67-56-1	5.6	NA
		Methylene chloride	75-9-2	0.089	30
		Methyl ethyl ketone	78-93-3	0.28	36
		Methyl isobutyl ketone	108-10-1	0.14	33
		Nitrobenzene	98-95-3	0.068	14
		Pyridine	110-86-1	0.014	16
		Tetrachloroethylene	127-18-4	0.056	6.0
		Toluene	108-88-3	0.080	10
		1,1,1-Trichloroethane	71-55-6	0.054	6.0
		1,1,2-Trichloroethane	79-00-5	0.054	6.0
		1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	0.057	30
		Trichloroethylene	79-01-6	0.054	6.0
		Trichloromonofluoromethane	75-69-4	0.020	30

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		Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
		Xylenes-mixed isomers (sum of o-, m-, and p-xylene concentrations)	1330-20-7	0.32	30
	F003 and/or F005 solvent wastes that contain any combination of one or more of the following three solvents as the only listed F001-5 solvents: carbon disulfide, cyclohexanone, and/or methanol. (formerly 268.41(c))	Carbon disulfide	75-15-0	3.8	4.8 mg/l TCLP
		Cyclohexanone	108-94-1	0.36	0.75 mg/l TCLP
		Methanol	67-56-1	5.6	0.75 mg/l TCLP
	F005 solvent waste containing 2-Nitropropane as the only listed F001-5 solvent.	2-Nitropropane	79-46-9	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
	F005 solvent waste containing 2-Ethoxyethanol as the only listed F001-5 solvent.	2-Ethoxyethanol	110-80-5	BIODG: or CMBST	CMBST
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 (segregated basis) on carbon steel; (4) aluminum or zinc-aluminum plating on carbon steel; (5) cleaning/stripping associated with tin, zinc and aluminum plating on carbon steel; and (6) chemical etching and milling of aluminum.	Cadmium	7440-43-9	0.69	0.11 mg/l TCLP
		Chromium (Total)	7440-47-3	2.77	0.60 mg/l TCLP
		Cyanides (Total)[7]	57-12-5	1.2	590
		Cyanides (Amenable)[7]	57-12-5	0.86	30
		Lead	7439-92-1	0.69	0.75 mg/l TCLP
		Nickel	7440-02-0	3.98	11 mg/l TCLP
		Silver	7440-22-4	NA	0.14 mg/l TCLP
F007	Spent cyanide plating bath solutions from electroplating operations.	Cadmium	7440-43-9	NA	0.11 mg/l TCLP
		Chromium (Total)	7440-47-3	2.77	0.60 mg/l TCLP
		Cyanides (Total)[7]	57-12-5	1.2	590

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WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
		Cyanides (Amenable)[7]	57-12-5	0.86	30
		Lead	7439-92-1	0.69	0.75 mg/l TCLP
		Nickel	7440-02-0	3.98	11 mg/l TCLP
		Silver	7440-22-4	NA	0.14 mg/l TCLP
F008	Plating bath residues from the bottom of plating baths from electroplating operations where cyanides are used in the process.	Cadmium	7440-43-9	NA	0.11 mg/l TCLP
		Chromium (Total)	7440-47-3	2.77	0.60 mg/l TCLP
		Cyanides (Total)[7]	57-12-5	1.2	590
		Cyanides (Amenable)[7]	57-12-5	0.86	30
		Lead	7439-92-1	0.69	0.75 mg/l TCLP
		Nickel	7440-02-0	3.98	11 mg/l TCLP
		Silver	7440-22-4	NA	0.14 mg/l TCLP
F009	Spent stripping and cleaning bath solutions from electroplating operations where cyanides are used in the process.	Cadmium	7440-43-9	NA	0.11 mg/l TCLP
		Chromium (Total)	7440-47-3	2.77	0.60 mg/l TCLP
		Cyanides (Total)[7]	57-12-5	1.2	590
		Cyanides (Amenable)[7]	57-12-5	0.86	30
		Lead	7439-92-1	0.69	0.75 mg/l TCLP
		Nickel	7440-02-0	3.98	11 mg/l TCLP
		Silver	7440-22-4	NA	0.14 mg/l TCLP

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WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
F010	Quenching bath residues from oil baths from metal heat treating operations where cyanides are used in the process.	Cyanides (Total)[7]	57-12-5	1.2	590
		Cyanides (Amenable)[7]	57-12-5	0.86	NA
F011	Spent cyanide solutions from salt bath pot cleaning from metal heat treating operations.	Cadmium	7440-43-9	NA	0.11 mg/l TCLP
		Chromium (Total)	7440-47-3	2.77	0.60 mg/l TCLP
		Cyanides (Total)[7]	57-12-5	1.2	590
		Cyanides (Amenable)[7]	57-12-5	0.86	30
		Lead	7439-92-1	0.69	0.75 mg/l TCLP
		Nickel	7440-02-0	3.98	11 mg/l TCLP
		Silver	7440-22-4	NA	0.14 mg/l TCLP
F012	Quenching wastewater treatment sludges from metal heat treating operations where cyanides are used in the process.	Cadmium	7440-43-9	NA	0.11 mg/l TCLP
		Chromium (Total)	7440-47-3	2.77	0.60 mg/l TCLP
		Cyanides (Total)[7]	57-12-5	1.2	590
		Cyanides (Amenable)[7]	57-12-5	0.86	30
		Lead	7439-92-1	0.69	0.75 mg/l TCLP
		Nickel	7440-02-0	3.98	11 mg/l TCLP
		Silver	7440-22-4	NA	0.14 mg/l TCLP
F019	Wastewater treatment sludges from the chemical conversion coating of aluminum except from zirconium phosphating in	Chromium (Total)	7440-47-3	2.77	0.60 mg/l TCLP
		Cyanides (Total)[7]	57-12-5	1.2	590

TREATMENT STANDARDS FOR HAZARDOUS WASTES NOTE: NA means not applicable					
		REGULATED HAZARDOUS CONSTITUENT		WASTEWATERS	NONWASTEWATERS
WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
	aluminum can washing when such phosphating is an exclusive conversion coating process.	Cyanides (Amenable)[7]	57-12-5	0.86	30
F020, F021, F022, F023, F026	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: (1) tri- or tetrachlorophenol, or of intermediates used to produce their pesticide derivatives, excluding wastes from the production of Hexachlorophene from highly purified 2,4,5-trichlorophenol (F020); (2) pentachlorophenol, or of intermediates used to produce its derivatives (i.e., F021); (3) tetra-, penta-, or hexachlorobenzenes under alkaline conditions (i.e., F022); and 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: (1) tri- or tetrachlorophenols, excluding wastes from equipment used only for the production of Hexachlorophene from highly purified 2,4,5-trichlorophenol (F023); (2) tetra-, penta-, or hexachlorobenzenes under alkaline conditions (i.e., F026).	HxCDDs (All Hexachlorodibenzo-p-dioxins)	NA	0.000063	0.001
		HxCDFs (All Hexachlorodibenzofurans)	NA	0.000063	0.001
		PeCDDs (All Pentachlorodibenzo-p-dioxins)	NA	0.000063	0.001
		PeCDFs (All Pentachlorodibenzofurans)	NA	0.000035	0.001
		Pentachlorophenol	87-86-5	0.089	7.4
		TCDDs (All Tetrachlorodibenzo-p-dioxins)	NA	0.000063	0.001
		TCDFs (All Tetrachlorodibenzofurans)	NA	0.000063	0.001
		2,4,5-Trichlorophenol	95-95-4	0.18	7.4
		2,4,6-Trichlorophenol	88-06-2	0.035	7.4
		2,3,4,6-Tetrachlorophenol	58-90-2	0.030	7.4
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 one to and including five, with	All F024 wastes	NA	CMBST[11]	CMBST[11]
		2-Chloro-1,3-butadiene	126-99-8	0.057	0.28
		3-Chloropropylene	107-05-1	0.036	30
		1,1-Dichloroethane	75-34-3	0.059	6.0

TREATMENT STANDARDS FOR HAZARDOUS WASTES NOTE: NA means not applicable					
WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	REGULATED HAZARDOUS CONSTITUENT		WASTEWATERS	NONWASTEWATERS
		Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
	varying amounts and positions of chlorine substitution. (This listing does not include wastewaters, wastewater treatment sludges, spent catalysts, and wastes listed in 261.31 or 261.32.).	1,2-Dichloroethane	107-06-2	0.21	6.0
		1,2-Dichloropropane	78-87-5	0.85	18
		cis-1,3-Dichloropropylene	10061-01-5	0.036	18
		trans-1,3-Dichloropropylene	10061-02-6	0.036	18
		bis(2-Ethylhexyl) phthalate	117-81-7	0.28	28
		Hexachloroethane	67-72-1	0.055	30
		Chromium (Total)	7440-47-3	2.77	0.60 mg/l TCLP
		Nickel	7440-02-0	3.98	11 mg/l TCLP
F025	Condensed light ends 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 one to and including five, with varying amounts and positions of chlorine substitution. F025 - Light Ends Subcategory	Carbon tetrachloride	56-23-5	0.057	6.0
		Chloroform	67-66-3	0.046	6.0
		1,2-Dichloroethane	107-06-2	0.21	6.0
		1,1-Dichloroethylene	75-35-4	0.025	6.0
		Methylene chloride	75-9-2	0.089	30
		1,1,2-Trichloroethane	79-00-5	0.054	6.0
		Trichloroethylene	79-01-6	0.054	6.0
		Vinyl chloride	75-01-4	0.27	6.0
	Spent filters and filter aids, and spent desiccant wastes from the production of certain chlorinated aliphatic hydrocarbons,	Carbon tetrachloride	56-23-5	0.057	6.0
		Chloroform	67-66-3	0.046	6.0

TREATMENT STANDARDS FOR HAZARDOUS WASTES NOTE: NA means not applicable					
		REGULATED HAZARDOUS CONSTITUENT		WASTEWATERS	NONWASTEWATERS
WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
	by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution. F025 - Spent Filters/Aids and Desiccants Subcategory	Hexachlorobenzene	118-74-1	0.055	10
		Hexachlorobutadiene	87-68-3	0.055	5.6
		Hexachloroethane	67-72-1	0.055	30
		Methylene chloride	75-9-2	0.089	30
		1,1,2-Trichloroethane	79-00-5	0.054	6.0
		Trichloroethylene	79-01-6	0.054	6.0
		Vinyl chloride	75-01-4	0.27	6.0
F027	Discarded unused formulations containing tri-, tetra-, or pentachlorophenol or discarded unused formulations 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.).	HxCDDs (All Hexachlorodibenzo-p-dioxins)	NA	0.000063	0.001
		HxCDFs (All Hexachlorodibenzofurans)	NA	0.000063	0.001
		PeCDDs (All Pentachlorodibenzo-p-dioxins)	NA	0.000063	0.001
		PeCDFs (All Pentachlorodibenzofurans)	NA	0.000035	0.001
		Pentachlorophenol	87-86-5	0.089	7.4
		TCDDs (All Tetrachlorodibenzo-p-dioxins)	NA	0.000063	0.001
		TCDFs (All Tetrachlorodibenzofurans)	NA	0.000063	0.001
		2,4,5-Trichlorophenol	95-95-4	0.18	7.4

TREATMENT STANDARDS FOR HAZARDOUS WASTES NOTE: NA means not applicable					
WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	REGULATED HAZARDOUS CONSTITUENT		WASTEWATERS	NONWASTEWATERS
		Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
		2,4,6-Trichlorophenol	88-06-2	0.035	7.4
		2,3,4,6-Tetrachlorophenol	58-90-2	0.030	7.4
F028	Residues resulting from the incineration or thermal treatment of soil contaminated with EPA Hazardous Wastes Nos. F020, F021, F023, F026, and F027.	HxCDDs (All Hexachlorodibenzo-p-dioxins)	NA	0.000063	0.001
		HxCDFs (All Hexachlorodibenzofurans)	NA	0.000063	0.001
		PeCDDs (All Pentachlorodibenzo-p-dioxins)	NA	0.000063	0.001
		PeCDFs (All Pentachlorodibenzofurans)	NA	0.000035	0.001
		Pentachlorophenol	87-86-5	0.089	7.4
		TCDDs (All Tetrachlorodibenzo-p-dioxins)	NA	0.000063	0.001
		TCDFs (All Tetrachlorodibenzofurans)	NA	0.000063	0.001
		2,4,5-Trichlorophenol	95-95-4	0.18	7.4
		2,4,6-Trichlorophenol	88-06-2	0.035	7.4
		2,3,4,6-Tetrachlorophenol	58-90-2	0.030	7.4
F032	Wastewaters (except 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	Acenaphthene	83-32-9	0.059	3.4
		Anthracene	120-12-7	0.059	3.4
		Benz(a)anthracene	56-55-3	0.059	3.4

TREATMENT STANDARDS FOR HAZARDOUS WASTES NOTE: NA means not applicable					
WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	REGULATED HAZARDOUS CONSTITUENT		WASTEWATERS	NONWASTEWATERS
		Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
	previously used chlorophenolic formulations (except potentially cross-contaminated wastes that have had the F032 waste code deleted in accordance with 261.35 of this chapter or potentially cross-contaminated wastes that are otherwise currently regulated as hazardous wastes (i.e., F034 or F035), and where the generator does not resume or initiate 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 and/or penta-chlorophenol.	Benzo(b)fluoranthene (difficult to distinguish from benzo(k)fluoranthene)	205-99-2	0.11	6.8
		Benzo(k)fluoranthene (difficult to distinguish from benzo(b)fluoranthene)	207-08-9	0.11	6.8
		Benzo(a)pyrene	50-32-8	0.061	3.4
		Chrysene	218-01-9	0.059	3.4
		Dibenz(a,h)anthracene	53-70-3	0.055	8.2
		2-4-Dimethyl phenol	105-67-9	0.036	14
		Fluorene	86-73-7	0.059	3.4
		Hexachlorodibenzo-p-dioxins	NA	0.000063, or CMBST[11]	0.001, or CMBST[11]
		Hexachlorodibenzofurans	NA	0.000063, or CMBST[11]	0.001, or CMBST[11]
		Indeno (1,2,3-c,d) pyrene	193-39-5	0.0055	3.4
		Naphthalene	91-20-3	0.059	5.6
		Pentachlorodibenzo-p-dioxins	NA	0.000063, or CMBST[11]	0.001, or CMBST[11]
		Pentachlorodibenzofurans	NA	0.000035, or CMBST[11]	0.001, or CMBST[11]

TREATMENT STANDARDS FOR HAZARDOUS WASTES NOTE: NA means not applicable					
WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	REGULATED HAZARDOUS CONSTITUENT		WASTEWATERS	NONWASTEWATERS
		Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
		Pentachlorophenol	87-86-5	0.089	7.4
		Phenanthrene	85-01-8	0.059	5.6
		Phenol	108-95-2	0.039	6.2
		Pyrene	129-00-0	0.067	8.2
		Tetrachlorodibenzo-p-dioxins	NA	0.000063, or CMBST[11]	0.001, or CMBST[11]
		Tetrachlorodibenzofurans	NA	0.000063, or CMBST[11]	0.001, or CMBST[11]
		2,3,4,6-Tetrachlorophenol	58-90-2	0.030	7.4
		2,4,6-Trichlorophenol	88-06-2	0.035	7.4
		Arsenic	7440-38-2	1.4	5.0 mg/l TCLP
		Chromium (Total)	7440-47-3	2.77	0.60 mg/l TCLP
F034	Wastewaters (except 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 and/or pentachlorophenol.	Acenaphthene	83-32-9	0.059	3.4
		Anthracene	120-12-7	0.059	3.4
		Benz(a)anthracene	56-55-3	0.059	3.4
		Benzo(b)fluoranthene (difficult to distinguish from benzo(k)fluoranthene)	205-99-2	0.11	6.8
		Benzo(k)fluoranthene (difficult to distinguish from benzo(b)fluoranthene)	207-08-9	0.11	6.8

TREATMENT STANDARDS FOR HAZARDOUS WASTES NOTE: NA means not applicable					
WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	REGULATED HAZARDOUS CONSTITUENT		WASTEWATERS	NONWASTEWATERS
		Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
		Benzo(a)pyrene	50-32-8	0.061	3.4
		Chrysene	218-01-9	0.059	3.4
		Dibenz(a,h)anthracene	53-70-3	0.055	8.2
		Fluorene	86-73-7	0.059	3.4
		Indeno (1,2,3-c,d) pyrene	193-39-5	0.0055	3.4
		Naphthalene	91-20-3	0.059	5.6
		Phenanthrene	85-01-8	0.059	5.6
		Pyrene	129-00-0	0.067	8.2
		Arsenic	7440-38-2	1.4	5.0 mg/l TCLP
		Chromium (Total)	7440-47-3	2.77	0.60 mg/l TCLP
F035	Wastewaters (except those that have not come into contact with process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes 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 and/or pentachlorophenol.	Arsenic	7440-38-2	1.4	5.0 mg/l TCLP
		Chromium (Total)	7440-47-3	2.77	0.60 mg/l TCLP
F037	Petroleum refinery primary oil/water/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	Acenaphthene	83-32-9	0.059	NA
		Anthracene	120-12-7	0.059	3.4
		Benzene	71-43-2	0.14	10

TREATMENT STANDARDS FOR HAZARDOUS WASTES NOTE: NA means not applicable					
WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	REGULATED HAZARDOUS CONSTITUENT		WASTEWATERS	NONWASTEWATERS
		Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
	petroleum refineries. Such sludges include, but are not limited to, those generated in: oil/water/solids separators; tanks and impoundments; ditches and other conveyances; sumps; and stormwater units receiving dry weather flow. Sludge 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 261.31(b)(2) (including sludges generated in one or more additional units after wastewaters have been treated in aggressive biological treatment units) and K051 wastes are not included in this listing.	Benz(a)anthracene	56-55-3	0.059	3.4
		Benzo(a)pyrene	50-32-8	0.061	3.4
		bis(2-Ethylhexyl) phthalate	117-81-7	0.28	28
		Chrysene	218-01-9	0.059	3.4
		Di-n-butyl phthalate	84-74-2	0.057	28
		Ethylbenzene	100-41-4	0.057	10
		Fluorene	86-73-7	0.059	NA
		Naphthalene	91-20-3	0.059	5.6
		Phenanthrene	85-01-8	0.059	5.6
		Phenol	108-95-2	0.039	6.2
		Pyrene	129-00-0	0.067	8.2
		Toluene	108-88-3	0.080	10
		Xylenes-mixed isomers (sum of o-, m-, and p-xylene concentrations)	1330-20-7	0.32	30
		Chromium (Total)	7440-47-3	2.77	0.60 mg/l TCLP
		Cyanides (Total)[7]	57-12-5	1.2	590
		Lead	7439-92-1	0.69	NA
		Nickel	7440-02-0	NA	11 mg/l TCLP

TREATMENT STANDARDS FOR HAZARDOUS WASTES NOTE: NA means not applicable					
		REGULATED HAZARDOUS CONSTITUENT		WASTEWATERS	NONWASTEWATERS
WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
F038	Petroleum refinery secondary (emulsified) oil/water/solids separation sludge and/or float generated from the physical and/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 floatation (IAF) units, 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 261.31(b)(2) (including sludges and floats generated in one or more additional units after wastewaters have been treated in aggressive biological units) and F037, K048, and K051 are not included in this listing.	Benzene	71-43-2	0.14	10
		Benzo(a)pyrene	50-32-8	0.061	3.4
		bis(2-Ethylhexyl) phthalate	117-81-7	0.28	28
		Chrysene	218-01-9	0.059	3.4
		Di-n-butyl phthalate	84-74-2	0.057	28
		Ethylbenzene	100-41-4	0.057	10
		Fluorene	86-73-7	0.059	NA
		Naphthalene	91-20-3	0.059	5.6
		Phenanthrene	85-01-8	0.059	5.6
		Phenol	108-95-2	0.039	6.2
		Pyrene	129-00-0	0.067	8.2
		Toluene	108-88-3	0.080	10
		Xylenes-mixed isomers (sum of o-, m-, and p-xylene concentrations)	1330-20-7	0.32	30
		Chromium (Total)	7440-47-3	2.77	0.60 mg/l TCLP
		Cyanides (Total)[7]	57-12-5	1.2	590
		Lead	7439-92-1	0.69	NA
		Nickel	7440-02-0	NA	11 mg/l TCLP

TREATMENT STANDARDS FOR HAZARDOUS WASTES NOTE: NA means not applicable					
		REGULATED HAZARDOUS CONSTITUENT		WASTEWATERS	NONWASTEWATERS
WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
F039	Leachate (liquids that have percolated through land disposed wastes) resulting from the disposal of more than one restricted waste classified as hazardous under subpart D of this part. (Leachate resulting from the disposal of one or more of the following EPA Hazardous Wastes and no other Hazardous Wastes retains its EPA Hazardous Waste Number(s): F020, F021, F022, F026, F027, and/or F028.).	Acenaphthylene	208-96-8	0.059	3.4
		Acenaphthene	83-32-9	0.059	3.4
		Acetone	67-64-1	0.28	160
		Acetonitrile	75-05-8	5.6	NA
		Acetophenone	96-86-2	0.010	9.7
		2-Acetylaminofluorene	53-96-3	0.059	140
		Acrolein	107-02-8	0.29	NA
		Acrylonitrile	107-13-1	0.24	84
		Aldrin	309-00-2	0.021	0.066
		4-Aminobiphenyl	92-67-1	0.13	NA
		Aniline	62-53-3	0.81	14
		Anthracene	120-12-7	0.059	3.4
		Aramite	140-57-8	0.36	NA
		alpha-BHC	319-84-6	0.00014	0.066
		beta-BHC	319-85-7	0.00014	0.066
		delta-BHC	319-86-8	0.023	0.066
		gamma-BHC	58-89-9	0.0017	0.066
		Benzene	71-43-2	0.14	10

