HAZARDOUS MATERIALS MANAGEMENT PLAN

April 2007

Annual Control Program Monitoring for
the Regulation and Recovery of Hazardous Substances

Unit of Development No. 16
Palm Beach Park of Commerce/Florida Research Park

Prepared for:
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APPENDICES

1. PURPOSE AND SCOPE OF THE HAZARDOUS MATERIALS MANAGEMENT PLAN

The purpose of this Hazardous Materials Management Plan (HMMP), as required of the developer/property owner, by Palm Beach County Resolution No. R-2005-1419.1, is to address the handling and disposal of any toxic or hazardous materials, of potential hazard to the Palm Beach Park of Commerce/Florida Research Park (Park) surface and ground water, in accordance with Florida Administrative Code (F.A.C.) Rule 62-730, and any biomedical waste in accordance with F.A.C. Rule 64E-16. This HMMP shall be implemented by the Northern Palm Beach County Improvement District (NPBCID) by the Environmental Liaison, Environmental Quality, Inc. (EL) upon its approval by The Palm Beach County Health Department (PBCHD) and The Florida Department of Environmental Protection (DEP). The EL position is required by Palm Beach County Resolution No. R-2005-1419, Exhibit C, Paragraph 9, as further detailed in Section 11 of the HMMP. **This HMMP supersedes the Park "Control Program for Regulation and Recovery of Hazardous Substances", last updated October 2001. The Control Program for Regulation and Recovery of Hazardous Substances document has been essentially merged into this HMMP.** The requirements of this document are to be enforced through the powers granted to NPBCID. Ultimate authority for the regulation of these uses shall be pursuant to the applicable State and Federal laws dealing with the transportation, use, handling, generation, and storage of hazardous substances under appropriate State and Federal statutes. Individual lot owners/tenants in the Park are responsible for compliance with the HMMP.

The HMMP addresses the following major areas:

- Requires disclosure by all owners or tenants of the property of all hazardous materials or waste proposed to be stored, used, or generated on premises;
- Requires the inspection of all premises storing, using, or generating hazardous materials or waste prior to the commencement of operation, and periodically thereafter, to assure that proper facilities and procedures are in place to properly manage hazardous materials projected to occur;
- Provides minimum standards and procedures for storage, prevention of spills, containment of spills, and transfer and disposal of such materials and waste;
- Provides for proper maintenance, operation, and monitoring of hazardous materials and waste management systems including spill and hazardous materials and waste containment systems;
- Details actions and procedures to be followed in case of spills or other accidents involving hazardous materials or waste;

- Guarantees financial and physical responsibility for spill clean up;
- Includes a program for continued monitoring of surface water and groundwater on the site; and
- Incorporates the HMMP into the development by including it as part of any lease or sale agreement provided to tenants and owners that will use, handle, store, display or generate hazardous materials or waste. The annual environmental inspection by the EL is performed utilizing the Environmental Liaison Inspection Form (ELI Form), attached hereto as Appendix C and incorporated into the requirements of this HMMP. A copy of the approved HMMP for the Park is being provided by the EL to the contractors and all owners, tenants and operators of businesses within the project who are now required to comply with the applicable provisions of the HMMP.

2. HAZARDOUS MATERIALS OR WASTES DISCLOSURES

To be consistent with the scope and requirements of the previously approved Control Program for Regulation and Recovery of Hazardous Substances, the terms "Hazardous Materials" or "Hazardous Substances" used in this document means any substance listed in the Environmental Protection Agency's (EPA's) designated list of "Extremely Hazardous Substances (EHS's) and their Threshold Planning Quantities (TPQ's)", updated periodically and attached hereto as Appendix A. Appendix A contains the most recent list (revised as of July 1, 2006) of EHS's (located in the United States Code of Federal Regulations, Title 40, Part 355.5) published via the United States Government Printing Office (GPO) website http://www.gpoaccess.gov/cfr . It is the responsibility of the user of this HMMP to determine, at the time of use, whether the EHS's as listed in Appendix A contain the most up to date information available.

"Hazardous Wastes" are defined by the United States Environmental Protection Agency (EPA) in the United States Code of Federal Regulations (CFR Title 40, Part 261). The EPA hazardous waste regulations may be referenced via the internet by utilizing the GPO website address above. The State of Florida DEP has adopted their own hazardous waste regulations (F.A.C. Chapter 62-730) and these regulations are included in this HMMP in Appendix B. The State of Florida hazardous waste regulations may also be accessed via the DEP Website http://www.dep.state.fl.us . It is the responsibility of the user of this HMMP to determine, at the time of use, whether the material enclosed in Appendix B is the most up to date information available.

The HMMP requires disclosure by all owners or tenants of the Park property of all hazardous materials or waste proposed to be stored, used, or generated on premises. Each new and existing owner will be given a copy of this HMMP. The distribution of the HMMP copies will be handled and documented by the EL.

Prior to the issuance of its Certificate of Occupancy (CO), each new owner or tenant will be required to submit to the EL a list of all hazardous materials or waste proposed to be stored, used, or generated on their premises. In addition, existing Park owners and tenants will also be required to submit to the EL a list of all hazardous materials or waste currently stored, used, or generated on their premises. It will be the responsibility of the owner or tenant to notify the EL in writing of any changes to the list of hazardous materials or wastes stored, used, or generated on the premises. The EL will maintain the records required under this disclosure at their offices.

3. PREMISES INSPECTIONS

Prior to the commencement of operation, an inspection of all premises storing, using, or generating hazardous materials or waste is required, and periodically thereafter, to assure that proper facilities and procedures are in place to properly manage hazardous materials projected to occur. The inspections are accomplished by the EL utilizing the ELI Form, incorporated into this agreement as Appendix C. An Annual Report will be issued by the EL and include all ELI Forms completed for the previous year. A copy of the Annual Report will be distributed to Palm Beach County Planning, Zoning and Building Department (PBCPZB); South Florida Water Management District (SFWMD); DEP; Treasure Coast Regional Planning Council (TCRPC); Northern Palm Beach County Improvement District (NPBCID); and the Palm Beach Park of Commerce Association, Inc. (the "POA).

A closure inspection of owners/tenants premises that are ceasing operations within the Park will also be performed by the EL. The purpose of the closure inspection is to perform a visual reconnaissance of the property to ensure that obvious environmental issues (such as remaining waste products) are taken care of prior to the cessation of operations. To the extent practical, environmental documents, such as waste manifests, should also be requested from the departing owner/tenant and maintained by the EL for future reference. **Important Note: It is the responsibility of all owners/tenants within the Park to notify the EL in the event of an inspection by any environmental regulatory agency (e.g. FDEP).**

4. SPILL PREVENTION, CONTAINMENT AND DISPOSAL

The HMMP requires minimum standards and procedures for storage, prevention of spills, containment of spills, and transfer and disposal of such materials and waste.

Minimum standards are described below; however, it is the ultimate responsibility of the owner/tenant to ensure that they are in compliance with all applicable environmental laws and regulations that may pertain to them.

Containment systems and monitoring programs at sites within the Park and facilities using, storing, or handling hazardous substances and wastes shall be subject to the review and approval, as may be required, by regulatory authorities such as the DEP, SFWMD, and PBCHD prior to said use, handling, or storing.

- Loading, off-loading and storage areas for such hazardous substances shall be curbed and provided with compatible impervious bases, free of cracks and gaps, to fully contain, leaks, spills, accumulated precipitation and toxic runoff from potential fire fighting operations, until collected material is neutralized and/or removed. The loading and off-loading areas shall have curbs on all sides except the side connecting the driveway area and the loading/off loading dock portions of those areas shall be roofed. The loading and off-loading area shall be depressed and shall provide a gradient away from the driveway area to an impervious sump located within the curbed area.
- Storage areas for hazardous substances shall be fully enclosed with controlled access only from inside buildings where use will occur; or such storage areas shall be located wholly within the depressed loading and off-loading areas with access to adjacent buildings for use via self-contained passageways. All substances shall be stored in areas which are conspicuously identified by sign and restricted by access to undesignated personnel so as to minimize any possibility of access by untrained persons. Said material shall be stored in accordance with applicable fire regulations and any applicable local ordinances.
- Tanks used for the storage of hazardous substances and fuels, with the exception of retail gasoline service stations, will be located above ground and shall have sufficient shell strength to assure against collapse or rupture. They will also have over-fill controls and be constructed over impervious surfaces and within an enclosed facility capable of retaining any accidental spillage or leakage. Suitable detection and alarm systems shall also be provided. Industrial waste holding ponds shall be prohibited.
- Disposal of hazardous substances shall be in accordance with applicable Florida State, Federal and local rules and regulations. On-site disposal of hazardous waste or substances is prohibited. Such substances shall not be disposed of into septic tanks or the surface water management system. Industrial waste treatment shall be provided in accordance with applicable DEP standards and standards adopted by the Park EL.
- Handling and disposal of hazardous wastes shall be in accordance with State of Florida hazardous waste regulations, F.A.C. Chapter 62-730, attached hereto as Appendix B. Biomedical Waste handling and disposal shall be in accordance with State of Florida Biomedical Waste regulations, F.A.C. Chapter 64E-16, enclosed herein as Appendix D.

5. SYSTEM MAINTENANCE, OPERATION AND MONITORING

The HMMP requires the proper maintenance, operation, and monitoring of hazardous materials and waste management systems including spills, hazardous materials and waste containment systems.

Minimum standards are described below; however, it is the ultimate responsibility of the owner/tenant to ensure that they are in compliance with all applicable environmental laws and regulations that may pertain to them.

- Records

  Facilities which use/handle or store hazardous substances shall maintain records indicating the type and quantity of hazardous substances in each shipment and storage location in the facility. Copies of such records shall be provided to the EL within 24 hours of the shipment. All records will be retained on-site for a minimum of three years unless a longer period is required by appropriate regulatory agencies.

- Monitoring System

  If a groundwater monitoring system is required for a facility with hazardous substances by a regulatory agency, then the location and construction details of all monitoring devices and sampling points shall be readily available for use by the regulatory agencies in the event some enforcement action with regard to the handling of hazardous substances may become necessary. Data results from the monitoring shall be routinely submitted to the EL and forwarded to the applicable regulatory agencies.

  As an additional check on the Park water quality, a Surface Water Monitoring Stations and Sampling Program shall be established by NPBCID as required by, or in consultation with, SFWMD.

6. SPILL RESPONSE

The HMMP details the actions and procedures to be followed in case of spills or other accidents involving hazardous materials or waste.

Minimum standards are described below; however, it is the ultimate responsibility of the owner/tenant to ensure that they are in compliance with all applicable environmental laws and regulations that may pertain to them.

The Park EL shall develop a procedure for informing the appropriate local, state and federal regulatory agencies of any event resulting in the environmental release of a

hazardous substance exceeding a reportable quantity within the Park. The EL shall make this procedure available to each facility using hazardous substances (see Appendix E: "WHAT DO I DO IN THE EVENT OF A SPILL OR LEAK?"). **It is important to note that releases other than hazardous substances (such as petroleum products and hazardous wastes) may require additional reporting requirements. A summary of release reporting requirements can be found on FDEP's website: http://www.dep.state.fl.us/law/ber/FederalRelease.htm. It is the responsibility of the owner/tenant to know, before a spill occurs, what their reporting requirements are.**

In all cases, any release, explosion, fire or any incident equal to or exceeding a Reportable Quantity (RQ) of any hazardous substance (refer to lists of hazardous and extremely hazardous substances and their RQ's in Appendix F) shall be reported immediately as follows:

FIRST CALL 911 THEN...

1. Florida State Warning Point (State Emergency Response Commission): 1-800-320-0519 or 1-850-413-9911
2. National Response Center: 1-800-424-8802
3. Local Emergency Planning Committee (Treasure Coast Regional Planning Council): 1-772-221-4060
4. The Northern Palm Beach County Improvement District: Ms. Tanya Quickel, 1-561-624-7830) and
5. The Park Environmental Liaison, Environmental Quality Inc.: 561-575-6778, 561-714-4172 or 561-670-1599. **Do <u>not</u> call the POA**.

Other emergency contact numbers that may be useful are as follows:

- ✓ Palm Beach County Fire Station (Jupiter Farms): 561-748-4730
- ✓ Florida Department of Environmental Protection, Emergency Response Office: 954-958-5575
- ✓ Florida Department of Environmental Protection, Southeast Florida District Office: 561-681-6600
- ✓ Palm Beach County Health Department, Hazardous Waste Section: 561-355-3022
- ✓ Poison Control Center: 1-800-222-1222
- ✓ US Environmental Protection Agency, Region IV: 1-800-241-1754

- ✓ OSHA: 1-800-321-6742

Important Note: The EL is to be notified in the event of ANY SPILL, regardless of whether or not it exceeds a Reportable Quantity.

Each facility utilizing hazardous substances shall designate an emergency coordinator and develop clearly defined notification procedures including 24 hour telephone numbers for responsible personnel and procedures for admittance of emergency vehicles and personnel for response to contamination clean up activities. A copy of said notification procedures shall be provided to the EL. Threshold limits for contamination shall be established and adequate reports required for notification of regulatory agencies as to the completion of the clean up activities.

7. FINANCIAL AND PHYSICAL RESPONSIBILITY FOR SPILL CLEAN UP

The HMMP requires guaranteed financial and physical responsibility for spill cleanup. The NPBCID shall fully fund and maintain a $20,000 cash fund for the cost of immediate response to contamination requiring immediate action for its removal. This fund shall remain in effect as long as any hazardous substances remain on-site and shall be available to the DEP on an immediate basis for their use in response to contamination of ground and surface waters.

Industrial facilities utilizing hazardous substances shall also be required to provide financial responsibility acceptable to the DEP to assist in clean up activities associated with their individual use of hazardous substances.

8. MONITORING OF SURFACE WATER AND GROUNDWATER

The HMMP requires a program for continued monitoring of surface water and groundwater at the Park.

As an additional check on the Park water quality, Surface Water and Groundwater Monitoring Stations and Sampling Programs shall be established by NPBCID as required by, or in consultation with, SFWMD.

9. HAZARDOUS MATERIALS MANAGEMENT PLAN DISTRIBUTION

The HMMP will be incorporated into the development and included as part of any lease or sale agreement provided to tenants and owners in the Park that will use, handle, store, display or generate hazardous materials or waste. A copy of the approved HMMP

for the Park shall be provided to the contractors and all owners, tenants and operators of businesses within the project and they shall be required to comply with the applicable provisions of the HMMP.

The distribution network as described above shall be coordinated and documented by the Park EL.

10. ACTIVITIES PROHIBITED BY REGULATORY APPROVALS

The following land uses are prohibited by stipulation with the regulatory agencies by recorded covenants and with the approval by Palm Beach County:

- Steel mills
- Paper mills
- Fertilizer manufacturing
- Pesticide manufacturing

In addition, a minimum of two thousand feet (2000') setback shall be required from any residential development for the following uses:

- Brewery
- Asphalt/concrete mixing and products, manufacturing and storage
- Chemical manufacturing
- Bulk storage of gas and oil

No nuclear reactor shall be allowed on any site within the Florida Research Park PIPD.

11. FACILITY TRAINING OF OPERATION PERSONNEL

The EL has been appointed to satisfy Condition 19 of the Palm Beach County Resolution No, R-82-120.

The duties of this position are as follows:

- Monitor development in the Park for compliance with this HMMP

- Prepare an educational and monitoring program to be coordinated with each owner and/or tenant of the Park and with the appropriate regulatory agency.
- Prepare an annual report describing the HMMP and submit report to the Palm Beach County Planning, Zoning and Building Department; the South Florida Water Management District, the Department of Environmental Protection; the Treasure Coast Regional Planning Council; the Northern Palm Beach County Improvement District; and Palm Beach Park of Commerce Association, Inc.
- Report immediately any violations of conditions of approval or any potentially hazardous conditions or practices of any tenant to the Palm Beach County Zoning Division, Florida Department of Environmental Protection and other appropriate regulatory agencies.

NOTE:

Personnel involved in the handling of hazardous substances in any facility in the Park shall be trained by competent instructors in the handling, use and control of the hazardous substances utilized at the facility. Such instructions shall be given to all new personnel and a quarterly refresher course shall be presented for all operating personnel. Included in the program shall be procedures for the handling of the hazardous substances, emergency equipment and systems and notification procedures in the event of groundwater contamination or other potential exposure of hazardous substances to off-site facilities. The Park's EL shall be notified of the refresher courses and shall be made aware of the time and place of any training activities, the list of attendees and provided an advance copy of all course materials.

12.FACILITY REGISTRATION

As a condition of the EL's approval, each facility using hazardous substances shall register with the Environmental Liaison, the Florida Emergency Response Commission, Palm Beach County Division of Emergency Management and Northern Palm Beach County Improvement District and any other regulatory agency requiring registration, the amount, type, description and source of any hazardous substances utilized by the operation, as well as details of storage, containment, disposal, and emergency procedures for the handling of hazardous substances. A compilation of these registrations shall be kept by the EL, up dated on an annual basis or more frequently as required by the appropriate regulatory agencies, and furnished to the appropriate regulatory agencies under the general permits for the Palm Beach Park of Commerce. Local emergency authorities (e.g. police, fire department, hospital) shall also be provided this information along with a plan of the property indicating entrances, evacuation routes, normal employee work stations and a list of properties, hazards, and location associated with the storage or use of hazardous substances on site.

Appendix A

40 CFR Part 355, Appendix A

United States Environmental Protection Agency

The List of Extremely Hazardous Substances and Their Threshold Planning Quantities

[Code of Federal Regulations]
[Title 40, Volume 27]
[Revised as of July 1, 2006]
From the U.S. Government Printing Office via GPO Access
[CITE: 40CFR355.50]

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TITLE 40--PROTECTION OF ENVIRONMENT

CHAPTER I--ENVIRONMENTAL PROTECTION AGENCY (CONTINUED)

PART 355_EMERGENCY PLANNING AND NOTIFICATION--Table of Contents

(a) Civil penalties. Any person who fails to comply with the requirements of Sec. 355.40 shall be subject to civil penalties of up to $25,000 for each violation in accordance with section 325(b)(1) of the Act.

(b) Civil penalties for continuing violations. Any person who fails to comply with the requirements of Sec. 355.40 shall be subject to civil penalties of up to $25,000 for each day during which the violation continues, in accordance with section 325(b)(2) of the Act. In the case of a second or subsequent violation, any such person may be subject to civil penalties of up to $75,000 for each day the violation continues, in accordance with section 325(b)(2) of the Act.

(c) Criminal penalties. Any person who knowingly and willfully fails to provide notice in accordance with Sec. 355.40 shall, upon conviction, be fined not more than $25,000 or imprisoned for not more than two (2) years, or both (or, in the case of a second or subsequent conviction, shall be fined not more than $50,000 or imprisoned for not more than five (5) years, or both) in accordance with section 325(b)(4) of the Act.

Appendix A to Part 355--The List of Extremely Hazardous Substances and Their Threshold Planning Quantities

[Alphabetical Order]

CAS No.	Chemical name	Notes	Reportable quantity * (pounds)	Threshold planning quantity (pounds)
75-86-5	Acetone Cyanohydrin.	.....	10	1,000
1752-30-3	Acetone Thiosemicarbazide.	.....	1,000	1,000/10,000
107-02-8	Acrolein.....	.....	1	500
79-06-1	Acrylamide.....	l	5,000	1,000/10,000
107-13-1	Acrylonitrile.....	l	100	10,000
814-68-6	Acrylyl Chloride..	h	100	100
111-69-3	Adiponitrile.....	l	1,000	1,000

116-06-3	Aldicarb.....	c	1	100/10,000
309-00-2	Aldrin.....	.....	1	500/10,000
107-18-6	Allyl Alcohol.....	.....	100	1,000
107-11-9	Allylamine.....	.....	500	500
20859-73-8	Aluminum Phosphide	b	100	500
54-62-6	Aminopterin.....	.....	500	500/10,000
78-53-5	Amiton.....	.....	500	500
3734-97-2	Amiton Oxalate....	.....	100	100/10,000
7664-41-7	Ammonia.....	l	100	500
300-62-9	Amphetamine.....	.....	1,000	1,000
62-53-3	Aniline.....	l	5,000	1,000
88-05-1	Aniline, 2,4,6-Trimethyl-.	.....	500	500
7783-70-2	Antimony Pentafluoride.	.....	500	500
1397-94-0	Antimycin A.....	c	1,000	1,000/10,000
86-88-4	ANTU.....	.....	100	500/10,000
1303-28-2	Arsenic Pentoxide.	.....	1	100/10,000
1327-53-3	Arsenous Oxide....	h	1	100/10,000
7784-34-1	Arsenous Trichloride.	.....	1	500
7784-42-1	Arsine.....	.....	100	100
2642-71-9	Azinphos-Ethyl....	.....	100	100/10,000
86-50-0	Azinphos-Methyl...	.....	1	10/10,000
98-87-3	Benzal Chloride...	.....	5,000	500
98-16-8	Benzenamine, 3-(Trifluoromethyl)-.	.....	500	500
100-14-1	Benzene, 1-(Chloromethyl)-4-Nitro-.	.....	500	500/10,000
98-05-5	Benzenearsonic Acid.	.....	10	10/10,000
3615-21-2	Benzimidazole, 4,5-Dichloro-2-(Trifluoromethyl)-.	g	500	500/10,000
98-07-7	Benzotrichloride..	.....	10	100
100-44-7	Benzyl Chloride...	.....	100	500
140-29-4	Benzyl Cyanide....	h	500	500

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15271-41-7	Bicyclo[2.2.1]Heptane-2-Carbonitrile, 5-Chloro-6-((((Methylamino)Carbonyl)Oxy)Imino)-, (1s-(1-alpha,2-beta,4-alpha,5-alpha,6E))-.	.....	500	500/10,000
534-07-6	Bis(Chloromethyl)	.....	10	10/10,000

	Ketone.			
4044-65-9	Bitoscanate.....	.....	500	500/10,000
10294-34-5	Boron Trichloride.	.....	500	500
7637-07-2	Boron Trifluoride.	.....	500	500
353-42-4	Boron Trifluoride Compound With Methyl Ether (1:1).	.....	1,000	1,000
28772-56-7	Bromadiolone.....	.....	100	100/10,000
7726-95-6	Bromine.....	l	500	500
1306-19-0	Cadmium Oxide.....	.....	100	100/10,000
2223-93-0	Cadmium Stearate..	c	1,000	1,000/10,000
7778-44-1	Calcium Arsenate..	.....	1	500/10,000
8001-35-2	Camphechlor.....	.....	1	500/10,000
56-25-7	Cantharidin.....	.....	100	100/10,000
51-83-2	Carbachol Chloride	.....	500	500/10,000
26419-73-8	Carbamic Acid, Methyl-, O-(((2,4-Dimethyl-1, 3-Dithiolan-2-yl)Methylene)Amino)-.	d	1	100/10,000
1563-66-2	Carbofuran.....	.....	10	10/10,000
75-15-0	Carbon Disulfide..	l	100	10,000
786-19-6	Carbophenothion...	.....	500	500
57-74-9	Chlordane.....	.....	1	1,000
470-90-6	Chlorfenvinfos....	.....	500	500
7782-50-5	Chlorine.....	.....	10	100
24934-91-6	Chlormephos.....	.....	500	500
999-81-5	Chlormequat Chloride.	h	100	100/10,000
79-11-8	Chloroacetic Acid.	.....	100	100/10,000
107-07-3	Chloroethanol.....	.....	500	500
627-11-2	Chloroethyl Chloroformate.	.....	1,000	1,000
67-66-3	Chloroform.....	l	10	10,000
542-88-1	Chloromethyl Ether	h	10	100
107-30-2	Chloromethyl Methyl Ether.	c	10	100
3691-35-8	Chlorophacinone...	.....	100	100/10,000
1982-47-4	Chloroxuron.....	.....	500	500/10,000
21923-23-9	Chlorthiophos.....	h	500	500
10025-73-7	Chromic Chloride..	.....	1	1/10,000
62207-76-5	Cobalt, ((2,2'-(1,2-Ethanediylbis (Nitrilomethylidyne)) Bis(6-Fluorophenolato)) (2-)-N,N',O,O')-.	.....	100	100/10,000
10210-68-1	Cobalt Carbonyl...	h	10	10/10,000
64-86-8	Colchicine.....	h	10	10/10,000
56-72-4	Coumaphos.....	.....	10	100/10,000
5836-29-3	Coumatetralyl.....	.....	500	500/10,000
95-48-7	Cresol, o-.....	.....	100	1,000/10,000

535-89-7	Crimidine.....	.....	100	100/10,000
4170-30-3	Crotonaldehyde....	.....	100	1,000
123-73-9	Crotonaldehyde, (E)-.	.....	100	1,000
506-68-3	Cyanogen Bromide..	.....	1,000	500/10,000
506-78-5	Cyanogen Iodide...	.....	1,000	1,000/10,000
2636-26-2	Cyanophos.....	.....	1,000	1,000
675-14-9	Cyanuric Fluoride.	.....	100	100
66-81-9	Cycloheximide.....	.....	100	100/10,000
108-91-8	Cyclohexylamine...	l	10,000	10,000
17702-41-9	Decaborane(14)....	.....	500	500/10,000
8065-48-3	Demeton.....	.....	500	500
919-86-8	Demeton-S-Methyl..	.....	500	500
10311-84-9	Dialifor.....	.....	100	100/10,000
19287-45-7	Diborane.....	.....	100	100
111-44-4	Dichloroethyl ether.	.....	10	10,000
149-74-6	Dichloromethylphenylsilane.	.....	1,000	1,000
62-73-7	Dichlorvos.....	.....	10	1,000
141-66-2	Dicrotophos.....	.....	100	100
1464-53-5	Diepoxybutane.....	.....	10	500
814-49-3	Diethyl Chlorophosphate.	h	500	500
71-63-6	Digitoxin.....	c	100	100/10,000
2238-07-5	Diglycidyl Ether..	.....	1,000	1,000
20830-75-5	Digoxin.....	h	10	10/10,000
115-26-4	Dimefox.....	.....	500	500
60-51-5	Dimethoate.....	.....	10	500/10,000
2524-03-0	Dimethyl Phosphorochloridothioate.	.....	500	500
77-78-1	Dimethyl sulfate..	.....	100	500
75-78-5	Dimethyldichlorosilane.	h	500	500

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57-14-7	Dimethylhydrazine.	.....	10	1,000
99-98-9	Dimethyl-p-Phenylenediamine.	.....	10	10/10,000
644-64-4	Dimetilan.....	d	1	500/10,000
534-52-1	Dinitrocresol.....	.....	10	10/10,000
88-85-7	Dinoseb.....	.....	1,000	100/10,000
1420-07-1	Dinoterb.....	.....	500	500/10,000
78-34-2	Dioxathion.....	.....	500	500
82-66-6	Diphacinone.....	.....	10	10/10,000
152-16-9	Diphosphoramide, Octamethyl-.	.....	100	100
298-04-4	Disulfoton.....	.....	1	500
514-73-8	Dithiazanine Iodide.	.....	500	500/10,000
541-53-7	Dithiobiuret.....	.....	100	100/10,000
316-42-7	Emetine,	h	1	1/10,000

	Dihydrochloride.			
115-29-7	Endosulfan.....	.....	1	10/10,000
2778-04-3	Endothion.....	.....	500	500/10,000
72-20-8	Endrin.....	.....	1	500/10,000
106-89-8	Epichlorohydrin...	l	100	1,000
2104-64-5	EPN.....	.....	100	100/10,000
50-14-6	Ergocalciferol....	c	1,000	1,000/10,000
379-79-3	Ergotamine Tartrate.	.....	500	500/10,000
1622-32-8	Ethanesulfonyl Chloride, 2-Chloro-.	.....	500	500
10140-87-1	Ethanol, 1,2-Dichloro-, Acetate.	.....	1,000	1,000
563-12-2	Ethion.....	.....	10	1,000
13194-48-4	Ethoprophos.....	.....	1,000	1,000
538-07-8	Ethylbis(2-Chloroethyl)Amine.	h	500	500
371-62-0	Ethylene Fluorohydrin.	c, h	10	10
75-21-8	Ethylene Oxide....	l	10	1,000
107-15-3	Ethylenediamine...	.....	5,000	10,000
151-56-4	Ethyleneimine.....	.....	1	500
542-90-5	Ethylthiocyanate..	.....	10,000	10,000
22224-92-6	Fenamiphos.....	.....	10	10/10,000
115-90-2	Fensulfothion.....	h	500	500
4301-50-2	Fluenetil.....	.....	100	100/10,000
7782-41-4	Fluorine.....	k	10	500
640-19-7	Fluoroacetamide...	j	100	100/10,000
144-49-0	Fluoroacetic Acid.	.....	10	10/10,000
359-06-8	Fluoroacetyl Chloride.	c	10	10
51-21-8	Fluorouracil.....	.....	500	500/10,000
944-22-9	Fonofos.....	.....	500	500
50-00-0	Formaldehyde.....	l	100	500
107-16-4	Formaldehyde Cyanohydrin.	h	1,000	1,000
23422-53-9	Formetanate Hydrochloride.	d, h	1	500/10,000
2540-82-1	Formothion.....	.....	100	100
17702-57-7	Formparanate.....	d	1	100/10,000
21548-32-3	Fosthietan.....	.....	500	500
3878-19-1	Fuberidazole.....	.....	100	100/10,000
110-00-9	Furan.....	.....	100	500
13450-90-3	Gallium Trichloride.	.....	500	500/10,000
77-47-4	Hexachlorocyclopentadiene.	h	10	100
4835-11-4	Hexamethylenediamine, N,N'-Dibutyl-.	.....	500	500
302-01-2	Hydrazine.....	.....	1	1,000
74-90-8	Hydrocyanic Acid..	.....	10	100
7647-01-0	Hydrogen Chloride (gas only).	l	5,000	500

7664-39-3	Hydrogen Fluoride.	.....	100	100
7722-84-1	Hydrogen Peroxide (Conc 52%).	l	1,000	1,000
7783-07-5	Hydrogen Selenide.	.....	10	10
7783-06-4	Hydrogen Sulfide..	l	100	500
123-31-9	Hydroquinone.....	l	100	500/10,000
13463-40-6	Iron, Pentacarbonyl-.	.....	100	100
297-78-9	Isobenzan.....	.....	100	100/10,000
78-82-0	Isobutyronitrile..	h	1,000	1,000
102-36-3	Isocyanic Acid, 3,4-Dichlorophenyl Ester.	.....	500	500/10,000
465-73-6	Isodrin.....	.....	1	100/10,000
55-91-4	Isofluorphate.....	c	100	100
4098-71-9	Isophorone Diisocyanate..	.....	100	500
108-23-6	Isopropyl Chloroformate.	.....	1,000	1,000
119-38-0	Isopropylmethylpyrazolyl Dimethylcarbamate.	d	1	500
78-97-7	Lactonitrile.....	.....	1,000	1,000
21609-90-5	Leptophos.....	.....	500	500/10,000
541-25-3	Lewisite.....	c, h	10	10
58-89-9	Lindane.....	.....	1	1,000/10,000

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7580-67-8	Lithium Hydride...	b	100	100
109-77-3	Malononitrile.....	.....	1,000	500/10,000
12108-13-3	Manganese, Tricarbonyl Methylcyclopentadienyl.	h	100	100
51-75-2	Mechlorethamine...	c	10	10
950-10-7	Mephosfolan.....	.....	500	500
1600-27-7	Mercuric Acetate..	.....	500	500/10,000
7487-94-7	Mercuric Chloride.	.....	500	500/10,000
21908-53-2	Mercuric Oxide....	.....	500	500/10,000
10476-95-6	Methacrolein Diacetate.	.....	1,000	1,000
760-93-0	Methacrylic Anhydride.	.....	500	500
126-98-7	Methacrylonitrile.	h	1,000	500
920-46-7	Methacryloyl Chloride.	.....	100	100
30674-80-7	Methacryloyloxyethyl Isocyanate.	h	100	100
10265-92-6	Methamidophos.....	.....	100	100/10,000
558-25-8	Methanesulfonyl Fluoride.	.....	1,000	1,000

950-37-8	Methidathion.....	.....	500	500/10,000
2032-65-7	Methiocarb.....	.....	10	500/10,000
16752-77-5	Methomyl.....	h	100	500/10,000
151-38-2	Methoxyethylmercuric Acetate.	.....	500	500/10,000
80-63-7	Methyl 2-Chloroacrylate.	.....	500	500
74-83-9	Methyl Bromide....	l	1,000	1,000
79-22-1	Methyl Chloroformate.	h	1,000	500
60-34-4	Methyl Hydrazine..	.....	10	500
624-83-9	Methyl Isocyanate.	.....	10	500
556-61-6	Methyl Isothiocyanate.	b	500	500
74-93-1	Methyl Mercaptan..	l	100	500
3735-23-7	Methyl Phenkapton.	.....	500	500
676-97-1	Methyl Phosphonic Dichloride.	b	100	100
556-64-9	Methyl Thiocyanate	.....	10,000	10,000
78-94-4	Methyl Vinyl Ketone.	.....	10	10
502-39-6	Methylmercuric Dicyanamide.	.....	500	500/10,000
75-79-6	Methyltrichlorosilane.	h	500	500
1129-41-5	Metolcarb.....	d	1	100/10,000
7786-34-7	Mevinphos.....	.....	10	500
315-18-4	Mexacarbate.....	.....	1,000	500/10,000
50-07-7	Mitomycin C.....	.....	10	500/10,000
6923-22-4	Monocrotophos.....	.....	10	10/10,000
2763-96-4	Muscimol.....	.....	1,000	500/10,000
505-60-2	Mustard Gas.....	h	500	500
13463-39-3	Nickel Carbonyl...	.....	10	1
54-11-5	Nicotine.....	c	100	100
65-30-5	Nicotine Sulfate..	.....	100	100/10,000
7697-37-2	Nitric Acid.....	.....	1,000	1,000
10102-43-9	Nitric Oxide.....	c	10	100
98-95-3	Nitrobenzene.....	l	1,000	10,000
1122-60-7	Nitrocyclohexane..	.....	500	500
10102-44-0	Nitrogen Dioxide..	.....	10	100
62-75-9	Nitrosodimethylamine.	h	10	1,000
991-42-4	Norbormide.....	.....	100	100/10,000
0	Organorhodium Complex (PMN-82-147).	.....	10	10/10,000
630-60-4	Ouabain.....	c	100	100/10,000
23135-22-0	Oxamyl.....	d	1	100/10,000
78-71-7	Oxetane, 3,3-Bis(Chloromethyl)-.	.....	500	500
2497-07-6	Oxydisulfoton.....	h	500	500
10028-15-6	Ozone.....	.....	100	100
1910-42-5	Paraquat Dichloride.	.....	10	10/10,000

2074-50-2	Paraquat Methosulfate.	.....	10	10/10,000
56-38-2	Parathion.....	c	10	100
298-00-0	Parathion-Methyl..	c	100	100/10,000
12002-03-8	Paris Green.....	.....	1	500/10,000
19624-22-7	Pentaborane.....	.....	500	500
2570-26-5	Pentadecylamine...	.....	100	100/10,000
79-21-0	Peracetic Acid....	.....	500	500
594-42-3	Perchloromethylmercaptan.	.....	100	500
108-95-2	Phenol.....	.....	1,000	500/10,000
4418-66-0	Phenol, 2,2'-Thiobis(4-Chloro-6-Methyl)-.	.....	100	100/10,000
64-00-6	Phenol, 3-(1-Methylethyl)-, Methylcarbamate.	d	1	500/10,000
58-36-6	Phenoxarsine, 10,10'-Oxydi-.	.....	500	500/10,000
696-28-6	Phenyl Dichloroarsine.	h	1	500
59-88-1	Phenylhydrazine Hydrochloride.	.....	1,000	1,000/10,000
62-38-4	Phenylmercury Acetate.	.....	100	500/10,000

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2097-19-0	Phenylsilatrane...	h	100	100/10,000
103-85-5	Phenylthiourea....	.....	100	100/10,000
298-02-2	Phorate.....	.....	10	10
4104-14-7	Phosacetim.....	.....	100	100/10,000
947-02-4	Phosfolan.....	.....	100	100/10,000
75-44-5	Phosgene.....	l	10	10
13171-21-6	Phosphamidon.....	.....	100	100
7803-51-2	Phosphine.....	.....	100	500
2703-13-1	Phosphonothioic Acid, Methyl-, O-Ethyl O-(4-(Methylthio) Phenyl) Ester.	.....	500	500
50782-69-9	Phosphonothioic Acid, Methyl-, S-(2-(Bis(1Methylethyl)Amino)Ethyl) O-Ethyl Ester.	.....	100	100
2665-30-7	Phosphonothioic Acid, Methyl-, O-(4-Nitrophenyl) O-Phenyl Ester.	.....	500	500
3254-63-5	Phosphoric Acid, Dimethyl 4-(Methylthio)Pheny	.....	500	500

	l Ester.			
2587-90-8	Phosphorothioic Acid, O,O-Dimethyl-S-(2-Methylthio) Ethyl Ester.	c, g	500	500
7723-14-0	Phosphorus.....	b, h	1	100
10025-87-3	Phosphorus Oxychloride.	.....	1,000	500
10026-13-8	Phosphorus Pentachloride.	b	500	500
7719-12-2	Phosphorus Trichloride.	.....	1,000	1,000
57-47-6	Physostigmine.....	d	1	100/10,000
57-64-7	Physostigmine, Salicylate (1:1).	d	1	100/10,000
124-87-8	Picrotoxin.....	.....	500	500/10,000
110-89-4	Piperidine.....	.....	1,000	1,000
23505-41-1	Pirimifos-Ethyl...	.....	1,000	1,000
10124-50-2	Potassium Arsenite	.....	1	500/10,000
151-50-8	Potassium Cyanide.	b	10	100
506-61-6	Potassium Silver Cyanide.	b	1	500
2631-37-0	Promecarb.....	d, h	1	500/10,000
106-96-7	Propargyl Bromide.	.....	10	10
57-57-8	Propiolactone, Beta-.	.....	10	500
107-12-0	Propionitrile.....	.....	10	500
542-76-7	Propionitrile, 3-Chloro-.	.....	1,000	1,000
70-69-9	Propiophenone, 4-Amino-.	g	100	100/10,000
109-61-5	Propyl Chloroformate.	.....	500	500
75-56-9	Propylene Oxide...	l	100	10,000
75-55-8	Propyleneimine....	.....	1	10,000
2275-18-5	Prothoate.....	.....	100	100/10,000
129-00-0	Pyrene.....	c	5,000	1,000/10,000
140-76-1	Pyridine, 2-Methyl-5-Vinyl-.	.....	500	500
504-24-5	Pyridine, 4-Amino-	h	1,000	500/10,000
1124-33-0	Pyridine, 4-Nitro-,l-Oxide.	.....	500	500/10,000
53558-25-1	Pyriminil.....	h	100	100/10,000
14167-18-1	Salcomine.....	.....	500	500/10,000
107-44-8	Sarin.....	h	10	10
7783-00-8	Selenious Acid....	.....	10	1,000/10,000
7791-23-3	Selenium Oxychloride.	.....	500	500
563-41-7	Semicarbazide Hydrochloride.	.....	1,000	1,000/10,000
3037-72-7	Silane, (4-Aminobutyl)Diethoxymethyl-.	.....	1,000	1,000
7631-89-2	Sodium Arsenate...	.....	1	1,000/10,000

7784-46-5	Sodium Arsenite...	.....	1	500/10,000
26628-22-8	Sodium Azide (Na(N3)).	b	1,000	500
124-65-2	Sodium Cacodylate.	.....	100	100/10,000
143-33-9	Sodium Cyanide (Na(CN)).	b	10	100
62-74-8	Sodium Fluoroacetate.	.....	10	10/10,000
13410-01-0	Sodium Selenate...	.....	100	100/10,000
10102-18-8	Sodium Selenite...	h	100	100/10,000
10102-20-2	Sodium Tellurite..	.....	500	500/10,000
900-95-8	Stannane, Acetoxytriphenyl-.	g	500	500/10,000
57-24-9	Strychnine.....	c	10	100/10,000
60-41-3	Strychnine Sulfate	.....	10	100/10,000
3689-24-5	Sulfotep.....	.....	100	500
3569-57-1	Sulfoxide, 3-Chloropropyl Octyl.	.....	500	500
7446-09-5	Sulfur Dioxide....	1	500	500
7783-60-0	Sulfur Tetrafluoride.	.....	100	100
7446-11-9	Sulfur Trioxide...	b	100	100
7664-93-9	Sulfuric Acid.....	.....	1,000	1,000
77-81-6	Tabun.....	c, h	10	10
7783-80-4	Tellurium Hexafluoride.	k	100	100
107-49-3	TEPP.....	.....	10	100
13071-79-9	Terbufos.....	h	100	100
78-00-2	Tetraethyllead....	c	10	100

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597-64-8	Tetraethyltin.....	c	100	100
75-74-1	Tetramethyllead...	c, 1	100	100
509-14-8	Tetranitromethane.	.....	10	500
10031-59-1	Thallium Sulfate..	h	100	100/10,000
6533-73-9	Thallous Carbonate	c, h	100	100/10,000
7791-12-0	Thallous Chloride.	c, h	100	100/10,000
2757-18-8	Thallous Malonate.	c, h	100	100/10,000
7446-18-6	Thallous Sulfate..	.....	100	100/10,000
2231-57-4	Thiocarbazide.....	.....	1,000	1,000/10,000
39196-18-4	Thiofanox.....	.....	100	100/10,000
297-97-2	Thionazin.....	.....	100	500
108-98-5	Thiophenol.....	.....	100	500
79-19-6	Thiosemicarbazide.	.....	100	100/10,000
5344-82-1	Thiourea, (2-Chlorophenyl)-.	.....	100	100/10,000
614-78-8	Thiourea, (2-Methylphenyl)-.	.....	500	500/10,000
7550-45-0	Titanium Tetrachloride.	.....	1,000	100
584-84-9	Toluene 2,4-Diisocyanate.	.....	100	500

91-08-7	Toluene 2,6-Diisocyanate.	.....		100	100
110-57-6	Trans-1,4-Dichlorobutene.	.....		500	500
1031-47-6	Triamiphos.....	.....		500	500/10,000
24017-47-8	Triazofos.....	.....		500	500
76-02-8	Trichloroacetyl Chloride.	.....		500	500
115-21-9	Trichloroethylsilane.	h		500	500
327-98-0	Trichloronate.....	k		500	500
98-13-5	Trichlorophenylsilane.	h		500	500
1558-25-4	Trichloro(Chloromethyl)Silane.	.....		100	100
27137-85-5	Trichloro(Dichlorophenyl) Silane.	.....		500	500
998-30-1	Triethoxysilane...	.....		500	500
75-77-4	Trimethylchlorosilane.	.....		1,000	1,000
824-11-3	Trimethylolpropane Phosphite.	h		100	100/10,000
1066-45-1	Trimethyltin Chloride.	.....		500	500/10,000
639-58-7	Triphenyltin Chloride.	.....		500	500/10,000
555-77-1	Tris(2-Chloroethyl)Amine.	h		100	100
2001-95-8	Valinomycin.....	c		1,000	1,000/10,000
1314-62-1	Vanadium Pentoxide	.....		1,000	100/10,000
108-05-4	Vinyl Acetate Monomer.	1		5,000	1,000
81-81-2	Warfarin.....	.....		100	500/10,000
129-06-6	Warfarin Sodium...	h		100	100/10,000
28347-13-9	Xylylene Dichloride.	.....		100	100/10,000
58270-08-9	Zinc, Dichloro(4,4-Dimethyl-5((((Methylamino) Carbonyl) Oxy)Imino)Pentanenitrile)-, (T-4)-.	.....		100	100/10,000
1314-84-7	Zinc Phosphide....	b		100	500

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* Only the statutory or final RQ is shown. For more information, see 40 CFR table 302.4.

Notes:

a This chemical does not meet acute toxicity criteria. Its TPQ is set at 10,000 pounds.

b This material is a reactive solid. The TPQ does not default to 10,000 pounds for non-powder, non-molten, nonsolution form.

c The calculated TPQ changed after technical review as described in the technical support document.

d Indicates that the RQ is subject to change when the assessment of potential carcinogenicity and/or other toxicity is completed.

e Statutory reportable quantity for purposes of notification under SARA sect 304(a)(2).
f [Reserved]
g New chemicals added that were not part of the original list of 402 substances.
h Revised TPQ based on new or re-evaluated toxicity data.
j TPQ is revised to its calculated value and does not change due to technical review as in proposed rule.
k The TPQ was revised after proposal due to calculation error.
l Chemicals on the original list that do not meet toxicity criteria but because of their high production volume and recognized toxicity are considered chemicals of concern (``Other chemicals'').

[61 FR 20479, May 7, 1996, as amended at 68 FR 52984, Sept. 8, 2003; 69 FR 68815, Nov. 26, 2004]

Appendix B to Part 355--The List of Extremely Hazardous Substances and Their Threshold Planning Quantities

[CAS Number Order]

CAS No.	Chemical name	Notes	Reportable quantity * (pounds)	Threshold planning quantity (pounds)
0	Organorhodium Complex (PMN-82-147).	.....	10	10/10,000
50-00-0	Formaldehyde.....	l	100	500
50-07-7	Mitomycin C.....	.....	10	500/10,000

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50-14-6	Ergocalciferol....	c	1,000	1,000/10,000
51-21-8	Fluorouracil.....	.....	500	500/10,000
51-75-2	Mechlorethaminec..	c	10	10
51-83-2	Carbachol Chloride	.....	500	500/10,000
54-11-5	Nicotine.....	c	100	100
54-62-6	Aminopterin.....	.....	500	500/10,000
55-91-4	Isofluorphate.....	c	100	100
56-25-7	Cantharidin.....	.....	100	100/10,000
56-38-2	Parathion.....	c	10	100
56-72-4	Coumaphos.....	.....	10	100/10,000
57-14-7	Dimethylhydrazine.	.....	10	1,000
57-24-9	Strychnine.....	c	10	100/10,000
57-47-6	Physostigmine.....	d	1	100/10,000
57-57-8	Propiolactone, Beta-.	.....	10	500
57-64-7	Physostigmine, Salicylate (1:1).	d	1	100/10,000
57-74-9	Chlordane.....	.....	1	1,000
58-36-6	Phenoxarsine,	.....	500	500/10,000

	10,10'-Oxydi-.			
58-89-9	Lindane.....	.....	1	1,000/10,000
59-88-1	Phenylhydrazine Hydrochloride.	.....	1,000	1,000/10,000
60-34-4	Methyl Hydrazine..	.....	10	500
60-41-3	Strychnine sulfate	.....	10	100/10,000
60-51-5	Dimethoate.....	.....	10	500/10,000
62-38-4	Phenylmercury Acetate.	.....	100	500/10,000
62-53-3	Aniline.....	l	5,000	1,000
62-73-7	Dichlorvos.....	.....	10	1,000
62-74-8	Sodium Fluoroacetate.	.....	10	10/10,000
62-75-9	Nitrosodimethylamine.	h	10	1,000
64-00-6	Phenol, 3-(1-Methylethyl)-, Methylcarbamate.	d	1	500/10,000
64-86-8	Colchicine.....	h	10	10/10,000
65-30-5	Nicotine sulfate..	.....	100	100/10,000
66-81-9	Cycloheximide.....	.....	100	100/10,000
67-66-3	Chloroform.....	l	10	10,000
70-69-9	Propiophenone, 4-Amino-.	g	100	100/10,000
71-63-6	Digitoxin.....	c	100	100/10,000
72-20-8	Endrin.....	.....	1	500/10,000
74-83-9	Methyl Bromide....	l	1,000	1,000
74-90-8	Hydrocyanic Acid..	.....	10	100
74-93-1	Methyl Mercaptan..	l	100	500
75-15-0	Carbon Disulfide..	l	100	10,000
75-21-8	Ethylene Oxide....	l	10	1,000
75-44-5	Phosgene.....	l	10	10
75-55-8	Propyleneimine....	.....	1	10,000
75-56-9	Propylene Oxide...	l	100	10,000
75-74-1	Tetramethyllead...	c, l	100	100
75-77-4	Trimethylchlorosilane.	.....	1,000	1,000
75-78-5	Dimethyldichlorosilane.	h	500	500
75-79-6	Methyltrichlorosilane.	h	500	500
75-86-5	Acetone Cyanohydrin.	.....	10	1,000
76-02-8	Trichloroacetyl Chloride.	.....	500	500
77-47-4	Hexachlorocyclopentadiene.	h	10	100
77-78-1	Dimethyl Sulfate..	.....	100	500
77-81-6	Tabun.....	c, h	10	10
78-00-2	Tetraethyllead....	c	10	100
78-34-2	Dioxathion.....	.....	500	500
78-53-5	Amiton.....	.....	500	500
78-71-7	Oxetane, 3,3-Bis(Chloromethyl)-.	.....	500	500

78-82-0	Isobutyronitrile..	h	1,000	1,000
78-94-4	Methyl Vinyl Ketone.	.....	10	10
78-97-7	Lactonitrile.....	.....	1,000	1,000
79-06-1	Acrylamide.....	l	5,000	1,000/10,000
79-11-8	Chloroacetic Acid.	.....	100	100/10,000
79-19-6	Thiosemicarbazide.	.....	100	100/10,000
79-21-0	Peracetic Acid....	.....	500	500
79-22-1	Methyl Chloroformate.	h	1,000	500
80-63-7	Methyl 2-Chloroacrylate.	.....	500	500
81-81-2	Warfarin.....	.....	100	500/10,000
82-66-6	Diphacinone.....	.....	10	10/10,000
86-50-0	Azinphos-Methyl...	.....	1	10/10,000
86-88-4	ANTU.....	.....	100	500/10,000
88-05-1	Aniline, 2,4,6-Trimethyl-.	.....	500	500
88-85-7	Dinoseb.....	.....	1,000	100/10,000

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91-08-7	Toluene 2,6-Diisocyanate.	.....	100	100
95-48-7	Cresol, o-.....	.....	100	1,000/10,000
98-05-5	Benzenearsonic Acid.	.....	10	10/10,000
98-07-7	Benzotrichloride..	.....	10	100
98-13-5	Trichlorophenylsilane.	h	500	500
98-16-8	Benzenamine, 3-(Trifluoromethyl)-.	.....	500	500
98-87-3	Benzal Chloride...	.....	5,000	500
98-95-3	Nitrobenzene.....	l	1,000	10,000
99-98-9	Dimethyl-p-Phenylenediamine.	.....	10	10/10,000
100-14-1	Benzene, 1-(Chloromethyl)-4-Nitro-.	.....	500	500/10,000
100-44-7	Benzyl Chloride...	.....	100	500
102-36-3	Isocyanic Acid, 3,4-Dichlorophenyl Ester.	.....	500	500/10,000
103-85-5	Phenylthiourea....	.....	100	100/10,000
106-89-8	Epichlorohydrin...	l	100	1,000
106-96-7	Propargyl Bromide.	.....	10	10
107-02-8	Acrolein.....	.....	1	500
107-07-3	Chloroethanol.....	.....	500	500
107-11-9	Allylamine.....	.....	500	500
107-12-0	Propionitrile.....	.....	10	500
107-13-1	Acrylonitrile.....	l	100	10,000
107-15-3	Ethylenediamine...	.....	5,000	10,000

107-16-4	Formaldehyde Cyanohydrin.	h	1,000	1,000
107-18-6	Allyl Alcohol.....	.....	100	1,000
107-30-2	Chloromethyl Methyl Ether.	c	10	100
107-44-8	Sarin.....	h	10	10
107-49-3	TEPP.....	.....	10	100
108-05-4	Vinyl Acetate Monomer.	l	5,000	1,000
108-23-6	Isopropyl Chloroformate.	.....	1,000	1,000
108-91-8	Cyclohexylamine...	l	10,000	10,000
108-95-2	Phenol.....	.....	1,000	500/10,000
108-98-5	Thiophenol.....	.....	100	500
109-61-5	Propyl Chloroformate.	.....	500	500
109-77-3	Malononitrile.....	.....	1,000	500/10,000
110-00-9	Furan.....	.....	100	500
110-57-6	Trans-1,4-Dichlorobutene.	.....	500	500
110-89-4	Piperidine.....	.....	1,000	1,000
111-44-4	Dichloroethyl Ether.	.....	10	10,000
111-69-3	Adiponitrile.....	l	1,000	1,000
115-21-9	Trichloroethylsilane.	h	500	500
115-26-4	Dimefox.....	.....	500	500
115-29-7	Endosulfan.....	.....	1	10/10,000
115-90-2	Fensulfothion.....	h	500	500
116-06-3	Aldicarb.....	c	1	100/10,000
119-38-0	Isopropylmethylpyrazolyl Dimethylcarbamate.	d	1	500
123-31-9	Hydroquinone.....	l	100	500/10,000
123-73-9	Crotonaldehyde, (E)-.	.....	100	1,000
124-65-2	Sodium Cacodylate.	.....	100	100/10,000
124-87-8	Picrotoxin.....	.....	500	500/10,000
126-98-7	Methacrylonitrile.	h	1,000	500
129-00-0	Pyrene.....	c	5,000	1,000/10,000
129-06-6	Warfarin Sodium...	h	100	100/10,000
140-29-4	Benzyl Cyanide....	h	500	500
140-76-1	Pyridine, 2-Methyl-5-Vinyl-.	.....	500	500
141-66-2	Dicrotophos.....	.....	100	100
143-33-9	Sodium Cyanide (Na(CN)).	b	10	100
144-49-0	Fluoroacetic Acid.	.....	10	10/10,000
149-74-6	Dichloromethylphenylsilane.	.....	1,000	1,000
151-38-2	Methoxyethylmercuric Acetate.	.....	500	500/10,000
151-50-8	Potassium Cyanide.	b	10	100
151-56-4	Ethyleneimine.....	.....	1	500
152-16-9	Diphosphoramide,	.....	100	100