TREATMENT STANDARDS FOR HAZARDOUS WASTES NOTE: NA means not applicable					
WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	REGULATED HAZARDOUS CONSTITUENT		WASTEWATERS	NONWASTEWATERS
		Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
		Benz(a)anthracene	56-55-3	0.059	3.4
		Benzo(b)fluoranthene (difficult to distinguish from benzo(k)fluoranthene)	205-99-2	0.11	6.8
		Benzo(k)fluoranthene (difficult to distinguish from benzo(b)fluoranthene)	207-08-9	0.11	6.8
		Benzo(g,h,i)perylene	191-24-2	0.0055	1.8
		Benzo(a)pyrene	50-32-8	0.061	3.4
		Bromodichloromethane	75-27-4	0.35	15
		Methyl bromide (Bromomethane)	74-83-9	0.11	15
		4-Bromophenyl phenyl ether	101-55-3	0.055	15
		n-Butyl alcohol	71-36-3	5.6	2.6
		Butyl benzyl phthalate	85-68-7	0.017	28
		2-sec-Butyl-4,6-dinitrophenol (Dinoseb)	88-85-7	0.066	2.5
		Carbon disulfide	75-15-0	3.8	NA
		Carbon tetrachloride	56-23-5	0.057	6.0
		Chlordane (alpha and gamma isomers)	57-74-9	0.0033	0.26

TREATMENT STANDARDS FOR HAZARDOUS WASTES NOTE: NA means not applicable					
WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	REGULATED HAZARDOUS CONSTITUENT		WASTEWATERS	NONWASTEWATERS
		Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
		p-Chloroaniline	106-47-8	0.46	16
		Chlorobenzene	108-90-7	0.057	6.0
		Chlorobenzilate	510-15-6	0.10	NA
		2-Chloro-1,3-butadiene	126-99-8	0.057	NA
		Chlorodibromomethane	124-48-1	0.057	15
		Chloroethane	75-00-3	0.27	6.0
		bis(2-Chloroethoxy)methane	111-91-1	0.036	7.2
		bis(2-Chloroethyl)ether	111-44-4	0.033	6.0
		Chloroform	67-66-3	0.046	6.0
		bis(2-Chloroisopropyl)ether	39638-32-9	0.055	7.2
		p-Chloro-m-cresol	59-50-7	0.018	14
		Chloromethane (Methyl chloride)	74-87-3	0.19	30
		2-Chloronaphthalene	91-58-7	0.055	5.6
		2-Chlorophenol	95-57-8	0.044	5.7
		3-Chloropropylene	107-05-1	0.036	30
		Chrysene	218-01-9	0.059	3.4
		o-Cresol	95-48-7	0.11	5.6

TREATMENT STANDARDS FOR HAZARDOUS WASTES NOTE: NA means not applicable					
WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	REGULATED HAZARDOUS CONSTITUENT		WASTEWATERS	NONWASTEWATERS
		Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
		m-Cresol (difficult to distinguish from p-cresol)	108-39-4	0.77	5.6
		p-Cresol (difficult to distinguish from m-cresol)	106-44-5	0.77	5.6
		Cyclohexanone	108-94-1	0.36	NA
		1,2-Dibromo-3-chloropropane	96-12-8	0.11	15
		Ethylene dibromide (1,2-Dibromoethane)	106-93-4	0.028	15
		Dibromomethane	74-95-3	0.11	15
		2,4-D (2,4-Dichlorophenoxyacetic acid)	94-75-7	0.72	10
		o,p'-DDD	53-19-0	0.023	0.087
		p,p'-DDD	72-54-8	0.023	0.087
		o,p'-DDE	3424-82-6	0.031	0.087
		p,p'-DDE	72-55-9	0.031	0.087
		o,p'-DDT	789-02-6	0.0039	0.087
		p,p'-DDT	50-29-3	0.0039	0.087
		Dibenz(a,h)anthracene	53-70-3	0.055	8.2
		Dibenz(a,e)pyrene	192-65-4	0.061	NA

TREATMENT STANDARDS FOR HAZARDOUS WASTES NOTE: NA means not applicable					
WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	REGULATED HAZARDOUS CONSTITUENT		WASTEWATERS	NONWASTEWATERS
		Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
		m-Dichlorobenzene	541-73-1	0.036	6.0
		o-Dichlorobenzene	95-50-1	0.088	6.0
		p-Dichlorobenzene	106-46-7	0.090	6.0
		Dichlorodifluoromethane	75-71-8	0.23	7.2
		1,1-Dichloroethane	75-34-3	0.059	6.0
		1,2-Dichloroethane	107-06-2	0.21	6.0
		1,1-Dichloroethylene	75-35-4	0.025	6.0
		trans-1,2-Dichloroethylene	156-60-5	0.054	30
		2,4-Dichlorophenol	120-83-2	0.044	14
		2,6-Dichlorophenol	87-65-0	0.044	14
		1,2-Dichloropropane	78-87-5	0.85	18
		cis-1,3-Dichloropropylene	10061-01-5	0.036	18
		trans-1,3-Dichloropropylene	10061-02-6	0.036	18
		Dieldrin	60-57-1	0.017	0.13
		Diethyl phthalate	84-66-2	0.20	28
		2-4-Dimethyl phenol	105-67-9	0.036	14
		Dimethyl phthalate	131-11-3	0.047	28
		Di-n-butyl phthalate	84-74-2	0.057	28

TREATMENT STANDARDS FOR HAZARDOUS WASTES NOTE: NA means not applicable					
		REGULATED HAZARDOUS CONSTITUENT		WASTEWATERS	NONWASTEWATERS
WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
		1,4-Dinitrobenzene	100-25-4	0.32	2.3
		4,6-Dinitro-o-cresol	534-52-1	0.28	160
		2,4-Dinitrophenol	51-28-5	0.12	160
		2,4-Dinitrotoluene	121-14-2	0.32	140
		2,6-Dinitrotoluene	606-20-2	0.55	28
		Di-n-octyl phthalate	117-84-0	0.017	28
		Di-n-propylnitrosamine	621-64-7	0.40	14
		1,4-Dioxane	123-91-1	12.0	170
		Diphenylamine (difficult to distinguish from diphenylnitrosamine)	122-39-4	0.92	NA
		Diphenylnitrosamine (difficult to distinguish from diphenylamine)	86-30-6	0.92	NA
		1,2-Diphenylhydrazine	122-66-7	0.087	NA
		Disulfoton	298-04-4	0.017	6.2
		Endosulfan I	939-98-8	0.023	0.066
		Endosulfan II	33213-6-5	0.029	0.13
		Endosulfan sulfate	1031-07-8	0.029	0.13
		Endrin	72-20-8	0.0028	0.13

TREATMENT STANDARDS FOR HAZARDOUS WASTES NOTE: NA means not applicable					
		REGULATED HAZARDOUS CONSTITUENT		WASTEWATERS	NONWASTEWATERS
WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
		Endrin aldehyde	7421-93-4	0.025	0.13
		Ethyl acetate	141-78-6	0.34	33
		Ethyl cyanide (Propanenitrile)	107-12-0	0.24	360
		Ethyl benzene	100-41-4	0.057	10
		Ethyl ether	60-29-7	0.12	160
		bis(2-Ethylhexyl) phthalate	117-81-7	0.28	28
		Ethyl methacrylate	97-63-2	0.14	160
		Ethylene oxide	75-21-8	0.12	NA
		Famphur	52-85-7	0.017	15
		Fluoranthene	206-44-0	0.068	3.4
		Fluorene	86-73-7	0.059	3.4
		Heptachlor	76-44-8	0.0012	0.066
		Heptachlor epoxide	1024-57-3	0.016	0.066
		Hexachlorobenzene	118-74-1	0.055	10
		Hexachlorobutadiene	87-68-3	0.055	5.6
		Hexachlorocyclopentadiene	77-47-4	0.057	2.4
		HxCDDs (All Hexachlorodibenzo-p-dioxins)	NA	0.000063	0.001
		HxCDFs (All Hexachlorodibenzofurans)	NA	0.000063	0.001

TREATMENT STANDARDS FOR HAZARDOUS WASTES NOTE: NA means not applicable					
		REGULATED HAZARDOUS CONSTITUENT		WASTEWATERS	NONWASTEWATERS
WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
		Hexachloroethane	67-72-1	0.055	30
		Hexachloropropylene	1888-71-7	0.035	30
		Indeno (1,2,3-c,d) pyrene	193-39-5	0.0055	3.4
		Iodomethane	74-88-4	0.19	65
		Isobutyl alcohol	78-83-1	5.6	170
		Isodrin	465-73-6	0.021	0.066
		Isosafrole	120-58-1	0.081	2.6
		Kepone	143-50-8	0.0011	0.13
		Methacrylonitrile	126-98-7	0.24	84
		Methanol	67-56-1	5.6	NA
		Methapyrilene	91-80-5	0.081	1.5
		Methoxychlor	72-43-5	0.25	0.18
		3-Methylcholanthrene	56-49-5	0.0055	15
		4,4-Methylene bis(2-chloroaniline)	101-14-4	0.50	30
		Methylene chloride	75-09-2	0.089	30
		Methyl ethyl ketone	78-93-3	0.28	36
		Methyl isobutyl ketone	108-10-1	0.14	33
		Methyl methacrylate	80-62-6	0.14	160

TREATMENT STANDARDS FOR HAZARDOUS WASTES NOTE: NA means not applicable					
		REGULATED HAZARDOUS CONSTITUENT		WASTEWATERS	NONWASTEWATERS
WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
		Methyl methansulfonate	66-27-3	0.018	NA
		Methyl parathion	298-00-0	0.014	4.6
		Naphthalene	91-20-3	0.059	5.6
		2-Naphthylamine	91-59-8	0.52	NA
		p-Nitroaniline	100-01-6	0.028	28
		Nitrobenzene	98-95-3	0.068	14
		5-Nitro-o-toluidine	99-55-8	0.32	28
		p-Nitrophenol	100-02-7	0.12	29
		N-Nitrosodiethylamine	55-18-5	0.40	28
		N-Nitrosodimethylamine	62-75-9	0.40	NA
		N-Nitroso-di-n-butylamine	924-16-3	0.40	17
		N-Nitrosomethylethylamine	10595-95-6	0.40	2.3
		N-Nitrosomorpholine	59-89-2	0.40	2.3
		N-Nitrosopiperidine	100-75-4	0.013	35
		N-Nitrosopyrrolidine	930-55-2	0.013	35
		Parathion	56-38-2	0.014	4.6
		Total PCBs (sum of all PCB isomers, or all Aroclors)	1336-36-3	0.10	10

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		REGULATED HAZARDOUS CONSTITUENT		WASTEWATERS	NONWASTEWATERS
WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
		Pentachlorobenzene	608-93-5	0.055	10
		PeCDDs (All Pentachlorodibenzo-p-dioxins)	NA	0.000063	0.001
		PeCDFs (All Pentachlorodibenzofurans)	NA	0.000035	0.001
		Pentachloronitrobenzene	82-68-8	0.055	4.8
		Pentachlorophenol	87-86-5	0.089	7.4
		Phenacetin	62-44-2	0.081	16
		Phenanthrene	85-01-8	0.059	5.6
		Phenol	108-95-2	0.039	6.2
		Phorate	298-02-2	0.021	4.6
		Phthalic anhydride	85-44-9	0.055	NA
		Pronamide	23950-58-5	0.093	1.5
		Pyrene	129-00-0	0.067	8.2
		Pyridine	110-86-1	0.014	16
		Safrole	94-59-7	0.081	22
		Silvex (2,4,5-TP)	93-72-1	0.72	7.9
		2,4,5-T	93-76-5	0.72	7.9
		1,2,4,5-Tetrachlorobenzene	95-94-3	0.055	14
		TCDDs (All	NA	0.000063	0.001

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WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
		Tetrachlorodibenzo-p-dioxins)			
		TCDFs (All Tetrachlorodibenzofurans)	NA	0.000063	0.001
		1,1,1,2-Tetrachloroethane	630-20-6	0.057	6.0
		1,1,2,2-Tetrachloroethane	79-34-6	0.057	6.0
		Tetrachloroethylene	127-18-4	0.056	6.0
		2,3,4,6-Tetrachlorophenol	58-90-2	0.030	7.4
		Toluene	108-88-3	0.080	10
		Toxaphene	8001-35-2	0.0095	2.6
		Bromoform (Tribromomethane)	75-25-2	0.63	15
		1,2,4-Trichlorobenzene	120-82-1	0.055	19
		1,1,1-Trichloroethane	71-55-6	0.054	6.0
		1,1,2-Trichloroethane	79-00-5	0.054	6.0
		Trichloroethylene	79-01-6	0.054	6.0
		Trichloromonofluoromethane	75-69-4	0.020	30
		2,4,5-Trichlorophenol	95-95-4	0.18	7.4
		2,4,6-Trichlorophenol	88-06-2	0.035	7.4
		1,2,3-Trichloropropane	96-18-4	0.85	30
		1,1,2-Trichloro-1,2,2-	76-13-1	0.057	30

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		REGULATED HAZARDOUS CONSTITUENT		WASTEWATERS	NONWASTEWATERS
WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
		trifluoroethane			
		tris(2,3-Dibromopropyl) phosphate	126-72-7	0.11	NA
		Vinyl chloride	75-01-4	0.27	6.0
		Xylenes-mixed isomers (sum of o-, m-, and p-xylene concentrations)	1330-20-7	0.32	30
		Antimony	7440-36-0	1.9	1.15 mg/l TCLP
		Arsenic	7440-38-2	1.4	5.0 mg/l TCLP
		Barium	7440-39-3	1.2	21 mg/l TCLP
		Beryllium	7440-41-7	0.82	NA
		Cadmium	7440-43-9	0.69	0.11 mg/l TCLP
		Chromium (Total)	7440-47-3	2.77	0.60 mg/l TCLP
		Cyanides (Total)[7]	57-12-5	1.2	590
		Cyanides (Amenable)[7]	57-12-5	0.86	NA
		Fluoride	16964-48-8	35	NA
		Lead	7439-92-1	0.69	0.75 mg/l TCLP
		Mercury	7439-97-6	0.15	0.025 mg/l TCLP
		Nickel	7440-02-0	3.98	11 mg/l TCLP
		Selenium	7782-49-2	0.82	5.7 mg/l TCLP

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		REGULATED HAZARDOUS CONSTITUENT		WASTEWATERS	NONWASTEWATERS
WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
		Silver	7440-22-4	0.43	0.14 mg/l TCLP
		Sulfide	8496-25-8	14	NA
		Thallium	7440-28-0	1.4	NA
		Vanadium	7440-62-2	4.3	NA
K001	Bottom sediment sludge from the treatment of wastewaters from wood preserving processes that use creosote and/or pentachlorophenol.	Naphthalene	91-20-3	0.059	5.6
		Pentachlorophenol	87-86-5	0.089	7.4
		Phenanthrene	85-01-8	0.059	5.6
		Pyrene	129-00-0	0.067	8.2
		Toluene	108-88-3	0.080	10
		Xylenes-mixed isomers (sum of o-, m-, and p-xylene concentrations)	1330-20-7	0.32	30
		Lead	7439-92-1	0.69	0.75 mg/l TCLP
K002	Wastewater treatment sludge from the production of chrome yellow and orange pigments.	Chromium (Total)	7440-47-3	2.77	0.60 mg/l TCLP
		Lead	7439-92-1	0.69	0.75 mg/l TCLP
K003	Wastewater treatment sludge from the production of molybdate orange pigments.	Chromium (Total)	7440-47-3	2.77	0.60 mg/l TCLP
		Lead	7439-92-1	0.69	0.75 mg/l TCLP
K004	Wastewater treatment sludge from the production of zinc yellow pigments.	Chromium (Total)	7440-47-3	2.77	0.60 mg/l TCLP
		Lead	7439-92-1	0.69	0.75 mg/l TCLP
K005	Wastewater treatment sludge from the production of chrome	Chromium (Total)	7440-47-3	2.77	0.60 mg/l TCLP

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WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	REGULATED HAZARDOUS CONSTITUENT		WASTEWATERS	NONWASTEWATERS
		Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
	green pigments.	Lead	7439-92-1	0.69	0.75 mg/l TCLP
		Cyanides (Total)[7]	57-12-5	1.2	590
K006	Wastewater treatment sludge from the production of chrome oxide green pigments (anhydrous).	Chromium (Total)	7440-47-3	2.77	0.60 mg/l TCLP
		Lead	7439-92-1	0.69	0.75 mg/l TCLP
	Wastewater treatment sludge from the production of chrome oxide green pigments (hydrated).	Chromium (Total)	7440-47-3	2.77	0.60 mg/l TCLP
		Lead	7439-92-1	0.69	NA
K007	Wastewater treatment sludge from the production of iron blue pigments.	Chromium (Total)	7440-47-3	2.77	0.60 mg/l TCLP
		Lead	7439-92-1	0.69	0.75 mg/l TCLP
		Cyanides (Total)[7]	57-12-5	1.2	590
K008	Oven residue from the production of chrome oxide green pigments.	Chromium (Total)	7440-47-3	2.77	0.60 mg/l TCLP
		Lead	7439-92-1	0.69	0.75 mg/l TCLP
K009	Distillation bottoms from the production of acetaldehyde from ethylene.	Chloroform	67-66-3	0.046	6.0
K010	Distillation side cuts from the production of acetaldehyde from ethylene.	Chloroform	67-66-3	0.046	6.0
K011	Bottom stream from the wastewater stripper in the production of acrylonitrile.	Acetonitrile	75-05-8	5.6	38
		Acrylonitrile	107-13-1	0.24	84
		Acrylamide	79-06-1	19	23
		Benzene	71-43-2	0.14	10

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WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	REGULATED HAZARDOUS CONSTITUENT		WASTEWATERS	NONWASTEWATERS
		Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
		Cyanide (Total)	57-12-5	1.2	590
K013	Bottom stream from the acetonitrile column in the production of acrylonitrile.	Acetonitrile	75-05-8	5.6	38
		Acrylonitrile	107-13-1	0.24	84
		Acrylamide	79-06-1	19	23
		Benzene	71-43-2	0.14	10
		Cyanide (Total)	57-12-5	1.2	590
K014	Bottoms from the acetonitrile purification column in the production of acrylonitrile.	Acetonitrile	75-05-8	5.6	38
		Acrylonitrile	107-13-1	0.24	84
		Acrylamide	79-06-1	19	23
		Benzene	71-43-2	0.14	10
		Cyanide (Total)	57-12-5	1.2	590
K015	Still bottoms from the distillation of benzyl chloride.	Anthracene	120-12-7	0.059	3.4
		Benzal chloride	98-87-3	0.055	6.0
		Benzo(b)fluoranthene (difficult to distinguish from benzo(k)fluoranthene)	205-99-2	0.11	6.8
		Benzo(k)fluoranthene (difficult to distinguish from benzo(b)fluoranthene)	207-08-9	0.11	6.8
		Phenanthrene	85-01-8	0.059	5.6

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WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	REGULATED HAZARDOUS CONSTITUENT		WASTEWATERS	NONWASTEWATERS
		Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
		Toluene	108-88-3	0.080	10
		Chromium (Total)	7440-47-3	2.77	0.60 mg/l TCLP
		Nickel	7440-02-0	3.98	11 mg/l TCLP
K016	Heavy ends or distillation residues from the production of carbon tetrachloride.	Hexachlorobenzene	118-74-1	0.055	10
		Hexachlorobutadiene	87-68-3	0.055	5.6
		Hexachlorocyclopentadiene	77-47-4	0.057	2.4
		Hexachloroethane	67-72-1	0.055	30
		Tetrachloroethylene	127-18-4	0.056	6.0
K017	Heavy ends (still bottoms) from the purification column in the production of epichlorohydrin.	bis(2-Chloroethyl)ether	111-44-4	0.033	6.0
		1,2-Dichloropropane	78-87-5	0.85	18
		1,2,3-Trichloropropane	96-18-4	0.85	30
K018	Heavy ends from the fractionation column in ethyl chloride production.	Chloroethane	75-00-3	0.27	6.0
		Chloromethane	74-87-3	0.19	NA
		1,1-Dichloroethane	75-34-3	0.059	6.0
		1,2-Dichloroethane	107-06-2	0.21	6.0
		Hexachlorobenzene	118-74-1	0.055	10
		Hexachlorobutadiene	87-68-3	0.055	5.6
		Hexachloroethane	67-72-1	0.055	30

TREATMENT STANDARDS FOR HAZARDOUS WASTES NOTE: NA means not applicable					
WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	REGULATED HAZARDOUS CONSTITUENT		WASTEWATERS	NONWASTEWATERS
		Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
		Pentachloroethane	76-01-7	NA	6.0
		1,1,1-Trichloroethane	71-55-6	0.054	6.0
K019	Heavy ends from the distillation of ethylene dichloride in ethylene dichloride production.	bis(2-Chloroethyl)ether	111-44-4	0.033	6.0
		Chlorobenzene	108-90-7	0.057	6.0
		Chloroform	67-66-3	0.046	6.0
		p-Dichlorobenzene	106-46-7	0.090	NA
		1,2-Dichloroethane	107-06-2	0.21	6.0
		Fluorene	86-73-7	0.059	NA
		Hexachloroethane	67-72-1	0.055	30
		Naphthalene	91-20-3	0.059	5.6
		Phenanthrene	85-01-8	0.059	5.6
		1,2,4,5-Tetrachlorobenzene	95-94-3	0.055	NA
		Tetrachloroethylene	127-18-4	0.056	6.0
		1,2,4-Trichlorobenzene	120-82-1	0.055	19
		1,1,1-Trichloroethane	71-55-6	0.054	6.0
K020	Heavy ends from the distillation of vinyl chloride in vinyl chloride monomer production.	1,2-Dichloroethane	107-06-2	0.21	6.0
		1,1,2,2-Tetrachloroethane	79-34-6	0.057	6.0
		Tetrachloroethylene	127-18-4	0.056	6.0

TREATMENT STANDARDS FOR HAZARDOUS WASTES NOTE: NA means not applicable					
		REGULATED HAZARDOUS CONSTITUENT		WASTEWATERS	NONWASTEWATERS
WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
K021	Aqueous spent antimony catalyst waste from fluoromethanes production.	Carbon tetrachloride	56-23-5	0.057	6.0
		Chloroform	67-66-3	0.046	6.0
		Antimony	7440-36-0	1.9	1.15 mg/l TCLP
K022	Distillation bottom tars from the production of phenol/acetone from cumene.	Toluene	108-88-3	0.080	10
		Acetophenone	96-86-2	0.010	9.7
		Diphenylamine (difficult to distinguish from diphenylnitrosamine)	122-39-4	0.92	13
		Diphenylnitrosamine (difficult to distinguish from diphenylamine)	86-30-6	0.92	13
		Phenol	108-95-2	0.039	6.2
		Chromium (Total)	7440-47-3	2.77	0.60 mg/l TCLP
		Nickel	7440-02-0	3.98	11 mg/l TCLP
K023	Distillation light ends from the production of phthalic anhydride from naphthalene.	Phthalic anhydride (measured as Phthalic acid or Terephthalic acid)	100-21-0	0.055	28
		Phthalic anhydride (measured as Phthalic acid or Terephthalic acid)	85-44-9	0.055	28
K024	Distillation bottoms from the production of phthalic anhydride from naphthalene.	Phthalic anhydride (measured as Phthalic acid or Terephthalic acid)	100-21-0	0.055	28

TREATMENT STANDARDS FOR HAZARDOUS WASTES NOTE: NA means not applicable					
WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	REGULATED HAZARDOUS CONSTITUENT		WASTEWATERS	NONWASTEWATERS
		Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
		Phthalic anhydride (measured as Phthalic acid or Terephthalic acid)	85-44-9	0.055	28
K025	Distillation bottoms from the production of nitrobenzene by the nitration of benzene.	NA	NA	LLEXT fb SSTRP fb CARBN; or CMBST	CMBST
K026	Stripping still tails from the production of methyl ethyl pyridines.	NA	NA	CMBST	CMBST
K027	Centrifuge and distillation residues from toluene diisocyanate production.	NA	NA	CARBN; or CMBST	CMBST
K028	Spent catalyst from the hydrochlorinator reactor in the production of 1,1,1-trichloroethane.	1,1-Dichloroethane	75-34-3	0.059	6.0
		trans-1,2-Dichloroethylene	156-60-5	0.054	30
		Hexachlorobutadiene	87-68-3	0.055	5.6
		Hexachloroethane	67-72-1	0.055	30
		Pentachloroethane	76-01-7	NA	6.0
		1,1,1,2-Tetrachloroethane	630-20-6	0.057	6.0
		1,1,2,2-Tetrachloroethane	79-34-6	0.057	6.0
		Tetrachloroethylene	127-18-4	0.056	6.0
		1,1,1-Trichloroethane	71-55-6	0.054	6.0
		1,1,2-Trichloroethane	79-00-5	0.054	6.0
		Cadmium	7440-43-9	0.69	NA
		Chromium (Total)	7440-47-3	2.77	0.60 mg/l TCLP

TREATMENT STANDARDS FOR HAZARDOUS WASTES NOTE: NA means not applicable					
WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	REGULATED HAZARDOUS CONSTITUENT		WASTEWATERS	NONWASTEWATERS
		Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
		Lead	7439-92-1	0.69	0.75 mg/l TCLP
		Nickel	7440-02-0	3.98	11 mg/l TCLP
K029	Waste from the product steam stripper in the production of 1,1,1-trichloroethane.	Chloroform	67-66-3	0.046	6.0
		1,2-Dichloroethane	107-06-2	0.21	6.0
		1,1-Dichloroethylene	75-35-4	0.025	6.0
		1,1,1-Trichloroethane	71-55-6	0.054	6.0
		Vinyl chloride	75-01-4	0.27	6.0
K030	Column bodies or heavy ends from the combined production of trichloroethylene and perchloroethylene.	o-Dichlorobenzene	95-50-1	0.088	NA
		p-Dichlorobenzene	106-46-7	0.090	NA
		Hexachlorobutadiene	87-68-3	0.055	5.6
		Hexachloroethane	67-72-1	0.055	30
		Hexachloropropylene	1888-71-7	NA	30
		Pentachlorobenzene	608-93-5	NA	10
		Pentachloroethane	76-01-7	NA	6.0
		1,2,4,5-Tetrachlorobenzene	95-94-3	0.055	14
		Tetrachloroethylene	127-18-4	0.056	6.0
		1,2,4-Trichlorobenzene	120-82-1	0.055	19
K031	By-product salts generated in the production of MSMA and cacodylic acid.	Arsenic	7440-38-2	1.4	5.0 mg/l TCLP

TREATMENT STANDARDS FOR HAZARDOUS WASTES NOTE: NA means not applicable					
		REGULATED HAZARDOUS CONSTITUENT		WASTEWATERS	NONWASTEWATERS
WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
K032	Wastewater treatment sludge from the production of chlordane.	Hexachlorocyclopentadiene	77-47-4	0.057	2.4
		Chlordane (alpha and gamma isomers)	57-74-9	0.0033	0.26
		Heptachlor	76-44-8	0.0012	0.066
		Heptachlor epoxide	1024-57-3	0.016	0.066
K033	Wastewater and scrub water from the chlorination of cyclopentadiene in the production of chlordane.	Hexachlorocyclopentadiene	77-47-4	0.057	2.4
K034	Filter solids from the filtration of hexachlorocyclopentadiene in the production of chlordane.	Hexachlorocyclopentadiene	77-47-4	0.057	2.4
K035	Wastewater treatment sludges generated in the production of creosote.	Acenaphthene	83-32-9	NA	3.4
		Anthracene	120-12-7	NA	3.4
		Benz(a)anthracene	56-55-3	0.059	3.4
		Benzo(a)pyrene	50-32-8	0.061	3.4
		Chrysene	218-01-9	0.059	3.4
		o-Cresol	95-48-7	0.11	5.6
		m-Cresol (difficult to distinguish from p-cresol)	108-39-4	0.77	5.6
		p-Cresol (difficult to distinguish from m-cresol)	106-44-5	0.77	5.6

TREATMENT STANDARDS FOR HAZARDOUS WASTES NOTE: NA means not applicable					
WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	REGULATED HAZARDOUS CONSTITUENT		WASTEWATERS	NONWASTEWATERS
		Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
		Dibenz(a,h)anthracene	53-70-3	NA	8.2
		Fluoranthene	206-44-0	0.068	3.4
		Fluorene	86-73-7	NA	3.4
		Indeno(1,2,3-cd)pyrene	193-39-5	NA	3.4
		Naphthalene	91-20-3	0.059	5.6
		Phenanthrene	85-01-8	0.059	5.6
		Phenol	108-95-2	0.039	6.2
		Pyrene	129-00-0	0.067	8.2
K036	Still bottoms from toluene reclamation distillation in the production of disulfoton.	Disulfoton	298-04-4	0.017	6.2
K037	Wastewater treatment sludges from the production of disulfoton.	Disulfoton	298-04-4	0.017	6.2
		Toluene	108-88-3	0.080	10
K038	Wastewater from the washing and stripping of phorate production.	Phorate	298-02-2	0.021	4.6
K039	Filter cake from the filtration of diethylphosphorodithioic acid in the production of phorate.	NA	NA	CARBN; or CMBST	CMBST
K040	Wastewater treatment sludge from the production of phorate.	Phorate	298-02-2	0.021	4.6
K041	Wastewater treatment sludge from the production of toxaphene.	Toxaphene	8001-35-2	0.0095	2.6
K042	Heavy ends or distillation residues from the distillation of	o-Dichlorobenzene	95-50-1	0.088	6.0

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WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	REGULATED HAZARDOUS CONSTITUENT		WASTEWATERS	NONWASTEWATERS
		Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
	tetrachlorobenzene in the production of 2,4,5-T.	p-Dichlorobenzene	106-46-7	0.090	6.0
		Pentachlorobenzene	608-93-5	0.055	10
		1,2,4,5-Tetrachlorobenzene	95-94-3	0.055	14
		1,2,4-Trichlorobenzene	120-82-1	0.055	19
K043	2,6-Dichlorophenol waste from the production of 2,4-D.	2,4-Dichlorophenol	120-83-2	0.044	14
		2,6-Dichlorophenol	187-65-0	0.044	14
		2,4,5-Trichlorophenol	95-95-4	0.18	7.4
		2,4,6-Trichlorophenol	88-06-2	0.035	7.4
		2,3,4,6-Tetrachlorophenol	58-90-2	0.030	7.4
		Pentachlorophenol	87-86-5	0.089	7.4
		Tetrachloroethylene	127-18-4	0.056	6.0
		HxCDDs (All Hexachlorodibenzo-p-dioxins)	NA	0.000063	0.001
		HxCDFs (All Hexachlorodibenzofurans)	NA	0.000063	0.001
		PeCDDs (All Pentachlorodibenzo-p-dioxins)	NA	0.000063	0.001
		PeCDFs (All Pentachlorodibenzofurans)	NA	0.000035	0.001
		TCDDs (All Tetrachlorodibenzo-p-dioxins)	NA	0.000063	0.001

TREATMENT STANDARDS FOR HAZARDOUS WASTES NOTE: NA means not applicable					
WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	REGULATED HAZARDOUS CONSTITUENT		WASTEWATERS	NONWASTEWATERS
		Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
		TCDFs (All Tetrachlorodibenzofurans)	NA	0.000063	0.001
K044	Wastewater treatment sludges from the manufacturing and processing of explosives.	NA	NA	DEACT	DEACT
K045	Spent carbon from the treatment of wastewater containing explosives.	NA	NA	DEACT	DEACT
K046	Wastewater treatment sludges from the manufacturing, formulation and loading of lead-based initiating compounds.	Lead	7439-92-1	0.69	0.75 mg/l TCLP
K047	Pink/red water form TNT operations	NA	NA	DEACT	DEACT
K048	Dissolved air flotation (DAF) float from the petroleum refining industry.	Benzene	71-43-2	0.14	10
		Benzo(a)pyrene	50-32-8	0.061	3.4
		bis(2-Ethylhexyl) phthalate	117-81-7	0.28	28
		Chrysene	218-01-9	0.059	3.4
		Di-n-butyl phthalate	84-74-2	0.057	28
		Ethylbenzene	100-41-4	0.057	10
		Fluorene	86-73-7	0.059	NA
		Naphthalene	91-20-3	0.059	5.6
		Phenanthrene	85-01-8	0.059	5.6
		Phenol	108-95-2	0.039	6.2
		Pyrene	129-00-0	0.067	8.2

TREATMENT STANDARDS FOR HAZARDOUS WASTES NOTE: NA means not applicable					
WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	REGULATED HAZARDOUS CONSTITUENT		WASTEWATERS	NONWASTEWATERS
		Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
		Toluene	108-88-33	0.080	10
		Xylenes-mixed isomers (sum of o-, m-, and p-xylene concentrations)	1330-20-7	0.32	30
		Chromium (Total)	7440-47-3	2.77	0.60 mg/l TCLP
		Cyanides (Total)[7]	57-12-5	1.2	590
		Lead	7439-92-1	0.69	NA
		Nickel	7440-02-0	NA	11 mg/l TCLP
K049	Slop oil emulsion solids from the petroleum refining industry.	Anthracene	120-12-7	0.059	3.4
		Benzene	71-43-2	0.14	10
		Benzo(a)pyrene	50-32-8	0.061	3.4
		bis(2-Ethylhexyl) phthalate	117-81-7	0.28	28
		Carbon disulfide	75-15-0	3.8	NA
		Chrysene	2218-01-9	0.059	3.4
		2,4-Dimethylphenol	105-67-9	0.036	NA
		Ethylbenzene	100-41-4	0.057	10
		Naphthalene	91-20-3	0.059	5.6
		Phenanthrene	85-01-8	0.059	5.6
		Phenol	108-95-2	0.039	6.2

TREATMENT STANDARDS FOR HAZARDOUS WASTES NOTE: NA means not applicable					
WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	REGULATED HAZARDOUS CONSTITUENT		WASTEWATERS	NONWASTEWATERS
		Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
		Pyrene	129-00-0	0.067	8.2
		Toluene	108-88-3	0.080	10
		Xylenes-mixed isomers (sum of o-, m-, and p-xylene concentrations)	1330-20-7	0.32	30
		Cyanides (Total)[7]	57-12-5	1.2	590
		Chromium (Total)	7440-47-3	2.77	0.60 mg/l TCLP
		Lead	7439-92-1	0.69	NA
		Nickel	7440-02-0	NA	11 mg/l TCLP
K050	Heat exchanger bundle cleaning sludge from the petroleum refining industry.	Benzo(a)pyrene	50-32-8	0.061	3.4
		Phenol	108-95-2	0.039	6.2
		Cyanides (Total)[7]	57-12-5	1.2	590
		Chromium (Total)	7440-47-3	2.77	0.60 mg/l TCLP
		Lead	7439-92-1	0.69	NA
		Nickel	7440-02-0	NA	11 mg/l TCLP
K051	API separator sludge from the petroleum refining industry.	Acenaphthene	83-32-9	0.059	NA
		Anthracene	120-12-7	0.059	3.4
		Benz(a)anthracene	56-55-3	0.059	3.4
		Benzene	71-43-2	0.14	10

TREATMENT STANDARDS FOR HAZARDOUS WASTES NOTE: NA means not applicable					
WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	REGULATED HAZARDOUS CONSTITUENT		WASTEWATERS	NONWASTEWATERS
		Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
		Benzo(a)pyrene	50-32-8	0.061	3.4
		bis(2-Ethylhexyl) phthalate	117-81-7	0.28	28
		Chrysene	2218-01-9	0.059	3.4
		Di-n-butyl phthalate	105-67-9	0.057	28
		Ethylbenzene	100-41-4	0.057	10
		Fluorene	86-73-7	0.059	NA
		Naphthalene	91-20-3	0.059	5.6
		Phenanthrene	85-01-8	0.059	5.6
		Phenol	108-95-2	0.039	6.2
		Pyrene	129-00-0	0.067	8.2
		Toluene	108-88-3	0.08	10
		Xylenes-mixed isomers (sum of o-, m-, and p-xylene concentrations)	1330-20-7	0.32	30
		Cyanides (Total)[7]	57-12-5	1.2	590
		Chromium (Total)	7440-47-3	2.77	0.60 mg/l TCLP
		Lead	7439-92-1	0.69	NA
		Nickel	7440-02-0	NA	11 mg/l TCLP
K052	Tank bottoms (leaded) from the petroleum refining industry.	Benzene	71-43-2	0.14	10

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		Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
		Benzo(a)pyrene	50-32-8	0.061	3.4
		o-Cresol	95-48-7	0.11	5.6
		m-Cresol (difficult to distinguish from p-cresol)	108-39-4	0.77	5.6
		p-Cresol (difficult to distinguish from m-cresol)	106-44-5	0.77	5.6
		2,4-Dimethylphenol	105-67-9	0.036	NA
		Ethylbenzene	100-41-4	0.057	10
		Naphthalene	91-20-3	0.059	5.6
		Phenanthrene	85-01-8	0.059	5.6
		Phenol	108-95-2	0.039	6.2
		Toluene	108-88-3	0.08	10
		Xylenes-mixed isomers (sum of o-, m-, and p-xylene concentrations)	1330-20-7	0.32	30
		Chromium (Total)	7440-47-3	2.77	0.60 mg/l TCLP
		Cyanides (Total)[7]	57-12-5	1.2	590
		Lead	7439-92-1	0.69	NA
		Nickel	7440-02-0	NA	11 mg/l TCLP

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		REGULATED HAZARDOUS CONSTITUENT		WASTEWATERS	NONWASTEWATERS
WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
K060	Ammonia still lime sludge from coking operations.	Benzene	71-43-2	0.14	10
		Benzo(a)pyrene	50-32-8	0.061	3.4
		Naphthalene	91-20-3	0.059	5.6
		Phenol	108-95-2	0.039	6.2
		Cyanides (Total)[7]	57-12-5	1.2	590
K061	Emission control dust/sludge from the primary production of steel in electric furnaces.	Antimony	7440-36-0	NA	1.15 mg/l TCLP
		Arsenic	7440-38-2	NA	5.0 mg/l TCLP
		Barium	7440-39-3	NA	21 mg/l TCLP
		Beryllium	7440-41-7	NA	1.22 mg/l TCLP
		Cadmium	7440-43-9	0.69	0.11 mg/l TCLP
		Chromium (Total)	7440-47-3	2.77	0.60 mg/l TCLP
		Lead	7439-92-1	0.69	0.75 mg/l TCLP
		Mercury	7439-97-6	NA	0.025 mg/l TCLP
		Nickel	7440-02-0	3.98	11 mg/l TCLP
		Selenium	7782-49-2	NA	5.7 mg/l TCLP
		Silver	7440-22-4	NA	0.14 mg/l TCLP
		Thallium	7440-28-0	NA	0.20 mg/l TCLP
		Zinc	7440-66-6	NA	4.3 mg/l TCLP

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		REGULATED HAZARDOUS CONSTITUENT		WASTEWATERS	NONWASTEWATERS
WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
K062	Spent pickle liquor generated by steel finishing operations of facilities within the iron and steel industry (SIC Codes 331 and 332).	Chromium (Total)	7440-47-3	2.77	0.60 mg/l TCLP
		Lead	7439-92-1	0.69	0.75 mg/l TCLP
		Nickel	7440-02-0	3.98	NA
K069	Emission control dust/sludge from secondary lead smelting. - Calcium Sulfate (Low Lead) Subcategory	Cadmium	7440-43-9	0.69	0.11 mg/l TCLP
		Lead	7439-92-1	0.69	0.75 mg/l TCLP
	Emission control dust/sludge from secondary lead smelting. - Non-Calcium Sulfate (High Lead) Subcategory	NA	NA	NA	RLEAD
K071	K071 (Brine purification muds from the mercury cell process in chlorine production, where separately prepurified brine is not used) nonwastewaters that are residues from RMERC.	Mercury	7439-97-6	NA	0.20 mg/l TCLP
	K071 (Brine purification muds from the mercury cell process in chlorine production, where separately prepurified brine is not used.) nonwastewaters that are not residues from RMERC.	Mercury	7439-97-6	NA	0.025 mg/l TCLP
	All K071 wastewaters.	Mercury	7439-97-6	0.15	NA
K073	Chlorinated hydrocarbon waste from the purification step of the diaphragm cell process using graphite anodes in chlorine production.	Carbon tetrachloride	56-23-5	0.057	6.0
		Chloroform	67-66-3	0.046	6.0
		Hexachloroethane	67-72-1	0.055	30
		Tetrachloroethylene	127-18-4	0.056	6.0
		1,1,1-Trichloroethane	71-55-6	0.054	6.0

TREATMENT STANDARDS FOR HAZARDOUS WASTES NOTE: NA means not applicable					
		REGULATED HAZARDOUS CONSTITUENT		WASTEWATERS	NONWASTEWATERS
WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
K083	Distillation bottoms from aniline production.	Aniline	62-53-3	0.81	14
		Benzene	71-43-2	0.14	10
		Cyclohexanone	108-94-1	0.36	NA
		Diphenylamine (difficult to distinguish from diphenylnitrosamine)	122-39-4	0.92	13
		Diphenylnitrosamine (difficult to distinguish from diphenylamine)	86-30-6	0.92	13
		Nitrobenzene	98-95-3	0.068	14
		Phenol	108-95-2	0.039	6.2
		Nickel	7440-02-0	3.98	11 mg/l TCLP
K084	Wastewater treatment sludges generated during the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds.	Arsenic	7440-38-2	1.4	5.0 mg/l TCLP
K085	Distillation or fractionation column bottoms from the production of chlorobenzenes.	Benzene	71-43-2	0.14	10
		Chlorobenzene	108-90-7	0.057	6.0
		m-Dichlorobenzene	541-73-1	0.036	6.0
		o-Dichlorobenzene	95-50-1	0.088	6.0
		p-Dichlorobenzene	106-46-7	0.090	6.0
		Hexachlorobenzene	118-74-1	0.055	10

TREATMENT STANDARDS FOR HAZARDOUS WASTES NOTE: NA means not applicable					
WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	REGULATED HAZARDOUS CONSTITUENT		WASTEWATERS	NONWASTEWATERS
		Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
		Total PCBs (sum of all PCB isomers, or all Aroclors)	1336-36-3	0.10	10
		Pentachlorobenzene	608-93-5	0.055	10
		1,2,4,5-Tetrachlorobenzene	95-94-3	0.055	14
		1,2,4-Trichlorobenzene	120-82-1	0.055	19
K086	Solvent wastes 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.	Acetone	67-64-1	0.28	160
		Acetophenone	96-86-2	0.010	9.7
		bis(2-Ethylhexyl) phthalate	117-81-7	0.28	28
		n-Butyl alcohol	71-36-3	5.6	2.6
		Butylbenzyl phthalate	85-68-7	0.017	28
		Cyclohexanone	108-94-1	0.36	NA
		o-Dichlorobenzene	95-50-1	0.088	6.0
		Diethyl phthalate	84-66-2	0.20	28
		Dimethyl phthalate	131-11-3	0.047	28
		Di-n-butyl phthalate	84-74-2	0.057	28
		Di-n-octyl phthalate	117-84-0	0.017	28
		Ethyl acetate	141-78-6	0.34	33
		Ethylbenzene	100-41-4	0.057	10