	Octamethyl-.			
297-78-9	Isobenzan.....	.....	100	100/10,000
297-97-2	Thionazin.....	.....	100	500
298-00-0	Parathion-Methyl..	c	100	100/10,000
298-02-2	Phorate.....	.....	10	10
298-04-4	Disulfoton.....	.....	1	500
300-62-9	Amphetamine.....	.....	1,000	1,000
302-01-2	Hydrazine.....	.....	1	1,000
309-00-2	Aldrin.....	.....	1	500/10,000
315-18-4	Mexacarbate.....	.....	1,000	500/10,000
316-42-7	Emetine, Dihydrochloride.	h	1	1/10,000

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327-98-0	Trichloronate.....	k	500	500
353-42-4	Boron Trifluoride Compound With Methyl Ether (1:1).	.....	1,000	1,000
359-06-8	Fluoroacetyl Chloride.	c	10	10
371-62-0	Ethylene Fluorohydrin.	c, h	10	10
379-79-3	Ergotamine Tartrate.	.....	500	500/10,000
465-73-6	Isodrin.....	.....	1	100/10,000
470-90-6	Chlorfenvinfos....	.....	500	500
502-39-6	Methylmercuric Dicyanamide.	.....	500	500/10,000
504-24-5	Pyridine, 4-Amino-	h	1,000	500/10,000
505-60-2	Mustard Gas.....	h	500	500
506-61-6	Potassium Silver Cyanide.	b	1	500
506-68-3	Cyanogen Bromide..	.....	1,000	500/10,000
506-78-5	Cyanogen Iodide...	.....	1,000	1,000/10,000
509-14-8	Tetranitromethane.	.....	10	500
514-73-8	Dithiazanine Iodide.	.....	500	500/10,000
534-07-6	Bis(Chloromethyl) Ketone.	.....	10	10/10,000
534-52-1	Dinitrocresol.....	.....	10	10/10,000
535-89-7	Crimidine.....	.....	100	100/10,000
538-07-8	Ethylbis(2-Chloroethyl)Amine.	h	500	500
541-25-3	Lewisite.....	c, h	10	10
541-53-7	Dithiobiuret.....	.....	100	100/10,000
542-76-7	Propionitrile, 3-Chloro-.	.....	1,000	1,000
542-88-1	Chloromethyl Ether	h	10	100
542-90-5	Ethylthiocyanate..	.....	10,000	10,000
555-77-1	Tris(2-Chloroethyl)Amine.	h	100	100
556-61-6	Methyl	b	500	500

	Isothiocyanate.			
556-64-9	Methyl Thiocyanate	.....	10,000	10,000
558-25-8	Methanesulfonyl Fluoride.	.....	1,000	1,000
563-12-2	Ethion.....	.....	10	1,000
563-41-7	Semicarbazide Hydrochloride.	.....	1,000	1,000/10,000
584-84-9	Toluene 2,4- Diisocyanate.	.....	100	500
594-42-3	Perchloromethylmer captan.	.....	100	500
597-64-8	Tetraethyltin.....	c	100	100
614-78-8	Thiourea, (2- Methylphenyl)-.	.....	500	500/10,000
624-83-9	Methyl Isocyanate.	.....	10	500
627-11-2	Chloroethyl Chloroformate.	.....	1,000	1,000
630-60-4	Ouabain.....	c	100	100/10,000
639-58-7	Triphenyltin Chloride.	.....	500	500/10,000
640-19-7	Fluoroacetamide...	j	100	100/10,000
644-64-4	Dimetilan.....	d	1	500/10,000
675-14-9	Cyanuric Fluoride.	.....	100	100
676-97-1	Methyl Phosphonic Dichloride.	b	100	100
696-28-6	Phenyl Dichloroarsine.	h	1	500
760-93-0	Methacrylic Anhydride.	.....	500	500
786-19-6	Carbophenothion...	.....	500	500
814-49-3	Diethyl Chlorophosphate.	h	500	500
814-68-6	Acrylyl Chloride..	h	100	100
824-11-3	Trimethylolpropane Phosphite.	h	100	100/10,000
900-95-8	Stannane, Acetoxytriphenyl-.	g	500	500/10,000
919-86-8	Demeton-S-Methyl..	.....	500	500
920-46-7	Methacryloyl Chloride.	.....	100	100
944-22-9	Fonofos.....	.....	500	500
947-02-4	Phosfolan.....	.....	100	100/10,000
950-10-7	Mephosfolan.....	.....	500	500
950-37-8	Methidathion.....	.....	500	500/10,000
991-42-4	Norbormide.....	.....	100	100/10,000
998-30-1	Triethoxysilane...	.....	500	500
999-81-5	Chlormequat Chloride.	h	100	100/10,000
1031-47-6	Triamiphos.....	.....	500	500/10,000
1066-45-1	Trimethyltin Chloride.	.....	500	500/10,000
1122-60-7	Nitrocyclohexane..	.....	500	500
1124-33-0	Pyridine, 4-Nitro- ,1-Oxide.	.....	500	500/10,000
1129-41-5	Metolcarb.....	d	1	100/10,000

1303-28-2	Arsenic Pentoxide.	.....	1	100/10,000
1306-19-0	Cadmium Oxide.....	.....	100	100/10,000
1314-62-1	Vanadium Pentoxide	.....	1,000	100/10,000
1314-84-7	Zinc Phosphide....	b	100	500
1327-53-3	Arsenous Oxide....	h	1	100/10,000
1397-94-0	Antimycin A.....	c	1,000	1,000/10,000
1420-07-1	Dinoterb.....	.....	500	500/10,000
1464-53-5	Diepoxybutane.....	.....	10	500

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1558-25-4	Trichloro(Chloromethyl)Silane.	.....	100	100
1563-66-2	Carbofuran.....	.....	10	10/10,000
1600-27-7	Mercuric Acetate..	.....	500	500/10,000
1622-32-8	Ethanesulfonyl Chloride, 2-Chloro-.	.....	500	500
1752-30-3	Acetone Thiosemicarbazide.	.....	1,000	1,000/10,000
1910-42-5	Paraquat Dichloride.	.....	10	10/10,000
1982-47-4	Chloroxuron.....	.....	500	500/10,000
2001-95-8	Valinomycin.....	c	1,000	1,000/10,000
2032-65-7	Methiocarb.....	.....	10	500/10,000
2074-50-2	Paraquat Methosulfate.	.....	10	10/10,000
2097-19-0	Phenylsilatrane...	h	100	100/10,000
2104-64-5	EPN.....	.....	100	100/10,000
2223-93-0	Cadmium Stearate..	c	1,000	1,000/10,000
2231-57-4	Thiocarbazide.....	.....	1,000	1,000/10,000
2238-07-5	Diglycidyl Ether..	.....	1,000	1,000
2275-18-5	Prothoate.....	.....	100	100/10,000
2497-07-6	Oxydisulfoton.....	h	500	500
2524-03-0	Dimethyl Phosphorochloridothioate.	.....	500	500
2540-82-1	Formothion.....	.....	100	100
2570-26-5	Pentadecylamine...	.....	100	100/10,000
2587-90-8	Phosphorothioic Acid, O,O-Dimethyl-S-(2-Methylthio) Ethyl Ester.	c, g	500	500
2631-37-0	Promecarb.....	d, h	1	500/10,000
2636-26-2	Cyanophos.....	.....	1,000	1,000
2642-71-9	Azinphos-Ethyl....	.....	100	100/10,000
2665-30-7	Phosphonothioic Acid, Methyl-, O-(4-Nitrophenyl) O-Phenyl Ester.	.....	500	500
2703-13-1	Phosphonothioic Acid, Methyl-, O-Ethyl O-(4-	.....	500	500

	(Methylthio)Phenyl) Ester.			
2757-18-8	Thallous Malonate.	c, h	100	100/10,000
2763-96-4	Muscimol.....	.....	1,000	500/10,000
2778-04-3	Endothion.....	.....	500	500/10,000
3037-72-7	Silane, (4-Aminobutyl)Diethoxymethyl-.	.....	1,000	1,000
3254-63-5	Phosphoric Acid, Dimethyl 4-(Methylthio)Phenyl Ester.	.....	500	500
3569-57-1	Sulfoxide, 3-Chloropropyl Octyl.	.....	500	500
3615-21-2	Benzimidazole, 4,5-Dichloro-2-(Trifluoromethyl)-.	g	500	500/10,000
3689-24-5	Sulfotep.....	.....	100	500
3691-35-8	Chlorophacinone...	.....	100	100/10,000
3734-97-2	Amiton Oxalate....	.....	100	100/10,000
3735-23-7	Methyl Phenkapton.	.....	500	500
3878-19-1	Fuberidazole.....	.....	100	100/10,000
4044-65-9	Bitoscanate.....	.....	500	500/10,000
4098-71-9	Isophorone Diisocyanate..	.....	100	500
4104-14-7	Phosacetim.....	.....	100	100/10,000
4170-30-3	Crotonaldehyde....	.....	100	1,000
4301-50-2	Fluenetil.....	.....	100	100/10,000
4418-66-0	Phenol, 2,2'-Thiobis(4-Chloro-6-Methyl)-.	.....	100	100/10,000
4835-11-4	Hexamethylenediamine, N,N'-Dibutyl-.	.....	500	500
5344-82-1	Thiourea, (2-Chlorophenyl)-.	.....	100	100/10,000
5836-29-3	Coumatetralyl.....	.....	500	500/10,000
6533-73-9	Thallous Carbonate	c, h	100	100/10,000
6923-22-4	Monocrotophos.....	.....	10	10/10,000
7446-09-5	Sulfur Dioxide....	l	500	500
7446-11-9	Sulfur Trioxide...	b	100	100
7446-18-6	Thallous Sulfate..	.....	100	100/10,000
7487-94-7	Mercuric Chloride.	.....	500	500/10,000
7550-45-0	Titanium Tetrachloride.	.....	1,000	100
7580-67-8	Lithium Hydride...	b	100	100
7631-89-2	Sodium Arsenate...	.....	1	1,000/10,000
7637-07-2	Boron Trifluoride.	.....	500	500
7647-01-0	Hydrogen Chloride (gas only).	l	5,000	500
7664-39-3	Hydrogen Fluoride.	.....	100	100
7664-41-7	Ammonia.....	l	100	500
7664-93-9	Sulfuric Acid.....	.....	1,000	1,000
7697-37-2	Nitric Acid.....	.....	1,000	1,000

7719-12-2	Phosphorus Trichloride.	.....	1,000	1,000
7722-84-1	Hydrogen Peroxide (Conc 52%).	l	1,000	1,000
7723-14-0	Phosphorus.....	b, h	1	100
7726-95-6	Bromine.....	l	500	500
7778-44-1	Calcium Arsenate..	.....	1	500/10,000
7782-41-4	Fluorine.....	k	10	500
7782-50-5	Chlorine.....	.....	10	100
7783-00-8	Selenious Acid....	.....	10	1,000/10,000
7783-06-4	Hydrogen Sulfide..	l	100	500

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7783-07-5	Hydrogen Selenide.	.....	10	10
7783-60-0	Sulfur Tetrafluoride.	.....	100	100
7783-70-2	Antimony Pentafluoride.	.....	500	500
7783-80-4	Tellurium Hexafluoride.	k	100	100
7784-34-1	Arsenous Trichloride.	.....	1	500
7784-42-1	Arsine.....	.....	100	100
7784-46-5	Sodium Arsenite...	.....	1	500/10,000
7786-34-7	Mevinphos.....	.....	10	500
7791-12-0	Thallous Chloride.	c, h	100	100/10,000
7791-23-3	Selenium Oxychloride.	.....	500	500
7803-51-2	Phosphine.....	.....	100	500
8001-35-2	Camphechlor.....	.....	1	500/10,000
8065-48-3	Demeton.....	.....	500	500
10025-73-7	Chromic Chloride..	.....	1	1/10,000
10025-87-3	Phosphorus Oxychloride.	.....	1,000	500
10026-13-8	Phosphorus Pentachloride.	b	500	500
10028-15-6	Ozone.....	.....	100	100
10031-59-1	Thallium Sulfate..	h	100	100/10,000
10102-18-8	Sodium Selenite...	h	100	100/10,000
10102-20-2	Sodium Tellurite..	.....	500	500/10,000
10102-43-9	Nitric Oxide.....	c	10	100
10102-44-0	Nitrogen Dioxide..	.....	10	100
10124-50-2	Potassium Arsenite	.....	1	500/10,000
10140-87-1	Ethanol, 1,2-Dichloro-, Acetate.	.....	1,000	1,000
10210-68-1	Cobalt Carbonyl...	h	10	10/10,000
10265-92-6	Methamidophos.....	.....	100	100/10,000
10294-34-5	Boron Trichloride.	.....	500	500
10311-84-9	Dialifor.....	.....	100	100/10,000
10476-95-6	Methacrolein Diacetate.	.....	1,000	1,000

12002-03-8	Paris Green.....	.....	1	500/10,000
12108-13-3	Manganese, Tricarbonyl Methylcyclopentadienyl.	h	100	100
13071-79-9	Terbufosh.....	h	100	100
13171-21-6	Phosphamidon.....	.....	100	100
13194-48-4	Ethoprophos.....	.....	1,000	1,000
13410-01-0	Sodium Selenate...	.....	100	100/10,000
13450-90-3	Gallium Trichloride.	.....	500	500/10,000
13463-39-3	Nickel Carbonyl...	.....	10	1
13463-40-6	Iron, Pentacarbonyl-.	.....	100	100
14167-18-1	Salcomine.....	.....	500	500/10,000
15271-41-7	Bicyclo[2.2.1]Heptane-2-Carbonitrile, 5-Chloro-6-((((Methylamino)Carbonyl)Oxy)Imino)-, (1s-(1-alpha,2-beta,4-alpha,5-alpha,6E))-.	.....	500	500/10,000
16752-77-5	Methomyl.....	h	100	500/10,000
17702-41-9	Decaborane(14)....	.....	500	500/10,000
17702-57-7	Formparanated.....	d	1	100/10,000
19287-45-7	Diborane.....	.....	100	100
19624-22-7	Pentaborane.....	.....	500	500
20830-75-5	Digoxin.....	h	10	10/10,000
20859-73-8	Aluminum Phosphide	b	100	500
21548-32-3	Fosthietan.....	.....	500	500
21609-90-5	Leptophos.....	.....	500	500/10,000
21908-53-2	Mercuric Oxide....	.....	500	500/10,000
21923-23-9	Chlorthiophos.....	h	500	500
22224-92-6	Fenamiphos.....	.....	10	10/10,000
23135-22-0	Oxamyl.....	d	1	100/10,000
23422-53-9	Formetanate Hydrochloride.	d, h	1	500/10,000
23505-41-1	Pirimifos-Ethyl...	.....	1,000	1,000
24017-47-8	Triazofos.....	.....	500	500
24934-91-6	Chlormephos.....	.....	500	500
26419-73-8	Carbamic Acid, Methyl-, O-(((2,4-Dimethyl-1, 3-Dithiolan-2-yl)Methylene)Amino)-.	d	1	100/10,000
26628-22-8	Sodium Azide (Na(N3)).	b	1,000	500
27137-85-5	Trichloro(Dichlorophenyl)Silane.	.....	500	500
28347-13-9	Xylylene Dichloride.	.....	100	100/10,000

28772-56-7	Bromadiolone.....	.....	100	100/10,000
30674-80-7	Methacryloyloxyeth yl Isocyanateh.	.....	100	100
39196-18-4	Thiofanox.....	.....	100	100/10,000
50782-69-9	Phosphonothioic Acid, Methyl-, S-(2-(Bis(1-Methylethyl)Amino)Ethyl) O-Ethyl Ester.	.....	100	100
53558-25-1	Pyriminil.....	h	100	100/10,000
58270-08-9	Zinc, Dichloro(4,4-Dimethyl-5((((Methylamino) Carbonyl)Oxy)Imin o)Pentanenitrile)-, (T-4)-.	.....	100	100/10,000

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62207-76-5	Cobalt, ((2,2'-(1,2-Ethanediylbis (Nitrilomethylidy ne)) Bis(6-Fluorophenolato)) (2-)-N,N',O,O')-.	.....	100	100/10,000

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*Only the statutory or final RQ is shown. For more information, see 40 CFR table 302.4.

Notes:

a. This chemical does not meet acute toxicity criteria. Its TPQ is set at 10,000 pounds.

b. This material is a reactive solid. The TPQ does not default to 10,000 pounds for non-powder, non-molten, non-solution form.

c. The calculated TPQ changed after technical review as described in the technical support document.

d. Indicates that the RQ is subject to change when the assessment of potential carcinogenicity and/or other toxicity is completed.

e. Statutory reportable quantity for purposes of notification under SARA sect 304(a)(2).

f. [Reserved]

g. New chemicals added that were not part of the original list of 402 substances.

h. Revised TPQ based on new or re-evaluated toxicity data.

j. TPQ is revised to its calculated value and does not change due to technical review as in proposed rule.

k. The TPQ was revised after proposal due to calculation error.

l. Chemicals on the original list that do not meet toxicity criteria but because of their high production volume and recognized toxicity are considered chemicals of concern (``Other chemicals'').

[61 FR 20484, May 7, 1996, as amended at 68 FR 52984, Sept. 8, 2003; 69 FR 68815, Nov. 26, 2004]

Appendix B

F.A.C. Chapter 62-730

State of Florida Department of Environmental Protection
Hazardous Waste Regulations

CHAPTER 62-730 HAZARDOUS WASTE

PART I HAZARDOUS WASTE RULE - DEFINITION AND IDENTIFICATION

62-730.001 Declaration and Intent.

The State of Florida Department of Environmental Protection (DEP or the Department) promulgates Chapter 62-730, Florida Administrative Code (F.A.C.), to implement the hazardous waste program established in Part IV of Chapter 403, Florida Statutes (F.S.). Such program shall include appropriate definitions; rules identifying hazardous waste and providing for proper management of hazardous waste; procedures for issuing departmental authorizations, including permits; and provisions for implementing risk-based facility-wide corrective action.

Specific Authority 403.704, 403.721, 403.8055 FS. Law Implemented 403.704, 403.72, 403.721 FS. History–New 5-28-81, Amended 9-8-81, 12-6-81, 3-4-82, 5-19-83, 1-5-84, 7-22-85, Formerly 17-30.01, 17-30.001, 17-730.001, Amended 1-29-06.

62-730.020 Definitions.

(1) The Department adopts by reference the definitions contained in 40 Code of Federal Regulations (CFR) 260.10 revised as of July 1, 2005.

(2) When the same word, phrase, or term is defined in Part IV of Chapter 403, F.S., and 40 CFR 260.10 and the definitions are not identical, the definitions as given in the state statute shall apply.

(3)(a) References to 40 CFR Part 261 [as adopted in subsection 62-730.030(1), F.A.C.] shall mean rules adopted by DEP regarding identification of hazardous wastes; references to 40 CFR Part 262 [as adopted in subsection 62-730.160(1), F.A.C.] shall mean rules adopted by DEP regarding generators of hazardous wastes; references to 40 CFR Part 263 [as adopted in subsection 62-730.180(1), F.A.C.] shall mean rules adopted by DEP regarding transporters of hazardous wastes; references to 40 CFR Parts 264 [as adopted in subsection 62-730.180(1), F.A.C.] and 265 [as adopted in subsection 62-730.180(2), F.A.C.] shall mean rules adopted by DEP regarding treaters, storers, and disposers of hazardous wastes; references to 40 CFR Part 266 [as adopted in subsection 62-730.181(1), F.A.C.] shall mean rules adopted by DEP regarding standards for the management of specific hazardous wastes; references to 40 CFR Part 268 [as adopted in subsection 62-730.183, F.A.C.] shall mean rules adopted by DEP regarding land disposal restrictions; references to 40 CFR Part 273 [as adopted in subsection 62-730.185(1), F.A.C.] shall mean rules adopted by DEP regarding standards for universal waste management; and references to 40 CFR Parts 270 [as adopted in subsection 62-730.220(1), F.A.C.] and 124 [as adopted in subsection 62-730.200(3), F.A.C.] shall mean rules adopted by DEP regarding permitting of hazardous waste facilities or Section 403.722, F.S.

(b) Unless specifically indicated otherwise, when used in any provisions as may be adopted in this chapter from 40 CFR Parts 124 and 260 through 273: "United States" shall mean the State of Florida; "U.S. Environmental Protection Agency" or "EPA" shall mean DEP; and "Administrator" or "Regional Administrator" or "State Director" shall mean Secretary (including the Secretary's designee, where appropriate).

1. Substitutions as described in paragraph (3)(b) of this section shall not be made in 40 CFR: 124.(6)(e); 124.10(c)(1)(ii); 260.10; 260.11(a); 261.10; 261.11; Part 261, Appendix IX; Part 262, Subparts E and F; 263.20(g)(4); 264.12(a)(1); 264.1082(c)(4)(ii); 265.12(a)(1); 265.1083(c)(4)(ii); 268.1(e)(3); 268.2(j); 268.13; 268.40(b); 270.2; 270.10(e)(2) and (3); 270.10(f)(2) and (3); 270.10(g)(1); 270.11(a)(3); 270.32(b)(2); 270.72(a)(5) and (b)(5); and 273.32(a)(3).

2. Substitutions as described in paragraph (3)(b) of this section shall not be made and alternative substitutions or deletions shall be made as described in the following:

a. Replace "Waste Identification Branch (5304)" with "Characteristics Section (OS-333)" in 40 CFR 261.4(b)(11)(ii).

b. Delete "in the Region where the sample is collected" in 40 CFR 261.4(e)(3)(iii).

c. Delete "for the Region in which the generator is located" in 40 CFR 262.42(a)(2) and (b).

d. Replace "a State" with "Florida" in 40 CFR 264.1(g)(1) and 265.1(c)(5).

e. Replace "regional EPA Office" and "EPA regional office" with "Department district office" in 40 CFR 273.18(g), 273.38(g) and 273.61(c).

3. "Department" shall not be substituted for "EPA" in the 40 CFR as adopted for the following phrases: "EPA Identification Number", "EPA identification number(s)", "EPA ID number", "EPA hazardous waste number(s)", "EPA publication", "EPA Acknowledgement of Consent", and "EPA form".

(c) Any reference to the Federal Solid Waste Disposal Act as amended by the Resource Conservation and Recovery Act of 1976 (RCRA) and its amendments, within 40 CFR Part 124 and Parts 260 through 273 as adopted by reference herein, shall be construed to refer to comparable provisions of the Florida Resource Recovery and Management Act (FRRMA) as established in Part IV of Chapter 403, F.S.

(d) References to Section 1004(5) of RCRA, which is the definition of hazardous waste, shall mean Section 403.703(21), F.S.

(e) References to Section 3010 of RCRA shall mean notification requirements of Florida Law.

(4) References in this chapter to individual sections of Florida statutes and rule chapters shall be construed to include the qualifying phrase "as the statute, section, or rule chapter may be amended or renumbered from time to time" unless the mention in this chapter specifically states that the statute, section or rule chapter is "incorporated by reference."

(5) Federal regulations adopted and incorporated by reference in this rule shall become effective 20 days after filing with the Secretary of State unless the Secretary stipulates a different date in the filing. However, no such federal regulation adopted as a state rule shall become effective earlier than the effective date of the federal regulation.

Specific Authority 403.704, 403.721, 403.8055 FS. Law Implemented 403.704, 403.72, 403.721 FS. History–New 5-28-81, Amended 9-8-81, 12-6-81, 11-25-82, 5-19-83, 1-5-84, 8-24-84, 7-5-85, Formerly 17-30.02, Amended 9-19-86, 10-31-86, 4-13-88, Formerly 17-30.020, Amended 1-25-89, 8-13-90, 9-10-91, 10-14-92, 10-7-93, Formerly 17-730.020, Amended 1-5-95, 9-7-95, 4-30-97, 8-19-98, 2-4-00, 12-20-00, 8-1-02, 10-1-04, 1-29-06, 4-6-06.

62-730.021 References, Variances and Case-by-Case Regulations.

The Department adopts by reference the following Sections of 40 CFR Part 260 revised as of July 1, 2005: 260.11, 260.21, 260.23, 260.30, 260.31, 260.32, 260.33, 260.40 and 260.41.

Specific Authority 403.704, 403.721, 403.8055 FS. Law Implemented 403.704, 403.721 FS. History–New 7-5-85, Formerly 17-30.021, Amended 1-25-89, 8-13-90, 9-10-91, 10-14-92, 10-7-93, Formerly 17-730.021, Amended 1-5-95, 9-7-95, 4-30-97, 8-19-98, 2-4-00, 12-20-00, 8-1-02, 10-1-04, 4-6-06.

62-730.030 Identification of Hazardous Waste.

(1) The Department adopts by reference 40 CFR Part 261 revised as of July 1, 2005, and all appendices, with the exceptions described in paragraphs (1)(a) through (c) of this section. The Department adopts by reference the amendments to 40 CFR Part 261 Appendix IX in the Federal Register dated August 1, 2005 (70 FR 44150).

(a) The Project XL site-specific regulations in 40 CFR 261.4(b)(16), 261.4(b)(18), and 261.6(a)(2)(v).

(b) Errors to be corrected as follows:

1. In 40 CFR 261.21(a)(3), replace "an ignitable compressed gas as defined in 49 CFR 173.300" with "a flammable gas as defined in 49 CFR 173.115(a)."

2. In 40 CFR 261.21(a)(4) replace "an oxidizer as defined in 49 CFR 173.151" with "an oxidizer as defined in 49 CFR 173.127(a)."

3. Replace 40 CFR 261.23(a)(8) with "It is a forbidden explosive as defined in 49 CFR 173.54, or would have been a Class A or Class B explosive as defined in 49 CFR 173.52 and 49 CFR 173.53."

(c) The optional amendments to 40 CFR 261.4(b) in the Federal Registers dated May 20, 1992 (57 FR 21524), July 1, 1992 (57 FR 29220) and February 11, 1999 (64 FR 6806).

For the optional amendments in paragraph (1)(c) of this section, the language in effect immediately prior to the effective date of the referenced Federal Registers remains in effect. 40 CFR Part 261 [as adopted in subsection 62-730.030(1), F.A.C.] contains EPA's rules on the identification and listing of hazardous waste. No delisting is effective until it is adopted by the Department.

(2) 40 CFR 261.5(g)(3)(iii) shall refer to hazardous waste management programs approved by EPA.

(3) A conditionally exempt small quantity generator (CESQG) which chooses to send its hazardous waste to an off-site treatment, storage or disposal facility shall document delivery of its hazardous waste through written receipts and other records which are retained for at least three years. The written receipts and other records shall include names and addresses of the generator and the treatment, storage or disposal facility, the type and amount of hazardous waste delivered, and the date of shipment.

(4) 40 CFR 261.2(f) [as adopted in subsection 62-730.030(1), F.A.C.] requires respondents in actions to enforce regulations to provide appropriate documentation to support their claim that a material is not a solid waste or is conditionally exempt from regulation.

(a) With respect to a claim that a substance (which if otherwise disposed of would be a hazardous waste under this chapter) is not a solid waste because it is a mixture of domestic sewage and other wastes that passes through a sewer system to a publicly owned treatment works (POTW) for treatment under 40 CFR 261.4(a)(1) [as adopted in subsection 62-730.030(1), F.A.C.], "appropriate documentation" shall mean a copy of notification to the POTW and the Department in accordance with the requirements of subsection 62-625.600(15), F.A.C., including a copy of the certification required by paragraph 62-625.600(15)(d), F.A.C. In order to avoid a penalty for disposal of hazardous waste without proper notification, the documentation must have been submitted to the POTW on a date prior to the date of the Department's inspection of the facility and prior to the Department's request for such documentation. This provision applies to all hazardous waste generators, including CESQGs, which discharge more than 15 kilograms of non-acute hazardous wastes in any calendar month, or any quantity of acute hazardous wastes.

(b) With respect to a claim that hazardous waste is exempt from regulation because it was disposed of or generated by one or more CESQGs who meet the requirements of 40 CFR 261.5 [as adopted in subsection 62-730.030(1), F.A.C.] "appropriate documentation" shall mean written records from each applicable CESOG, detailing the quantities of hazardous waste generated by that CESOG, and the method and location of disposal of such hazardous waste.

Specific Authority 403.72, 403.721, 403.8055 FS. Law Implemented 403.72, 403.721 FS. History–New 5-28-81, Amended 9-8-81, 12-6-81, 3-4-82, 11-25-82, 5-19-83, 1-5-84, 8-24-84, 12-18-84, 7-5-85, 10-3-85, Formerly 17-30.03, Amended 5-5-86, 8-25-86, 9-19-86, 10-31-86, 3-31-87, 4-13-88, Formerly 17-30.030, Amended 1-25-89, 8-13-90, 9-10-91, 10-14-92, 10-7-93, Formerly 17-730.030, Amended 1-5-95, 9-7-95, 4-30-97, 8-19-98, 2-4-00, 12-20-00, 8-1-02, 10-1-04, 1-29-06, 4-6-06.

62-730.100 Availability of Information.

(1) Pursuant to Chapter 119, F.S., all documents, papers, or other material received or made by the Department in connection with its hazardous waste program are public records. Except as provided in Chapter 119, F.S., all such information is available for inspection at reasonable times and under reasonable conditions. The Department shall furnish copies of public records upon payment of the actual cost of duplication. In the case of records for which no claim of exemption from public records has been made under this section, records shall be made available as soon as possible but in no event later than 20 working days from the receipt of a request.

(2) When requests for records are not sufficient to identify and locate the requested records the Department shall promptly notify the requestor and make every reasonable effort to assist in the identification and description of records requested.

(3) Any person who submits information to the Department pursuant to this chapter may assert a claim of trade secret or records confidentiality under Sections 403.73 and 403.111, F.S. In order to assert such a claim the information submitted must be accompanied by a cover letter which explains what information is a trade secret or confidential records and why it is believed to be

a trade secret or confidential records. In addition each page of the material subject to the claim shall be prominently stamped or marked "Confidential Trade Secret" or "Confidential Records". Information submitted to the Department without a proper claim of trade secret or records confidentiality shall be treated as a public record. Material which would not be considered confidential business information under 40 CFR Part 2 Subpart B shall not be considered a trade secret or confidential records for purposes of this section.

(4) Upon receipt of information upon which a claim of exemption from public records has been made, the Department shall place the material upon which the claim has been made in a separate file and shall place a notice in the public record file that such information exists.

(5) Any person who requests the right to inspect material for which a claim of exemption from public records has been made shall be promptly informed of their rights under this rule and under Chapter 119, F.S. The Department shall send a copy of the records request and the notice of rights to the person asserting the claim of exemption. The Department shall issue a notice of its intent to release the information or to keep it confidential within 20 working days of receipt of a request which properly describes the identity and location of the information pursuant to subsection (2). The person who requested the right to inspect and the person asserting the claim of exemption from records shall have a period of 14 days in which to request a public hearing. The Department may, after notice and opportunity for hearing, determine that the material is exempt from public records and is confidential.

(6) The Department's final agency action with respect to the claim of exemption is subject to accelerated judicial review in circuit court pursuant to Section 119.11, F.S.

Specific Authority 403.704, 403.722 FS. Law Implemented 403.111, 403.704, 403.722, 403.73 FS. History–New 7-9-82, Formerly 17-30.31, Amended 9-23-87, 6-28-88, Formerly 17-30.310, Amended 10-7-93, Formerly 17-730.310, 62-730.310, 62-730.310, Amended.1-29-06.

PART II STANDARDS FOR GENERATORS AND TRANSPORTERS OF HAZARDOUS WASTE AND OWNERS AND OPERATORS OF HAZARDOUS WASTE FACILITIES

62-730.150 General.

(1) All references to the term "interim status" in the EPA regulations adopted by reference herein shall not be applicable to these rules. The standards contained in 40 CFR Part 265 [as adopted by reference in subsection 62-730.180(2), F.A.C.], adopted by reference herein, shall apply to existing facilities in operation upon the effective date of this rule and to a facility which is in existence on the effective date of a rule change by the Department which would for the first time require the facility to obtain a hazardous waste permit.

(2)(a) All generators (except generators that are conditionally exempt pursuant to 40 CFR 261.5 [as adopted in subsection 62-730.030(1), F.A.C.]), all transporters, and all persons who own or operate a facility which treats, stores, or disposes of hazardous waste, must notify the Department using Form 62-730.900(1)(b), 8700-12FL – Florida Notification of Regulated Waste Activity, effective date January 29, 2006, which is hereby adopted and incorporated by reference, unless they have previously notified. Rule 62-730.900, F.A.C., contains information on obtaining a copy of this form. In addition, transporters are subject to the reporting requirements of Rule 62-730.170, F.A.C.

(b) All generators, transporters, or persons who own or operate a facility which treats, stores, or disposes of hazardous waste, and everyone required to notify under Rule 62-730.181, F.A.C., shall notify the Department of all changes in status and shall use the 8700-12FL – Florida Notification of Regulated Waste Activity form to do so. Changes in status include, but are not limited to: changes in the facility name, location, mailing address, business form, ownership or management control of the facility or its operations; ownership of the real property where the facility is located; facility contact person; type of regulated waste activity; going out of business; tax default; or petition for bankruptcy protection.

(3) The "2005 Hazardous Waste Report Form, Form 62-730.900(8), effective date January 29, 2006," is hereby adopted and incorporated by reference. Rule 62-730.900, F.A.C., contains information on obtaining a copy of this form.

(4) Upon written request of the Department for specific information concerning waste management activities, any person who generates, treats, stores, transports, disposes of, or otherwise handles, or has handled, or proposes to handle hazardous waste, and any person who owns or operates a hazardous waste facility, shall furnish all requested information relating to such waste or handling to the Department within 30 days of receipt of the Department's request.

(5) With respect to training requirements for owners and operators of hazardous waste treatment, storage and disposal facilities and generators, "annual review" shall be computed based on the calendar year.

(6)(a) The Department has initiated a compliance assistance pilot program (CAPP), addressed to solid and hazardous wastes generated during the act or process of repairing or modifying the mechanical components of automobiles and/or light trucks. For the purpose of this rule, "light truck" means a two-axle vehicle with a gross vehicle weight of 8,500 pounds or less. The purpose of the CAPP is to provide detailed, focused written and electronic informational materials; to collect information on current waste management practices; to optimize the Department's compliance resources; and to develop performance measures for determining the impact of the innovative technique.

(b) As part of the CAPP, the Department will mail compliance certification packages. Each recipient of the package entitled "Compliance Assistance Pilot Project – Florida's Compliance Certification Package" from the Department (the recipient), shall, on or before the date which is 45 days after receipt of the package, follow the instructions included in the package. The instructions include how to complete and submit the appropriate DEP forms.

(c) The recipient shall complete Form 62-730.900(7)(b), CAPP Compliance Certification Form, effective date October 10, 2002, which is hereby adopted and incorporated by reference, if the recipient:

1. Owns or operates an automotive repair shop (a shop) in the Department's Northeast District or Northwest District; and

2. The shop engages in the repair or modification of light truck or automobile engines, brakes, mufflers, or transmissions/ transmission axles, unless the shop is excluded in paragraph 62-730.150(6)(d), F.A.C. Rule 62-730.900, F.A.C., contains information on obtaining a copy of this form.

(d) The recipient is excluded if, at the same location, the shop:

1. Has or is part of a gasoline station, truck stop, automotive auction facility, salvage dealership, new car or light truck dealership, used car or light truck dealership, motorcycle dealership, or recreational vehicle (RV) dealership; or

2. Has a paint spray booth; or

3. Is engaged only in one or more of the following: car wash, diagnostic services, lube/oil change, mobile repair, electric systems repairs, glass/window repairs, or exhaust system repair.

(e) Only one CAPP Compliance Certification Form is required for each shop that meets the criteria of paragraph 62-730.150(6)(c), F.A.C. The CAPP Compliance Certification Form must be signed by a responsible official, which means one of the following:

1. The shop owner, if the shop is owned by a sole proprietorship; or

2. A general partner, if the shop is owned by a partnership; or

3. A corporate officer, if the shop is owned by a corporation; or

4. The most senior manager of the shop, if the shop is owned by a corporation or a governmental agency and the senior manager is authorized by corporate vote or by terms of employment to act on behalf of the owner with respect to regulatory matters.

(f) Any recipient that is excluded under paragraph 62-730.150(6)(d), F.A.C., need only submit Form 62-730.900(7)(a), CAPP Exclusion Statement, effective date October 10, 2002, which is hereby adopted and incorporated by reference. However, recipients who are excluded are encouraged to also complete and submit a CAPP Compliance Certification Form. Rule 62-730.900, F.A.C., contains information on obtaining a copy of these forms.

(g) If the CAPP Compliance Certification Form indicates any non-compliance items, the recipient must concurrently submit Form 62-730.900(7)(c), CAPP Return-to-Compliance Plan, effective date October 10, 2002, which is hereby adopted and incorporated by reference. Rule 62-730.900, F.A.C., contains information on obtaining a copy of this form. The CAPP Return-to-Compliance Plan shall:

1. Indicate the requirement in violation;

2. Indicate what will be done to return to compliance; and

3. Indicate the date by which compliance will be achieved.

(h) The CAPP Compliance Certification Form must include the following statements: "I [name of responsible official] on behalf of [name of automotive repair shop] certify that I am familiar with the information contained in this submittal, including any and all documents accompanying this form. Based on my inquiry of those individuals responsible for obtaining the information, the information is to the best of my knowledge true, complete and accurate on the date that I sign. Systems to maintain compliance are in place at this automotive repair shop, and will be maintained even if processes or operating procedures change. If any non-compliance items were identified in the compliance certification process, this automotive repair shop will return to compliance in accordance with the plan proposed in the attached CAPP Return-to-Compliance Plan. I realize that other federal, state or local environmental laws, including more stringent county and municipal requirements, may apply to my shop, and I acknowledge that my shop must comply with all environmental laws even if they are not included in this form. I am fully authorized to make this certification on behalf of this shop, and I am aware that under Florida law there are significant penalties (e.g. fines up to $50,000 per day) for knowingly submitting any false statement, representation, or certification."

(7) No person shall refuse reasonable entry or access to any authorized representative of the department who requests entry for purposes of inspection pursuant to Section 403.091, F.S., and who presents appropriate credentials; nor shall any person obstruct, hamper, or interfere with any such inspection.

Specific Authority 403.0611, 403.087, 403.704, 403.721, 403.7234, 403.8055 FS. Law Implemented 403.061, 403.0611, 403.091, 403.151, 403.704, 403.721, 403.722, 403.7222, 403.7234 FS. History–New 5-19-82, Amended 1-5-84, 7-5-85, 7-22-85, Formerly 17-30.15, Amended 5-5-86, Formerly 17-30.150, Amended 8-13-90, 10-14-92, 10-7-93, Formerly 17-730.150, Amended 1-5-95, 9-7-95, 10-10-02, 10-1-04, 1-29-06.

62-730.160 Standards Applicable to Generators of Hazardous Waste.

(1) The Department adopts by reference 40 CFR Part 262 revised as of July 1, 2005, including the Appendix with the exception of 40 CFR 262.34(e) and the Project XL site-specific regulations in 262.10(j) and Subparts I and J.

(2) A primary exporter of hazardous waste shall file a copy of the advance notification required by 40 CFR 262.53, the annual reports required by 40 CFR 262.56, and the exception reports required by 40 CFR 262.55 with the Department.

(3) References in 40 CFR 262.34(f) [as adopted in subsection 62-730.160(1), F.A.C.] to on-site accumulation of hazardous waste for up to 270 days by generators of greater than 100 kg but less than 1000 kg of hazardous waste in a calendar month shall not apply. Such waste may only be accumulated on-site for 180 days or less without a permit.

(4) Generators of hazardous waste shall complete the following sections of the Uniform Hazardous Waste Manifest: Items 1 through 15 and the applicable parts of item 16, if required for international shipments, on Form 8700-22, and Items 21 through 32, on Form 8700-22A. Copies of a list of vendors which supply the form and instructions may be obtained by contacting the Hazardous Waste Management Section, MS 4555, Division of Waste Management, Department of Environmental Protection, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400.

(5) Generators of 1000 kilograms or greater of hazardous waste in a calendar month shall submit biennial reports required by 40 CFR 262.41 [as adopted in subsection 62-730.160(1), F.A.C.] to the Department on Form 62-730.900(8) ("2005 Hazardous Waste Report Form"). Rule 62-730.900, F.A.C., contains information on obtaining a copy of this form and instructions.

(6) Generators of hazardous waste who accumulate hazardous waste on-site under 40 CFR 262.34, shall maintain written documentation of the inspections required under 40 CFR Part 265. The generator shall keep the written documentation of the inspections under this section for at least three years from the date of the inspection. At a minimum, this documentation shall include the date and time of the inspection, the legibly printed name of the inspector, the number of containers, the condition of the containers, a notation of the observations made, and the date and nature of any repairs or other remedial actions.

(7) Generators shall maintain adequate aisle space between containers of hazardous waste to allow for inspection of the condition and labels of the individual containers.

Specific Authority 403.704, 403.721, 403.8055 FS. Law Implemented 403.704, 403.72, 403.721 FS. History–New 5-19-82, Amended 5-20-82, 3-31-83, 1-5-84, 2-2-84, 8-24-84, 7-5-85, 10-3-85, Formerly 17-30.16, Amended 9-19-86, 10-31-86, 3-31-87, 5-26-87, 6-28-88, Formerly 17-30.160, Amended 1-25-89, 8-13-90, 9-10-91, 10-14-92, 10-7-93, Formerly 17-730.160, Amended 1-5-95, 9-7-95, 4-30-97, 8-19-98, 2-4-00, 12-20-00, 8-1-02, 10-1-04, 1-29-06, 4-6-06.

62-730.161 Emergency Identification Numbers.

(1) 40 CFR 262.12(a) requires all generators to obtain an EPA identification number before offering hazardous waste for transport. Under certain special circumstances, the Department processes applications for an emergency identification number [referred to as an emergency EPA/DEP I.D. number]. These special circumstances are:

(a) Emergency situations such as spills;

(b) Cleanup of abandoned sites; and

(c) One-time cleanup of a site that does not normally generate hazardous waste, and will not generate waste in the foreseeable future.

(2) In order to apply for an emergency EPA/DEP I.D. number, the generator of the hazardous waste(s) shall:

(a) Send the Department a completed Form 62-730.900(3), Application for a Hazardous Waste Emergency EPA/DEP Identification Number ("Emergency I.D. Form"), effective date January 5, 1995, which is hereby adopted and incorporated by reference. Rule 62-730.900, F.A.C., contains information on obtaining a copy of this form; and

(b) Follow the instructions on the form.

(3) For the purpose of this section:

(a) An "emergency situation" shall mean a sudden release of hazardous waste or hazardous materials during transportation or at a product storage facility.

(b) A "one-time cleanup" shall mean removal of hazardous waste where: waste has been abandoned on a property; the property is under bankruptcy proceedings or an administrative, civil, criminal, or judicial proceeding to compel facility closure; or any other situation which necessitates a one-time cleanup or removal of hazardous waste.

(4) Pursuant to Sections 403.721 and 403.727, F.S., it is a violation of this rule for a generator to:

(a) Provide false or incorrect information on the DEP Emergency I.D. Form.

(b) Ship hazardous wastes not listed on the DEP Emergency I.D. Form.

(c) Ship a greater volume of hazardous waste than listed on the DEP Emergency I.D. Form without delivering, within 24 hours of the shipment, a written explanation of the reason for exceeding the original estimated volume.

(d) Ship hazardous waste after 60 days from the issue date of the emergency EPA/DEP I.D. number.

(e) Fail to send the Department a legible copy of all signed and returned manifests and the land disposal restriction notices and certifications required under 40 CFR 268.7 for the hazardous wastes shipped under the emergency EPA/DEP I.D. number within 45 days of the last shipment.

(5) A generator with an emergency EPA/DEP I.D. number who generates greater than 1000 kg of hazardous waste in a calendar month, shall submit a biennial report as described in subsection 62-730.160(5), F.A.C.

Specific Authority 403.704, 403.72, 403.721, 403.727 FS. Law Implemented 403.704, 403.721 FS. History–New 1-5-95, Amended 1-29-06.

62-730.170 Standards Applicable to Transporters of Hazardous Waste.

(1) The Department adopts by reference 40 CFR Part 263 revised as of July 1, 2005.

(2) In addition to the requirements of subsection (1) of this rule, no person shall transport a hazardous waste within the state for which either a manifest is required under 40 CFR Part 262 [as adopted in subsection 62-730.160(1), F.A.C.] or a reclamation agreement is entered between a generator and recycler pursuant to 40 CFR 263.20 [as adopted in subsection 62-730.170(1), F.A.C.] unless compliance with the following special requirements have been demonstrated.

(a) The transporter shall have and maintain financial responsibility for sudden accidental occurrences in a minimum amount of $1,000,000 per occurrence for combined coverage of injury to persons and for damage to property and the environment from the spillage of hazardous waste while such wastes are being transported including the costs of cleaning up the spill. Such financial responsibility shall be issued by an agent or company authorized or licensed to transact business in the State of Florida. Such financial responsibility shall be maintained at all times, be exclusive of legal defense costs, and be established by any one or a combination of the following:

1. Evidence of casualty/liability insurance on an occurrence basis with or without a deductible. With the deductible the Insurer is liable for the payment of amounts within any deductible applicable to the policy, with a right of reimbursement by the insured for any such payment made by the Insurer. Each insurance policy must be evidenced by a certificate of liability insurance or amended by attachment of an endorsement.

2. Surety bonds.

(b) Evidence of coverage shall include submittal of an originally signed copy of one or more of the following forms, which are hereby adopted and incorporated by reference:

1. Hazardous Waste Transporter Certificate of Liability Insurance, Form 62-730.900(5)(a), effective date January 29, 2006.

2. Hazardous Waste Transporter Liability Endorsement, Form 62-730.900(5)(b), effective date January 29, 2006

3. Hazardous Waste Transporter Liability Surety Bond, Form 62-730.900(5)(c), effective date January 29, 2006.

Rule 62-730.900, F.A.C., contains information on obtaining a copy of these forms.

(c) The insurance policy, including all endorsements, or the liability surety bond must be maintained at the carrier's principal place of business.

(d) Whenever requested by the Secretary (or designee) of the Florida Department of Environmental Protection, the Insurer agrees to furnish to the Department a signed duplicate original of the policy and all endorsements.

(e) The transporter shall annually submit to the Department two originally signed Transporter Status Forms, Form 62-730.900(5)(d), effective date January 5, 1995, which is hereby adopted and incorporated by reference. Rule 62-730.900, F.A.C., contains information on obtaining a copy of this form. The Department shall complete the approval part of the form and return one of the originally signed forms to the transporter after verifying that the transporter is complying with the financial responsibility requirements of this section. A copy of this form complete with the Department approval shall be carried in each vehicle transporting hazardous waste for the transporter. This approval is non-transferable and non-assignable.

(f) This subsection does not apply to any person who transports hazardous waste only on the site of a hazardous waste generator or a permitted hazardous waste treatment, storage, or disposal facility.

(g) States and the federal government are exempt from the requirements of this subsection.

(3) Evidence of financial responsibility, updated for the current year, shall be verified annually by the submission of the appropriate form described in paragraph (2)(b) of this section or by the submission of a certificate of insurance. A certificate of insurance shall include a certification by the insurer that the original insurance policy and all endorsements are still in full force and effect as evidenced on the original forms submitted to the Department.

Specific Authority 403.704, 403.721, 403.724, 403.8055 FS. Law Implemented 403.704, 403.721, 403.724 FS. History–New 11-8-81, Amended 5-31-84, 9-13-84, Formerly 17-30.17, Amended 9-19-86, 3-31-87, 5-26-87, 6-28-88, Formerly 17-30.170, Amended 1-25-89, 8-13-90, 9-10-91, 10-14-92, 10-7-93, Formerly 17-730.170, Amended 1-5-95, 4-30-97, 8-19-98, 2-4-00, 12-20-00, 8-1-02, 10-1-04, 1-29-06, 4-6-06.

62-730.171 Transfer Facilities.

(1) 40 CFR 263.12 [as adopted by reference in subsection 62-730.170(1), F.A.C.] provides that transporters who store manifested hazardous waste in proper containers at a transfer facility for 10 days or less are exempt from regulation as a hazardous waste facility. If the waste is stored for more than 10 days, the facility is subject to the permitting requirements for a hazardous waste storage facility.

(2) A transfer facility used for storage of hazardous waste for more than 24 hours but 10 days or less shall comply with the following requirements all as adopted by reference in subsection 62-730.180(2), F.A.C., except where otherwise noted:

(a) The owner or operator of the transfer facility shall comply with the requirements of 40 CFR Part 265 Subparts B (general facility standards), C (preparedness and prevention), D (contingency and emergency plan), and I (management of containers), with the exception of 265.13. The aisle space requirements described in 40 CFR 265.35 and the special requirements for incompatible wastes described in 40 CFR 265.177(c) shall not apply at transfer facilities to containers stored in trucks loaded in accordance with DOT regulations described in 40 CFR 263.10 [as adopted by reference in subsection 62-730.170(1), F.A.C.]. The 40 CFR Part 265 requirements referenced above shall apply to transfer facilities notwithstanding 40 CFR 265.1(c)(12). The owner or operator of the transfer facility shall submit the contingency and emergency plan to the Department with their first Transfer Facility Notification Form, Form 62-730.900(6), effective date January 5, 1995, which is hereby adopted and incorporated by reference. Rule 62-730.900, F.A.C., contains information on obtaining a copy of this form.

(b) The owner or operator of the transfer facility shall have a written closure plan to show that the facility will be closed in a manner which satisfies the requirements of the closure performance, notification, and decontamination standards of 40 CFR 265.111, 265.112, 265.114 and 265.115. The owner or operator of the transfer facility shall submit the closure plan to the Department with their first Transfer Facility Notification Form. Within 60 days of completion of closure, the owner or operator of the transfer facility, shall submit to the Department a certification that the facility has been closed in accordance with the specifications in the closure plan. The certification shall be signed by the owner or operator of the transfer facility, by the owner of the real property where the transfer facility is located, and by an independent registered, professional engineer.

(c) Records required in this section shall be maintained in permanent form and shall be available for inspection by the Department. The records shall be kept at the facility unless the Department gives written approval to do otherwise.

(d) Hazardous waste stored in containers or vehicles at transfer facilities shall be stored on a manmade surface which is capable of preventing spills or releases to the ground.

(e) The owner or operator of a transfer facility shall maintain a written record of when all hazardous waste enters and leaves the facility. This record shall include the generator's name, the generator's EPA/DEP identification number, and the manifest number. For conditionally exempt small quantity generators without an EPA/DEP identification number, the record shall include the name and address of the generator. This recordkeeping requirement applies to all hazardous wastes including hazardous waste generated by CESQGs.

(3) The owner or operator of a transfer facility which stores manifested shipments of hazardous waste for more than 24 hours but 10 days or less shall notify the Department on the Transfer Facility Notification Form. The owner or operator of a new facility shall submit a notification form at least 30 days before the storage of hazardous waste is to begin. The transfer facility shall annually update the information on the Transfer Facility Notification Form and send it to the Department with the transporter's evidence of financial responsibility as required under subsection 62-730.170(3), F.A.C.

(4) The owner or operator of a transfer facility shall obtain an EPA/DEP identification number for each transfer facility location. Any owner or operator who has not obtained an EPA/DEP identification number for each transfer facility location may obtain one by applying to the Department using Form 62-730.900(1)(b), 8700-12FL – Florida Notification of Regulated Waste Activity.

Specific Authority 403.0877, 403.704, 403.721 FS. Law Implemented 403.0877, 403.704, 403.721 FS. History–New 3-2-86, Amended 6-28-88, Formerly 17-30.171, Amended 8-13-90, 9-10-91, 10-14-92, Formerly 17-730.171, Amended 1-5-95, 1-29-06.

62-730.180 Standards Applicable to Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities.

(1) The Department adopts by reference 40 CFR Part 264 revised as of July 1, 2005, including all appendices, with the exceptions described in paragraphs (1)(a) through (c) of this section. The Department adopts by reference the amendments to 40 CFR Part 264 Appendix IX in the Federal Register dated August 1, 2005 (70 FR 44150).

(a) The Project XL site-specific regulations and other site-specific regulations in 40 CFR 264.1(g)(12), 264.301(l), 264.1030(d), 264.1050(g), 264.1080(e), 264.1080(f), and 264.1080(g).

(b) The following sections applicable only to unauthorized states: 40 CFR 264.1(f), 264.149 and 264.150.

(c) The following optional amendments:

1. The amendments to 40 CFR 264.141(h), 264.147(g)(1), 264.151(g) and 264.151(h)(2) in the Federal Register dated September 1, 1988 (53 FR 33938);

2. The amendments to 40 CFR 264.143(f)(10), 264.145(f)(11), 264.151(f), 264.151(g), 264.151(h)(1), and 264.151(h)(2) in the Federal Register dated September 16, 1992 (57 FR 42832); and

3. The amendments to 40 CFR 264.112(c) and 264.118(d) in the Federal Register dated September 28, 1988 (53 FR 37912).

For the optional amendments in paragraph (c) above, the language in effect immediately prior to the effective date of the referenced Federal Registers remains in effect.

(2) The Department adopts by reference 40 CFR Part 265 revised as of July 1, 2005, including all appendices, with the exceptions described in paragraphs (2)(a) through (e) of this section.

(a) Subpart R;

(b) The Project XL site-specific regulations in 40 CFR 265.1(c)(15), 265.1030(c), 265.1050(f), 265.1080(e), 265.1080(f), and 265.1080(g).

(c) The following sections applicable only to unauthorized states: 40 CFR 265.1(c)(4), 265.149 and 265.150.

(d) An error in 40 CFR 265.340(b)(2), which is hereby corrected by replacing it with 40 CFR 265.340(b)(2) as published in the September 30, 1999 Federal Register (64 FR 52828).

(e) The amendments to 40 CFR 265.141(h) and 265.147 in the Federal Register dated September 1, 1988 (53 FR 33938) and to 40 CFR 25.112(c) and 265.118(d) in the Federal Register dated September 28, 1988 (53 FR 37912).

For the optional amendments in paragraph (e) above, the language in effect immediately prior to the effective date of the referenced Federal Registers remains in effect.