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WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	REGULATED HAZARDOUS CONSTITUENT		WASTEWATERS	NONWASTEWATERS
		Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
		Methanol	67-56-1	5.6	NA
		Methyl ethyl ketone	78-93-3	0.28	36
		Methyl isobutyl ketone	108-10-1	0.14	33
		Methylene chloride	75-09-2	0.089	30
		Naphthalene	91-20-3	0.059	5.6
		Nitrobenzene	98-95-3	0.068	14
		Toluene	108-88-3	0.080	10
		1,1,1-Trichloroethane	71-55-6	0.054	6.0
		Trichloroethylene	79-01-6	0.054	6.0
		Xylenes-mixed isomers (sum of o-, m-, and p-xylene concentrations)	1330-20-7	0.32	30
		Chromium (Total)	7440-47-3	2.77	0.60 mg/l TCLP
		Cyanides (Total)[7]	57-12-5	1.2	590
		Lead	7439-92-1	0.69	0.75 mg/l TCLP
K087	Decanter tank tar sludge from coking operations.	Acenaphthylene	208-96-8	0.059	3.4
		Benzene	71-43-2	0.14	10
		Chrysene	218-01-9	0.059	3.4
		Fluoranthene	206-44-0	0.068	3.4

TREATMENT STANDARDS FOR HAZARDOUS WASTES NOTE: NA means not applicable					
WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	REGULATED HAZARDOUS CONSTITUENT		WASTEWATERS	NONWASTEWATERS
		Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
		Indeno(1,2,3-cd)pyrene	193-39-5	0.0055	3.4
		Naphthalene	91-20-3	0.059	5.6
		Phenanthrene	85-01-8	0.059	5.6
		Toluene	108-88-3	0.080	10
		Xylenes-mixed isomers (sum of o-, m-, and p-xylene concentrations)	1330-20-7	0.32	30
		Lead	7439-92-1	0.69	0.75 mg/l TCLP
K088	Spent potliners from primary aluminum reduction.	Acenaphthene	83-32-9	0.059	3.4
		Anthracene	120-12-7	0.059	3.4
		Benz(a)anthracene	56-55-3	0.059	3.4
		Benzo(a)pyrene	50-32-8	0.061	3.4
		Benzo(b)fluoranthene	205-99-2	0.11	6.8
		Benzo(k)fluoranthene	207-08-9	0.11	6.8
		Benzo(g,h,i)perylene	191-24-2	0.0055	1.8
		Chrysene	218-01-9	0.059	3.4
		Dibenz(a,h)anthracene	53-70-3	0.055	8.2
		Fluoranthene	206-44-0	0.068	3.4
		Indeno(1,2,3,-c,d)pyrene	193-39-5	0.0055	3.4

TREATMENT STANDARDS FOR HAZARDOUS WASTES NOTE: NA means not applicable					
WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	REGULATED HAZARDOUS CONSTITUENT		WASTEWATERS	NONWASTEWATERS
		Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
		Phenanthrene	85-01-8	0.059	5.6
		Pyrene	129-00-0	0.067	8.2
		Antimony	7440-36-0	1.9	1.15 mg/l TCLP
		Arsenic	7440-38-2	1.4	5.0 mg/l TCLP
		Barium	7440-39-3	1.2	21 mg/l TCLP
		Beryllium	7440-41-7	0.82	1.22 mg/l TCLP
		Cadmium	7440-43-9	0.69	0.11 mg/l TCLP
		Chromium (Total)	7440-47-3	2.77	0.60 mg/l TCLP
		Lead	7439-92-1	0.69	0.75 mg/l TCLP
		Mercury	7439-97-6	0.15	0.025 mg/l TCLP
		Nickel	7440-02-0	3.98	11 mg/l TCLP
		Selenium	7782-49-2	0.82	5.7 mg/l TCLP
		Silver	7440-22-4	0.43	0.14 mg/l TCLP
		Cyanide (Total)[7]	57-12-5	1.2	590
		Cyanide (Amenable)[7]	57-12-5	0.86	30
		Fluoride	16984-48-8	35	48 mg/l TCLP
K093	Distillation light ends from the production of phthalic anhydride from ortho-xylene.	Phthalic anhydride (measured as Phthalic acid or Terephthalic acid)	100-21-0	0.055	28

TREATMENT STANDARDS FOR HAZARDOUS WASTES NOTE: NA means not applicable					
WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	REGULATED HAZARDOUS CONSTITUENT		WASTEWATERS	NONWASTEWATERS
		Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
		Phthalic anhydride (measured as Phthalic acid or Terephthalic acid)	85-44-9	0.055	28
K094	Distillation bottoms from the production of phthalic anhydride from ortho-xylene.	Phthalic anhydride (measured as Phthalic acid or Terephthalic acid)	100-21-0	0.055	28
		Phthalic anhydride (measured as Phthalic acid or Terephthalic acid)	85-44-9	0.055	28
K095	Distillation bottoms from the production of 1,1,1-trichloroethane.	Hexachloroethane	67-72-1	0.055	30
		Pentachloroethane	76-01-7	0.055	6.0
		1,1,1,2-Tetrachloroethane	630-20-6	0.057	6.0
		1,1,2,2-Tetrachloroethane	79-34-6	0.057	6.0
		Tetrachloroethylene	127-18-4	0.056	6.0
		1,1,2-Trichloroethane	79-00-5	0.054	6.0
		Trichloroethylene	79-01-6	0.054	6.0
K096	Heavy ends from the heavy ends column from the production of 1,1,1-trichloroethane.	m-Dichlorobenzene	541-73-1	0.036	6.0
		Pentachloroethane	76-01-7	0.055	6.0
		1,1,1,2-Tetrachloroethane	630-20-6	0.057	6.0
		1,1,2,2-Tetrachloroethane	79-34-6	0.057	6.0
		Tetrachloroethylene	127-18-4	0.056	6.0

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WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	REGULATED HAZARDOUS CONSTITUENT		WASTEWATERS	NONWASTEWATERS
		Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
		1,2,4-Trichlorobenzene	120-82-1	0.055	19
		1,1,2-Trichloroethane	79-00-5	0.054	6.0
		Trichloroethylene	79-01-6	0.054	6.0
K097	Vacuum stripper discharge from the chlordane chlorinator in the production of chlordane.	Chlordane (alpha and gamma isomers)	57-74-9	0.0033	0.26
		Heptachlor	76-44-8	0.0012	0.066
		Heptachlor epoxide	1024-57-3	0.016	0.066
		Hexachlorocyclopentadiene	77-47-4	0.057	2.4
K098	Untreated process wastewater from the production of toxaphene.	Toxaphene	8001-35-2	0.0095	2.6
K099	Untreated wastewater from the production of 2,4-D.	2,4-Dichlorophenoxyacetic acid	94-75-7	0.72	10
		HxCDDs (All Hexachlorodibenzo-p-dioxins)	NA	0.000063	0.001
		HxCDFs (All Hexachlorodibenzofurans)	NA	0.000063	0.001
		PeCDDs (All Pentachlorodibenzo-p-dioxins)	NA	0.000063	0.001
		PeCDFs (All Pentachlorodibenzofurans)	NA	0.000035	0.001
		TCDDs (All Tetrachlorodibenzo-p-dioxins)	NA	0.000063	0.001

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WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	REGULATED HAZARDOUS CONSTITUENT		WASTEWATERS	NONWASTEWATERS
		Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
		TCDFs (All Tetrachlorodibenzofurans)	NA	0.000063	0.001
K100	Waste leaching solution from acid leaching of emission control dust/sludge from secondary lead smelting.	Cadmium	7440-43-9	0.69	0.11 mg/l TCLP
		Chromium (Total)	7440-47-3	2.77	0.60 mg/l TCLP
		Lead	7439-92-1	0.69	0.75 mg/l TCLP
K101	Distillation tar residues from the distillation of aniline-based compounds in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds.	o-Nitroaniline	88-74-4	0.27	14
		Arsenic	7440-38-2	1.4	5.0 mg/l TCLP
		Cadmium	7440-43-9	0.69	NA
		Lead	7439-92-1	0.69	NA
		Mercury	7439-97-6	0.15	NA
K102	Residue from the use of activated carbon for decolorization in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds.	o-Nitrophenol	88-75-5	0.028	13
		Arsenic	7440-38-2	1.4	5.0 mg/l TCLP
		Cadmium	7440-43-9	0.69	NA
		Lead	7439-92-1	0.69	NA
		Mercury	7439-97-6	0.15	NA
K103	Process residues from aniline extraction from the production of aniline.	Aniline	62-53-3	0.81	14
		Benzene	71-43-2	0.14	10
		2,4-Dinitrophenol	51-28-5	0.12	160
		Nitrobenzene	98-95-3	0.068	14

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		REGULATED HAZARDOUS CONSTITUENT		WASTEWATERS	NONWASTEWATERS
WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
		Phenol	108-95-2	0.039	6.2
K104	Combined wastewater streams generated from nitrobenzene/ aniline production.	Aniline	62-53-3	0.81	14
		Benzene	71-43-2	0.14	10
		2,4-Dinitrophenol	51-28-5	0.12	160
		Nitrobenzene	98-95-3	0.068	14
		Phenol	108-95-2	0.039	6.2
		Cyanides (Total)[7]	57-12-5	1.2	590
K105	Separated aqueous stream from the reactor product washing step in the production of chlorobenzenes.	Benzene	71-43-2	0.14	10
		Chlorobenzene	108-90-7	0.057	6.0
		2-Chlorophenol	95-57-8	0.044	5.7
		o-Dichlorobenzene	95-50-1	0.088	6.0
		p-Dichlorobenzene	106-46-7	0.090	6.0
		Phenol	108-95-2	0.039	6.2
		2,4,5-Trichlorophenol	95-95-4	0.18	7.4
		2,4,6-Trichlorophenol	88-06-2	0.035	7.4
K106	K106 (wastewater treatment sludge from the mercury cell process in chlorine production) nonwastewaters that contain greater than or equal to 260 mg/kg total mercury.	Mercury	7439-97-6	NA	RMERC

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WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
	K106 (wastewater treatment sludge from the mercury cell process in chlorine production) nonwastewaters that contain less than 260 mg/kg total mercury that are residues from RMERC.	Mercury	7439-97-6	NA	0.20 mg/l TCLP
	Other K106 nonwastewaters that contain less than 260 mg/kg total mercury and are not residues from RMERC.	Mercury	7439-97-6	NA	0.025 mg/l TCLP
	All K106 wastewaters.	Mercury	7439-97-6	0.15	NA
K107	Column bottoms from product separation from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides.	NA	NA	CMBST; or CHOXD fb CARBN; or BIODG fb CARBN	CMBST
K108	Condensed column overheads from product separation and condensed reactor vent gases from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides.	NA	NA	CMBST; or CHOXD fb CARBN; or BIODG fb CARBN	CMBST
K109	Spent filter cartridges from product purification from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides.	NA	NA	CMBST; or CHOXD fb CARBN; or BIODG fb CARBN	CMBST
K110	Condensed column overheads from intermediate separation from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides.	NA	NA	CMBST; or CHOXD fb CARBN; or BIODG fb CARBN	CMBST
K111	Product washwaters from the production of dinitrotoluene via nitration of toluene	2,4-Dinitrotoluene	121-1-2	0.32	140
		2,6-Dinitrotoluene	606-20-2	0.55	28
K112	Reaction by-product water from the drying column in the production of toluenediamine via hydrogenation of dinitrotoluene.	NA	NA	CMBST; or CHOXD fb CARBN; or BIODG fb CARBN	CMBST

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		REGULATED HAZARDOUS CONSTITUENT		WASTEWATERS	NONWASTEWATERS
WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
K113	Condensed liquid light ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.	NA	NA	CARBN; OR CMBST	CMBST
K114	Vicinals from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotolune.	NA	NA	CARBN; or CMBST	CMBST
K115	Heavy ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.	Nickel	7440-02-0	3.98	11 mg/l TCLP
		NA	NA	CARBN; or CMBST	CMBST
K116	Organic condensate from the solvent recovery column in the production of toluene diisocyanate via phosgenation of toluenediamine.	NA	NA	CARBN; or CMBST	CMBST
K117	Wastewater from the reactor vent gas scrubber in the production of ethylene dibromide via bromination of ethene.	Methyl bromide (Bromomethane)	74-83-9	0.11	15
		Chloroform	67-66-3	0.046	6.0
		Ethylene dibromide (1,2-Dibromoethane)	106-93-4	0.028	15
K118	Spent absorbent solids from purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene.	Methyl bromide (Bromomethane)	74-83-9	0.11	15
		Chloroform	67-66-3	0.046	6.0
		Ethylene dibromide (1,2-Dibromoethane)	106-93-4	0.028	15
K123	Process wastewater (including supernates, filtrates, and washwaters) from the production of ethylenebisdithiocarbamic acid and its salts.	NA	NA	CMBST; or CHOXD fb (BIODG or CARBN)	CMBST

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WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
K124	Reactor vent scrubber water from the production of ethylenebisdithiocarbamic acid and its salts.	NA	NA	CMBST; or CHOXD fb (BIODG or CARBN)	CMBST
K125	Filtration, evaporation, and centrifugation solids from the production of ethylenebisdithiocarbamic acid and its salts.	NA	NA	CMBST; or CHOXD fb (BIODG or CARBN)	CMBST
K126	Baghouse dust and floor sweepings in milling and packaging operations from the production or formulation of ethylenebisdithiocarbamic acid and its salts.	NA	NA	CMBST; or CHOXD fb (BIODG or CARBN)	CMBST
K131	Wastewater from the reactor and spent sulfuric acid from the acid dryer from the production of methyl bromide.	Methyl bromide (Bromomethane)	74-83-9	0.11	15
K132	Spent absorbent and wastewater separator solids from the production of methyl bromide.	Methyl bromide (Bromomethane)	74-83-9	0.11	15
K136	Still bottoms from the purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene.	Methyl bromide (Bromomethane)	74-83-9	0.11	15
		Chloroform	67-66-3	0.046	6.0
		Ethylene dibromide (1,2-Dibromoethane)	106-93-4	0.028	15
K140	Floor sweepings, off-specification product, and spent filter media from the production of 2,4,6-tribromophenol.	2,4,6-Tribromophenol	118-79-6	0.035	7.4
K141	Process residues from the recovery of coal tar, including, but not limited to, collecting sump residues from the production of coke or the recovery of coke by-products produced from coal. This listing does not include K087 (decanter tank tar sludge from coking operations).	Benzene	71-43-2	0.14	10
		Benz(a)anthracene	56-55-3	0.059	3.4
		Benzo(a)pyrene	50-2-8	0.061	3.4
		Benzo(b)fluoranthene (difficult to distinguish from benzo(k)fluoranthene)	205-99-2	0.11	6.8

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WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	REGULATED HAZARDOUS CONSTITUENT		WASTEWATERS	NONWASTEWATERS
		Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
		Benzo(k)fluoranthene (difficult to distinguish from benzo(b)fluoranthene)	207-08-9	0.11	6.8
		Chrysene	218-01-9	0.059	3.4
		Dibenz(a,h)anthracene	53-70-3	0.055	8.2
		Indeno(1,2,3-cd)pyrene	193-39-5	0.0055	3.4
K142	Tar storage tank residues from the production of coke from coal or from the recovery of coke by-products produced from coal.	Benzene	71-43-2	0.14	10
		Benz(a)anthracene	56-55-3	0.059	3.4
		Benzo(a)pyrene	50-32-8	0.061	3.4
		Benzo(b)fluoranthene (difficult to distinguish from benzo(k)fluoranthene)	205-99-2	0.11	6.8
		Benzo(k)fluoranthene (difficult to distinguish from benzo(b)fluoranthene)	207-08-9	0.11	6.8
		Chrysene	218-01-9	0.059	3.4
		Dibenz(a,h)anthracene	53-70-3	0.055	8.2
		Indeno(1,2,3-cd)pyrene	193-39-5	0.0055	3.4
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.	Benzene	71-43-2	0.14	10
		Benz(a)anthracene	56-55-3	0.059	3.4
		Benzo(a)pyrene	50-32-8	0.061	3.4

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WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	REGULATED HAZARDOUS CONSTITUENT		WASTEWATERS	NONWASTEWATERS
		Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
		Benzo(b)fluoranthene (difficult to distinguish from benzo(k)fluoranthene)	205-99-2	0.11	6.8
		Benzo(k)flouranthene (difficult to distinguish from benzo(b)fluoranthene)	207-08-9	0.11	6.8
		Chrysene	218-01-9	0.059	3.4
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.	Benzene	71-43-2	0.14	10
		Benz(a)anthracene	56-55-3	0.059	3.4
		Benzo(a)pyrene	50-32-8	0.061	3.4
		Benzo(b)fluoranthene (difficult to distinguish from benzo(k)fluoranthene)	205-99-2	0.11	6.8
		Benzo(k)fluoranthene (difficult to distinguish from benzo(b)fluoranthene)	207-08-9	0.11	6.8
		Chrysene	218-01-9	0.059	3.4
		Dibenz(a,h)anthracene	53-70-3	0.055	8.2
K145	Residues from naphthalene collection and recovery operations from the recovery of coke by-products produced from coal.	Benzene	71-43-2	0.14	10
		Benz(a)anthracene	56-55-3	0.059	3.4
		Benzo(a)pyrene	50-32-8	0.061	3.4
		Chrysene	218-01-9	0.059	3.4

TREATMENT STANDARDS FOR HAZARDOUS WASTES NOTE: NA means not applicable					
WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	REGULATED HAZARDOUS CONSTITUENT		WASTEWATERS	NONWASTEWATERS
		Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
		Dibenz(a,h)anthracene	53-70-3	0.055	8.2
		Naphthalene	91-20-3	0.059	5.6
K147	Tar storage tank residues from coal tar refining.	Benzene	71-43-2	0.14	10
		Benz(a)anthracene	56-55-3	0.059	3.4
		Benzo(a)pyrene	50-32-8	0.061	3.4
		Benzo(b)fluoranthene (difficult to distinguish from benzo(k)fluoranthene)	205-99-2	0.11	6.8
		Benzo(k)fluoranthene (difficult to distinguish from benzo(b)fluoranthene)	207-08-9	0.11	6.8
		Chrysene	218-01-9	0.059	3.4
		Dibenz(a,h)anthracene	53-70-3	0.055	8.2
		Indeno(1,2,3-cd)pyrene	193-39-5	0.0055	3.4
K148	Residues from coal tar distillation, including, but not limited to, still bottoms.	Benz(a)anthracene	56-55-3	0.059	3.4
		Benzo(a)pyrene	50-32-8	0.061	3.4
		Benzo(b)fluoranthene (difficult to distinguish from benzo(k)fluoranthene)	205-99-2	0.11	6.8
		Benzo(k)fluoranthene (difficult to distinguish from benzo(b)fluoranthene)	207-08-9	0.11	6.8

TREATMENT STANDARDS FOR HAZARDOUS WASTES NOTE: NA means not applicable					
WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	REGULATED HAZARDOUS CONSTITUENT		WASTEWATERS	NONWASTEWATERS
		Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
		Chrysene	218-01-9	0.059	3.4
		Dibenz(a,h)anthracene	53-70-3	0.055	8.2
		Indeno(1,2,3-cd)pyrene	193-39-5	0.0055	3.4
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 distillations of benzyl chloride.)	Chlorobenzene	108-90-7	0.057	6.0
		Chloroform	67-66-3	0.046	6.0
		Chloromethane	74-87-3	0.19	30
		p-Dichlorobenzene	106-46-7	0.090	6.0
		Hexachlorobenzene	118-74-1	0.055	10
		Pentachlorobenzene	608-93-5	0.055	10
		1,2,4,5-Tetrachlorobenzene	95-94-3	0.055	14
		Toluene	108-88-3	0.080	10
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.	Carbon tetrachloride	56-23-5	0.057	6.0
		Chloroform	67-66-3	0.046	6.0
		Chloromethane	74-87-3	0.19	30
		p-Dichlorobenzene	106-46-7	0.090	6.0
		Hexachlorobenzene	118-74-1	0.055	10
		Pentachlorobenzene	608-93-5	0.055	10
		1,2,4,5-Tetrachlorobenzene	95-94-3	0.055	14

TREATMENT STANDARDS FOR HAZARDOUS WASTES NOTE: NA means not applicable					
		REGULATED HAZARDOUS CONSTITUENT		WASTEWATERS	NONWASTEWATERS
WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
		1,1,2,2-Tetrachloroethane	79-34-5	0.057	6.0
		Tetrachloroethylene	127-18-4	0.056	6.0
		1,2,4-Trichlorobenzene	120-82-1	0.055	19
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.	Benzene	71-43-2	0.14	10
		Carbon tetrachloride	56-23-5	0.057	6.0
		Chloroform	67-66-3	0.046	6.0
		Hexachlorobenzene	118-74-1	0.055	10
		Pentachlorobenzene	608-93-5	0.055	10
		1,2,4,5-Tetrachlorobenzene	95-94-3	0.055	14
		Tetrachloroethylene	127-18-4	0.056	6.0
		Toluene	108-88-3	0.080	10
K156	Organic waste (including heavy ends, still bottoms, light ends, spent solvents, filtrates, and decantates) from the production of carbamates and carbamoyl oximes. [10]	Acetonitrile	75-05-8	5.6	38
		Acetophenone	96-86-2	0.010	9.7
		Aniline	62-53-3	0.81	14
		Benomyl	17804-35-2	0.056	1.4
		Benzene	71-43-2	0.14	10
		Carbaryl	63-25-2	0.006	0.14
		Carbenzadim	10605-21-7	0.056	1.4