(3) The Department adopts by reference 40 CFR 264.112(c)(1) and (2), 264.118(d)(1) and (2), 265.112(c)(3) and (4), 265.118(d)(3) and (4) revised as of July 1, 1988. The Department adopts by reference 40 CFR 264.143(f)(10), 264.145(f)(11), 264.147(g)(1), 264.151(f), 264.151(g), 264.151(h)(1), and 264.151(h)(2) revised as of July 1, 1988.

(4) Owners and operators of hazardous waste treatment, storage and disposal facilities shall submit biennial reports required by 40 CFR 264.75 [as adopted by reference in subsection 62-730.180(1), F.A.C.], and 265.75 [as adopted by reference in subsection 62-730.180(2), F.A.C.], to the Department on Form 62-730.900(8) ("2005 Hazardous Waste Report Form"). Rule 62-730.900, F.A.C, contains information on obtaining a copy of this form.

(5) The owner or operator of a permitted hazardous waste facility who desires to locate a transfer facility at the hazardous waste facility shall apply for a permit modification. The permit modification shall require public notice as described in Rule 62-730.292, F.A.C.

(6) Unless otherwise exempted from corrective action financial assurance requirements pursuant to state or federal law, the owner or operator of a hazardous waste facility shall demonstrate compliance with the financial assurance requirements of 40 CFR Part 264 Subpart H [as adopted by reference in subsection 62-730.180(1), F.A.C.], or 40 CFR Part 265 Subpart H [as adopted by reference in subsection 62-730.180(2), F.A.C.], by using the following forms, which are hereby adopted and incorporated by reference:

(a) Hazardous Waste Facility Letter from Chief Financial Officer to Demonstrate Financial Assurance for Closure, Post-Closure or Corrective Action, Form 62-730.900(4)(a), effective date January 5, 1995.

(b) Hazardous Waste Facility Letter from Chief Financial Officer to Demonstrate Financial Responsibility for Liability, Closure, Post-Closure or Corrective Action, Form 62-730.900(4)(b), effective date January 5, 1995.

(c) Hazardous Waste Facility Corporate Guarantee to Demonstrate Financial Assurance for Closure, Post-Closure or Corrective Action, Form 62-730.900(4)(c), effective date January 5, 1995.

(d) Hazardous Waste Facility Corporate Guarantee for Liability Coverage, Form 62-730.900(4)(d), effective date January 5, 1995.

(e) Hazardous Waste Facility Trust Fund Agreement to Demonstrate Financial Assurance for Closure, Post-Closure or Corrective Action, Form 62-730.900(4)(e), effective date January 5, 1995.

(f) Hazardous Waste Facility Standby Trust Fund Agreement to Demonstrate Financial Assurance for Closure, Post-Closure or Corrective Action, Form 62-730.900(4)(f), effective January 5, 1995.

(g) Hazardous Waste Facility Irrevocable Letter of Credit to Demonstrate Financial Assurance for Closure, Post-Closure, or Corrective Action, Form 62-730.900(4)(g), effective date January 5, 1995.

(h) Hazardous Waste Facility Financial Guarantee Bond to Demonstrate Financial Assurance for Closure, Post-Closure or Corrective Action, Form 62-730.900(4)(h), effective date January 5, 1995.

(i) Hazardous Waste Facility Performance Bond to Demonstrate Financial Assurance for Closure, Post-Closure or Corrective Action, Form 62-730.900(4)(i), effective date January 5, 1995.

(j) Hazardous Waste Facility Insurance Certificate to Demonstrate Financial Assurance for Closure, Post-Closure or Corrective Action, Form 62-730.900(4)(j), effective date January 5, 1995.

(k) Hazardous Waste Facility Certificate of Liability Insurance (Primary Policy), Form 62-730.900(4)(k), effective date January 5, 1995.

(l) Hazardous Waste Facility Certificate of Liability Insurance (Excess/Surplus Policy), Form 62-730.900(4)(l), effective date January 5, 1995.

(m) Hazardous Waste Facility Endorsement (Primary Policy), Form 62-730.900(4)(m), effective date January 5, 1995.

(n) Hazardous Waste Facility Endorsement (Excess/Surplus Policy), Form 62-730.900(4)(n), effective date January 5, 1995.

(o) Hazardous Waste Facility Letter Of Credit to Demonstrate Liability Coverage, Form 62-730.900(4)(o), effective date January 29, 2006.

(p) Hazardous Waste Facility Surety Bond to Demonstrate Liability Coverage, Form 62-730.900(4)(p), effective date January 29, 2006.

(q) Hazardous Waste Facility Trust Fund to Demonstrate Liability Coverage, Form 62-730.900(4)(q), effective date January 29, 2006.

(r) Hazardous Waste Facility Standby Trust Fund to Demonstrate Liability Coverage, Form 62-730.900(4)(r), effective date January 29, 2006.

Rule 62-730.900, F.A.C., contains information on obtaining copies of these forms.

Specific Authority 403.704, 403.721, 403.724, 403.8055 FS. Law Implemented 403.704, 403.721, 403.724 FS. History–New 5-19-82, Amended 3-4-82, 5-20-82, 7-14-82, 8-30-82, 10-7-82, 11-25-82, 2-3-83, 3-31-83, 5-19-83, 1-5-84, 2-2-84, 11-7-84, 7-5-85, 10-3-85, Formerly 17-30.18, Amended 5-5-86, 9-19-86, 10-31-86, 3-31-87, 4-13-88, 6-28-88, Formerly 17-30.180, Amended 1-25-89, 8-13-90, 9-10-91, 10-14-92, 10-7-93, Formerly 17-730.180, Amended 1-5-95, 9-7-95, 4-30-97, 8-19-98, 2-4-00, 12-20-00, 8-1-02, 10-1-04, 1-29-06, 4-6-06.

62-730.181 Standards for the Management of Specific Hazardous Wastes and Specific Types of Hazardous Waste Management Facilities.

(1) The Department adopts by reference 40 CFR Part 266 revised as of July 1, 2005, except for the Project XL site-specific regulations in Subpart O.

(2) Owners or operators of facilities claiming exemption to regulations under 40 CFR 266.20(b) shall maintain detailed operations records that may be used to determine if the claim of exemption is valid. The records shall be retained for at least three years and be made available to the Department upon request.

Specific Authority 403.704, 403.721, 403.8055 FS. Law Implemented 403.704, 403.721 FS. History–New 7-5-85, Amended 10-3-85, 5-5-86, 4-13-88, Formerly 17-30.181, Amended 1-25-89, 8-13-90, 9-10-91, 10-14-92, 10-7-93, Formerly 17-730.181, Amended 1-5-95, 9-7-95, 2-25-96, 4-30-97, 8-19-98, 2-4-00, 12-20-00, 8-1-02, 10-1-04, 1-29-06, 4-6-06.

62-730.183 Land Disposal Restrictions.

The Department adopts by reference 40 CFR Part 268 revised as of July 1, 2005, and all appendices, with the exception of subsections (1) and (2) of this section.

(1) 40 CFR 268.5, 268.6, 268.42(b) and 268.44(a) through (g). The authority for implementing these excluded sections remains with EPA. However, internal references to 40 CFR 268.44 in 268.30(d)(3), 268.33(b)(3), 268.34(e)(3), 268.35(b)(3), 268.38(d)(3), 268.39(f)(3), 268.49(b) and 268.50(e) shall mean 40 CFR 268.44(a) through (m).

(2) The inclusion of lab packs containing D009 wastes in 40 CFR 268.7(a)(9)(iii).

Specific Authority 403.704, 403.721, 403.8055 FS. Law Implemented 403.704, 403.721 FS. History–New 1-25-89, Formerly 17-30.183, Amended 8-13-90, 9-10-91, 10-14-92, 10-7-93, Formerly 17-730.183, Amended 1-5-95, 9-7-95, 4-30-97, 8-19-98, 2-4-00, 12-20-00, 8-1-02, 10-1-04, 4-6-06.

62-730.185 Standards for Universal Waste Management.

(1) The Department adopts by reference 40 CFR Part 273 revised as of July 1, 2005.

(2) Any person seeking to add a hazardous waste or any category of hazardous waste to this section may petition under Section 120.54(7), F.S.; and 40 CFR 260.23 [as adopted by reference in subsection 62-730.021, F.A.C.], 273.80 and 273.81 [both as adopted by reference in subsection 62-730.185(1), F.A.C.].

Specific Authority 403.704, 403.721, 403.8055 FS. Law Implemented 403.061, 403.704, 403.721 FS. History–New 9-7-95, Amended 4-30-97, 8-19-98, 2-4-00, 12-20-00, 8-1-02, 10-1-04, 1-29-06, 4-6-06.

PART III HAZARDOUS WASTE PERMITTING AND OTHER AUTHORIZATIONS

62-730.200 Introduction, Scope and Procedures for Decision Making.

(1) This Part provides the requirements and procedures for the issuance, approval, denial, renewal, modification, and revocation of any research development and demonstration permit, temporary operation permit, construction permit, postclosure permit, corrective action permit, emergency permit, clean closure plan, remedial action plan, variance, closure equivalency determination, or other authorization required by law from the Department for a hazardous waste facility.

(2) The provisions of Chapter 62-4, F.A.C., shall also apply to the permitting of hazardous waste facilities, but only to the extent Chapter 62-4, F.A.C., is consistent with this Part.

(3) The Department will follow the procedures set forth in these sections of 40 CFR Part 124 revised as of July 1, 2005: 124.3(a); 124.5(a), (c), and (d); 124.6(a), (d), and (e) except (d)(4)(ii) through (v); 124.8(a) and (b) except (b)(3) and (b)(8); 124.10(a) except (a)(1)(i) and (a)(1)(iv) through (a)(3); 124.10(b); 124.10(c) except (c)(1)(iv) through (viii); 124.10(d) except (d)(1)(vii) through (ix) and (d)(2)(iv); 124.11; 124.12(a); and 124.17 except (b); 124.31 except for two sentences in 124.31(a) which include the phrase “over which EPA has permit issuance authority”; 124.32 except for two sentences in 124.32(a) which include the phrase “over which EPA has permit issuance authority”; and 124.33 except for 124.33(a); which are hereby adopted by reference. Sections 124.31, 124.32, 124.33 apply to all applicants seeking construction or operation permits for hazardous waste management units.

(4) Whenever a permit is required pursuant to this chapter and when other rules of the Department require another type of permit, the Department will make every effort to consolidate the review, issuance, and reissuance of Department permits.

(5) Permits may be issued or denied for one or more hazardous waste management unit at a facility without simultaneously issuing or denying a permit to all hazardous waste management units at the facility. The permit status of any unit for which a permit has not been issued or denied is not affected by the issuance or denial of a permit to any other unit at the facility.

Specific Authority 403.704, 403.721, 403.722, 403.8055 FS. Law Implemented 403.704, 403.721, 403.722 FS. History–New 7-1-82, Formerly 17-30.20, Amended 9-23-87, 6-28-88, Formerly 17-30.200, Amended 9-10-91, 10-14-92, Formerly 17-730.200, Amended 1-5-95, 1-29-06, 4-6-06.

Editorial Note: *Formerly Rule 62-730.184, F.A.C.*

62-730.210 Definitions.

(1) The definitions as described in Rule 62-730.020, F.A.C., shall apply to this part.

(2) In addition, as used in this part:

(a) "Authorization" means any permit, certification, consent, designation, approval, variance, registration, license, agreement, order (including consent order), enforceable document, or other determination required by law from the Department prior to some proposed action or to obtain some relief.

(b) "Clean closure determination" means a determination by the Department that all wastes and waste residues; all contaminated system components, structures and equipment; and all soil, sediment, groundwater, and surface water at a contaminated site have been removed or decontaminated to the extent necessary to protect human health and the environment. The term "no further action" refers only to sites that receive a clean closure determination without controls. The term "no further action with controls" refers to sites that receive a clean closure determination with controls. "Sites" as used in this paragraph means solid waste management units (SWMUs), regulated hazardous waste management units, and areas of concern (AOCs).

(c) "Clean closure plan" means an enforceable document designed to achieve a clean closure determination with or without controls.

(d) "Closure" means the cessation of operation of a hazardous waste facility or unit, and the act of securing such a facility or unit pursuant to the requirements of Rule 62-730.180, F.A.C., so that it will pose no significant threat to human health or the environment.

(e) Contaminated site" means any contiguous land, sediment, surface water, or groundwater area that contains contaminants that may be harmful to human health or the environment. The term includes releases of contaminants from SWMUs, regulated hazardous waste management units, and AOCs.

(f) "Corrective action permit" means a hazardous waste facility permit that authorizes remedial activities for solid waste management unit(s) as described in 40 CFR 264.101 or that authorizes remedial activities for SWMUs, regulated unit(s) or AOCs pursuant to 40 CFR 264.110(c) or 40 CFR 265.110(c). At operating hazardous waste management facilities, conditions for remedial activities will be incorporated into the operation permit. At facilities that have or once had a permit to operate or close a hazardous waste disposal unit, a corrective action-only permit is not available if the unit is closed with controls, unless the Department has accepted a certification of completion of postclosure for all such hazardous waste disposal units at the facility.

(g) "Enforceable document" means a written action by the Department which is subject to the provisions of Section 120.69, F.S.

(h) "Notice of deficiency" (NOD) means a certified letter from the Department to an applicant for any permit or other authorization indicating those items which were not completed or were inadequate in the original application or in subsequent submittals and requesting the submission of the required information.

(i) The phrase "owner or operator" includes a permittee or a respondent subject to a Department order.

(j) "Part I" means the section of the permit application submitted on the DEP form adopted in paragraph 62-730.900(2)(a), F.A.C.

(k) "Part II" means all other sections of the permit application submitted to demonstrate compliance with 40 CFR Part 264.

(l) "Permit" means a type of legal authorization granted by the Department to engage in or conduct any construction, operation, or remedial activities at a hazardous waste facility for a specified period of time.

(m) "Postclosure permit" means a hazardous waste facility permit issued pursuant to the provisions of 40 CFR 270.1(c) and 40 CFR 270.28.

(n) "Remedial activities" means all activities required or undertaken to identify contamination and to reduce the concentration of contaminants to meet cleanup target levels. The term includes "closure" as outlined in 40 CFR 264.111 through 264.115 [as adopted in subsection 62-730.180(1), F.A.C.] and 40 CFR 265.111 through 265.115 [as adopted in subsection 62-730.180(2), F.A.C.] with respect to closing hazardous waste treatment, storage and disposal units; "postclosure care" as outlined in 40 CFR 264.117 through 264.120 [as adopted in subsection 62-730.180(1), F.A.C.] and 40 CFR 265.117 through 265.120 [as adopted in subsection 62-730.180(2), F.A.C.] with respect to closed hazardous waste treatment, storage and disposal units; and "corrective action" as required by 40 CFR Part 264 [as adopted in subsection 62-730.180(1), F.A.C.] for releases from any solid waste management unit at a hazardous waste facility.

(o) "Subpart H remedial action plan" or "Subpart H RAP" means a special form of hazardous waste authorization as promulgated in 40 CFR Part 270 Subpart H [as adopted in subsection 62-730.220(1), F.A.C.] to approve the treatment, storage or disposal of hazardous remediation waste as defined in 40 CFR 260.10 [as adopted by reference in subsection 62-730.020(1), F.A.C.].

(p) "Temporary operation permit" (TOP) means the legal authorization, limited to a maximum of 3 years, granted by the Department to operate a hazardous waste facility in accordance with Section 403.722, F.S., and Rule 62-730.231, F.A.C.

Specific Authority 403.704, 403.722 FS. Law Implemented 403.704, 403.722 FS. History–New 7-9-82, Amended 1-5-84, Formerly 17-30.21, Amended 9-23-87, Formerly 17-30.210, Amended 9-10-91, Formerly 17-730.210, Amended 1-29-06.

62-730.220 Applications for Permits and Other Authorizations.

(1) The Department adopts by reference the following sections of 40 CFR Part 270 revised as of July 1, 2005: 270.1(c) except for the Project XL site-specific regulations in 270.1(c)(2)(ix), 270.2, 270.3, 270.4, 270.6, 270.10, 270.11, 270.12 through 270.28, 270.30, 270.31, 270.32(b)(2), 270.33, 270.51, 270.61, 270.62, 270.65, 270.66, 270.68, 270.72, 270.79 through 270.230, and 270.235.

(2)(a) Applicants for hazardous waste permits shall use the following forms, which are hereby adopted and incorporated by reference, and shall comply with subsection (7) of this section:

1. Part 1 – General, Form 62-730.900(2)(a), effective date January 29, 2006.

2. Well Construction Summary Report, Form 62-730.900(2)(b), effective date January 29, 2006.

3. Information Regarding Potential Releases from Solid Waste Management Units, Form 62-730.900(2)(c), effective date January 29, 2006.

4. Certification, Form 62-730.900(2)(d), effective date January 29, 2006. Rule 62-730.900, F.A.C., contains information on obtaining copies of these forms.

(b) The Department shall, upon request of the applicant, combine applications for all required hazardous waste permits at the same hazardous waste facility into one issued permit. The fee for a combined application shall be the highest of all applicable fees. Operation under a combined construction and operation permit shall not begin until the facility is in full compliance with 40 CFR Part 264 standards.

(3) All applicants for hazardous waste authorizations (including permits) shall supply the number of copies of applications and supporting documents requested by the Department. All copies shall contain original signatures and seals in all instances where a signature or certification is required. Except as otherwise instructed in this rule, all applications shall be sent for review and determination to the Hazardous Waste Regulation Section, MS 4560, Division of Waste Management, Department of Environmental Protection, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400.

(4) All applicants for a hazardous waste authorization shall indicate all other federal and state laws that may apply to the activity for which authorization is requested.

(5) 40 CFR 261.5(f)(3)(iii) and 40 CFR 261.5(g)(3)(iii) [as adopted in subsection 62-730.030(1), F.A.C.] provide that waste generated by conditionally exempt small quantity generators ("CESQG waste") must be delivered to certain specified facilities, including a facility "authorized to manage hazardous waste by a State with a hazardous waste management program approved under Part 271 of this chapter." Florida is such a state. The Department's authorization to manage CESQG waste shall include facility-specific operating conditions, including location, generator responsibilities, amount and type of wastes, time limits, and recordkeeping, as appropriate to the request and generator status of the authorized person.

(6) Within 60 days after receipt of an application for a hazardous waste facility authorization, the Department shall examine the application and notify the applicant of apparent errors or omissions and request additional information through a Notice of Deficiency (NOD). The applicant shall respond to the Department within the time limit set forth in the NOD or within 30 days of receipt of the NOD, if no time limit is set forth in the NOD. Failure to provide complete and adequate responses to an NOD with respect to application for a hazardous waste authorization within the time limit is a violation of this rule.

(7) Applicants for a hazardous waste permit shall include with Part II of their permit application all of the following information, as applicable, in addition to that required by the sections of 40 CFR Part 270 adopted in subsection (1) of this section.

(a) Owners or operators of facilities that store or propose to store containers of hazardous waste shall include a complete description of the procedures used to comply with 40 CFR 264.171, 264.172 and 264.173.

(b) Owners or operators of facilities that use or propose to use tank systems for storage or treating hazardous waste shall include a copy of the complete plan describing their response to leaks or spills and disposition of leaking or unfit-for-use tank systems as required by 40 CFR 264.196. For tank systems that do not meet the containment requirements of 40 CFR 264.193, the application shall include a complete description of the leak test or other approved method used to comply with 40 CFR 264.193(i)(1), (2) and (3).

(c) Owners or operators of facilities that treat or dispose of hazardous waste in land treatment units or propose the use of land treatment units shall include:

1. A complete description of an unsaturated zone monitoring program that complies with 40 CFR 264.278; and

2. A complete statement of how the recordkeeping requirements of 40 CFR 264.279 will be met.

(d) Owners or operators of facilities that dispose or propose to dispose of hazardous waste in landfills shall include a complete description of how the surveying and recordkeeping requirements of 40 CFR 264.309 will be met.

(e) The owners or operators of facilities that incinerate or propose to incinerate hazardous waste shall include a certification of the results of monitoring temperatures, waste feed rates, carbon monoxide, and an appropriate indicator of combustion gas velocity. The certification shall include a statement about the precision and accuracy of these measurements for any previously conducted trial burn.

(f) The owners or operators of facilities that treat, store, or dispose of hazardous waste in miscellaneous units or propose the use of miscellaneous units shall include a complete explanation of how the requirements of 40 CFR 264.17 will be met if ignitable, reactive, or incompatible wastes are to be placed in the miscellaneous unit.

(g) Owners or operators of hazardous waste treatment, storage or disposal facilities that intend to operate a transfer facility at the facility shall submit information that demonstrates compliance with Rule 62-730.171, F.A.C., as part of the hazardous waste facility permit application which is described in Rule 62-730.220, F.A.C.

(8) All applications for an authorization shall be certified by the facility owner, facility operator, and real property owner. The determination of the proper person to sign applications as owner, operator and real property owner shall be made in accordance with the provisions of 40 CFR 270.11.

(9) All applications, plans, specifications, certification of construction completion reports, and other related documents shall be certified by a professional engineer registered in the State of Florida, except as provided in subsection 62-4.050(3), F.A.C.

(10) All applications, plans, specifications and supporting documents, or any part thereof, which involve the practice of professional geology as defined in Chapter 492, F.S., shall be certified by a professional geologist licensed by the State of Florida.

(11) All applications for hazardous waste authorizations shall include all the information required by this part and by Forms 62-730.900(2)(a) through (d). All applications for hazardous waste authorizations that include elements of a Part II permit application shall be submitted in the same format as the instructions provided by the Department. For example, the Closure Plan shall be in "Part II. K" of the application. All applications should be submitted in a standard 3-ring or D-ring binder. Provide a header with the revision number, date and page number on each page of the application. Applications (or revised pages to applications) shall include an index page which indicates all the items being certified by a professional engineer.

Specific Authority 403.061, 403.087, 403.704, 403.721, 403.722 FS. Law Implemented 403.151, 403.704, 403.707, 403.721, 403.722, 403.723, 403.727 FS. History–New 7-9-82, Amended 1-5-84, 8-19-84, 7-22-85, Formerly 17-30.22, Amended 9-23-87, 6-28-88, 12-12-88, Formerly 17-30.220, Amended 8-13-90, 9-10-91, 10-14-92, 10-7-93, Formerly 17-730.220, Amended 1-5-95, 4-30-97, 8-19-98, 2-4-00, 12-20-00, 8-1-02, 10-1-04, 1-29-06, 4-6-06.

62-730.225 Requirements for Remedial Activities.

(1) One electronic copy of field and laboratory data, in field delimited and image formats, shall be submitted to the Department in accordance with the requirements of the permit or other authorization.

(2)(a) The quality assurance provisions of Chapter 62-160, F.A.C., shall apply to remedial activities at hazardous waste facilities. In addition, a sampling and analysis plan (SAP) is required for sampling and analysis at facilities with, or seeking, a hazardous waste permit or other authorization for remedial activities.

(b) The SAP shall contain the following elements:

1. A table showing the proposed constituents, matrices, analytical methods and sampling frequency for the project.

2. A table showing the proposed purging and sampling equipment.

3. A description of proposed management of investigation-derived wastes (IDW) including a statement that IDW that contains hazardous waste will be managed in accordance with Department regulations.

4. A statement that the sampling crew will follow the Department's most recent Standard Operating Procedures (SOPs) or other sampling program approved pursuant to Chapter 62-160, F.A.C. (as effective 6-8-04 or later).

5. A statement that the laboratory used will be accredited by the National Environmental Laboratory Accreditation Program (NELAP) and certified by the Florida Department of Health.

(c) One SAP shall be submitted and amended as appropriate for all sampling and analytical work at a facility. The owner or operator may elect to submit multiple SAPs if different sampling and analytical entities are involved, or the SAP may be a component of another submittal.

(d) Amendments or changes to SAPs shall be submitted if the scope of work is substantially altered or if any of the following circumstances occur:

1. New analytical methods, sampling or other field procedures, or instruments or equipment are added;

2. The sampling or analysis contractor is changed; or

3. Other changes are made as may reasonably be expected to affect the data quality objectives of the project.

(e) If the Department requests amendments to the SAP as specified in paragraph (3)(d) of this section, written amendments shall be submitted within 14 days of receipt of the Department's request. If the owner or operator proposes amendments to the SAP, a new or amended SAP shall be submitted within 14 days of the change.

(3) Owners or operators of sites suspected or confirmed to be contaminated with hazardous waste as defined in Section 403.703(21), F.S., and where a risk of exposure to the public may exist, shall place and maintain warning signs. Unless different conditions are approved by the Department in a site-specific authorization, the signs shall be as described in this subsection.

(a) Warning signs shall be at least 2 feet by 2 feet, made of durable weather resistant material, with a lettering in a color that highly contrasts with the background. All lettering must be at least 1 inch high.

(b) Warning signs shall be unobstructed and be mounted in such a manner that the center of the sign is approximately 56 inches above ground surface and is capable of being seen from at least 75 feet away from all access locations.

(c) Warning sign text shall warn of danger, prohibit the entry of unauthorized persons, convey other information appropriate to site conditions, and include a telephone number to call for more information.

Specific Authority 403.061, 403.704, 403.707, 403.72, 403.721, 403.722, 403.7255 FS. Law Implemented 403.087, 403.088, 403.704, 403.707, 403.72, 403.721, 403.722, 403.783 FS. History–New 1-29-06.

62-730.226 Financial Assurance for Remedial Activities.

(1) Unless otherwise exempted from corrective action financial assurance requirements pursuant to state or federal law, the following persons shall establish and maintain financial assurance for remedial activities using the appropriate forms adopted in subsection 62-730.180(6), F.A.C.:

(a) An owner or operator who is required to establish a corrective action program under 40 CFR 264.100 or 264.101 [as adopted in subsection 62-730.180(1), F.A.C.]; and

(b) An owner or operator who undertakes remedial activities pursuant to an operating permit, a postclosure permit, a corrective action permit or clean closure plan.

(2) An owner or operator as described in subsection (1) of this section shall provide a detailed written cost estimate in undiscounted current dollars. The cost estimate shall include all projected remedial activities. At a minimum, the cost estimate shall equal the estimated cost of completing such remedial activities according to the schedule and methods outlined in a plan for the remedial activities.

(3) The cost estimate for remedial activities shall:

(a) Itemize the separate costs for each year;

(b) Indicate the sum of the separate costs for each year;

(c) Indicate the sum of all the costs for remedial activities; and

(d) Be based on the costs to the owner or operator of hiring a third party to perform remedial activities at the facility according to the methods specified in the approved remedial activities plan. A third party is a party that is neither a parent nor subsidiary of the owner or operator.

(4) The cost estimate for remedial activities shall:

(a) Not incorporate any salvage value that may be gained by the sale of hazardous wastes, facility structure or equipment, land or other facility assets at the time of partial or final closures; and

(b) Incorporate a zero cost for hazardous waste that might have economic value.

(5) The owner or operator of a facility required to undertake remedial activities shall:

(a) Choose from the options described in 40 CFR 264.143 [as adopted in subsection 62-730.180(1), F.A.C.] to provide financial assurance for remedial activities and comply with the requirements of 40 CFR 264.143.