TREATMENT STANDARDS FOR HAZARDOUS WASTES NOTE: NA means not applicable					
WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	REGULATED HAZARDOUS CONSTITUENT		WASTEWATERS	NONWASTEWATERS
		Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
		Carbofuran	1563-66-2	0.006	0.14
		Carbosulfan	55285-14-8	0.028	1.4
		Chlorobenzene	108-90-7	0.057	6.0
		Chloroform	67-66-3	0.046	6.0
		o-Dichlorobenzene	95-50-1	0.088	6.0
		Methomyl	16752-77-5	0.028	0.14
		Methylene chloride	75-09-2	0.089	30
		Methyl ethyl ketone	78-93-3	0.28	36
		Naphthalene	91-20-3	0.059	5.6
		Phenol	108-95-2	0.039	6.2
		Pyridine	110-86-1	0.014	16
		Toluene	108-88-3	0.080	10
		Triethylamine	121-44-8	0.081	1.5
K157	Wastewaters (including scrubber waters, condenser waters, washwaters, and separation waters) from the production of carbamates and carbamoyl oximes. [10]	Carbon tetrachloride	56-23-5	0.057	6.0
		Chloroform	67-66-3	0.046	6.0
		Chloromethane	74-87-3	0.19	30
		Methomyl	16752-77-5	0.028	0.14
		Methylene chloride	75-09-2	0.089	30

TREATMENT STANDARDS FOR HAZARDOUS WASTES NOTE: NA means not applicable					
WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	REGULATED HAZARDOUS CONSTITUENT		WASTEWATERS	NONWASTEWATERS
		Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
		Methyl ethyl ketone	78-93-3	0.28	36
		o-Phenylenediamine	95-54-5	0.056	5.6
		Pyridine	110-86-1	0.014	16
		Triethylamine	121-44-8	0.081	1.5
K158	Bag house dusts and filter/separation solids from the production of carbamates and carbamoyl oximes. [10]	Benomyl	17804-35-2	0.056	1.4
		Benzene	71-43-2	0.14	10
		Carbenzadim	10605-21-7	0.056	1.4
		Carbofuran	1563-66-2	0.006	0.14
		Carbosulfan	55285-14-8	0.028	1.4
		Chloroform	67-66-3	0.046	6.0
		Methylene chloride	75-09-2	0.089	30
		Phenol	108-95-2	0.039	6.2
K159	Organics from the treatment of thiocarbamate wastes. [10]	Benzene	71-43-2	0.14	10
		Butylate	2008-41-5	0.042	1.4
		EPTC (Eptam)	759-94-4	0.042	1.4
		Molinate	2212-67-1	0.042	1.4
		Pebulate	1114-71-2	0.042	1.4
		Vernolate	1929-77-7	0.042	1.4

TREATMENT STANDARDS FOR HAZARDOUS WASTES NOTE: NA means not applicable					
		REGULATED HAZARDOUS CONSTITUENT		WASTEWATERS	NONWASTEWATERS
WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
K161	Purification solids (including filtration, evaporation, and centrifugation solids), baghouse dust and floor sweepings from the production of dithiocarbamate acids and their salts.[10]	Antimony	7440-36-0	1.9	1.15 mg/l TCLP
		Arsenic	7440-38-2	1.4	5.0 mg/l TCLP
		Carbon disulfide	75-15-0	3.8	4.8 mg/l TCLP
		Dithiocarbamates (total)	NA	0.028	28
		Lead	7439-92-1	0.69	0.75 mg/l TCLP
		Nickel	7440-02-0	3.98	11 mg/l TCLP
		Selenium	7782-49-2	0.82	5.7 mg/l TCLP
P001	Warfarin, & salts, when present at concentrations greater than 0.3%	Warfarin	81-81-2	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P002	1-Acetyl-2-thiourea	1-Acetyl-2-thiourea	591-08-2	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P003	Acrolein	Acrolein	107-02-8	0.29	CMBST
P004	Aldrin	Aldrin	309-00-2	0.021	0.066
P005	Allyl alcohol	Allyl alcohol	107-18-6	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P006	Aluminum phosphide	Aluminum phosphide	20859-73-8	CHOXD; CHRED; or CMBST	CHOXD; CHRED; or CMBST
P007	5-Aminomethyl 3-isoxazolol	5-Aminomethyl 3-isoxazolol	2763-96-4	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P008	4-Aminopyridine	4-Aminopyridine	504-24-5	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST

TREATMENT STANDARDS FOR HAZARDOUS WASTES NOTE: NA means not applicable					
		REGULATED HAZARDOUS CONSTITUENT		WASTEWATERS	NONWASTEWATERS
WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
P009	Ammonium picrate	Ammonium picrate	131-74-8	CHOXD; CHRED; CARBN; BIODG; or CMBST	CHOXD; CHRED; or CMBST
P010	Arsenic acid	Arsenic	7440-38-2	1.4	5.0 mg/l TCLP
P011	Arsenic pentoxide	Arsenic	7440-38-2	1.4	5.0 mg/l TCLP
P012	Arsenic trioxide	Arsenic	7440-38-2	1.4	5.0 mg/l TCLP
P013	Barium cyanide	Barium	7440-39-3	NA	21 mg/l TCLP
		Cyanides (Total)[7]	57-12-5	1.2	590
		Cyanides (Amenable)[7]	57-12-5	0.86	30
P014	Thiophenol (Benzene thiol)	Thiophenol (Benzene thiol)	108-98-5	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P015	Beryllium dust	Beryllium	7440-41-7	RMETL; or RTHRM	RMETL; or RTHRM
P016	Dichloromethyl ether (Bis(chloromethyl)ether)	Dichloromethyl ether	542-88-1	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P017	Bromoacetone	Bromoacetone	598-31-2	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P018	Brucine	Brucine	357-57-3	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P020	2-sec-Butyl-4,6-dinitrophenol (Dinoseb)	2-sec-Butyl-4,6-dinitrophenol (Dinoseb)	88-85-7	0.066	2.5
P021	Calcium cyanide	Cyanides (Total)[7]	57-12-5	1.2	590
		Cyanides (Amenable)[7]	57-12-5	0.86	30

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		REGULATED HAZARDOUS CONSTITUENT		WASTEWATERS	NONWASTEWATERS
WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
P022	Carbon disulfide	Carbon disulfide	75-15-0	3.8	CMBST
		Carbon disulfide; alternate[6] standard for nonwastewaters only	75-15-0	NA	4.8 mg/l TCLP
P023	Chloroacetaldehyde	Chloroacetaldehyde	107-20-0	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P024	p-Chloroaniline	p-Chloroaniline	106-47-8	0.46	16
P026	1-(o-Chlorophenyl)thiourea	1-(o-Chlorophenyl)thiourea	5344-82-1	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P027	3-Chloropropionitrile	3-Chloropropionitrile	542-76-7	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P028	Benzyl chloride	Benzyl chloride	100-44-7	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P029	Copper cyanide	Cyanides (Total)[7]	57-12-5	1.2	590
		Cyanides (Amenable)[7]	57-12-5	0.86	30
P030	Cyanides (soluble salts and complexes)	Cyanides (Total)[7]	57-12-5	1.2	590
		Cyanides (Amenable)[7]	57-12-5	0.86	30
P031	Cyanogen	Cyanogen	460-19-5	CHOXD; WETOX; or CMBST	CHOXD; WETOX; or CMBST
P033	Cyanogen chloride	Cyanogen chloride	506-77-4	CHOXD; WETOX; or CMBST	CHOXD; WETOX; or CMBST
P034	2-Cyclohexyl-4,6-dinitrophenol	2-Cyclohexyl-4,6-	131-89-5	(WETOX or CHOXD) fb	CMBST

TREATMENT STANDARDS FOR HAZARDOUS WASTES NOTE: NA means not applicable					
		REGULATED HAZARDOUS CONSTITUENT		WASTEWATERS	NONWASTEWATERS
WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
		dinitrophenol		CARBN; or CMBST	
P036	Dichlorophenylarsine	Arsenic	7440-38-2	1.4	5.0 mg/l TCLP
P037	Dieldrin	Dieldrin	60-57-1	0.017	0.13
P038	Diethylarsine	Arsenic	7440-38-2	1.4	5.0 mg/l TCLP
P039	Disulfoton	Disulfoton	298-04-4	0.017	6.2
P040	0,0-Diethyl O-pyrazinyl phosphorothioate	0,0-Diethyl O-pyrazinyl phosphorothioate	297-97-2	CARBN; or CMBST	CMBST
P041	Diethyl-p-nitrophenyl phosphate	Diethyl-p-nitrophenyl phosphate	311-45-5	CARBN; or CMBST	CMBST
P042	Epinephrine	Epinephrine	51-43-4	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P043	Diisopropylfluorophosphate (DFP)	Diisopropylfluorophosphate (DFP)	55-91-4	CARBN; or CMBST	CMBST
P044	Dimethoate	Dimethoate	60-51-5	CARBN; or CMBST	CMBST
P045	Thiofanox	Thiofanox	39196-18-4	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P046	alpha, alpha-Dimethylphenethylamine	alpha, alpha-Dimethylphenethylamine	122-09-8	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P047	4,6-Dinitro-o-cresol	4,6-Dinitro-o-cresol	543-52-1	0.28	160
	4,6-Dinitro-o-cresol salts	NA	NA	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P048	2,4-Dinitrophenol	2,4-Dinitrophenol	51-28-5	0.12	160

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WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
P049	Dithiobiuret	Dithiobiuret	541-53-7	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P050	Endosulfan	Endosulfan I	939-98-8	0.023	0.066
		Endosulfan II	33213-6-5	0.029	0.13
		Endosulfan sulfate	1031-07-8	0.029	0.13
P051	Endrin	Endrin	72-20-8	0.0028	0.13
		Endrin aldehyde	7421-93-4	0.025	0.13
P054	Aziridine	Aziridine	151-56-4	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P056	Fluorine	Fluoride (measured in wastewaters only)	16964-48-8	35	ADGAS fb NEUTR
P057	Fluoroacetamide	Fluoroacetamide	640-19-7	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P058	Fluoroacetic acid, sodium salt	Fluoroacetic acid, sodium salt	62-74-8	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P059	Heptachlor	Heptachlor	76-44-8	0.0012	0.066
		Heptachlor epoxide	1024-57-3	0.016	0.066
P060	Isodrin	Isodrin	465-73-6	0.021	0.066
P062	Hexaethyl tetraphosphate	Hexaethyl tetraphosphate	757-58-4	CARBN; or CMBST	CMBST
P063	Hydrogen cyanide	Cyanides (Total)[7]	57-12-5	1.2	590
		Cyanides (Amenable)[7]	57-12-5	0.86	30

TREATMENT STANDARDS FOR HAZARDOUS WASTES NOTE: NA means not applicable					
		REGULATED HAZARDOUS CONSTITUENT		WASTEWATERS	NONWASTEWATERS
WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
P064	Isocyanic acid, ethyl ester	Isocyanic acid, ethyl ester	624-83-9	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P065	Mercury fulminate nonwastewaters, regardless of their total mercury content, that are not incinerator residues or are not residues from RMERC.	Mercury	7439-97-6	NA	IMERC
	Mercury fulminate nonwastewaters that are either incinerator residues or are residues from RMERC; and contain greater than or equal to 260 mg/kg total mercury.	Mercury	7439-97-6	NA	RMERC
	Mercury fulminate nonwastewaters that are residues from RMERC and contain less than 260 mg/kg total mercury.	Mercury	7439-97-6	NA	0.20 mg/l TCLP
	Mercury fulminate nonwastewaters that are incinerator residues and contain less than 260 mg/kg total mercury.	Mercury	7439-97-6	NA	0.025 mg/l TCLP
	All mercury fulminate wastewaters.	Mercury	7439-97-6	0.15	NA
P066	Methomyl	Methomyl	16752-77-5	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P067	2-Methyl-aziridine	2-Methyl-aziridine	75-55-8	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P068	Methyl hydrazine	Methyl hydrazine	60-34-4	CHOXD; CHRED; CARBN; BIODG; or CMBST	CHOXD; CHRED; or CMBST
P069	2-Methyllactonitrile	2-Methyllactonitrile	75-86-5	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P070	Aldicarb	Aldicarb	116-06-3	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST

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WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
P071	Methyl parathion	Methyl parathion	298-00-0	0.014	4.6
P072	1-Naphthyl-2-thiourea	1-Naphthyl-2-thiourea	86-88-4	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P073	Nickel carbonyl	Nickel	7440-02-0	3.98	11 mg/l TCLP
P074	Nickel cyanide	Cyanides (Total)[7]	57-12-5	1.2	590
		Cyanides (Amenable)[7]	57-12-5	0.86	30
		Nickel	7440-02-0	3.98	11 mg/l TCLP
P075	Nicotine and salts	Nicotine and salts	54-11-5	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P076	Nitric oxide	Nitric oxide	10102-43-9	ADGAS	ADGAS
P077	p-Nitroaniline	p-Nitroaniline	100-01-6	0.028	28
P078	Nitrogen dioxide	Nitrogen dioxide	10102-44-0	ADGAS	ADGAS
P081	Nitroglycerin	Nitroglycerin	55-63-0	CHOXD; CHRED; CARBN; BIODG; or CMBST	CHOXD; CHRED; or CMBST
P082	N-Nitrosodimethylamine	N-Nitrosodimethylamine	62-75-9	0.40	2.3
P084	N-Nitrosomethylvinylamine	N-Nitrosomethylvinylamine	4549-40-0	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P085	Octamethylpyrophosphoramide	Octamethylpyrophosphoramide	152-16-9	CARBN; or CMBST	CMBST
P087	Osmium tetroxide	Osmium tetroxide	20816-12-0	RMETL; or RTHRM	RMETL; or RTHRM

TREATMENT STANDARDS FOR HAZARDOUS WASTES NOTE: NA means not applicable					
		REGULATED HAZARDOUS CONSTITUENT		WASTEWATERS	NONWASTEWATERS
WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
P088	Endothall	Endothall	145-73-3	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P089	Parathion	Parathion	56-38-2	0.014	4.6
P092	Phenyl mercuric acetate nonwastewaters, regardless of their total mercury content, that are not incinerator residues or are not residues from RMERC.	Mercury	7439-97-6	NA	IMERC; or RMERC
	Phenyl mercuric acetate nonwastewaters that are either incinerator residues or are residues from RMERC; and still contain greater than or equal to 260 mg/kg total mercury.	Mercury	7439-97-6	NA	RMERC
	Phenyl mercuric acetate nonwastewaters that are residues from RMERC and contain less than 260 mg/kg total mercury.	Mercury	7439-97-6	NA	0.20 mg/l TCLP
	Phenyl mercuric acetate nonwastewaters that are incinerator residues and contain less than 260 mg/kg total mercury.	Mercury	7439-97-6	NA	0.025 mg/l TCLP
	All phenyl mercuric acetate wastewaters.	Mercury	7439-97-6	0.15	NA
P093	Phenylthiourea	Phenylthiourea	103-85-5	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P094	Phorate	Phorate	298-02-2	0.021	4.6
P095	Phosgene	Phosgene	75-44-5	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P096	Phosphine	Phosphine	7803-51-2	CHOXD; CHRED; or CMBST	CHOXD; CHRED; or CMBST
P097	Famphur	Famphur	52-85-7	0.017	15
P098	Potassium cyanide.	Cyanides (Total)[7]	57-12-5	1.2	590

TREATMENT STANDARDS FOR HAZARDOUS WASTES NOTE: NA means not applicable					
WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	REGULATED HAZARDOUS CONSTITUENT		WASTEWATERS	NONWASTEWATERS
		Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
		Cyanides (Amenable)[7]	57-12-5	0.86	30
P099	Potassium silver cyanide	Cyanides (Total)[7]	57-12-5	1.2	590
		Cyanides (Amenable)[7]	57-12-5	0.86	30
		Silver	7440-22-4	0.43	0.14 mg/l TCLP
P101	Ethyl cyanide (Propanenitrile)	Ethyl cyanide (Propanenitrile)	107-12-0	0.24	360
P102	Propargyl alcohol	Propargyl alcohol	107-19-7	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P103	Selenourea	Selenium	7782-49-2	0.82	5.7 mg/l TCLP
P104	Silver cyanide	Cyanides (Total)[7]	57-12-5	1.2	590
		Cyanides (Amenable)[7]	57-12-5	0.86	30
		Silver	7440-22-4	0.43	0.14 mg/l TCLP
P105	Sodium azide	Sodium azide	26628-22-8	CHOXD; CHRED; CARBN; BIODG; or CMBST	CHOXD; CHRED; or CMBST
P106	Sodium cyanide	Cyanides (Total)[7]	57-12-5	1.2	590
		Cyanides (Amenable)[7]	57-12-5	0.86	30
P108	Strychnine and salts	Strychnine and salts	57-24-9	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P109	Tetraethyldithiopyrophosphate	Tetraethyldithiopyrophosphate	3689-24-5	CARBN; or CMBST	CMBST
P110	Tetraethyl lead	Lead	7439-92-1	0.69	0.75 mg/l TCLP

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WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
P111	Tetraethylpyrophosphate	Tetraethylpyrophosphate	107-49-3	CARBN; or CMBST	CMBST
P112	Tetranitromethane	Tetranitromethane	509-14-8	CHOXD; CHRED; CARBN; BIODG; or CMBST	CHOXD; CHRED; or CMBST
P113	Thallic oxide	Thallium (measured in wastewaters only)	7440-28-0	1.4	RTHRM; or STABL
P114	Thallium selenite	Selenium	7782-49-2	0.82	5.7 mg/l TCLP
P115	Thallium (I) sulfate	Thallium (measured in wastewaters only)	7440-28-0	1.4	RTHRM; or STABL
P116	Thiosemicarbazide	Thiosemicarbazide	79-19-6	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P118	Trichloromethanethiol	Trichloromethanethiol	75-70-7	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P119	Ammonium vanadate	Vanadium (measured in wastewaters only)	7440-62-2	4.3	STABL
P120	Vanadium pentoxide	Vanadium (measured in wastewaters only)	7440-62-2	4.3	STABL
P121	Zinc cyanide	Cyanides (Total)[7]	57-12-5	1.2	590
		Cyanides (Amenable)[7]	57-12-5	0.86	30
P122	Zinc phosphide Zn_3P_2, when present at concentrations greater than 10%	Zinc Phosphide	1314-84-7	CHOXD; CHRED; or CMBST	CHOXD; CHRED; or CMBST
P123	Toxaphene	Toxaphene	8001-35-2	0.0095	2.6
P127	Carbofuran [10]	Carbofuran	1563-66-2	0.006	0.14

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		REGULATED HAZARDOUS CONSTITUENT		WASTEWATERS	NONWASTEWATERS
WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
P128	Mexacarbate [10]	Mexacarbate	315-18-4	0.056	1.4
P185	Tirpate [10]	Tirpate	26419-73-8	0.056	0.28
P188	Physostigmine salicylate [10]	Physostigmine salicylate	57-64-7	0.056	1.4
P189	Carbosulfan [10]	Carbosulfan	55285-14-8	0.028	1.4
P190	Metolcarb [10]	Metolcarb	1129-41-5	0.056	1.4
P191	Dimetilan [10]	Dimetilan	644-64-4	0.056	1.4
P192	Isolan [10]	Isolan	119-38-0	0.056	1.4
P194	Oxamyl [10]	Oxamyl	23135-22-0	0.056	0.28
P196	Manganese dimethyldithiocarbamate [10]	Dithiocarbamates (total)	NA	0.028	28
P197	Formparanate [10]	Formparanate	17702-57-7	0.056	1.4
P198	Formetanate hydrochloride [10]	Formetanate hydrochloride	23422-53-9	0.056	1.4
P199	Methiocarb [10]	Methiocarb	2032-65-7	0.056	1.4
P201	Promecarb [10]	Promecarb	2631-37-0	0.056	1.4
P202	m-Cumenyl methylcarbamate [10]	m-Cumenyl methylcarbamate	64-00-6	0.056	1.4
P203	Aldicarb sulfone [10]	Aldicarb sulfone	1646-88-4	0.056	0.28
P204	Physostigmine [10]	Physostigmine	57-47-6	0.056	1.4
P205	Ziram [10]	Dithiocarbamates (total)	NA	0.028	28
U001	Acetaldehyde	Acetaldehyde	75-07-0	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST

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WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
U002	Acetone	Acetone	67-64-1	0.28	160
U003	Acetonitrile	Acetonitrile	75-05-8	5.6	CMBST
		Acetonitrile; alternate[6] standard for nonwastewaters only	75-05-8	NA	38
U004	Acetophenone	Acetophenone	98-86-2	0.010	9.7
U005	2-Acetylaminofluorene	2-Acetylaminofluorene	53-96-3	0.059	140
U006	Acetyl chloride	Acetyl Chloride	75-36-5	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U007	Acrylamide	Acrylamide	79-06-1	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U008	Acrylic acid	Acrylic acid	79-10-7	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U009	Acrylonitrile	Acrylonitrile	107-13-1	0.24	84
U010	Mitomycin C	Mitomycin C	50-07-7	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U011	Amitrole	Amitrole	61-82-5	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U012	Aniline	Aniline	62-53-3	0.81	14
U014	Auramine	Auramine	492-80-8	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U015	Azaserine	Azaserine	115-02-6	(WETOX or CHOXD) fb	CMBST

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		REGULATED HAZARDOUS CONSTITUENT		WASTEWATERS	NONWASTEWATERS
WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
				CARBN; or CMBST	
U016	Benz(c)acridine	Benz(c)acridine	225-51-4	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U017	Benzal chloride	Benzal chloride	98-87-3	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U018	Benz(a)anthracene	Benz(a)anthracene	56-55-3	0.059	3.4
U019	Benzene	Benzene	71-43-2	0.14	10
U020	Benzenesulfonyl chloride	Benzenesulfonyl chloride	98-09-9	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U021	Benzidine	Benzidine	92-87-5	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U022	Benzo(a)pyrene	Benzo(a)pyrene	50-32-8	0.061	3.4
U023	Benzotrichloride	Benzotrichloride	98-07-7	CHOXD; CHRED; CARBN; BIODG; or CMBST	CHOXD; CHRED; or CMBST
U024	bis(2-Chloroethoxy)methane	bis(2-Chloroethoxy)methane	111-91-1	0.036	7.2
U025	bis(2-Chloroethyl)ether	bis(2-Chloroethyl)ether	111-44-4	0.033	6.0
U026	Chlornaphazine	Chlornaphazine	494-03-1	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U027	bis(2-Chloroisopropyl)ether	bis(2-Chloroisopropyl)ether	39638-32-9	0.055	7.2
U028	bis(2-Ethylhexyl) phthalate	bis(2-Ethylhexyl) phthalate	117-81-7	0.28	28
U029	Methyl bromide (Bromomethane)	Methyl bromide	74-83-9	0.11	15

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WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
		(Bromomethane)			
U030	4-Bromophenyl phenyl ether	4-Bromophenyl phenyl ether	101-55-3	0.055	15
U031	n-Butyl alcohol	n-Butyl alcohol	71-36-3	5.6	2.6
U032	Calcium chromate	Chromium (Total)	7440-47-3	2.77	0.60 mg/l TCLP
U033	Carbon oxyfluoride	Carbon oxyfluoride	353-50-4	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U034	Trichloroacetaldehyde (Chloral)	Trichloroacetaldehyde (Chloral)	75-87-6	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U035	Chlorambucil	Chlorambucil	305-03-3	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U036	Chlordane	Chlordane (alpha and gamma isomers)	57-74-9	0.0033	0.26
U037	Chlorobenzene	Chlorobenzene	108-90-7	0.057	6.0
U038	Chlorobenzilate	Chlorobenzilate	510-15-6	0.10	CMBST
U039	p-Chloro-m-cresol	p-Chloro-m-cresol	59-50-7	0.018	14
U041	Epichlorohydrin (1-Chloro-2,3-epoxypropane)	Epichlorohydrin (1-Chloro-2,3-epoxypropane)	106-89-8	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U042	2-Chloroethyl vinyl ether	2-Chloroethyl vinyl ether	110-75-8	0.062	CMBST
U043	Vinyl chloride	Vinyl chloride	75-01-4	0.27	6.0
U044	Chloroform	Chloroform	67-66-3	0.046	6.0
U045	Chloromethane (Methyl chloride)	Chloromethane (Methyl	74-87-3	0.19	30

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WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
		chloride)			
U046	Chloromethyl methyl ether	Chloromethyl methyl ether	107-30-2	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U047	2-Chloronaphthalene	2-Chloronaphthalene	91-58-7	0.055	5.6
U048	2-Chlorophenol	2-Chlorophenol	95-57-8	0.044	5.7
U049	4-Chloro-o-toluidine hydrochloride	4-Chloro-o-toluidine hydrochloride	3165-93-3	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U050	Chrysene	Chrysene	218-01-9	0.059	3.4
U051	Creosote	Naphthalene	91-20-3	0.059	5.6
		Pentachlorophenol	87-86-5	0.089	7.4
		Phenanthrene	85-01-8	0.059	5.6
		Pyrene	129-00-0	0.067	8.2
		Toluene	108-88-3	0.080	10
		Xylenes-mixed isomers (sum of o-, m-, and p-xylene concentrations)	1330-20-7	0.32	30
		Lead	7439-92-1	0.69	0.75 mg/l TCLP
U052	Cresols (Cresylic acid)	o-Cresol	95-48-7	0.11	5.6
		m-Cresol (difficult to distinguish from p-cresol)	108-39-4	0.77	5.6

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		Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
		p-Cresol (difficult to distinguish from m-cresol)	106-44-5	0.77	5.6
		Cresol-mixed isomers (Cresylic acid) (sum of o-, m-, and p-cresol concentrations)	1319-77-3	0.88	11.2
U053	Crotonaldehyde	Crotonaldehyde	4170-30-3	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U055	Cumene	Cumene	98-82-8	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U056	Cyclohexane	Cyclohexane	110-82-7	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U057	Cyclohexanone	Cyclohexanone	108-94-1	0.36	CMBST
		Cyclohexanone; alternate[6] standard for nonwastewaters only	108-94-1	NA	0.75 mg/l TCLP
U058	Cyclophosphamide	Cyclophosphamide	50-18-0	CARBN; or CMBST	CMBST
U059	Daunomycin	Daunomycin	20830-81-3	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U060	DDD	o,p'-DDD	53-19-0	0.023	0.087
		p,p'-DDD	72-54-8	0.023	0.087
U061	DDT	o-p'-DDT	789-02-6	0.0039	0.087

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		Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
		p,p'-DDT	50-29-3	0.0039	0.087
		o,p'-DDD	53-19-0	0.023	0.087
		p,p'-DDD	72-54-8	0.023	0.087
		o,p'-DDE	3424-82-6	0.031	0.087
		p,p'-DDE	72-55-9	0.031	0.087
U062	Diallate	Diallate	2303-16-4	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U063	Dibenz(a,h)anthracene	Dibenz(a,h)anthracene	53-70-3	0.055	8.2
U064	Dibenz(a,i)pyrene	Dibenz(a,i)pyrene	189-55-9	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U066	1,2-Dibromo-3-chloropropane	1,2-Dibromo-3-chloropropane	96-12-8	0.11	15
U067	Ethylene dibromide (1,2-Dibromoethane)	Ethylene dibromide (1,2-Dibromoethane)	106-93-4	0.028	15
U068	Dibromomethane	Dibromomethane	74-95-3	0.11	15
U069	Di-n-butyl phthalate	Di-n-butyl phthalate	84-74-2	0.057	28
U070	o-Dichlorobenzene	o-Dichlorobenzene	95-50-1	0.088	6.0
U071	m-Dichlorobenzene	m-Dichlorobenzene	541-73-1	0.036	6.0
U072	p-Dichlorobenzene	p-Dichlorobenzene	106-46-7	0.090	6.0
U073	3,3'-Dichlorobenzidine	3,3'-Dichlorobenzidine	91-94-1	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST

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WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
U074	1,4-Dichloro-2-butene	cis-1,4-Dichloro-2-butene	1476-11-5	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
		trans-1,4-Dichloro-2-butene	764-41-0	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U075	Dichlorodifluoromethane	Dichlorodifluoromethane	75-71-8	0.23	7.2
U076	1,1-Dichloroethane	1,1-Dichloroethane	75-34-3	0.059	6.0
U077	1,2-Dichloroethane	1,2-Dichloroethane	107-06-2	0.21	6.0
U078	1,1-Dichloroethylene	1,1-Dichloroethylene	75-35-4	0.025	6.0
U079	1,2-Dichloroethylene	trans-1,2-Dichloroethylene	156-60-5	0.054	30
U080	Methylene chloride	Methylene chloride	75-09-2	0.089	30
U081	2,4-Dichlorophenol	2,4-Dichlorophenol	120-83-2	0.044	14
U082	2,6-Dichlorophenol	2,6-Dichlorophenol	87-65-0	0.044	14
U083	1,2-Dichloropropane	1,2-Dichloropropane	78-87-5	0.85	18
U084	1,3-Dichloropropylene	cis-1,3-Dichloropropylene	10061-01-5	0.036	18
		trans-1,3-Dichloropropylene	10061-02-6	0.036	18
U085	1,2:3,4-Diepoxybutane	1,2:3,4-Diepoxybutane	1464-53-5	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U086	N,N'-Diethylhydrazine	N,N'-Diethylhydrazine	1615-80-1	CHOXD; CHRED; CARBN; BIODG; or CMBST	CHOXD; CHRED; or CMBST
U087	O,O-Diethyl S-methyldithiophosphate	O,O-Diethyl S-	3288-58-2	CARBN; or CMBST	CMBST

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WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
		methyldithiophosphate			
U088	Diethyl phthalate	Diethyl phthalate	84-66-2	0.20	28
U089	Diethyl stilbestrol	Diethyl stilbestrol	56-53-1	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U090	Dihydrosafrole	Dihydrosafrole	94-58-6	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U091	3,3'-Dimethoxybenzidine	3,3'-Dimethoxybenzidine	119-90-4	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U092	Dimethylamine	Dimethylamine	124-40-3	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U093	p-Dimethylaminoazobenzene	p-Dimethylaminoazobenzene	60-11-7	0.13	CMBST
U094	7,12-Dimethylbenz(a)anthracene	7,12-Dimethylbenz(a)anthracene	57-97-6	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U095	3,3'-Dimethylbenzidine	3,3'-Dimethylbenzidine	119-93-7	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U096	alpha, alpha-Dimethyl benzyl hydroperoxide	alpha, alpha-Dimethyl benzyl hydroperoxide	80-15-9	CHOXD; CHRED; CARBN; BIODG; or CMBST	CHOXD; CHRED; or CMBST
U097	Dimethylcarbamoyl chloride	Dimethylcarbamoyl chloride	79-44-7	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U098	1,1-Dimethylhydrazine	1,1-Dimethylhydrazine	57-14-7	CHOXD; CHRED; CARBN; BIODG; or CMBST	CHOXD; CHRED; or CMBST
U099	1,2-Dimethylhydrazine	1,2-Dimethylhydrazine	540-73-8	CHOXD; CHRED;	CHOXD; CHRED; or

TREATMENT STANDARDS FOR HAZARDOUS WASTES NOTE: NA means not applicable					
		REGULATED HAZARDOUS CONSTITUENT		WASTEWATERS	NONWASTEWATERS
WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
				CARBN; BIODG; or CMBST	CMBST
U101	2,4-Dimethylphenol	2,4-Dimethylphenol	105-67-9	0.036	14
U102	Dimethyl phthalate	Dimethyl phthalate	131-11-3	0.047	28
U103	Dimethyl sulfate	Dimethyl sulfate	77-78-1	CHOXD; CHRED; CARBN; BIODG; or CMBST	CHOXD; CHRED; or CMBST
U105	2,4-Dinitrotoluene	2,4-Dinitrotoluene	121-14-2	0.32	140
U106	2,6-Dinitrotoluene	2,6-Dinitrotoluene	606-20-2	0.55	28
U107	Di-n-octyl phthalate	Di-n-octyl phthalate	117-84-0	0.017	28
U108	1,4-Dioxane	1,4-Dioxane	123-91-1	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
		1,4-Dioxane; alternate[6]	123-91-1	12.0	170
U109	1,2-Diphenylhydrazine	1,2-Diphenylhydrazine	122-66-7	CHOXD; CHRED; CARBN; BIODG; or CMBST	CHOXD; CHRED; or CMBST
		1,2-Diphenylhydrazine; alternate[6] standard for wastewaters only	122-66-7	0.087	NA
U110	Dipropylamine	Dipropylamine	142-84-7	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U111	Di-n-propylnitrosamine	Di-n-propylnitrosamine	621-64-7	0.40	14
U112	Ethyl acetate	Ethyl acetate	141-78-6	0.34	33

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U113	Ethyl acrylate	Ethyl acrylate	140-88-5	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U114	Ethylenebisdithiocarbamic acid salts and esters	Ethylenebisdithiocarbamic acid	111-54-6	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U115	Ethylene oxide	Ethylene oxide	75-21-8	(WETOX or CHOXD) fb CARBN; or CMBST	CHOXD; or CMBST
		Ethylene oxide; alternate[6] standard for wastewaters only	75-21-8	0.12	NA
U116	Ethylene thiourea	Ethylene thiourea	96-45-7	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U117	Ethyl ether	Ethyl ether	60-29-7	0.12	160
U118	Ethyl methacrylate	Ethyl methacrylate	97-63-2	0.14	160
U119	Ethyl methane sulfonate	Ethyl methane sulfonate	62-50-0	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U120	Fluoranthene	Fluoranthene	206-44-0	0.068	3.4
U121	Trichloromonofluoromethane	Trichloromonofluoromethane	75-69-4	0.020	30
U122	Formaldehyde	Formaldehyde	50-00-0	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U123	Formic acid	Formic acid	64-18-6	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U124	Furan	Furan	110-00-9	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST

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U125	Furfural	Furfural	98-01-1	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U126	Glycidylaldehyde	Glycidylaldehyde	765-34-4	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U127	Hexachlorobenzene	Hexachlorobenzene	118-74-1	0.055	10
U128	Hexachlorobutadiene	Hexachlorobutadiene	87-68-3	0.055	5.6
U129	Lindane	alpha-BHC	319-84-6	0.00014	0.066
		beta-BHC	319-85-7	0.00014	0.066
		delta-BHC	319-86-8	0.023	0.066
		gamma-BHC (Lindane)	58-89-9	0.0017	0.066
U130	Hexachlorocyclopentadiene	Hexachlorocyclopentadiene	77-47-4	0.057	2.4
U131	Hexachloroethane	Hexachloroethane	67-72-1	0.055	30
U132	Hexachlorophene	Hexachlorophene	70-30-4	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U133	Hydrazine	Hydrazine	302-01-2	CHOXD; CHRED; CARBN; BIODG; or CMBST	CHOXD; CHRED; or CMBST
U134	Hydrogen fluoride	Fluoride (measured in wastewaters only)	16964-48-8	35	ADGAS fb NEUTR; or NEUTR
U135	Hydrogen Sulfide	Hydrogen Sulfide	7783-06-4	CHOXD; CHRED, or CMBST	CHOXD; CHRED; or CMBST.
U136	Cacodylic acid	Arsenic	7440-38-2	1.4	5.0 mg/l TCLP

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U137	Indeno(1,2,3-c,d)pyrene	Indeno(1,2,3-c,d)pyrene	193-39-5	0.0055	3.4
U138	Iodomethane	Iodomethane	74-88-4	0.19	65
U140	Isobutyl alcohol	Isobutyl alcohol	78-83-1	5.6	170
U141	Isosafrole	Isosafrole	120-58-1	0.081	2.6
U142	Kepone	Kepone	143-50-8	0.0011	0.13
U143	Lasiocarpine	Lasiocarpine	303-34-4	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U144	Lead acetate	Lead	7439-92-1	0.69	0.75 mg/l TCLP
U145	Lead phosphate	Lead	7439-92-1	0.69	0.75 mg/l TCLP
U146	Lead subacetate	Lead	7439-92-1	0.69	0.75 mg/l TCLP
U147	Maleic anhydride	Maleic anhydride	108-31-6	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U148	Maleic hydrazide	Maleic hydrazide	123-33-1	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U149	Malononitrile	Malononitrile	109-77-3	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U150	Melphalan	Melphalan	148-82-3	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U151	U151 (mercury) nonwastewaters that contain greater than or equal to 260 mg/kg total mercury.	Mercury	7439-97-6	NA	RMERC

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	U151 (mercury) nonwastewaters that contain less than 260 mg/kg total mercury and that are residues from RMERC only.	Mercury	7439-97-6	NA	0.20 mg/l TCLP
	U151 (mercury) nonwastewaters that contain less than 260 mg/kg total mercury and that are not residues from RMERC.	Mercury	7439-97-6	NA	0.025 mg/l TCLP
	All U151 (mercury) wastewaters.	Mercury	7439-97-6	0.15	NA
	Elemental Mercury Contaminated with Radioactive Materials	Mercury	7439-97-6	NA	AMLGM
U152	Methacrylonitrile	Methacrylonitrile	126-98-7	0.24	84
U153	Methanethiol	Methanethiol	74-93-1	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U154	Methanol	Methanol	67-56-1	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
		Methanol; alternate[6] set of standards for both wastewaters and nonwastewaters	67-56-1	5.6	0.75 mg/l TCLP
U155	Methapyrilene	Methapyrilene	91-80-5	0.081	1.5
U156	Methyl chlorocarbonate	Methyl chlorocarbonate	79-22-1	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U157	3-Methylcholanthrene	3-Methylcholanthrene	56-49-5	0.0055	15
U158	4,4'-Methylene bis(2-chloroaniline)	4,4'-Methylene bis(2-chloroaniline)	101-14-4	0.50	30
U159	Methyl ethyl ketone	Methyl ethyl ketone	78-93-3	0.28	36

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WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
U160	Methyl ethyl ketone peroxide	Methyl ethyl ketone peroxide	1338-23-4	CHOXD; CHRED; CARBN; BIODG; or CMBST	CHOXD; CHRED; or CMBST
U161	Methyl isobutyl ketone	Methyl isobutyl ketone	108-10-1	0.14	33
U162	Methyl methacrylate	Methyl methacrylate	80-62-6	0.14	160
U163	N-Methyl N'-nitro N-nitrosoguanidine	N-Methyl N'-nitro N-nitrosoguanidine	70-25-7	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U164	Methylthiouracil	Methylthiouracil	56-04-2	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U165	Naphthalene	Naphthalene	91-20-3	0.059	5.6
U166	1,4-Naphthoquinone	1,4-Naphthoquinone	130-15-4	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U167	1-Naphthylamine	1-Naphthylamine	134-32-7	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U168	2-Naphthylamine	2-Naphthylamine	91-59-8	0.52	CMBST
U169	Nitrobenzene	Nitrobenzene	98-95-3	0.068	14
U170	p-Nitrophenol	p-Nitrophenol	100-02-7	0.12	29
U171	2-Nitropropane	2-Nitropropane	79-46-9	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U172	N-Nitrosodi-n-butylamine	N-Nitrosodi-n-butylamine	924-16-3	0.40	17
U173	N-Nitrosodiethanolamine	N-Nitrosodiethanolamine	1116-54-7	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST

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U174	N-Nitrosodiethylamine	N-Nitrosodiethylamine	55-18-5	0.40	28
U176	N-Nitroso-N-ethylurea	N-Nitroso-N-ethylurea	759-73-9	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U177	N-Nitroso-N-methylurea	N-Nitroso-N-methylurea	684-93-5	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U178	N-Nitroso-N-methylurethane	N-Nitroso-N-methylurethane	615-53-2	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U179	N-Nitrosopiperidine	N-Nitrosopiperidine	100-75-4	0.013	35
U180	N-Nitrosopyrrolidine	N-Nitrosopyrrolidine	930-55-2	0.013	35
U181	5-Nitro-o-toluidine	5-Nitro-o-toluidine	99-55-8	0.32	28
U182	Paraldehyde	Paraldehyde	123-63-7	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U183	Pentachlorobenzene	Pentachlorobenzene	608-93-5	0.055	10
U184	Pentachloroethane	Pentachloroethane	76-01-7	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
		Pentachloroethane; alternate[6] standards for both wastewaters and nonwastewaters	76-01-7	0.055	6.0
U185	Pentachloronitrobenzene	Pentachloronitrobenzene	82-68-8	0.055	4.8
U186	1,3-Pentadiene	1,3-Pentadiene	504-60-9	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U187	Phenacetin	Phenacetin	62-44-2	0.081	16

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U188	Phenol	Phenol	108-95-2	0.039	6.2
U189	Phosphorus sulfide	Phosphorus sulfide	1314-80-3	CHOXD; CHRED; or CMBST	CHOXD; CHRED; or CMBST
U190	Phthalic anhydride (measured as Phthalic acid or Terephthalic acid	Phthalic anhydride (measured as Phthalic acid or Terephthalic acid)	100-21-0	0.055	28
		Phthalic anhydride (measured as Phthalic acid or Terephthalic acid)	85-44-9	0.055	28
U191	2-Picoline	2-Picoline	109-06-8	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U192	Pronamide	Pronamide	23950-58-5	0.093	1.5
U193	1,3-Propane sultone	1,3-Propane sultone	1120-71-4	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U194	n-Propylamine	n-Propylamine	107-10-8	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U196	Pyridine	Pyridine	110-86-1	0.014	16
U197	p-Benzoquinone	p-Benzoquinone	106-51-4	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U200	Reserpine	Reserpine	50-55-5	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U201	Resorcinol	Resorcinol	108-46-3	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST

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U202	Saccharin and salts	Saccharin	81-07-2	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U203	Safrole	Safrole	94-59-7	0.081	22
U204	Selenium dioxide	Selenium	7782-49-2	0.82	5.7 mg/l TCLP
U205	Selenium sulfide	Selenium	7782-49-2	0.82	5.7 mg/l TCLP
U206	Streptozotocin	Streptozotocin	18883-66-4	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U207	1,2,4,5-Tetrachlorobenzene	1,2,4,5-Tetrachlorobenzene	95-94-3	0.055	14
U208	1,1,1,2-Tetrachloroethane	1,1,1,2-Tetrachloroethane	630-20-6	0.057	6.0
U209	1,1,2,2-Tetrachloroethane	1,1,2,2-Tetrachloroethane	79-34-5	0.057	6.0
U210	Tetrachloroethylene	Tetrachloroethylene	127-18-4	0.056	6.0
U211	Carbon tetrachloride	Carbon tetrachloride	56-23-5	0.057	6.0
U213	Tetrahydrofuran	Tetrahydrofuran	109-99-9	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U214	Thallium (I) acetate	Thallium (measured in wastewaters only)	7440-28-0	1.4	RTHRM; or STABL
U215	Thallium (I) carbonate	Thallium (measured in wastewaters only)	7440-28-0	1.4	RTHRM; or STABL
U216	Thallium (I) chloride	Thallium (measured in wastewaters only)	7440-28-0	1.4	RTHRM; or STABL
U217	Thallium (I) nitrate	Thallium (measured in wastewaters only)	7440-28-0	1.4	RTHRM; or STABL

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U218	Thioacetamide	Thioacetamide	62-55-5	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U219	Thiourea	Thiourea	62-56-6	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U220	Toluene	Toluene	108-88-3	0.080	10
U221	Toluenediamine	Toluenediamine	25376-45-8	CARBN; or CMBST	CMBST
U222	o-Toluidine hydrochloride	o-Toluidine hydrochloride	636-21-5	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U223	Toluene diisocyanate	Toluene diisocyanate	26471-62-5	CARBN; or CMBST	CMBST
U225	Bromoform (Tribromomethane)	Bromoform (Tribromomethane)	75-25-2	0.63	15
U226	1,1,1-Trichloroethane	1,1,1-Trichloroethane	71-55-6	0.054	6.0
U227	1,1,2-Trichloroethane	1,1,2-Trichloroethane	79-00-5	0.054	6.0
U228	Trichloroethylene	Trichloroethylene	79-01-6	0.054	6.0
U234	1,3,5-Trinitrobenzene	1,3,5-Trinitrobenzene	99-35-4	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U235	tris-(2,3-Dibromopropyl)-phosphate	tris-(2,3-Dibromopropyl)-phosphate	126-72-7	0.11	0.10
U236	Trypan Blue	Trypan Blue	72-57-1	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U237	Uracil mustard	Uracil mustard	66-75-1	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST

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U238	Urethane (Ethyl carbamate)	Urethane (Ethyl carbamate)	51-79-6	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U239	Xylenes	Xylenes-mixed isomers (sum of o-, m-, and p-xylene concentrations)	1330-20-7	0.32	30
U240	2,4-D (2,4-Dichlorophenoxyacetic acid)	2,4-D (2,4-Dichlorophenoxyacetic acid)	94-75-7	0.72	10
	2,4-D (2,4-Dichlorophenoxyacetic acid) salts and esters		NA	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U243	Hexachloropropylene	Hexachloropropylene	1888-71-7	0.035	30
U244	Thiram	Thiram	137-26-8	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U246	Cyanogen bromide	Cyanogen bromide	506-68-3	CHOXD; WETOX; or CMBST	CHOXD; WETOX; or CMBST
U247	Methoxychlor	Methoxychlor	72-43-5	0.25	0.18
U248	Warfarin, & salts, when present at concentrations of 0.3% or less	Warfarin	81-81-2	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U249	Zinc phosphide, Zn_3P_2, when present at concentrations of 10% or less	Zinc Phosphide	1314-84-7	CHOXD; CHRED; or CMBST	CHOXD; CHRED; or CMBST
U271	Benomyl [10]	Benomyl	17804-35-2	0.056	1.4
U278	Bendiocarb [10]	Bendiocarb	22781-23-3	0.056	1.4
U279	Carbaryl [10]	Carbaryl	63-25-2	0.006	0.14

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U280	Barban [10]	Barban	101-27-9	0.056	1.4
U328	o-Toluidine	o-Toluidine	95-53-4	CMBST; or CHOXD fb (BIODG or CARBN); or BIODG fb CARBN.	CMBST
U353	p-Toluidine	p-Toluidine	106-49-0	CMBST; or CHOXD fb (BIODG or CARBN); or BIODG fb CARBN	CMBST
U359	2-Ethoxyethanol	2-Ethoxyethanol	110-80-5	CMBST; or CHOXD fb (BIODG or CARBN); or BIODG fb CARBN	CMBST
U364	Bendiocarb phenol [10]	Bendiocarb phenol	22961-82-6	0.056	1.4
U367	Carbofuran phenol [10]	Carbofuran phenol	1563-38-8	0.056	1.4
U372	Carbendazim [10]	Carbendazim	10605-21-7	0.056	1.4
U373	Propham [10]	Propham	122-42-9	0.056	1.4
U387	Prosulfocarb [10]	Prosulfocarb	52888-80-9	0.042	1.4
U389	Triallate [10]	Triallate	2303-17-5	0.042	1.4
U394	A2213 [10]	A2213	30558-43-1	0.042	1.4
U395	Diethylene glycol, dicarbamate [10]	Diethylene glycol, dicarbamate	5952-26-1	0.056	1.4
U404	Triethylamine [10]	Triethylamine	101-44-8	0.081	1.5
U408	2,4,6-Tribromophenol	2,4,6-Tribromophenol	111-79-6	0.035	7.4
U409	Thiophanate-methyl [10]	Thiophanate-methyl	23564-05-8	0.056	1.4

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WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY[1]	Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
U410	Thiodicarb [10]	Thiodicarb	59669-26-0	0.019	1.4
U411	Propoxur [10]	Propoxur	114-26-1	0.056	1.4

FOOTNOTES TO TREATMENT STANDARD TABLE 268.40

1 The waste descriptions provided in this table do not replace waste descriptions in 40 CFR 261. Descriptions of Treatment/Regulatory Subcategories are provided, as needed, to distinguish between applicability of different standards.

2 CAS means Chemical Abstract Services. When the waste code and/or regulated constituents are described as a combination of a chemical with its salts and/or esters, the CAS number is given for the parent compound only.

3 Concentration standards for wastewaters are expressed in mg/l and are based on analysis of composite samples.

4 All treatment standards expressed as a Technology Code or combination of Technology Codes are explained in detail in 40 CFR 268.42 Table 1 - Technology Codes and Descriptions of Technology-Based Standards.

5 Except for Metals (EP or TCLP) and Cyanides (Total and Amenable) the nonwastewater treatment standards expressed as a concentration were established, in part, based upon incineration in units operated in accordance with the technical requirements of 40 CFR Part 264 Subpart O or Part 265 Subpart O, or based upon combustion in fuel substitution units operating in accordance with applicable technical requirements. A facility may comply with these treatment standards according to provisions in 40 CFR 268.40(d). All concentration standards for nonwastewaters are based on analysis of grab samples.

6 Where an alternate treatment standard or set of alternate standards has been indicated, a facility may comply with this alternate standard, but only for the Treatment/Regulatory Subcategory or physical form (i.e., wastewater and/or nonwastewater) specified for that alternate standard.

7 Both Cyanides (Total) and Cyanides (Amenable) for nonwastewaters are to be analyzed using Method 9010 or 9012, found in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods,≅ EPA Publication SW-846, as incorporated by reference in 40 CFR 260.11, with a sample size of 10 grams and a distillation time of one hour and 15 minutes.

8 These wastes, when rendered nonhazardous and then subsequently managed in CWA, or CWA-equivalent systems, are not subject to treatment standards. (See 268.1(c)(3)and (4)).

9 These wastes, when rendered nonhazardous and then subsequently injected in a Class I SDWA well, are not subject to treatment standards. (See 148.1(d)).

10 Between August 26, 1996, and August 26, 1997, the treatment standard for this waste may be satisfied by either meeting the constituent concentrations in this table or by treating the waste by the specified technologies: combustion, as defined by the technology code CMBST at 268.42 Table 1 of this Part, for nonwastewaters; and, biodegradation as definded by the technolgy code BIODG, carbon adsorption as defined by the technology code CARBN, chemical oxidation as defined by the technology code CHOXD, or combustion as defined as technology code CMBST at 268.42 Table 1 of this Part, for wastewaters.

11 For these wastes, the definition of CMBST is limited to: (1) combustion units operating under 40 CFR 266, (2) combustion units permitted under 40 CFR Part 264, Subpart O, or (3) combustion units operating under 40 CFR 265, Subpart O, which have obtained a determination of equivalent treatment under 268.42 (b).

Replace 268.42 lead in and (a). Delete (a)(1)&(2)&(3) (retain 268.42(a)Table 1)

268.42 Treatment standards expressed as specified technologies.
Note: For the requirements previously found in this section in Table 2 - Technology-Based Standards By RCRA Waste Code, and Table 3 - Technology-Based Standards for Specific Radioactive Hazardous Mixed Waste, refer to 268.40

(a) The following wastes in the table in 268.40 "Treatment Standards for Hazardous Wastes," for which standards are expressed as a treatment method rather than a concentration level, must be treated using the technology or technologies specified in the table entitled "Technology Codes and Descriptions of Technology-Based Standards" in this section. (revised 12/92; 5/96)

Replace 268.44(a), adding (1)&(2); replace 268.44(d)&(h); add (h)(1) through (5); replace (m); continue to reserve (n); remove (p)

268.44 Variance from a treatment standard.

(a) Based on a petition filed by a generator or treater of hazardous waste, the Administrator may approve a variance from an applicable treatment standard if:

(1) It is not physically possible to treat the waste to the level specified in the treatment standard, or by the method specified as the treatment standard. To show that this is the case, the petitioner must demonstrate that because the physical or chemical properties of the waste differ significantly from waste analyzed in developing the treatment standard, the waste cannot be treated to the specified level or by the specified method; or

(2) It is inappropriate to require the waste to be treated to the level specified in the treatment standard or by the method specified as the treatment standard, even though such treatment is technically possible. To show that this is the case, the petitioner must either demonstrate that:

(i) Treatment to the specified level or by the specified method is technically inappropriate (for example, resulting in combustion of large amounts of mildly contaminated environmental media where the treatment standard is not based on combustion of such media); or

(ii) For remediation waste only, treatment to the specified level or by the specified method is environmentally inappropriate because it would likely discourage aggressive remediation.

(d) After receiving a petition for variance from a treatment standard, the Administrator may request any additional information or samples which he may require to evaluate the petition. Additional copies of the complete petition may be requested as needed to send to affected states and Regional Offices. (amended 11/90)

(e) The Regional Administrator will give public notice in the Federal Register of the intent to approve or deny a petition and provide an opportunity for public comment. The final decision on a variance from a treatment standard will be published in the Federal Register.

(h) Based on a petition filed by a generator or treater of hazardous waste, the Department may approve a site-specific variance from an applicable treatment standard if:

(1) It is not physically possible to treat the waste to the level specified in the treatment standard, or by the method specified as the treatment standard. To show that this is the case, the petitioner must demonstrate that because the physical or chemical properties of the waste differ significantly from waste analyzed in developing the treatment standard, the waste cannot be treated to the specified level or by the specified method; or

(2) It is inappropriate to require the waste to be treated to the level specified in the treatment standard or by the method specified as the treatment standard, even though such treatment is technically possible. To show that this is the case, the petitioner must either demonstrate that:

(i) Treatment to the specified level or by the specified method is technically inappropriate (for example, resulting in combustion of large amounts of mildly contaminated environmental media where the treatment standard is not based on combustion of such media); or

(ii) For remediation waste only, treatment to the specified level or by the specified method is environmentally inappropriate because it would likely discourage aggressive remediation.

(3) For contaminated soil only, treatment to the level or by the method specified in the soil treatment standards would result in concentrations of hazardous constituents that are below (i.e., lower than) the concentrations necessary to minimize short- and long-term threats to human health and the environment. Treatment variances approved under this paragraph must:

(i) At a minimum, impose alternative land disposal restriction treatment standards that, using a reasonable maximum exposure scenario:

(A) For carcinogens, achieve constituent concentrations that result in the total excess risk to an individual exposed over a lifetime generally falling within a range from 10^{-4} to 10^{-6}; and

(B) For constituents with non-carcinogenic effects, achieve constituent concentrations that an individual could be exposed to on a daily basis without appreciable risk of deleterious effect during a lifetime.

(ii) Not consider post-land-disposal controls.

(4) For contaminated soil only, treatment to the level or by the method specified in the soil treatment standards would result in concentrations of hazardous constituents that are below (i.e., lower than) natural background concentrations at the site where the contaminated soil will land disposed.

(5) Public notice and a reasonable opportunity for public comment must be provided before granting or denying a petition.

(m) For all variances, the petitioner must also demonstrate that compliance with any given treatment variance is sufficient to minimize threats to human health and the environment posed by land disposal of the waste. In evaluating this demonstration, the Department and EPA may take into account whether a treatment variance should be approved if the subject waste is to be used in a manner constituting disposal pursuant to 266.20 through 266.23.

(n) [Reserved]

(p) [Removed]

Replace 268.45(d)(3)&(4)

268.45 Treatment standards for hazardous debris. (12/93)

(d) Treatment residuals -

(3) Cyanide-reactive debris. Residue from the treatment of debris that is reactive because of cyanide must meet the treatment standards for D003 in "Treatment Standards for Hazardous Wastes" at 268.40.

(4) Ignitable nonwastewater residue. Ignitable nonwastewater residue containing equal to or greater than 10% total organic carbon is subject to the technology specified in the treatment standard for D001: Ignitable Liquids.

Replace 268.48 Universal Treatment Standards Table, including footnotes

268.48 Universal Treatment Standards

UNIVERSAL TREATMENT STANDARDS NOTE: NA means not applicable			
		Wastewater Standard	Nonwastewater Standard
REGULATED CONSTITUENT Common Name	CAS[1] Number	Concentration in mg/l[2]	Concentration in mg/kg[3] unless noted as "mg/lTCLP"
Organic Constituents			
A2213 [6]	30558-43-1	0.042	1.4
Acenaphthylene	208-96-8	0.059	3.4
Acenaphthene	83-32-9	0.059	3.4
Acetone	67-64-1	0.28	160
Acetonitrile	75-05-8	5.6	38
Acetophenone	96-86-2	0.010	9.7
2-Acetylaminofluorene	53-96-3	0.059	140
Acrolein	107-02-8	0.29	NA
Acrylamide	79-06-1	19	23
Acrylonitrile	107-13-1	0.24	84
Aldicarb sulfone [6]	1646-88-4	0.056	0.28
Aldrin	309-00-2	0.021	0.066
4-Aminobiphenyl	92-67-1	0.13	NA
Aniline	62-53-3	0.81	14
Anthracene	120-12-7	0.059	3.4
Aramite	140-57-8	0.36	NA
alpha-BHC	319-84-6	0.00014	0.066
beta-BHC	319-85-7	0.00014	0.066
delta-BHC	319-86-8	0.023	0.066
gamma-BHC	58-89-9	0.0017	0.066
Barban [6]	101-27-9	0.056	1.4
Bendiocarb [6]	22781-23-3	0.056	1.4
Bendiocarb phenol [6]	22961-82-6	0.056	1.4
Benomyl [6]	17804-35-2	0.056	1.4
Benzene	71-43-2	0.14	10
Benz(a)anthracene	56-55-3	0.059	3.4
Benzal chloride	98-87-3	0.055	6.0
Benzo(b)fluoranthene (difficult to distinguish from benzo(k)fluoranthene)	205-99-2	0.11	6.8
Benzo(k)fluoranthene (difficult to distinguish from benzo(b)fluoranthene)	207-08-9	0.11	6.8
Benzo(g,h,i)perylene	191-24-2	0.0055	1.8
Benzo(a)pyrene	50-32-8	0.061	3.4
Bromodichloromethane	75-27-4	0.35	15
Bromomethane/Methyl bromide	74-83-9	0.11	15
4-Bromophenyl phenyl ether	101-55-3	0.055	15
n-Butyl alcohol	71-36-3	5.6	2.6
Butylate [6]	2008-41-5	0.042	1.4
Butyl benzyl phthalate	85-68-7	0.017	28
2-sec-Butyl-4,6-dinitrophenol/Dinoseb	88-85-7	0.066	2.5
Carbaryl [6]	63-25-2	0.006	0.14
Carbenzadim [6]	10605-21-7	0.056	1.4
Carbofuran [6]	1563-66-2	0.006	0.14
Carbofuran phenol [6]	1563-38-8	0.056	1.4
Carbon disulfide	75-15-0	3.8	4.8 mg/l TCLP
Carbon tetrachloride	56-23-5	0.057	6.0

UNIVERSAL TREATMENT STANDARDS NOTE: NA means not applicable			
		Wastewater Standard	Nonwastewater Standard
REGULATED CONSTITUENT Common Name	CAS[1] Number	Concentration in mg/l[2]	Concentration in mg/kg[3] unless noted as "mg/lTCLP"
Carbosulfan [6]	55285-14-8	0.028	1.4
Chlordane (alpha and gamma isomers)	57-74-9	0.0033	0.26
p-Chloroaniline	106-47-8	0.46	16
Chlorobenzene	108-90-7	0.057	6.0
Chlorobenzilate	510-15-6	0.10	NA
2-Chloro-1,3-butadiene	126-99-8	0.057	0.28
Chlorodibromomethane	124-48-1	0.057	15
Chloroethane	75-00-3	0.27	6.0
bis(2-Chloroethoxy)methane	111-91-1	0.036	7.2
bis(2-Chloroethyl)ether	111-44-4	0.033	6.0
Chloroform	67-66-3	0.046	6.0
bis(2-Chloroisopropyl)ether	39638-32-9	0.055	7.2
p-Chloro-m-cresol	59-50-7	0.018	14
2-Chloroethyl vinyl ether	110-75-8	0.062	NA
Chloromethane/Methyl chloride	74-87-3	0.19	30
2-Chloronaphthalene	91-58-7	0.055	5.6
2-Chlorophenol	95-57-8	0.044	5.7
3-Chloropropylene	107-05-1	0.036	30
Chrysene	218-01-9	0.059	3.4
o-Cresol	95-48-7	0.11	5.6
m-Cresol (difficult to distinguish from p-cresol)	108-39-4	0.77	5.6
p-Cresol (difficult to distinguish from m-cresol)	106-44-5	0.77	5.6
m-Cumenyl methylcarbamate [6]	64-00-6	0.056	1.4
Cyclohexanone	108-94-1	0.36	0.75 mg/l TCLP
o,p'-DDD	53-19-0	0.023	0.087
p,p'-DDD	72-54-8	0.023	0.087
o,p'-DDE	3424-82-6	0.031	0.087
p,p'-DDE	72-55-9	0.031	0.087
o,p'-DDT	789-02-6	0.0039	0.087
p,p'-DDT	50-29-3	0.0039	0.087
Dibenz(a,h)anthracene	53-70-3	0.055	8.2
Dibenz(a,e)pyrene	192-65-4	0.061	NA
1,2-Dibromo-3-chloropropane	96-12-8	0.11	15
1,2-Dibromoethane/Ethylene dibromide	106-93-4	0.028	15
Dibromomethane	74-95-3	0.11	15
m-Dichlorobenzene	541-73-1	0.036	6.0
o-Dichlorobenzene	95-50-1	0.088	6.0
p-Dichlorobenzene	106-46-7	0.090	6.0
Dichlorodifluoromethane	75-71-8	0.23	7.2
1,1-Dichloroethane	75-34-3	0.059	6.0
1,2-Dichloroethane	107-06-2	0.21	6.0
1,1-Dichloroethylene	75-35-4	0.025	6.0
trans-1,2-Dichloroethylene	156-60-5	0.054	30
2,4-Dichlorophenol	120-83-2	0.044	14
2,6-Dichlorophenol	87-65-0	0.044	14
2,4-Dichlorophenoxyacetic acid/2,4-D	94-75-7	0.72	10
1,2-Dichloropropane	78-87-5	0.85	18
cis-1,3-Dichloropropylene	10061-01-5	0.036	18
trans-1,3-Dichloropropylene	10061-02-6	0.036	18
Dieldrin	60-57-1	0.017	0.13
Diethylene glycol, dicarbamate [6]	5952-26-1	0.056	1.4
Diethyl phthalate	84-66-2	0.20	28
p-Dimethylaminoazobenzene	60-11-7	0.13	NA
2-4-Dimethyl phenol	105-67-9	0.036	14
Dimethyl phthalate	131-11-3	0.047	28
Dimetilan [6]	644-64-4	0.056	1.4
Di-n-butyl phthalate	84-74-2	0.057	28

UNIVERSAL TREATMENT STANDARDS NOTE: NA means not applicable			
REGULATED CONSTITUENT Common Name	CAS[1] Number	Wastewater Standard Concentration in mg/l[2]	Nonwastewater Standard Concentration in mg/kg[3] unless noted as "mg/lTCLP"
1,4-Dinitrobenzene	100-25-4	0.32	2.3
4,6-Dinitro-o-cresol	534-52-1	0.28	160
2,4-Dinitrophenol	51-28-5	0.12	160
2,4-Dinitrotoluene	121-14-2	0.32	140
2,6-Dinitrotoluene	606-20-2	0.55	28
Di-n-octyl phthalate	117-84-0	0.017	28
Di-n-propylnitrosamine	621-64-7	0.40	14
1,4-Dioxane	123-91-1	12.0	170
Diphenylamine (difficult to distinguish from diphenylnitrosamine)	122-39-4	0.92	13
Diphenylnitrosamine (difficult to distinguish from diphenylamine)	86-30-6	0.92	13
1,2-Diphenylhydrazine	122-66-7	0.087	NA
Disulfoton	298-04-4	0.017	6.2
Dithiocarbamates (total) [6]	NA	0.028	28
Endosulfan I	959-98-8	0.023	0.066
Endosulfan II	33213-65-9	0.029	0.13
Endosulfan sulfate	1031-07-8	0.029	0.13
Endrin	72-20-8	0.0028	0.13
Endrin aldehyde	7421-93-4	0.025	0.13
EPTC [6]	759-94-4	0.042	1.4
Ethyl acetate	141-78-6	0.34	33
Ethyl benzene	100-41-4	0.057	10
Ethyl cyanide/Propanenitrile	107-12-0	0.24	360
Ethyl ether	60-29-7	0.12	160
bis(2-Ethylhexyl) phthalate	117-81-7	0.28	28
Ethyl methacrylate	97-63-2	0.14	160
Ethylene oxide	75-21-8	0.12	NA
Famphur	52-85-7	0.017	15
Fluoranthene	206-44-0	0.068	3.4
Fluorene	86-73-7	0.059	3.4
Formetanate hydrochloride [6]	23422-53-9	0.056	1.4
Formparanate [6]	17702-57-7	0.056	1.4
Heptachlor	76-44-8	0.0012	0.066
Heptachlor epoxide	1024-57-3	0.016	0.066
Hexachlorobenzene	118-74-1	0.055	10
Hexachlorobutadiene	87-68-3	0.055	5.6
Hexachlorocyclopentadiene	77-47-4	0.057	2.4
HxCDDs (All Hexachlorodibenzo-p-dioxins)	NA	0.000063	0.001
HxCDFs (All Hexachlorodibenzofurans)	NA	0.000063	0.001
Hexachloroethane	67-72-1	0.055	30
Hexachloropropylene	1888-71-7	0.035	30
Indeno (1,2,3-c,d) pyrene	193-39-5	0.0055	3.4
Iodomethane	74-88-4	0.19	65
Isobutyl alcohol	78-83-1	5.6	170
Isodrin	465-73-6	0.021	0.066
Isolan [6]	119-38-0	0.056	1.4
Isosafrole	120-58-1	0.081	2.6
Kepone	143-50-0	0.0011	0.13
Methacrylonitrile	126-98-7	0.24	84
Methanol	67-56-1	5.6	0.75 mg/l TCLP
Methapyrilene	91-80-5	0.081	1.5
Methiocarb [6]	2032-65-7	0.056	1.4
Methomyl [6]	16752-77-5	0.028	0.14
Methoxychlor	72-43-5	0.25	0.18
3-Methylcholanthrene	56-49-5	0.0055	15
4,4-Methylene bis(2-chloroaniline)	101-14-4	0.50	30