(b) Submit the appropriate forms adopted in paragraphs 62-730.900(4)(a), (b), (c), (e), (f), (g), (h), (i), and (j), F.A.C. Photocopies of Department supplied forms are acceptable. Retyped forms are not acceptable and will be returned.

(c) Provide financial assurance within 30 days of notification by the Department that the cost estimate is approved.

(6) The owner or operator shall adjust the cost estimate for remedial activities, including the cost estimates for each year of remedial activities, for inflation within 60 days prior to the anniversary date of the established financial instrument(s). For owners or operators using the financial test or corporate guarantee, the cost estimate for remedial activities shall be updated for inflation before submission of updated information as specified in 40 CFR 264.143(f)(3) [as adopted in subsection 62-730.180(1), F.A.C.].

(7) The owner or operator shall revise the cost estimate for remedial activities no later than 30 days after the Department approves a request to modify specified remedial activities if the change increases the cost or expected duration of remedial activities. The revision shall reflect any change in the total number of years required to perform the remedial activities and any changes in the estimated costs for each year of the remedial activities. The owner or operator shall adjust the revised costs for inflation as specified in subsection (6) of this section.

(8) An owner or operator may obtain a financial assurance variance upon a complete and adequate showing that the owner or operator is unable to obtain or provide financial assurance. Such showing shall include annual documentation of efforts to obtain or provide financial assurance; a copy of the most recent federal tax returns filed by the owner or operator; and an audited financial statement prepared on an accrual basis in accordance with generally accepted accounting principles (GAAP). The financial statement shall consist of a balance sheet, statement of income and statement of cash flows. A statement of retained earnings shall also be provided where applicable to the entity providing the financial statement.

Specific Authority 403.201, 403.704, 403.721, 403.724 FS. Law Implemented 403.201, 403.704, 403.721, 403.724 FS. History–Formerly 62-730.180(6), Amended 1-29-06.

62-730.231 Newly Regulated Facilities.

(1) Any person who owns or operates a hazardous waste facility which is in existence on the effective date of a rule change by the Department which would for the first time require the facility to obtain a hazardous waste permit:

(a) Shall be deemed to have a Temporary Operation Permit (TOP) provided the owner or operator:

1. Complies with the notice requirements of Section 403.72(2), F.S., and

2. Submits a completed and signed Application for a Hazardous Waste Facility Permit Part I (Form 62-730.900(2)(a)) and Application for a Hazardous Waste Facility Permit Certification (Form 62-730.900(2)(d)), at the earlier of six months after the date the rule is filed or 30 days after the facility is first subject to the rule amendment that requires the facility to obtain a hazardous waste permit; and

(b) Is required to undertake facility-wide corrective actions pursuant to 40 CFR 264.101 whether or not a hazardous waste permit is applied for or issued.

(2) A facility operating under a TOP pursuant to this section shall not:
(a) Treat, store or dispose of any hazardous waste not specified in Part I of the permit application;
(b) Employ any process not specified in Part I of the permit application; or
(c) Exceed the design capacities specified in Part I of the permit application.
(3) A facility operating under a TOP pursuant to this section shall, at a minimum, comply with the standards of 40 CFR Part 265.
(4) Changes in the type of waste managed, design capacity, process, or ownership or operational control of the facility may be made upon approval by the Department in accordance with the standards and criteria for such changes set forth in 40 CFR 270.72.
(5) TOPs issued under this section shall include a compliance schedule to bring the facility into compliance with 40 CFR Part 264 standards.
(6) TOPs deemed to be issued under this section may be modified, revoked or enforced in the same manner as any other hazardous waste permit.
(7) No facility shall be eligible for a TOP under this section if it has previously been denied a State of Florida hazardous waste permit or has had a State of Florida hazardous waste permit revoked provided such denial or revocation has not been superseded by final order or a judicial determination. No facility shall be eligible for a TOP under this section if it has failed to qualify for federal interim status for any waste code or has lost interim status for any waste code, pursuant to applicable federal regulations.
(8) TOPs for land disposal facilities under this section shall terminate:
(a) One year after the date upon which the facility first became subject to permitting requirements unless the owner or operator of the facility certifies compliance with groundwater monitoring and financial requirements of Rule 62-730.180, F.A.C., and
(b) Three years after the date upon which the facility first became subject to permitting requirements.
(9) For all facilities which require an operation permit TOPs shall terminate three years after the date upon which the facility first became subject to permitting requirements. For all facilities which require a construction permit, other than land disposal facilities, TOPs shall terminate 120 days after the date upon which the facility first became subject to permitting requirements unless the Department receives a complete application for a construction permit prior to the end of the 120 day period.
(10) Within 60 days after the date upon which a land disposal facility first became subject to permitting requirements, the owner or operator shall submit a complete Groundwater Monitoring Plan proposal to satisfy the requirements of 40 CFR Part 264 Subpart F and Rule 62-730.225, F.A.C.
(11) Any facility subject to this section that does not qualify for a TOP; that has not made timely and complete application for a TOP; whose TOP has expired; or who has not obtained a TOP or operation permit; shall immediately cease operation and apply for an operation permit, a postclosure permit or a clean closure plan authorization.
(12) No public notice of a facility's qualification for a TOP under this section is required. However, nothing in this section shall affect any rights that may exist under Chapter 120, F.S., and Chapter 28-106, F.A.C.
(13) Facilities operating with a TOP issued pursuant to this section must apply for an operation permit at least 180 days before the termination of the TOP.
(14) A facility operating under a TOP shall apply for a postclosure permit as described in Rule 62-730.260, F.A.C., before the TOP terminates if the facility decides not to continue to operate and cannot obtain a clean closure determination without controls as defined in Rule 62-730.210, F.A.C.

Specific Authority 403.704, 403.722, 403.814 FS. Law Implemented 403.704, 403.722, 403.8055 FS. History–New 9-23-87, Amended 6-28-88, Formerly 17-30.231, Amended 8-13-90, 9-10-91, 10-14-92, 10-7-93, Formerly 17-730.231, Amended 1-5-95, 1-29-06.

62-730.240 Operation Permits.

(1) No person shall begin operation of a hazardous waste facility without applying for and receiving an operation permit from the Department. Application for operation permits shall be made on DEP Forms 62-730.900(2)(a) through (2)(d) as adopted in paragraph 62-730.220(2)(a), F.A.C.
(2)(a) The period of operation includes the closure period.
(b) No later than 180 days before the date upon which the owner or operator expects to begin closure of the facility, the owner or operator shall apply for any modification of the operation permit necessary to detail, supplement, amend, revise, update or complete any approved closure plan.
(3) Within 60 days of completion of closure, the owner or operator of the hazardous waste facility shall submit to the Department a certification that the facility has been closed in accordance with the specifications in the closure plan. The certification shall be signed by both the owner or operator of the hazardous waste facility and an independent registered professional engineer.
(4) In the event that the owner or operator of a permitted hazardous waste management unit is unable to clean close the unit without controls within the time limits allowed by the operation permit, all postclosure care and/or corrective action requirements shall apply to the unit which will be called a "postclosure unit". If the operation permit authorizes operation of hazardous waste management units other than the postclosure unit, the owner or operator shall apply for modification or renewal of the operation

permit to include postclosure and/or corrective action conditions applicable to the postclosure unit. If the only units authorized by the operation permit are postclosure units (or units that have been clean closed without controls, in addition to the postclosure unit), the owner or operator must obtain a postclosure and/or corrective action permit from the Department.

(5) Facilities which are closing under 40 CFR Part 264 standards [as adopted in subsection 62-730.180(1), F.A.C.] which have not been required to meet performance standards for new landfills, shall not be required to meet the double liner and leachate collection requirement of 40 CFR Part 264 Subpart N at closure.

(6) Hazardous waste facilities that are issued an operation permit shall comply with 40 CFR Part 264 standards [as adopted in subsection 62-730.180(1), F.A.C.], except for hazardous waste management units for which no 40 CFR Part 264 standards have been adopted in which case 40 CFR Part 265 standards [as adopted in subsection 62-730.180(2), F.A.C.] shall apply.

(7) Operation permits shall be issued for up to five years and shall be renewable. Operation permits shall not be issued for less than five years without cause.

Specific Authority 403.087, 403.704, 403.707, 403.721, 403.722 FS. Law Implemented 403.704, 403.707, 403.721, 403.722 FS. History–New 7-9-82, Formerly 17-30.24, Amended 9-23-87, Formerly 17-30.240, Amended 9-10-91, 10-14-92, Formerly 17-730.240, Amended 1-29-06.

62-730.250 Construction Permits.

(1) No person shall begin construction or major modification of any unit at a hazardous waste facility without applying for and receiving a construction permit from the Department. Application for construction permits shall be made on DEP forms adopted in paragraph 62-730.220(2)(a), F.A.C.

(2) If a construction permit for an incinerator allows a period of time necessary for trial burns pursuant to 40 CFR Part 264 Subpart O [as adopted in subsection 62-730.180(1), F.A.C.] the owner or operator of such an incinerator shall submit a complete application for an operation permit within 90 days after a trial burn or within 180 days before expiration of the construction permit, whichever date is sooner. After the completion of a successful trial burn, an owner or operator of an incinerator may operate under the construction permit until final agency action is taken on the operation permit, provided the facility is in compliance with 40 CFR Part 264 standards and the conditions of the construction permit.

(3) An owner or operator of a facility other than an incinerator may operate under its construction permit until final agency action is taken on the operation permit so long as the facility is in compliance with 40 CFR Part 264 standards, and makes timely application for an operation permit. For the purposes of this rule, timely application shall mean a complete application for an operation permit at least 180 days prior to expiration of the construction permit and within 90 days of completion of construction, whichever occurs first.

(4) Notwithstanding subsection (1) of this section, no permit shall be required under this section in order to construct a facility if such facility is constructed pursuant to approval by the Department and EPA under appropriate regulatory programs for the incineration of polychlorinated biphenyls. Any person owning or operating such a facility may at any time after construction or operation has begun, file a complete operation permit application to incinerate hazardous waste at the facility.

(5) No major modification to a facility, which includes the construction or expansion of hazardous waste management units shall be undertaken without application for and receipt of a construction permit. Modifications which do not require a construction permit may require a permit modification under Rule 62-730.290, F.A.C. No construction permit shall be required for changes made solely for the purpose of complying with the requirements of 40 CFR 265.193 [as adopted in subsection 62-730.180(2), F.A.C.]

(6) No person operating a hazardous waste transfer facility may alter operations or modify the facility so that it becomes a hazardous waste treatment, storage or disposal facility without first obtaining a hazardous waste construction permit.

Specific Authority 403.087, 403.704, 403.707, 403.721, 403.722 FS. Law Implemented 403.704, 403.707, 403.721, 403.722 FS. History–New 7-9-82, Formerly 17-30.25, Amended 9-23-87, 12-12-88, Formerly 17-30.250, Amended 7-3-89, 8-13-90, 9-10-91, 10-14-92, 10-7-93, Formerly 17-730.250, Amended 1-5-95, 1-29-06.

62-730.260 Permits for Remedial Activities.

(1) Except as authorized by the Department pursuant to this chapter, no person shall conduct remedial activities, as defined in Rule 62-730.210, F.A.C., at a hazardous waste facility without applying for and receiving a hazardous waste permit that includes conditions for remedial activities. Such permits include operation permits, postclosure permits, and corrective action permits. Where applicable, corrective action conditions shall be incorporated into a postclosure or operation permit.

(2) The owner or operator shall apply for a postclosure or corrective action permit on DEP forms adopted in paragraph 62-730.220(2)(a), F.A.C., either:

(a) At the time specified in a permit issued under this chapter; or

(b) Within 90 days of receipt of notification from the Department that a postclosure or corrective action permit is required.

(3) The owner or operator shall pay applicable fees pursuant to Rule 62-730.293, F.A.C., until the remedial activities are complete.

(4) The owner or operator shall apply for renewal of the postclosure or corrective action permit at least 180 days prior to its expiration throughout the remedial activities period.

(5) The term of a postclosure permit and a corrective action permit shall be 10 years.

(6) If postclosure plans have been approved by the Department as part of another application, the applicant for a postclosure permit shall include a copy of the approved postclosure plan with the application. The applicant shall also either:

(a) Attach a certification stating that no changes have been made to the plans; or

(b) Provide an amended plan showing all the changes which have been made, or are proposed to be made to the plans.

(7) Within 60 days of completion of the established postclosure care period for each hazardous waste unit, the owner or operator of the hazardous waste facility shall submit to the Department, by registered mail, a certification that the postclosure care period for each hazardous waste unit was performed in accordance with the specifications in the approved postclosure plan. The certification shall be signed by the owner or operator of the hazardous waste facility and an independent registered, professional engineer.

(8) A hazardous waste facility that closes with waste in place must record a deed notice pursuant to 40 CFR 264.119 or 40 CFR 265.119 "in accordance with State law." In Florida, this requirement must be fulfilled by the following:

(a) A restrictive covenant that runs with the land; or

(b) For government-owned facilities that are not transferred out of government ownership, a property management plan or land use control remedial design or corrective measures implementation plan that effectively controls exposure risks.

Specific Authority 403.704, 403.707, 403.721, 403.722 FS. Law Implemented 403.087, 403.704, 403.707, 403.721, 403.722 FS. History–New 7-9-82, Formerly 17-30.26, Amended 9-23-87, 6-28-88, Formerly 17-30.260, Amended 9-10-91, 10-14-92, 10-7-93, Formerly 17-730.260, Amended 1-5-95, 1-29-06.

62-730.265 Clean Closure Plans at Unpermitted Facilities and Subpart H Remedial Action Plans.

(1) Owners and operators of unpermitted hazardous waste facilities subject to the permitting requirements of 40 CFR Parts 264 or 270 may perform remedial activities in accordance with the provisions of this chapter by obtaining an alternate enforceable document that meets the requirements of 40 CFR 265.121 [as adopted in subsection 62-730.180(2), F.A.C.], with clean closure plan requirements. Except as provided in 40 CFR 264.1(g)(8) [as adopted in subsection 62-730.180(1), F.A.C.] no person shall conduct remedial activities at an unpermitted hazardous waste facility without applying for and receiving a hazardous waste permit, or complying with a clean closure plan issued by the Department or an order issued by EPA pursuant to §3008(h) of RCRA [42 USC §6928(h)].

(2) Owners and operators of unpermitted hazardous waste facilities subject to the permitting requirements of 40 CFR Part 264 [as adopted in subsection 62-730.180(1), F.A.C.] or 40 CFR Part 270 [as adopted in subsection 62-730.220(1), F.A.C.] shall comply with the provisions for remedial activities of Rule 62-730.225, F.A.C., the financial assurance provisions of Rule 62-730.226 and the public notice requirements of Rule 62-730.292, F.A.C.

(3) Owners and operators of remediation sites where hazardous remediation waste as defined in 40 CFR 260.10 [as adopted in subsection 62-730.020(1), F.A.C.] is generated, may apply for approval of a Subpart H RAP in accordance with the requirements and procedures of 40 CFR Part 270 Subpart H [as adopted in subsection 62-730.220(1), F.A.C.] in order to treat, store or dispose of the hazardous remediation waste. All applications for a Subpart H RAP shall be sent to the appropriate department project manager.

(4) The Department periodically prepares or updates a summary of options for management of environmental media (soil, sediments, groundwater, surface water) that contains hazardous waste. This summary is updated from time to time and is referenced for informational purposes only. Use of the summary is not mandatory. A copy can be obtained by contacting the Hazardous Waste Regulation Section, MS 4560, Division of Waste Management, Department of Environmental Protection, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400 or by locating the publication entitled "Management of Contaminated Media Under RCRA" at http://www.dep.state.fl.us/waste/categories/hazardous/pages/publications.htm.

Specific Authority 403.704, 403.707, 403.721, 403.722 FS. Law Implemented 403.704, 403.707, 403.721, 403.722 FS. History–New 1-29-06.

62-730.270 Exemptions.

(1) No permit under this chapter shall be required for the following:

(a) An ocean disposal barge or vessel, if the owner or operator:

1. Has and complies with a Federal permit for ocean dumping issued under 40 CFR Part 220, and

2. Complies with 40 CFR 264.11, 264.71, 264.72, 264.73(a) and (b)(1), 264.75, and 264.76 [as adopted in subsection 62-730.180(1), F.A.C.].

(b) A Publicly Owned Treatment Works (POTW), if the owner or operator:

1. Has and complies with a National Pollutant Discharge Elimination System (NPDES) permit, if required, and an applicable State domestic waste permit issued by the Department,

2. Complies with 40 CFR 264.11, 264.71, 264.72, 264.73(a) and (b)(1), 264.75, and 264.76 [as adopted in subsection 62-730.180(1), F.A.C.],

3. Accepts only waste which meets all Federal, State, and local pretreatment requirements which would be applicable to the waste if it were being discharged into the POTW through a sewer, pipe, or similar conveyance, and

4. For permits issued after November 8, 1984, complies with 40 CFR 264.101 [as adopted in subsection 62-730.180(1), F.A.C.].

(c) An injection well, if the owner or operator:

1. Has and complies with a State underground injection permit issued by a federally approved State Underground Injection Control program,

2. Complies with 40 CFR 264.11, 264.16, 264.71, 264.72, 264.73(a),(b)(1), and (b)(2), 264.75, and 264.76 [as adopted in subsection 62-730.180(1), F.A.C.], and

3. For permits issued after November 8, 1984, complies with 40 CFR 264.101 [as adopted in subsection 62-730.180(1), F.A.C.].

(2) Notwithstanding any other provision in Chapter 62-730, F.A.C., a facility which has been issued a permit under this chapter shall not be required to obtain a Department solid waste permit for the activities addressed in the hazardous waste permit.

(3) The following persons shall not be required to obtain a hazardous waste TOP, operation, construction, or closure permit:

(a) Generators of hazardous waste and hazardous waste facilities exempted or excluded from the hazardous waste permit program under other applicable provisions of federal or state law, rules or regulations, so long as all conditions of the exemption or exclusion are met.

(b) Generators of waste or facilities managing such wastes if those wastes are specifically excluded from the hazardous waste program under other applicable provisions of federal or state law, rules or regulations, so long as all conditions of the exclusion are met.

Specific Authority 403.704, 403.721, 403.722 FS. Law Implemented 403.704, 403.7045, 403.721, 403.722 FS. History–New 7-1-82, Formerly 17-30.27, Amended 9-23-87, Formerly 17-30.270, 17-730.270, Amended 1-29-06.

62-730.290 Modification and Transfer of Permits and Other Authorizations.

(1) After notice, and administrative hearing if requested by a substantially affected party, the Department shall require the owner or operator to conform to new or additional conditions upon a showing of good cause. For the purposes of this rule good cause shall be limited to the following:

(a) The standards or rules on which the permit or other authorization was based have been changed by amendment or judicial decision after the permit was issued or the authorization was granted;

(b) The Department has received information which was not available at the time of authorization and would have justified different conditions;

(c) There are alterations in the facility after authorization which justify different conditions but do not require a construction permit; or

(d) The causes set forth in subsection 62-4.080(1), F.A.C., and 40 CFR 270.41 and 270.42.

(2) When a permit or other authorization is to be modified only the conditions subject to modification are opened. All other aspects of the permit or other authorization shall remain in effect.

(3) Upon a written request by the owner or operator and submittal of the appropriate modification fee, the Department shall grant or deny modifications.

(4) Modifications to permits or other authorizations which are Class 2 and Class 3 modifications as set forth in 40 CFR 270.42 [as adopted in subsection 62-730.220(1), F.A.C.], shall be accompanied by a public notice as required in Rule 62-730.292, F.A.C. Modifications which are Class 1 modifications as set forth in 40 CFR 270.42, are minor modifications and may be made without public notice.

(5) With respect to postclosure and corrective action permits only, the permittee may request a permit modification to achieve CTLs based on secondary standards or based on nuisance, organoleptic or aesthetic considerations, which includes termination of financial responsibility requirements for remedial activities and changes to the groundwater plan, or may enter into a consent order (CO) in lieu of a permit and request termination of the hazardous waste postclosure or corrective action permit, when the permittee can demonstrate that the only contamination that remains at or from the facility is groundwater contamination in excess of CTLs based on secondary standards or based on nuisance, organoleptic or aesthetic considerations.

(6)(a) Application for transfer of a hazardous waste facility permit or other authorization shall be made at least 90 days before the effective date of the transfer on the Application for Transfer of A Permit Form 62-730.900(1)(a), effective date January 29, 2006, which is hereby adopted and incorporated by reference. Rule 62-730.900, F.A.C., contains information on obtaining a copy of this form.

(b) With respect to permits, the applicant shall comply with Section 403.722(13), F.S., and the application shall include:

1. A properly completed Application for Transfer of A Permit, Form 62-730.900(1)(a).

2. A statement as to how the new owner or operator intends to meet the financial responsibility requirements adopted in Rules 62-730.180 and 62-730.226, F.A.C. The new owner or operator must demonstrate financial responsibility within six months of the date of the change of ownership or operational control of the facility. The prior owner or operator shall comply with the requirements of 40 CFR Part 264 Subpart H [as adopted in subsection 62-730.180(1), F.A.C.] and 62-730.226, F.A.C., until the new owner or operator has demonstrated compliance.

3. A completed application for a Hazardous Waste Facility Permit Part I, Form 62-730.900(2)(a).

4. A completed application for a Hazardous Waste Facility Permit Certification, Form 62-730.900(2)(d).

(c) All applications for transfer of a permit or other authorizations shall include either a certification stating that no changes are to be made which would require modification of the authorization or a proposal for modification.

Specific Authority 403.087, 403.704, 403.722 FS. Law Implemented 403.087, 403.704, 403.722 FS. History–New 7-9-82, Amended 10-25-84, Formerly 17-30.29, Amended 9-23-87, Formerly 17-30.290, Amended 7-3-89, 9-10-91, 10-7-93, Formerly 17-730.290, Amended 1-29-06.

62-730.291 Permit Renewal.

(1) Prior to 180 days before the expiration of any hazardous waste permit, the permittee shall complete an application for a permit renewal, unless the facility has obtained or will obtain a facility-wide clean closure determination, without controls, or has entered or will enter into a CO to address CTLs based on secondary standards or based on nuisance, organoleptic or aesthetic considerations prior to the expiration of an existing permit. The Department will review the renewal permit application and issue or deny the permit in accordance with 40 CFR 270.51 [as adopted in subsection 62-730.220(1), F.A.C.].

(2) The application requirements for renewal of a permit are as follows:

(a) Owners or operators of facilities where there are changes to the facility plan or its operation (including closure) or remedial activities, or there are regulatory changes that effect its operation (including closure) or remedial activities, shall submit a letter describing the changes, all attachments necessary to completely describe the change, a completed Application for a Hazardous Waste Facility Permit Certification, Form 62-730.900(2)(d), and the permit renewal fee.

(b) Owners or operators of facilities which have operated or are conducting remedial activities (including closure) under the existing permit without any facility or regulatory changes shall submit a letter stating that there are no changes to the application filed in support of the existing permit, a completed Application for a Hazardous Waste Facility Permit Certification, Form 62-730.900(2)(d), and the permit renewal fee.

Specific Authority 403.704, 403.722 FS. Law Implemented 403.704, 403.722 FS. History–New 7-1-82, Formerly 17-30.30, Amended 9-23-87, 6-28-88, Formerly 17-30.300, Amended 8-13-90, 10-14-92, 10-7-93, Formerly 17-730.300, Amended 1-5-95, Formerly 62-730.300, Amended 1-29-06.

62-730.292 Public Notice for Hazardous Waste Permits and Other Authorizations.

(1) The pre-application public meeting requirements of 40 CFR 124.31 [as adopted in subsection 62-730.200(3), F.A.C.] apply to:

(a) Initial applications for construction or operation of a hazardous waste treatment, storage or disposal facility; and

(b) Operation permit renewals which propose a significant change in facility operations.

(2) The following applicants shall comply with the requirements of Section 403.722(12), F.S.:

(a) The applicant for a permit to construct or operate a hazardous waste treatment, storage or disposal facility; and

(b) The applicant for a modification or renewal of a construction or operation permit.

(3) The owner or operator shall cause notice of the Department's action to be published in a major local newspaper or newspapers of general circulation within 30 calendar days of receipt of:

(a) The Department's notice of intent to issue, modify, renew or terminate a hazardous waste permit; variance; or closure equivalency demonstration;

(b) An executed copy of an authorization from the Department to implement a clean closure plan;

(c) Approval by the Department of a remediation plan under 40 CFR Part 270 Subpart H [as adopted in subsection 62-730.220(1), F.A.C.]; and/or

(d) A clean closure determination.

(4) The owner or operator shall cause the Department's intent to issue a construction or operation permit (including modifications and renewals) to be broadcast over a local radio station.

(5) The notice for any hazardous waste permit or other hazardous waste authorization (except a variance) shall provide a 45-day period during which any person may comment on the Department's action or request an informal public meeting and a substantially affected party may request a hearing pursuant to Sections 120.569 and 120.57, F.S. The notice period for a variance pursuant to 40 CFR 260.31, 260.32 and 260.33 [as adopted in subsection 62-730.021, F.A.C.] shall be 30 days. The notice period for any other hazardous waste variance shall be 15 days. The notice shall contain instructions on how to examine a copy of the agency action and how members of the public can avail themselves of these rights and opportunities.

(6) The applicant shall provide the Department with proof of the publication and broadcast required by this section within 14 days of the receipt of proof of publication, but no later than 45 days after the applicant receives the Department's action.

(7) If within the applicable time limit after publication and broadcast as required in this section the Department receives written notice of opposition to the agency's intention to issue such authorization and a request for a hearing, the Department shall provide for a hearing pursuant to Sections 120.569 and 120.57, F.S., if requested by a substantially affected party or an informal public meeting if requested by any other person. The Department shall provide at least 30 days public notice prior to the holding of such hearing or meeting. Failure to request a hearing within the applicable time period shall constitute a waiver of the right to a hearing under Sections 120.569 and 120.57, F.S.

Specific Authority 403.061, 403.087, 403.704, 403.721, 403.722 FS. Law Implemented 403.151, 403.704, 403.707, 403.721, 403.722 FS. History–New 1-29-06.

62-730.293 Fees for Hazardous Waste Permits and Other Authorizations.

(1) Notwithstanding Chapter 62-4, F.A.C., the hazardous waste permit fees are as follows:

(a) Construction of a commercial treatment, storage, or disposal facility with a commercial incinerator, boiler or industrial furnace managing hazardous waste generated off-site.	$32,500
(b) Operation of a commercial treatment, storage or disposal facility with a commercial incinerator, boiler or industrial furnace managing hazardous waste generated off-site.	
(c) Department variance from federal regulations under 40 CFR 260.30.	
(d) A variance from classification as a solid waste; a variance to be classified as a boiler; a variance from tank containment and release detection requirements; or an exclusion determination for trivalent chromium waste.	
(e) All other hazardous waste facility authorizations for which a specific fee is not specified in this subsection.	
(f) Construction of a hazardous waste landfill, surface impoundment, waste pile, land treatment, or miscellaneous unit.	$25,000
(g) Construction of a hazardous waste treatment, storage or disposal facility with an incinerator, boiler or industrial furnace for treatment of hazardous waste generated on-site.	
(h) Construction of a container or tank hazardous waste storage and treatment facility.	$20,000
(i) A postclosure-only; or corrective action-only; or combination postclosure/corrective action-only authorization (i.e. a permit or an enforceable document).	$20,000 for 10 years or $2,000 per year
(j) Construction of a container or tank hazardous waste storage facility.	$15,000
(k) Operation of a hazardous waste landfill, surface impoundment, waste pile, land treatment or miscellaneous unit.	
(l) Operation of a hazardous waste treatment, storage or disposal facility with an incinerator, boiler or industrial furnace for treatment of hazardous waste generated on-site.	
(m) Operation of a container or tank hazardous waste storage or storage and treatment facility.	$10,000
(n) Substantial modifications that require a moderate technical evaluation by the Department. Examples include alterations of the existing facility or its operation which will require additional site-specific evaluation.	
(o) A hazardous waste variance other than those in paragraph (c) or (d).	$5,000
(p) Moderate modifications that require moderate technical evaluation by the Department. These modifications require a new site inspection, lead to different environmental impacts, or lessen the impacts of the original permit.	
(q) An operation permit renewal (closure or remedial activities conditions only) or a clean closure plan.	$2,000 per year
(r) A Research, Development and Demonstration (RDD) permit.	$2,000
(s) A “contained out” determination for soil or groundwater that contained hazardous waste and has undergone remedial activities.	$1,000 (no fee for contained out determination if incorporated into another authorization with a fee)
(t) A renewal of a two-year variance.	
(u) Minor modifications that are not otherwise specified. These include common or frequently occurring changes needed to maintain a facility’s capacity to manage wastes safely, minor changes in groundwater monitoring plans, or modifications to conform to new requirements.	
(v) A Subpart H remedial action plan (Subpart H RAP) for on-site treatment, storage, or disposal of hazardous remediation waste.	no fee required
(w) Substantial modifications that require significant changes to an existing authorization or clean closure plan and extensive evaluation by the Department. Examples include alteration of the existing facility; change in the facility plan, groundwater monitoring program assessment, or the remediation/engineering design; or other general facility standard.	same fee as a new application

(2) Fees for construction permits, operation permits and temporary operation permits (TOPs) may not be paid on a “per year” basis. Authorization fees established on a “per year” basis shall be payable as follows:

(a) Paying on a yearly basis is optional. If the applicant does not choose to pay on a yearly basis, the applicant shall submit whichever of the following is applicable with the application:

1. The entire payment for a five-year authorization which is equal to 5 times the “per year” fee amount; or

2. The entire payment for a 10-year authorization which is equal to 10 times the “per year” fee amount.

(b) If the applicant chooses the yearly payment option, the fee that accompanies the application shall be the amount established for one year. The next fee payment shall be due on the first anniversary of the effective date of the authorization. Each succeeding fee payment shall be due on the anniversary date of the effective date of the authorization. The applicant may choose to submit the

fee for more than one year at a time, up to the maximum fee for the life of the permit. Failure to submit any fee payment shall be a violation of this rule and shall be grounds for termination of the authorization and other enforcement action. If payment of an annual fee is late, the annual fee shall increase $20 for each overdue day, up to a maximum increase of $3,250 per year.

Specific Authority 403.087, 403.201, 403.704, 403.722 FS. Law Implemented 403.087, 403.201, 403.704, 403.722 FS. History–New 1-29-06.

62-730.320 Emergency Detonation or Thermal Treatment of Certain Hazardous Waste.

(1) "Explosives or munitions emergency response specialist" (EMER Specialist) means an individual trained in chemical or conventional munitions or explosives handling, transportation, render-safe procedures, or destruction techniques. EMER Specialists are limited to Department of Defense (DOD) emergency explosive ordnance disposal (EOD), technical escort unit (TEU), and civilian or contractor personnel certified by DOD in emergency explosive ordinance disposal; and other Federal, State, or local government, or civilian personnel similarly trained in explosives or munitions emergency responses.

(2) "Explosives or munitions emergency" ("EME") means a situation involving the suspected or detected presence of unexploded ordnance (UXO), damaged or deteriorated explosives or munitions, an improvised explosive device (IED), other potentially explosive material or device, or other potentially harmful military chemical munitions or device, that creates an actual or potential imminent threat to human health (including safety) or the environment (including property), as determined by an EMER Specialist.

(3) "Explosives or munitions emergency response" ("EME Response") means all immediate response activities by an EMER Specialist to control, mitigate, or eliminate the actual or potential threat encountered during an EME. An EME Response may include in-place render-safe procedures; treatment or destruction of the explosives or munitions; and/or transporting those items to another location to be rendered safe, treated, or destroyed. Any reasonable delay in the completion of an EME Response caused by a necessary, unforeseen, or uncontrollable circumstance will not terminate the EME.

(4) "Person having initial custody of the waste" means a person who has authority to request assistance from an EMER Specialist regarding the explosives or munitions waste that is the object of the EMER. This could be the owner of the waste; the person who generated the waste; the person who caused the waste to be at the location where found; or the owner of the real property where the waste is or was located (i.e. the real property where the EMER began); or an agent or tenant of the real property owner.

(5) If an EMER Specialist determines that an EME Response is necessary to protect human health or the environment, that specialist:

(a) Is not required to comply with the standards of 40 CFR Part 262 [as adopted in subsection 62-730.160(1), F.A.C.] applicable to generators of hazardous waste;

(b) Is not required to comply with the standards of 40 CFR Part 264 [as adopted in subsection 62-730.180(1), F.A.C.] or 40 CFR Part 265 [as adopted in subsection 62-730.180(2), F.A.C.] applicable to treatment, storage, and disposal of hazardous waste;

(c) May authorize the removal of the material or waste by transporters who do not have EPA identification numbers and without the preparation of a manifest.

(6) All EME Responses involving waste that is reactive, shock sensitive, or explosive and can only be safely disposed through immediate detonation or thermal treatment, are subject to the following specific conditions:

(a) The person having initial custody of the waste shall notify the Department of the name, address and telephone number of the person having initial custody of the waste; the type and amount of waste; the anticipated time and place of the treatment or detonation; and procedures for detonation or treatment. After the Department has been notified the EME Response can proceed. The local Department representative or designee may be present to observe the detonation or treatment; however, the EME Response need not be delayed solely in order for the Department representative to arrive.

(b) The detonation or treatment shall be conducted or supervised by an EMER Specialist.

(c) Prior to detonation or treatment, the site shall be secured and no site access allowed except by authorized personnel. The area around the site shall be visually inspected to assure that no unauthorized personnel are present. The securing and inspections of the site shall be made to at least the following distances:

POUNDS OF WASTE EXPLOSIVE	MINIMUM DISTANCE
0 to 100	204 meters (670 feet)
101 to 1,000	380 meters (1250 feet)
1,001 to 10,000	530 meters (1730 feet)
10,001 to 30,000	690 meters (2260 feet)

(d) Visible residual materials shall be recovered from the site and properly disposed of in accordance with Department rules.

(e) Adequate fire protection to assure confinement and control of any fire resulting from the operation shall be provided.

(7) In the case of EME Responses involving military munitions, the responding EMER Specialist's organizational unit must retain records for three years identifying the location, dates and time of the EME Response, the responsible persons responding, the type and description of material addressed (including amounts and sampling data, if available), and its disposition.

(8) If an EME Response is clearly not necessary to address the situation and a response can be delayed without compromising safety or increasing the risk posed to life, property, health, or the environment, the person having initial custody of the explosives or munitions shall fulfill the requirements of 40 CFR 270.61 [as adopted in subsection 62-730.220(1), F.A.C.] by providing oral or written notice to the Department and obtaining oral or written authorization from the Department prior to implementing a course of action. If the authorization is oral, it must be followed within five days by a written order. The following provisions apply to authorization under this subsection:

(a) Notice to the Department shall include the name of the person having initial custody of the explosives or munitions and the EMER Specialist(s) involved; a brief description of the explosives or munitions involved, including type, amount, and location; and a brief description of and reasons for the proposed actions, including location(s). Thermal treatment or detonation shall be conducted only at the time and place specified in the notice.

(b) Authorization shall include all applicable requirements of Chapter 62-730, F.A.C., to the extent possible and not inconsistent with the EME.

(c) Compliance with this subsection shall not excuse failure to obtain any other local, state, or federal approval or license which may be required for the activities allowed in this authorization.

(d) Authorization shall not exceed 90 days.

(e) Written orders shall be accompanied by the publication of public notice. This may be accomplished by the person having initial custody of the waste or by the Department.

(f) Within 30 days of the EME activities conducted under the written order, the authorized person shall submit to the Department a complete written summary of the EME activities which shall clearly specify the type and amount of explosives or munitions received and the manner and location of their treatment, storage, or disposal; disposition of any residues from the process; and other pertinent information.

(9) A person having initial custody of the waste shall conduct soil sampling or otherwise provide reasonable assurance to the Department that no residues of the EME Response or any other emergency action regarding explosives or munitions pose a threat to human health or the environment.

Specific Authority 403.704, 403.721 FS. Law Implemented 403.061, 403.704, 403.721, 403.726 FS. History–New 9-30-85, Formerly 17-30.32, 17-30.320, 17-730.320, Amended 1-5-95, 1-29-06.

PART IV HAZARDOUS WASTE FORMS

62-730.900 Forms.

Forms are listed here by form number. Copies of all forms can be obtained on the internet at http://www.dep.state.fl.us/waste/quick_topics/forms/pages/62-730.htm or by contacting the Hazardous Waste Regulation Section, MS 4560, Division of Waste Management, Department of Environmental Protection, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. In order to facilitate the initial submission of a complete application, applicants for hazardous waste permits are encouraged to use the Hazardous Waste Facility Permit Application Instructions, which provide guidance to the forms and assistance in assuring that the application complies with the provisions of 40 CFR Part 270 and this chapter.

(1) Notification Forms.

(a) Application for Transfer of a Permit, January 29, 2006. [Form number 62-730.900(1)(a)]

(b) 8700-12FL - Florida Notification of Regulated Waste Activity, January 29, 2006. [Form number 62-730.900(1)(b)]

(2) Application for a Hazardous Waste Facility Permit Forms.

(a) Part I – General, January 29, 1996. [Form number 62-730.900(2)(a)]

(b) Well Construction Summary Report, January 29, 2006. [Form number 62-730.900(2)(b)]

(c) Information Regarding Potential Releases from Solid Waste Management Units, January 29, 2006. [Form number 62-730.900(2)(c)]

(d) Certification, January 29, 2006. [Form number 62-730.900(2)(d)]

(3) Application for a Hazardous Waste Emergency EPA/DEP Identification Number, January 5, 1995. [Form number 62-730.900(3)]

(4) Hazardous Waste Financial Responsibility Forms.

(a) Hazardous Waste Facility Letter from Chief Financial Officer to Demonstrate Financial Assurance, January 5, 1995. [Form number 62-730.900(4)(a)]

(b) Hazardous Waste Facility Letter from Chief Financial Officer to Demonstrate Financial Responsibility, January 5, 1995. [Form number 62-730.900(4)(b)]

(c) Hazardous Waste Facility Corporate Guarantee to Demonstrate Financial Assurance, January 5, 1995. [Form number 62-730.900(4)(c)]

(d) Hazardous Waste Facility Corporate Guarantee for Liability Coverage, January 5, 1995. [Form number 62-730.900(4)(d)]

(e) Hazardous Waste Facility Trust Fund Agreement to Demonstrate Financial Assurance, January 5, 1995. [Form number 62-730.900(4)(e)]

(f) Hazardous Waste Facility Standby Trust Fund Agreement to Demonstrate Financial Assurance, January 5, 1995. [Form number 62-730.900(4)(f)]
(g) Hazardous Waste Facility Irrevocable Letter of Credit to Demonstrate Financial Assurance, January 5, 1995. [Form number 62-730.900(4)(g)]
(h) Hazardous Waste Facility Financial Guarantee Bond to Demonstrate Financial Assurance, January 5, 1995. [Form number 62-730.900(4)(h)]
(i) Hazardous Waste Facility Performance Bond to Demonstrate Financial Assurance, January 5, 1995. [Form number 62-730.900(4)(i)]
(j) Hazardous Waste Facility Insurance Certificate to Demonstrate Financial Assurance, January 5, 1995. [Form number 62-730.900(4)(j)]
(k) Hazardous Waste Facility Certificate of Liability Insurance (Primary Policy), January 5, 1995. [Form number 62-730.900(4)(k)]
(l) Hazardous Waste Facility Certificate of Liability Insurance (Excess/Surplus Policy), January 5, 1995. [Form number 62-730.900(4)(l)]
(m) Hazardous Waste Facility Endorsement (Primary Policy), January 5, 1995. [Form number 62-730.900(4)(m)]
(n) Hazardous Waste Facility Endorsement (Excess/Surplus Policy), January 5, 1995. [Form number 62-730.900(4)(n)]
(o) Hazardous Waste Facility Irrevocable Letter of Credit To Demonstrate Liability Coverage, January 29, 2006. [Form number 62-730.900(4)(o)]
(p) Hazardous Waste Facility Surety Bond To Demonstrate Liability Coverage, January 29, 2006. [Form number 62-730.900(4)(p)]
(q) Hazardous Waste Facility Trust Fund To Demonstrate Liability Coverage, January 29, 2006. [Form number 62-730.900(4)(q)]
(r) Hazardous Waste Facility Standby Trust Fund To Demonstrate Liability Coverage, January 29, 2006. [Form number 62-730.900(4)(r)]
(5) Hazardous Waste Transporter Financial Responsibility Forms.
(a) Hazardous Waste Transporter Certificate of Liability Insurance, January 29, 2006. [Form number 62-730.900(5)(a)]
(b) Hazardous Waste Transporter Liability Endorsement, January 29, 2006. [Form number 62-730.900(5)(b)]
(c) Hazardous Waste Transporter Liability Surety Bond, January 29, 2006. [Form number 62-730.900(5)(c)]
(d) Hazardous Waste Transporter Status Form, January 5, 1995. [Form number 62-730.900(5)(d)]
(6) Transfer Facility Notification Form, January 5, 1995. [Form number 62-730.900(6)]
(7) Compliance Assistance Pilot Project – Florida's Compliance Certification Package.
(a) CAPP Exclusion Statement, October 10, 2002. [Form number 62-730.900(7)(a)]
(b) CAPP Compliance Certification Form, October 10, 2002. [Form number 62-730.900(7)(b)]
(c) CAPP Return-to-Compliance Plan, October 10, 2002. [Form number 62-730.900(7)(c)]
(8) 2005 Hazardous Waste Report Form, January 29, 2006 [Form number 62-730.900(8)]

Specific Authority 120.53, 403.061, 403.0611 FS. Law Implemented 120.52, 120.53, 120.55, 403.0611, 403.0875, 403.7234 FS. History–New 11-30-82, Amended 4-1-83, 5-5-83, 8-21-83, 3-1-84, 5-31-84, 9-17-84, 10-29-84, 2-11-85, Formerly 17-1.207(1), (3)-(6), Amended 2-6-86, 4-8-86, 9-23-87, Formerly 17-30.401, Amended 6-28-88, 12-12-88, Formerly 17-30.900, Amended 7-3-89, 8-13-90, 9-10-91, 10-14-92, 10-7-93, Formerly 17-730.900, Amended 1-5-95, 10-10-02, 1-29-06.

Appendix C

Environmental Liaison Inspection Form

NORTHERN PALM BEACH COUNTY IMPROVEMENT DISTRICT
PALM BEACH PARK OF COMMERCE (FLORIDA RESEARCH PARK)
Unit of Development No. 16

ENVIRONMENTAL LIAISON INSPECTION (ELI) FORM
(Print or type information and check all appropriate boxes)

Subject Property Name:

Address/Location:

City: Unincorporated County: Palm Beach State: FL

Inspected by: Signature: _____

Company: Environmental Quality, Inc. Date: ☐ AM ☐ PM

Site Access Contact: Phone:

Instructions:

This ELI Form defines the scope of work to be performed in a checklist format and is the document on which the Inspector shall record the information during the inspection or interview. The scope of work to be performed by using this checklist involves monitoring the compliance with all environmentally related representations by the developer of the Palm Beach Park of Commerce and with the conditions of approval for the development. This ELI Form incorporates environmentally related representations and conditions of approval in effect as of September 1, 2005.

This ELI Form shall be completed by the Inspector performing the inspection of the subject property to document his/her observations. The Inspector shall not disturb, dismantle, or rearrange any materials, containers, or equipment in performance of this inspection. The Inspector is responsible for arranging access to the property and making all necessary preparations, including personal safety provisions, such as appropriate footwear and clothing. A telephone interview may be performed if conditions at the subject property have not changed significantly from the latest site inspection. However, a site visit must be performed if the inspection was conducted more than 12 months ago.

The Inspector shall walk the entire perimeter boundary of the subject property, walk each side of all onsite wet and dry drainage arteries, walk around all onsite portions of water bodies, walk all roads, drives and pathways, walk around and through all building improvements, and walk an appropriate grid pattern over the remaining area not covered above, including wooded/overgrown areas, to observe and record evidence of environmental concern relating to environmentally related representations by the developer and conditions of approval. The Inspector shall document items of environmental concern observed. Check mark all boxes that indicate the conditions observed; appropriately fill in the blanks where applicable.

I. TYPE OF CONTACT:

☐ Site Inspection ☐ Telephone Conversation

Date of last inspection:

II. PROPERTY DESCRIPTION: (Please check all items applicable)

☐ Warehouse ☐ Occupied Lot #:

☐ Warehouse & Administration ☐ Unoccupied

☐ Administration ☐ Other

III. OPERATIONS/ACTIVITIES:

The following activity, or evidence thereof, was observed onsite:

A. **Administration Services**

Offices	☐ No	☐ Yes
Wholesale / Retail Sales	☐ No	☐ Yes
Professional Services	☐ No	☐ Yes
Medical	☐ No	☐ Yes

B. **Warehouse (Uses)**

Vacant	☐ No	☐ Yes
Dry Storage / Distribution	☐ No	☐ Yes
Dry Goods (computers/toys/non-perishable/food)	☐ No	☐ Yes
Perishables (vegetation/flowers)	☐ No	☐ Yes
Repackaging / Reconsolidation	☐ No	☐ Yes

C. **Other Uses / Operations**

Waste Treatment processes	☐ No	☐ Yes
Gasoline Station	☐ No	☐ Yes
Motor vehicle repair / maintenance	☐ No	☐ Yes
Workshop	☐ No	☐ Yes
55-gallon drums observed	☐ No	☐ Yes
AST / UST	☐ No	☐ Yes
Inks / Dye / paint use	☐ No	☐ Yes
Photochemical laboratories	☐ No	☐ Yes
Vehicle washing	☐ No	☐ Yes
Hazardous Waste Treatment, Storage, or Disposal Facility	☐ No	☐ Yes
Auto Transport / Courier Service	☐ No	☐ Yes
Medical Facility / Hospital	☐ No	☐ Yes
Photo Developing	☐ No	☐ Yes
Office Supply warehouse	☐ No	☐ Yes
Equipment Storage	☐ No	☐ Yes
Testing Laboratory	☐ No	☐ Yes
Basement	☐ No	☐ Yes

IV. ENVIRONMENTALLY RELATED REPRESENTATIONS BY THE DEVELOPER (EXCLUDING LANDSCAPING REQUIREMENTS):

Declaration of Protective Covenants, Conditions, and Restrictions for Palm Beach Park of Commerce

Article II: Land Use Criteria

a. The property shall not be used for the following uses (derived from Article II, Section a):
Please check any that apply to the property that is being inspected.

Fertilizer manufacturer	☐ No	☐ Yes
Petroleum and coal derivation manufacturers	☐ No	☐ Yes
Exterminator manufacturing and warehousing	☐ No	☐ Yes
Chemical manufacturing, including insecticides, herbicides and pesticides	☐ No	☐ Yes
Steel or paper mills	☐ No	☐ Yes

Manufacturing and storage of radioactive materials ☐ No ☐ Yes

Comments, if any:

b. Rubbish, garbage, debris and waste material shall be placed only in designated containers (derived from Article II, Section g).

Were the above conditions observed on the property being inspected ? ☐ No ☐ Yes

Comments, if any:

c. No oil drilling, oil development operations, oil refining, quarrying or mining operations of any kind shall be permitted upon or in the property, nor on dedicated areas, nor shall oil wells, any other type of well for water or other purposes, tanks, tunnels, mineral excavations or shafts be permitted upon or in the property. No derrick or other structure designed for use in boring for oil or natural gas shall be erected, maintained or permitted upon any portion of the land subject to these restrictions. This Section k shall be applicable to all lots, including undeveloped lots, lots under construction and improved lots (derived from Article II, Section k).

Were the above conditions observed on the property being inspected ? ☐ No ☐ Yes

Comments, if any:

Article XI: General Provisions

a. The Association shall have the sole and exclusive right and privilege to provide water and sewer services to the Park and each lot therein, and to the occupants of any improvements constructed thereon (derived from Article XI, Section n).

Were the above conditions observed on the property being inspected ? ☐ No ☐ Yes

Well Purpose:

Well Permit Number:

Comments, if any:

V. PALM BEACH COUNTY CONDITIONS OF APPROVAL (RELATING TO THE ENVIRONMENT):

Palm Beach County Resolution No. R-2005-1419.1 – Exhibit C – Conditions of Approval

Health

a. Within the Florida Research Park, no structure or improvement shall be constructed, or altered, nor shall any premises be used as a laboratory unless the premises and related organizational processes comply with all federal, state and local laws and published guidelines governing the construction and operation of such a laboratory (derived from Health, Section 1).

Is the property being inspected a laboratory? ☐ No ☐ Yes

If yes, question (b) below addresses proof of compliance

b. The property owner or operator of the laboratory shall, upon request by the Palm Beach County Health Department, provide proof of compliance with federal, state and local regulations in the form of copies of licenses, permits, registrations, certificates of accreditation, inspection reports or other documentation deemed appropriate by the Palm Beach County Health Department (derived from Health, Section 2).

Is the property being inspected a laboratory? ☐ No ☐ Yes

If yes, has the Palm Beach County Health Department requested proof of compliance? ☐ No ☐ Yes

c. The property owner and operator of laboratories classified as Biosafety Level 2, 3, or 4, as defined in the Centers for Disease Control and Prevention (CDC) and National Institute of Health (NIH) "Biosafety in Microbiological and Biomedical Laboratories", 4th Edition, by the U.S. Department of Health and Human Services, May 1999, shall ensure that all wastes from such laboratories are effectively decontaminated before the waste leaves the area of the laboratory so designated (derived from Health, Section 3).

Is the property being inspected classified as a Biosafety Level 2, 3, or 4 Laboratory? ☐ No ☐ Yes

If yes, did the inspector observe that wastes are effectively decontaminated before leaving the laboratory? ☐ No ☐ Yes

Comments, if any:

d. No waste from Biosafety Level 2, 3, or 4 laboratories as defined in the Centers for Disease Control and Prevention (CDC) and National Institute of Health (NIH) "Biosafety in Microbiological and Biomedical Laboratories", 4th Edition, by the U.S. Department of Health and Human Services, May 1999, shall be discharged to the sewer before the waste is effectively decontaminated. All reasonable measures shall be instituted and maintained to prevent the accidental release of biological agents and toxins, and select agents and toxins, or other dangerous or exotic agents to the environment (derived from Health, Section 4).

Is the property being inspected classified as a Biosafety Level 2, 3, or 4 Laboratory? ☐ No ☐ Yes

If yes, did the inspector observe that wastes are effectively decontaminated before being discharged to the sewer system? ☐ No ☐ Yes

If yes, explain briefly the measures that have been instituted to prevent the accidental release of biological agents and toxins, and select agents and toxins, or other dangerous or exotic agents to the environment:

Additional comments, if any:

e. The property owner or operator of laboratory uses shall ensure zero discharge of untreated potentially contaminated waste to the sanitary sewer, and shall provide documented verification of such to the Palm Beach County Health Department upon request (derived from Health, Section 5).

Is the property being inspected a laboratory? ☐ No ☐ Yes

If yes, has the Palm Beach County Health Department requested documented verification of zero discharge of untreated waste to the sanitary sewer system? ☐ No ☐ Yes

Did the inspector observe untreated wastes discharge to the sanitary sewer system? ☐ No ☐ Yes

Comments, if any:

f. The property owner or operator of facilities generating industrial, hazardous or toxic waste shall not deposit or cause to be deposited any such waste into the sanitary sewer system unless adequate pretreatment facilities approved by the Florida Department of Environmental Protection, the Palm Beach County Health Department, and the agency responsible for sewage works are provided and used (derived from Health, Section 6).

Did the inspector observe the depositing of industrial, hazardous or toxic waste into the sanitary sewer system at the property being inspected? ☐ No ☐ Yes

Did the inspector observe pretreatment facilities at the property being inspected? ☐ No ☐ Yes

If yes, have these facilities been approved by the Florida Department of Environmental Protection, the Palm Beach County Health Department, and the agency responsible for sewage works? ☐ No ☐ Yes

Comments, if any:

g. The property owner or owner of the laboratory shall maintain records of all waste treatment at the facility, including proof of the effective decontamination of all treated waste. These records shall include the date, time, amount of waste, method of treatment, method(s) used to verify effectiveness of treatment, and the results of tests used to verify treatment effectiveness (derived from Health, Section 7).

Is the property being inspected a laboratory? ☐ No ☐ Yes

If yes, did the inspector observe waste treatment activities at the facility? ☐ No ☐ Yes

If yes, did the inspector observe that the laboratory is maintaining records as specified above? ☐ No ☐ Yes

Comments, if any:

h. Any person who is a generator or an employee of a generator of hazardous or infectious waste shall store such wastes prior to disposal in an area secured as to deny access to unauthorized persons, animals, wind, rain, insects, and rodents. If such wastes are placed in a trash receptacle or compactor that is accessible at any time to unauthorized persons, such receptacle or compactor shall be locked to anyone other than authorized persons or waste collection personnel (derived from Health, Section 8).

Did the inspector observe that hazardous or infectious waste is generated at the property being inspected? ☐ No ☐ Yes

If yes, did the inspector observe that the waste was being stored in a secure area as specified above? ☐ No ☐ Yes

Did the inspector observe that the waste was being placed in a trash receptacle or compactor? ☐ No ☐ Yes

If yes, did the inspector observe that the receptacle or compactor was locked to anyone other than personnel as specified above? ☐ No ☐ Yes

Comments, if any:

i. Prior to the issuance of a certificate of occupancy (CO) for any laboratories, the facility owner or operator shall submit to the Palm Beach County Health Department a copy of the facility's Biosafety and Security Plan. The recommended design to focus on increased security needs can be found in Appendix F – Laboratory Security and Emergency Response Guidance for Laboratories Working with Select Agents, of the CDC and NIH publication entitled Biosafety in Microbiological and Biomedical Laboratories, 4th Edition. The Biosafety and Security Plan shall outline biosafety and containment procedures, security systems and procedures, and incident response procedures, and shall have been approved by an officer of the company or institution with appropriate signature authority (derived from Health, Section 9).