UNIVERSAL TREATMENT STANDARDS NOTE: NA means not applicable			
		Wastewater Standard	Nonwastewater Standard
REGULATED CONSTITUENT Common Name	CAS[1] Number	Concentration in mg/l[2]	Concentration in mg/kg[3] unless noted as "mg/lTCLP"
Methylene chloride	75-09-2	0.089	30
Methyl ethyl ketone	78-93-3	0.28	36
Methyl isobutyl ketone	108-10-1	0.14	33
Methyl methacrylate	80-62-6	0.14	160
Methyl methansulfonate	66-27-3	0.018	NA
Methyl parathion	298-00-0	0.014	4.6
Metolcarb [6]	1129-41-5	0.056	1.4
Mexacarbate [6]	315-18-4	0.056	1.4
Molinate [6]	2212-67-1	0.042	1.4
Naphthalene	91-20-3	0.059	5.6
2-Naphthylamine	91-59-8	0.52	NA
o-Nitroaniline	88-74-4	0.27	14
p-Nitroaniline	100-01-6	0.028	28
Nitrobenzene	98-95-3	0.068	14
5-Nitro-o-toluidine	99-55-8	0.32	28
o-Nitrophenol	88-75-5	0.028	13
p-Nitrophenol	100-02-7	0.12	29
N-Nitrosodiethylamine	55-18-5	0.40	28
N-Nitrosodimethylamine	62-75-9	0.40	2.3
N-Nitroso-di-n-butylamine	924-16-3	0.40	17
N-Nitrosomethylethylamine	10595-95-6	0.40	2.3
N-Nitrosomorpholine	59-89-2	0.40	2.3
N-Nitrosopiperidine	100-75-4	0.013	35
N-Nitrosopyrrolidine	930-55-2	0.013	35
Oxamyl [6]	23135-22-0	0.056	0.28
Parathion	56-38-2	0.014	4.6
Total PCBs (sum of all PCB isomers, or all Aroclors)	1336-36-3	0.10	10
Pebulate [6]	1114-71-2	0.042	1.4
Pentachlorobenzene	608-93-5	0.055	10
PeCDDs (All Pentachlorodibenzo-p-dioxins)	NA	0.000063	0.001
PeCDFs (All Pentachlorodibenzofurans)	NA	0.000035	0.001
Pentachloroethane	76-01-7	0.055	6.0
Pentachloronitrobenzene	82-68-8	0.055	4.8
Pentachlorophenol	87-86-5	0.089	7.4
Phenacetin	62-44-2	0.081	16
Phenanthrene	85-01-8	0.059	5.6
Phenol	108-95-2	0.039	6.2
o-Phenylenediamine [6]	95-54-5	0.056	5.6
Phorate	298-02-2	0.021	4.6
Phthalic acid	100-21-0	0.055	28
Phthalic anhydride	85-44-9	0.055	28
Physostigmine [6]	57-47-6	0.056	1.4
Physostigmine salicylate [6]	57-64-7	0.056	1.4
Promecarb [6]	2631-37-0	0.056	1.4
Pronamide	23950-58-5	0.093	1.5
Propham [6]	122-42-9	0.056	1.4
Propoxur [6]	114-26-1	0.056	1.4
Prosulfocarb [6]	52888-80-9	0.042	1.4
Pyrene	129-00-0	0.067	8.2
Pyridine	110-86-1	0.014	16
Safrole	94-59-7	0.081	22
Silvex/2,4,5-TP	93-72-1	0.72	7.9
1,2,4,5-Tetrachlorobenzene	95-94-3	0.055	14
TCDDs (All Tetrachlorodibenzo-p-dioxins)	NA	0.000063	0.001
TCDFs (All Tetrachlorodibenzofurans)	NA	0.000063	0.001
1,1,1,2-Tetrachloroethane	630-20-6	0.057	6.0

UNIVERSAL TREATMENT STANDARDS NOTE: NA means not applicable			
REGULATED CONSTITUENT Common Name	CAS[1] Number	Wastewater Standard Concentration in mg/l[2]	Nonwastewater Standard Concentration in mg/kg[3] unless noted as "mg/lTCLP"
1,1,2,2-Tetrachloroethane	79-34-5	0.057	6.0
Tetrachloroethylene	127-18-4	0.056	6.0
2,3,4,6-Tetrachlorophenol	58-90-2	0.030	7.4
Thiodicarb [6]	59669-26-0	0.019	1.4
Thiophanate-methyl [6]	23564-05-8	0.056	1.4
Tirpate [6]	26419-73-8	0.056	0.28
Toluene	108-88-3	0.080	10
Toxaphene	8001-35-2	0.0095	2.6
Triallate [6]	2303-17-5	0.042	1.4
Tribromomethane/Bromoform	75-25-2	0.63	15
2,4,6-Tribromophenol	118-79-6	0.035	7.4
1,2,4-Trichlorobenzene	120-82-1	0.055	19
1,1,1-Trichloroethane	71-55-6	0.054	6.0
1,1,2-Trichloroethane	79-00-5	0.054	6.0
Trichloroethylene	79-01-6	0.054	6.0
Trichloromonofluoromethane	75-69-4	0.020	30
2,4,5-Trichlorophenol	95-95-4	0.18	7.4
2,4,6-Trichlorophenol	88-06-2	0.035	7.4
2,4,5-Trichlorophenoxyacetic acid/2,4,5-T	93-76-5	0.72	7.9
1,2,3-Trichloropropane	96-18-4	0.85	30
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	0.057	30
Triethylamine [6]	101-44-8	0.081	1.5
tris-(2,3-Dibromopropyl) phosphate	126-72-7	0.11	0.10
Vernolate [6]	1929-77-7	0.042	1.4
Vinyl chloride	75-01-4	0.27	6.0
Xylenes-mixed isomers (sum of o-, m-, and p-xylene concentrations)	1330-20-7	0.32	30
Inorganic Constituents			
Antimony	7440-36-0	1.9	1.15 mg/l TCLP
Arsenic	7440-38-2	1.4	5.0 mg/l TCLP
Barium	7440-39-3	1.2	21 mg/l TCLP
Beryllium	7440-41-7	0.82	1.22 mg/l TCLP
Cadmium	7440-43-9	0.69	0.11 mg/l TCLP
Chromium (Total)	7440-47-3	2.77	0.60 mg/l TCLP
Cyanides (Total)[4]	57-12-5	1.2	590
Cyanides (Amenable)[4]	57-12-5	0.86	30
Fluoride[5]	16984-48-8	35	NA
Lead	7439-92-1	0.69	0.75 mg/l TCLP
Mercury - Nonwastewater from Retort	7439-97-6	NA	0.20 mg/l TCLP
Mercury - All Others	7439-97-6	0.15	0.025 mg/lTCLP
Nickel	7440-02-0	3.98	11. mg/l TCLP
Selenium[7]	7782-49-2	0.82	5.7 mg/l TCLP
Silver	7440-22-4	0.43	0.14 mg/l TCLP
Sulfide[5]	18496-25-8	14	NA
Thallium	7440-28-0	1.4	0.20 mg/l TCLP
Vanadium[5]	7440-62-2	4.3	1.6 mg/l TCLP
Zinc[5]	7440-66-6	2.61	4.3 mg/l TCLP

FOOTNOTES TO TABLE UTS

1 CAS means Chemical Abstract Services. When the waste code and/or regulated constituents are described as a combination of a chemical with it's salts and/or esters, the CAS number is given for the parent compound only.

2 Concentration standards for wastewaters are expressed in mg/l and are based on analysis of composite samples.

3 Except for Metals (EP or TCLP) and Cyanides (Total and Amenable) the nonwastewater treatment standards expressed as a concentration were established, in part, based upon incineration in units operated in accordance with the technical requirements of part 264, subpart O or part 265, subpart O, or based upon combustion in fuel substitution units operating in accordance with applicable technical requirements. A facility may

comply with these treatment standards according to provisions in 268.40(d). All concentration standards for nonwastewaters are based on analysis of grab samples.

4 Both Cyanides (Total) and Cyanides (Amenable) for nonwastewaters are to be analyzed using Method 9010 or 9012, found in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846, as incorporated by reference in 260.11, with a sample size of 10 grams and a distillation time of one hour and 15 minutes.

5 These constituents are not "underlying hazardous constituents" in characteristic wastes, according to the definition at 268.2(i).

6 Between August 26, 1997, and August 26, 1998, these constituents are not "underlying hazardous constituents" as defined at 268.2(i) of this Part.

7 This constituent is not an underlying hazardous constituent as defined at 268.2(i) of this Part because its UTS level is greater than its TC level, thus a treated selenium waste would always be characteristically hazardous, unless it is treated to below its characteristic level.

Add 268.49 Alternative LDR treatment standards for contaminated soil, (a) and table, and (b) through (e)

268.49 Alternative LDR treatment standards for contaminated soil.

(a) Applicability. You must comply with LDRs prior to placing soil that exhibits a characteristic of hazardous waste, or exhibited a characteristic of hazardous waste at the time it was generated, into a land disposal unit. The following chart describes whether you must comply with LDRs prior to placing soil contaminated by listed hazardous waste into a land disposal unit:

If LDRs...	And If LDRs...	And If ...	Then You...
Applied to the listed waste when it contaminated the soil*	apply to the listed waste now		must comply with LDRs
Didn't apply to the listed waste when it contaminated the soil*	apply to the listed waste now	the soil is determined to contain the listed waste when the soil is first generated	must comply with LDRs
didn't apply to the listed waste when it contaminated the soil*	apply to the listed waste now	the soil is determined not to contain the listed waste when the soil is first generated	needn't comply with LDRs
didn't apply to the listed waste when it contaminated the soil*	don't apply to the listed waste now		needn't comply with LDRs
* For dates of LDR applicability, see Part 268 Appendix VII. To determine the date any given listed hazardous waste contaminated any given volume of soil, use the last date any given listed hazardous waste was placed into any given land disposal unit or, in the case of an accidental spill, the date of the spill.			

(b) Prior to land disposal, contaminated soil identified by paragraph (a) of this section as needing to comply with LDRs must be treated according to the applicable treatment standards specified in paragraph (c) of this section or according to the Universal Treatment Standards specified in 268.48 applicable to the contaminating listed hazardous waste and/or the applicable characteristic of hazardous waste if the soil is characteristic. The treatment standards specified in paragraph (c) of this section and the Universal Treatment Standards may be modified through a treatment variance approved in accordance with 268.44.

(c) Treatment standards for contaminated soils. Prior to land disposal, contaminated soil identified by paragraph (a) of this section as needing to comply with LDRs must be treated according to all the standards specified in this paragraph or according to the Universal Treatment Standards specified in 268.48.

(1) All soils. Prior to land disposal, all constituents subject to treatment must be treated as follows:

(A) For non-metals, treatment must achieve 90 percent reduction in total constituent concentrations, except as provided by paragraph (c)(1)(C) of this section.

(B) For metals, treatment must achieve 90 percent reduction in constituent concentrations as measured in leachate from the treated media (tested according to the TCLP) or 90 percent reduction in total constituent concentrations (when a metal removal treatment technology is used), except as provided by paragraph (c)(1)(C) of this section.

(C) When treatment of any constituent subject to treatment to a 90 percent reduction standard would result in a concentration less than 10 times the Universal Treatment Standard for that constituent, treatment to achieve constituent concentrations less than 10 times the universal treatment standard is not required. Universal Treatment Standards are identified in 268.48 Table UTS.

(2) Soils that exhibit the characteristic of ignitability, corrosivity or reactivity. In addition to the treatment required by paragraph (c)(1) of this section, prior to land disposal, soils that exhibit the characteristic of ignitability, corrosivity, or reactivity must be treated to eliminate these characteristics.

(3) Soils that contain nonanalyzable constituents. In addition to the treatment requirements of paragraphs (c)(1) and (2) of this section, prior to land disposal, the following treatment is required for soils that contain nonanalyzable constituents:

(A) For soil that also contains analyzable constituents, treatment of those analyzable constituents to the levels specified in paragraphs (c)(1) and (2) of this section; or,

(B) For soil that contains only nonanalyzable constituents, treatment by the method specified in 268.42 for the waste contained in the soil.

(d) Constituents subject to treatment. When applying the soil treatment standards in paragraph (c) of this section, constituents subject to treatment are any constituents listed in 268.48, Table UTS - Universal Treatment Standards that are reasonably expected to be present in any given volume of contaminated soil, except fluoride, selenium, sulfides, vanadium and zinc, and are present at concentrations greater than ten times the universal treatment standard.

(e) Management of treatment residuals. Treatment residuals from treating contaminated soil identified by paragraph (a) of this section as needing to comply with LDRs must be managed as follows:

(1) Soil residuals are subject to the treatment standards of this section;

(2) Non-soil residuals are subject to:

(A) For soils contaminated by listed hazardous waste, the RCRA Subtitle C standards applicable to the listed hazardous waste; and

(B) For soils that exhibit a characteristic of hazardous waste, if the non-soil residual also exhibits a characteristic of hazardous waste, the treatment standards applicable to the characteristic hazardous waste.

Replace 270.14(b)(5), incorporating note

270.14 Contents of Part B: General requirements

(b) (5) A copy of the general inspection schedule required by 264.15(b) Include where applicable, as part of the inspection schedule, specific requirements in 264.174, 245.193(i), 264.195, 264.226, 264.254, 264.273, 264.303, 264.602, 264.1033, 264.1052, 264.1053, 264,1058, 264.1084, 264.1085, 264.1086, and 264.1088.

Add 270.42(j)

270.42 (j) Combustion facility changes to meet part 63 MACT standards; procedures apply to hazardous waste combustion facility permit modifications requested under appendix I of 270.42, section L(9).

(1) Facility owners or operators must comply with the Notification of Intent to Comply (NIC) requirements of 40 CFR 63.1211 before a permit modification can be requested under this section.

(2) If the Director does not approve or deny the request within 90 days of receiving it, the request shall be deemed approved. The Director may at his or her discretion, extend this 90 day deadline one time for up to 30 days by notifying the facility owner or operator.

Add L.9. to Appendix I to 270.42, regarding Incinerators, Boilers and Industrial Furnaces "Classification of permit Modification" in alphanumeric order

Appendix I to 270.42 - Classification of Permit Modification - Insert in alphanumeric order

Modifications	Class
L. Incinerators, Boilers, and Industrial Furnaces:	
9. Technology Changes Needed to meet Standards under 40 CFR part 63 (Subpart EEE - National Emission Standards for Hazardous Air Pollutants from Hazardous Waste Combustors), provided the procedures of 270.42(i) are followed.	[1]1

Replace 270.62(d)

270.62 Hazardous waste incinerator permits (added 5/93).

(d) For the purpose of determining feasibility of compliance with the performance standards of 264.343 and of determining adequate operating conditions under 264.345, the applicant for a permit for an existing hazardous waste incinerator must prepare and submit a trial burn plan and perform a trial burn in accordance with 270.19(b) and paragraphs (b)(2) through (b)(9) of this section or, instead, submit other information as specified in 270.19(c). Applicants submitting information under 270.19(a) are exempt from compliance with 264.343 and 264.345 and, therefore, are exempt from the requirement to conduct a trial burn. Applicants who submit trial burn plans and receive approval before submission of a permit application must complete the trial burn and submit the results, specified in paragraph (b)(6), with part B of the permit application. If completion of this process conflicts with the date set for submission of the part B application, the applicant must contact the Department to establish a later date for submission of the part B application or the trial burn results. Trial burn results must be submitted prior to issuance of the permit. When the applicant submits a trial burn plan with part B of the permit application, the Department will specify a time period prior to permit issuance in which the trial burn must be conducted and the results submitted. (11/90, 12/92, 12/93, 9/98)

Replace 270.72(a)(6); add (b)(8)

270.72 Changes during interim status.

(a) Except as provided in paragraph (b), the owner or operator of an interim status facility may make the following changes at the facility: (amended 11/90)

(6) Addition of newly regulated units for the treatment, storage, or disposal of hazardous waste if the owner or operator submits a revised part A permit application on or before the date on which the unit becomes subject to the new requirements.

(b) Except as specifically allowed under this paragraph, changes listed under paragraph (a) of this section may not be made if they amount to reconstruction of the hazardous waste management facility. Reconstruction occurs when the capital investment in the changes to the facility exceeds 50 percent of the capital cost of a comparable entirely new hazardous waste management facility. If all other requirements are met, the following changes may be made even if they amount to a reconstruction: (amended 11/90)

(8) Changes necessary to comply with standards under 40 CFR part 63, Subpart EEE - National Emission Standards for Hazardous Air Pollutants From Hazardous Waste Combustors.

Statement of Need and Reasonableness:

This Statement of Need and Reasonableness complies with S. C. Code Ann. Section 1-23-115(C)(1)-(3) and (9)-(11). This amendment facilitates compliance with federal law.

DESCRIPTION OF AMENDMENT TO REGULATION 61-79 Hazardous Waste Management Regulations: The purpose of this amendment is to meet compliance requirements of the United States Environmental Protection Agency (EPA), which promulgates amendments to 40 CFR 124, 260 through 266, 268, 270, and 273 throughout each calendar year. Recent federal amendments include clarification, guidance and technical amendments regarding organic air emission standards for tanks, surface impoundments and containers ("CC"); Land Disposal Regulations Phase IV, second half, to include Soil Treatment Standards; the RCRA Comparable/Syngas Fuel Exclusion; and the addition of waste codes for organobromine production wastes. These rules and other amendments were published in the Federal Register between July 1, 1997, and June 30, 1998.

The Department has also made corrections to previous amendments. These amendments maintain conformity with federal requirements and ensure compliance with federal standards. No preliminary assessment report, fiscal impact statement, nor legislative review of this amendment is required.

Legal Authority for this amendment is S.C. Code Ann. Section 44-56-30, the Hazardous Waste Management Act, to facilitate the Resource Conservation and Recovery Act of 1976 as amended.

Plan for Implementation: Upon publication in the State Register as a final regulation, amended regulations will be provided to the regulated community at cost through the Department's Freedom of Information Office.

DETERMINATION OF NEED AND REASONABLENESS OF THE PROPOSED REGULATION BASED ON ALL FACTORS HEREIN AND EXPECTED BENEFITS: The EPA promulgates amendments to 40 CFR 124, 260 through 266, 268, 270, and 273 throughout each calendar year. Recent amendments include clarification, guidance and technical amendments regarding organic air emission standards for tanks, surface impoundments and containers ("CC"); Land Disposal Regulations Phase IV, second half, to include Soil Treatment Standards; the RCRA Comparable/Syngas Fuel Exclusion; and the addition of waste codes for organobromine production wastes. These rules and other amendments were published in the Federal Register between July 1, 1997, and June 30, 1998.

The Department has made corrections to previous amendments. These amendments will maintain conformity with federal requirements and ensure compliance with federal standards. No preliminary assessment report, fiscal impact statement, nor legislative review of this amendment will be required.

DETERMINATION OF COSTS AND BENEFITS: Each amendment reflects a federal provision. EPA estimated costs and benefits of the various amendments are summarized below. The summaries are taken from the cited Federal Register notices. A significant regulatory action is defined as one that (5/26/98 in 63 FR 28630) "is likely to result in a rule that may: (1) have an annual effect on the economy of $100 million or more or adversely affect, in a material way, the economy, productivity, competition, jobs, the environment, public health or safety, or state local, or tribal governments or communities; (2) create serious inconsistency or otherwise interfere with an action taken or planned by another agency; (3) materially alter the budgetary impact of entitlements...; or (4) raise novel legal or policy issues arising out of legal mandates..."

- Clarification, guidance and technical amendments regarding organic air emission standards for tanks, surface impoundments and containers ("CC")

Although the original organic air emission standards were considered significant, the amendments clarify the rule, provide more compliance alternatives, make certain regulatory provisions more lenient, and correct structural problems with the drafting of some sections. The Agency and the Office of Management and Budgets have determined this amendment to be non-significant (12/8/97 in 62 FR 64655&56) .-

Land Disposal Regulations Phase IV, second half, to include Soil Treatment Standards

EPA analyzed compliance costs and economic impacts for the newly identified wastes affected by this rule, as well as media contaminated with these wastes (5/26/98 in 63 FR 28630). In addition, the analysis addressed the cost savings associated with the new soil treatment standards. Newly identified mineral processing wastes include 118 mineral processing wastes identified as potentially characteristically hazardous, metal wastes, and treatment standards for contaminated media. EPA estimates the total costs of the final rule would save $6 million annually, thus not economically significant.

- RCRA Comparable/Syngas Fuel Exclusion

EPA estimated (6/19/98 in 63 FR 33818&9) that the rule will result in national annual cost savings to generators ranging from $11 to $36 million net annually, thus non-significant. Blending and combustion facilities are estimated to experience reduced receipts for managing hazardous wastes coupled with the costs of replacing these materials with more expensive substitutes.

- The addition of waste codes for organobromine production wastes.EPA estimated (5/4/98 in 63 FR 24623) that this rule is estimated to have an annualized incremental cost of $48,000 per year, a fraction of the $100 million annual cost which is judged "significant." Furthermore two firms in southern Arkansas account for 95 percent of the organobromine chemicals produced in the U.S.

UNCERTAINTIES OF ESTIMATES: No known uncertainties.

EFFECT ON ENVIRONMENT AND PUBLIC HEALTH: The overall effects of these rules are expected to be beneficial to the public health and environment and also reflect federal provisions in State law.

DETRIMENTAL EFFECT ON THE ENVIRONMENT AND PUBLIC HEALTH IF THE REGULATION IS NOT IMPLEMENTED: The State's authority to implement federal requirements, which are believed to be beneficial to the public health and environment, would be compromised if these amendments are not adopted in South Carolina.