Is the property being inspected a laboratory? ☐ No ☐ Yes

If yes, did the facility submit to the Palm Beach County Health Department a copy of the Facility's Biosafety and Security Plan? ☐ No ☐ Yes

Comments, if any:

j. Open burning for land clearing shall not be conducted without the prior approval of the Palm Beach County Health Department (derived from Health, Section 12).

Did the inspector observe any open burning at the property being inspected? ☐ No ☐ Yes

Comments, if any:

k. The existing Florida Research Park (PIPD) water supply system is in place to serve the project. No other private, community, or limited use potable water wells shall be permitted on the site (derived from Health, Section 14).

Did the inspector observe any potable water wells on the property being inspected? ☐ No ☐ Yes

Comments, if any:

l. No on-site sewage treatment and disposal system (OSTDS) shall be permitted on the site. All existing OSTDS shall be abandoned in accordance with Rule 64 E-6 FAC and Palm Beach County ECR-I (derived from Health, Section 15).

Did the inspector observe any OSTDS on the property being inspected? ☐ No ☐ Yes

Comments, if any:

m. Prior to the issuance of the first certificate of occupancy (CO) for any facility in the Florida Research Park project, the developer/property owner shall prepare a Hazardous Materials Management Plan and have it approved by the Palm Beach County Health Department and Florida Department of Environmental Protection. The plan shall address the handling and disposal of any toxic or hazardous materials in accordance with Florida Administrative Code Rule 62-730, and any biomedical waste in accordance with Florida Administrative Code Rule 64E-16. At a minimum, the plan shall (derived from Health, Section 16):

- require disclosure by all owners or tenants of the property of all hazardous materials or waste proposed to be stored, used, or generated on premises;
- require the inspection of all premises storing, using, or generating hazardous materials or waste prior to the commencement of operation, and periodically thereafter, to assure that proper facilities and procedures are in place to properly manage hazardous materials projected to occur;
- provide minimum standards and procedures for storage, prevention of spills, containment of spills, and transfer and disposal of such materials and waste;
- provide for proper maintenance, operation, and monitoring of hazardous materials and waste management systems including spill and hazardous materials and waste containment systems;
- detail actions and procedures to be followed in case of spills or other accidents involving hazardous materials or waste;
- guarantee financial and physical responsibility for spill clean up;
- include a program for continued monitoring of surface and groundwater on the site;
- The approved plan shall be incorporated into the development by including it as part of any lease or sale agreement provided to tenants and owners that will use, handle, store, display or generate hazardous materials or waste. A copy of the approved Hazardous Materials Management Plan for the Florida Research Park (PIPD) shall be provided to the contractors and all owners, tenants, and operators of businesses within the project and shall be required to comply with the applicable provisions of the plan.

Did the inspector observe that the developer/property owner has prepared a Hazardous Materials Management Plan and that the Palm Beach County Health Department and Florida Department of Environmental Protection have approved the plan? ☐ No ☐ Yes

If yes, did the inspector observe that the specific minimum conditions listed above have been followed? ☐ No ☐ Yes

Comments, if any:

n. The owner of the private utility system serving the Florida Research Park shall monitor the water demand from the existing water treatment facilities and initiate appropriate and effective measures to ensure that in no event will the water demand including fire-flow demand exceed the permitted capacity of the water supply system. The measures to ensure adequacy of water system capacity must be initiated within 6 months after the first month in which the average water demand exceeds 75% of the permitted system capacity (derived from Health, Section 17).

Is the property being inspected the owner of the private utility system serving the Florida Research Park? ☐ No ☐ Yes

If yes, did the inspector observe that the utility is monitoring the water demand and initiating measures as specified above? ☐ No ☐ Yes

Comments, if any:

o. The owner of the private utility system serving the Florida Research Park shall monitor the wastewater flow from the existing water treatment facilities and initiate appropriate and effective measures to ensure that in no event will the daily wastewater flows exceed the permitted capacity of the wastewater treatment system. The measures to ensure adequacy of the wastewater treatment system capacity must be initiated within 6 months after the first month in which the daily wastewater flows exceeds 75% of the permitted system capacity (derived from Health, Section 18).

Is the property being inspected the owner of the private utility system serving the Florida Research Park? ☐ No ☐ Yes

If yes, did the inspector observe that the utility is monitoring the wastewater flow and initiating measures as specified above? ☐ No ☐ Yes

Comments, if any:

p. The generation and disposal of hazardous effluents in the sanitary sewerage system shall be prohibited unless adequate pretreatment facilities approved by the Florida Department of Environmental Protection (FDEP) and Agency responsible for sewage works are constructed and used by project tenants or owners generating such effluents (derived from Health, Section 20).

Did the inspector observe the disposal of hazardous effluents into the sanitary sewerage system at the property being inspected? ☐ No ☐ Yes

Did the inspector observe pretreatment facilities at the property being inspected? ☐ No ☐ Yes

If yes, has the Florida Department of Environmental Protection approved these facilities and the agency responsible for sewage works? ☐ No ☐ Yes

Comments, if any:

q. The property owner and operator of any facility that receives, processes, handles, stores, or uses radioactive material must comply with all applicable Federal, State and local statutes, regulations, and ordinances (derived from Health, Section 22).

Did the inspector observe that radioactive materials are present at the property being inspected? ☐ No ☐ Yes

If yes, does the owner/operator assert that they comply with all applicable Federal, State and Local statutes, regulations, and ordinances regarding the radioactive materials? ☐ No ☐ Yes

Comments, if any:

r. The property owner shall notify the Palm Beach County Health Department upon closure of any operation that was issued a specific license for radioactive materials (derived from Health, Section 23).

Does the property owner report that they have closed any operations that were issued a specific license for radioactive materials? ☐ No ☐ Yes

If yes, was the Palm Beach County Health Department notified? ☐ No ☐ Yes

Comments, if any:

Zoning – Use Limitations

a. No nuclear reactor shall be allowed on any site with the Florida Research Park PIPD (derived from Zoning – Use Limitations, Section 3).

Did the inspector observe that a nuclear reactor is present on the property being inspected? ☐ No ☐ Yes

Comments, if any:

b. The property owner shall not allow any operation on the site that requires the following categories of specific licenses of radioactive materials outlined in Chapter 64E-5.204(2)(e)4, Florida Administrative Code, titled waste disposal or processing (derived from Zoning – Use Limitations, Section 4).

a. Commercial waste disposal or treatment facilities, including burial or incineration;
b. All other commercial facilities involving compaction, repackaging, storage, or transfer; and
c. Commercial treatment of radioactive materials for release to unrestricted areas.

Did the inspector observe any operations on the property being inspected that require the categories of licenses specified above? ☐ No ☐ Yes

If yes, specify the category observed:

Comments, if any:

VI. HAZARDOUS SUBSTANCES OBSERVED:

The inspector shall list below hazardous substances observed during the inspection:

VII. ADDITIONAL COMMENTS ON VISUAL INSPECTION OF PROPERTY:

Appendix D

CHAPTER 64E-16 BIOMEDICAL WASTE, F.A.C.

State of Florida Biomedical Waste Regulations

CHAPTER 64E-16 BIOMEDICAL WASTE

64E-16.001 General.

(1) This rule prescribes minimum sanitary practices relating to the management of biomedical waste, including segregation, handling, labeling, storage, transport, and treatment. This rule applies to all facilities that generate, transport, store, or treat biomedical waste to ensure that the waste is properly handled to protect public health. Further, this rule prescribes minimum standards for permitting biomedical waste generators, storage facilities and treatment facilities, and for registering biomedical waste transporters.

(2) This chapter does not apply to biomedical waste incinerators. This chapter does not apply to linen incinerators. This chapter does not apply to linen that is to be laundered and re-used. Further, this chapter does not apply to dead bodies that are disposed of by a person licensed under the provisions of Chapter 470, F.S., or to the transport of bodies, parts of bodies, or tissue specimens in furtherance of lawful examination, investigation, or autopsy conducted pursuant to Section 406.11, F.S. Specimens or samples collected for laboratory testing or use in medical research or teaching are not considered biomedical waste until such time as the material is discarded.

(3) The Department of Health shall regulate the packaging, transport, storage, and treatment of biomedical waste. The Department of Environmental Protection shall regulate biomedical waste incineration and biomedical waste disposal.

(4) Health care providers shall inform their home user clients verbally and in writing of the recommended method for handling biomedical waste generated in the home setting. Health care providers who deliver in-home medical services shall remove or have removed by a registered biomedical waste transporter all biomedical waste generated during the performance of these services.

(5) Home users should segregate and package their biomedical waste in a manner that reduces the chance of exposure to the public.

(6) Inspections, permitting and enforcement of emergency medical services that generate biomedical waste shall be performed by the Bureau of Emergency Medical Services.

Specific Authority 381.006, 381.0098 FS. Law Implemented 381.006, 381.0098, 395.002(13), 395.1011 FS. History–New 6-19-89, Amended 12-14-92, 1-23-94, 6-3-97, Formerly 10D-104.001.

64E-16.002 Definitions.

For the purpose of this chapter, the following words and phrases shall have the meanings indicated:

(1) American Society for Testing Materials, also referred to as ASTM – A technical society with headquarters located at 100 Barr Harbor Drive, West Conshohocken, Pennsylvania, 19428-2959, which publishes national standards for the testing and quality assurance of materials.

(2) Biomedical waste – Any solid or liquid waste which may present a threat of infection to humans, including nonliquid tissue, body parts, blood, blood products, and body fluids from humans and other primates; laboratory and veterinary wastes which contain human disease-causing agents; and discarded sharps. The following are also included:

(a) Used, absorbent materials saturated with blood, blood products, body fluids, or excretions or secretions contaminated with visible blood; and absorbent materials saturated with blood or blood products that have dried.

(b) Non-absorbent, disposable devices that have been contaminated with blood, body fluids or, secretions or excretions visibly contaminated with blood, but have not been treated by an approved method.

(3) Biomedical waste generator – A facility or person that produces biomedical waste. The term includes hospitals, skilled nursing or convalescent hospitals, intermediate care facilities, clinics, dialysis clinics, dental offices, health maintenance organizations, surgical clinics, medical buildings, physicians' offices, laboratories, veterinary clinics and funeral homes.

(a) Mobile health care units, such as bloodmobiles, that are part of a stationary biomedical waste generator, are not considered individual biomedical waste generators.

(b) Funeral homes that do not practice embalming are not considered biomedical waste generators.

(4) Body fluids – Those fluids which have the potential to harbor pathogens, such as human immunodeficiency virus and hepatitis B virus and include blood, blood products, lymph, semen, vaginal secretions, cerebrospinal, synovial, pleural, peritoneal, pericardial and amniotic fluids. In instances where identification of the fluid cannot be made, it shall be considered to be a regulated body fluid. Body excretions such as feces and secretions such as nasal discharges, saliva, sputum, sweat, tears, urine, and vomitus shall not be considered biomedical waste unless visibly contaminated with blood.

(5) Contaminated – Soiled by any biomedical waste.

(6) Decontamination – The process of removing pathogenic microorganisms from objects or surfaces, thereby rendering them safe for handling.

(7) Department – The Department of Health or its representative county health department.

(8) Disinfection – A process which results in a minimum Log 6 kill against the vegetative organisms listed in Table 1, and a minimum Log 4 kill against *Bacillus stearothermophilus* spores utilizing steam or a minimum Log 4 kill against *Bacillus Subtilis* spores utilizing dry heat, chemicals, or microwave shredding.

(9) Facility – All contiguous land, structures, and other appurtenances which are owned, operated, and licensed as a single entity which may consist of several generating, treatment, or storage units.

(10) Hazardous waste – Those materials defined in Chapter 62-730, F.A.C.

(11) Health Care Provider – Any person who provides medical care or personal services, as that term is defined in Section 400.402, F.S., to another individual.

(12) Home User – An individual who generates biomedical waste as a result of self-care or care by a family member or other non health care provider.

(13) Leak resistant – Prevents liquid from escaping to the environment in the upright position.

(14) Outer container – Any rigid type container used to enclose packages of biomedical waste.

(15) Packages – Any material that completely envelops biomedical waste. This includes red bags, sharps containers and outer containers.

(16) Person – Any individual, partnership, corporation, association, or public body engaged in the generation, storage, transport, or treatment of biomedical waste.

(17) Point of origin – The room or area where the biomedical waste is generated.

(18) Public sharps collection program – A cooperative program designed as a non-profit community service to assist the home user in the safe disposal of discarded sharps.

(19) Puncture resistant – Able to withstand punctures from contained sharps during normal usage and handling.

(20) Restricted – The use of any measure, such as a lock, sign, or location, to prevent unauthorized entry.

(21) Saturated – Soaked to capacity.

(22) Sealed – Free from openings that allow the passage of liquids.

(23) Sharps – Objects capable of puncturing, lacerating, or otherwise penetrating the skin.

(24) Sharps container – A rigid, leak and puncture resistant container, designed primarily for the containment of sharps, clearly labeled with the phrase and international biological hazard symbol as described in Section 64E-16.004(2)(a), F.A.C., and manufactured with dyes meeting the requirements for incidental metals as described in Section 64E-16.004(2)(b)1.b., F.A.C.

(25) Sterilization – A process which results in a minimum Log 6 kill against *Bacillus stearothermophilus* spores utilizing steam or a minimum Log 6 kill against *Bacillus Subtilis* spores utilizing dry heat, chemicals, or microwave shredding.

(26) Storage – The holding of packaged biomedical waste for a period longer than three days at a facility or in a transport vehicle.

(27) Transfer – The movement of biomedical waste within a facility.

(28) Transport – The movement of biomedical waste away from a facility.

(29) Transport vehicle – A motor vehicle, as defined in Section 320.01, F.S., a rail car, watercraft or aircraft, used for the transportation of biomedical waste.

(30) Treatment – Any process, including steam, chemicals, microwave shredding, or incineration, which changes the character or composition of biomedical waste to render it noninfectious by disinfection or sterilization.

Specific Authority 381.006, 381.0098 FS. Law Implemented 381.006, 381.0098, 395.002(13), 395.1011 FS. History–New 6-19-89, Amended 4-2-90, 12-14-92, 1-23-94, 8-20-95, 6-3-97, Formerly 10D-104.002.

64E-16.003 Facility Policies and Procedures.

(1) All biomedical waste facilities shall comply with the following:

(a) Biomedical waste mixed with hazardous waste, as defined in Chapter 62-730, F.A.C., Hazardous Waste, shall be managed as hazardous waste.

(b) Biomedical waste mixed with radioactive waste shall be managed in a manner that does not violate the provisions of Chapter 64E-5, F.A.C. The biomedical waste shall be managed in accordance with the provisions of Chapter 64E-16, F.A.C., after the radioactive component has decayed in storage as provided for in Chapter 64E-5, F.A.C., or is otherwise not regulated under Chapter 64E-5, F.A.C. The packaging requirements of Chapter 64E-5, F.A.C., shall be followed, unless the requirements of Chapter 64E-16, F.A.C., are more restrictive.

(c) Any other solid waste or liquid, which is neither hazardous nor radioactive in character, combined with untreated biomedical waste, shall be managed as untreated biomedical waste.

(d) All surfaces contaminated with spilled or leaked biomedical waste shall be decontaminated as part of the cleaning process.

(2) Each biomedical waste facility shall implement a written operating plan to manage biomedical waste, in accordance with this chapter. This plan shall be available for review by the department and facility personnel. The plan shall include the following: a description of training for personnel; procedures for segregating, labeling, packaging, transporting, storing, and treating, biomedical waste; procedures for decontaminating biomedical waste spills; and a contingency plan for emergencies. Facilities which have multiple specialty services shall include procedures specific to each specialty if procedures vary. Plans shall be updated when regulations, facility policies, or procedures change.

(a) Each facility or their designee shall train new personnel who handle biomedical waste as part of their work responsibilities. This training shall be provided prior to commencement of duties related to biomedical waste handling. Refresher training shall be completed annually by all personnel who handle biomedical waste. Training shall detail compliance with the facility's operating plan and Chapter 64E-16, F.A.C., and shall be maintained as a part of the operating plan.

(b) All biomedical waste management records shall be maintained for 3 years and shall be available for review by the department.

Specific Authority 381.006, 381.0098 FS. Law Implemented 381.006, 381.0098, 395.002(13), 395.1011 FS. History–New 6-19-89, Amended 4-2-90, 12-14-92, 1-23-94, 8-20-95, 6-3-97, Formerly 10D-104.003.

64E-16.004 Storage and Containment.

(1) Storage.

(a) Storage of biomedical waste at the generating facility shall not exceed 30 days. The 30 day period shall commence when the first non-sharps item of biomedical waste is placed into a red bag or sharps container, or when a sharps container containing only sharps is sealed.

(b) Storage of biomedical waste in a place other than at the generating facility shall not exceed 30 days. The 30 day storage period shall begin on the day the waste is collected from the generator.

(c) Indoor storage areas shall have restricted access and be designated in the written operating plan. They shall be located away from pedestrian traffic, be vermin and insect free, and shall be maintained in a sanitary condition. They shall be constructed of smooth, easily cleanable materials that are impervious to liquids.

(d) Outdoor storage areas, including containers and trailers, shall, in addition to the above criteria, be conspicuously marked with the international biological hazard symbol as described in paragraph 64E-16.004(2)(b), F.A.C., and shall be secured against vandalism and unauthorized entry. The international biological hazard symbol on an outdoor storage area shall be a minimum of six inches in diameter.

(2) Containment.

(a) Packages of biomedical waste shall remain sealed until treatment, except when compacted in accordance with the requirements of this chapter as stated in Section 64E-16.006(2), F.A.C. Ruptured or leaking packages of biomedical waste shall be placed into larger packaging without disturbing the original seal.

(b) All packages containing biomedical waste shall be visibly identifiable with the international biological hazard symbol and one of the following phrases: “BIOMEDICAL WASTE”, “BIOHAZARDOUS WASTE”, “BIOHAZARD”, “INFECTIOUS WASTE”, or “INFECTIOUS SUBSTANCE”. The symbol shall be red, orange, or black and the background color shall contrast with that of the symbol or comply with the requirements cited in subpart Z of 29 C.F.R. subparagraph 1910.1030(g)(1)(C), Occupational Exposure to Bloodborne Pathogen Standard.

SEE FLORIDA ADMINISTRATIVE CODE FOR “BIOMEDICAL WASTE SYMBOL”

(c) Bags.

1. Biomedical waste, except sharps, shall be packaged and sealed at the point of origin in impermeable, red plastic bags or, at the discretion of the generator, into sharps containers. The international biological hazard symbol shall be at least six inches in diameter on bags 19´´ × 14´´ or larger, and at least one inch in diameter on bags smaller than 19´´ × 14´´. Each plastic bag shall meet the following physical properties:

a. Impact resistance of 165 grams and tearing resistance of 480 grams in both the parallel and perpendicular planes with respect to the length of the bag. Impact resistance shall be determined using ASTM D-1709-91, and tearing resistance shall be determined using ASTM D-1922-89.

b. Incidental sum concentrations of lead, mercury, hexavalent chromium and cadmium shall be no greater than 100 ppm for dyes used in the coloration of bags.

(d) Sharps containers.

1. Sharps shall be discarded at the point of origin into single use or reusable sharps containers. Needles and scalpel blades shall not be placed directly into double-walled corrugated containers. Sharps containers must be sealed when full. A sharps container is considered full when materials placed into it reach the designated fill line, or, if a fill line is not indicated, when additional materials cannot be placed into the container without cramming or when no additional materials are to be placed in the container.

2. Permanently mounted sharps container holders shall bear the phrase and the international biological hazard symbol described in paragraph 64E-16.004(2)(a), F.A.C., if this information on the sharps container is concealed by the sharps container holder.

3. Reusable sharps containers shall only be emptied into a treatment cart or directly into a treatment unit. They shall be constructed of smooth, easily cleanable materials, and shall be decontaminated after each use.

4. The international biological hazard symbol shall be at least one inch in diameter on sharps containers.

(e) All outer containers shall be rigid, leak-resistant and puncture-resistant. Reusable outer containers shall be constructed of smooth, easily cleanable materials and shall be decontaminated after each use.

(f) The international biological hazard symbol shall be at least six inches in diameter on outer containers 19´´ × 14´´ or larger, and at least one inch in diameter on outer containers less than 19´´ × 14´´.

Specific Authority 381.006, 381.0098 FS. Law Implemented 381.006, 381.0098, 395.002(13), 395.1011 FS. History–New 6-19-89, Amended 4-2-90, 12-14-92, 1-23-94, 8-20-95, 6-4-97, Formerly 10D-104.004.

64E-16.005 Labeling.

(1) Biomedical waste bags and sharps containers shall be labeled with the generator's name and address unless treatment occurs at the generating facility.

(a) If a bag or sharps container is placed into a larger bag prior to transport, the label for the exterior bag shall comply with paragraph 64E-16.005(1), F.A.C. Inner bags and inner sharps containers are exempt from the labeling requirements of paragraph 64E-16.005(1), F.A.C.

(b) Outer containers shall be labeled with the transporter's name, address, registration number, and 24-hour telephone number prior to transport.

(2) The transporter may provide labels for bags or sharps containers that are generator-specific, such as bar codes or specific container numbers. Use of these generator-specific labels satisfies the requirements of paragraph 64E-16.005(1)(a), F.A.C.

Specific Authority 381.006, 381.0098 FS. Law Implemented 381.006, 381.0098, 395.002(13), 395.1011 FS. History–New 6-19-89, Amended 4-2-90, 12-14-92, 1-23-94, 8-20-95, 6-3-97, Formerly 10D-104.005.

64E-16.006 Generator Requirements.

(1) A biomedical waste generator shall not negotiate for the transport of biomedical waste with a person who is not registered with the department as a biomedical waste transporter.

(2) Compacting packages of biomedical waste within the generating facility, except recognizable human tissue, bulk liquids, or sharps, is acceptable provided the following conditions are met:

(a) Packages of biomedical waste shall not be compacted to a density greater than 22 pounds per cubic foot.

(b) Compacted packages of biomedical waste shall not be subjected to further compacting.

(c) Any residual or incidental liquid shall be contained within the inner bag or outer container. Should the inner bag or outer container rupture during compaction, residual or incidental liquids shall be disposed of directly into the sanitary sewer, an on-site sewage treatment and disposal system, or other system approved to receive such wastes by the Department of Environmental Protection or the department;

(d) Discharge of noxious air shall be kept to a minimum through use of HEPA filters having a pore size of 2 microns or less, negative pressure rooms, or other safety methods;

(e) Compacted packages of biomedical waste shall be treated by incineration or other approved treatment process. Treatment processes, such as steam, chemical, gas, dry heat, or microwaving, shall be considered by the department upon written request and microbiological evidence that the proposed process provides the same degree of treatment for compacted waste as for uncompacted waste. Steam treatment systems shall be tested against *Bacillus stearothermophilus* spores, as described in paragraph 64E-16.007(2), F.A.C. Other proposed treatment processes shall demonstrate efficacy using Section 64E-16.007(4), F.A.C.

Specific Authority 381.006, 381.0098 FS. Law Implemented 381.006, 381.0098, 395.002(13), 395.1011 FS. History–New 6-19-89, Amended 4-2-90, 12-14-92, 1-23-94, 8-20-95, 6-3-97, Formerly 10D-104.006.

64E-16.007 Treatment.

(1) Biomedical waste shall be treated by steam, incineration, or an alternative process approved by the department as described in Section 64E-16.007(4), F.A.C., prior to disposal. Treatment shall occur within 30 days of collection from the generator.

(2) Steam treatment units shall subject loads of biomedical waste to sufficient temperature, pressure, and time to demonstrate a minimum Log 4 kill of *Bacillus stearothermophilus* spores placed at the center of the waste load, and shall be operated in accordance with the following:

(a) Before placing a steam treatment unit into service, operating parameters such as temperature, pressure, and treatment time shall be determined according to the following:

1. Test loads of biomedical waste which consist of the maximum weight and density of biomedical waste to be treated shall be prepared. Separate loads of red bags, sharps containers, boxes, and compacted waste shall be prepared if they are to be treated separately.

2. Prior to treatment, *Bacillus stearothermophilus* spores shall be placed at the bottom and top of each treatment container, at the front of each treatment container at a depth of approximately one-half of the distance between the top and bottom of the load, in the approximate center of each treatment container, and in the rear of each treatment container at a depth of approximately one-half of the distance between the top and bottom of the load.

3. If the operating parameters used during the treatment of the test loads demonstrate a minimum Log 4 kill of *Bacillus stearothermophilus* spores at all locations, the steam treatment unit shall operate under those parameters when placed into service. If the operating parameters fail to provide a minimum Log 4 kill of *Bacillus stearothermophilus* spores at all locations, treatment time, temperature, or pressure shall be increased and the tests must be repeated until a minimum Log 4 kill of *Bacillus stearothermophilus* spores is demonstrated at all locations. The steam treatment unit shall be operated under those parameters when placed into service. Tests shall be repeated and new parameters established if the type of biomedical waste to be treated is changed.

(b) When operating parameters have been established and documented using the criteria in paragraph 64E-16.007(2)(a), F.A.C., the steam treatment unit may be placed into service.

(c) The steam treatment unit shall be serviced for preventive maintenance in accordance with the manufacturer's specifications. Records of maintenance shall be onsite and available for review.

(d) Unless a steam treatment unit is equipped to continuously monitor and record temperature and pressure during the entire length of each treatment cycle, each package of biomedical waste to be treated will have a temperature tape or equivalent test material such as a chemical indicator placed on a non-heat conducting probe at the center of each treatment container in the load that will indicate if the treatment temperature and pressure have been reached. Waste shall not be considered treated if the tape or equivalent indicator fails to show that a temperature of at least 250 degrees F (121 degrees C) was reached during the process.

(e) Each steam treatment unit shall be evaluated for effectiveness with spores of *Bacillus stearothermophilus* at least once each 7 days for permitted treatment facilities, or once each 40 hours of operation for generators who treat their own biomedical waste. The spores shall be placed at the center of the waste load. Evaluation results shall be maintained onsite and available for review.

(f) A written log shall be maintained for each steam treatment unit. The following shall be recorded for each usage:

1. The date, time, and operator name;

2. The type and approximate amount of waste treated;

3. The post-treatment confirmation results by either

a. recording the temperature, pressure, and length of time the waste was treated, or

b. the temperature and pressure monitoring indicator;

(g) A current written operating procedure shall specify, at a minimum, the following:

1. Parameters, determined from testing, that provide consistent treatment, such as exposure time, temperature, and pressure.

2. Identification of standard treatment containers and placement of the load in the steam treatment unit.

(3) Incineration of biomedical waste shall be achieved in a biological waste incinerator permitted by the Department of Environmental Protection.

(4) An alternative treatment process, such as chemical, gas, dry heat, or microwave shredding, shall be considered by the department upon receipt of a written request. The written request shall be directed to the State Health Officer and shall include:

(a) The specific treatment process and type of facility for which acceptance is sought;

(b) The reason for the request;

(c) Microbiological evidence, using the organisms listed in Table 1, that the proposed process provides sterilization or a satisfactory level of disinfection. Using the protocol described in Section 64E-16.007(4), F.A.C., alternative treatment systems must show either:

1. For disinfection, a minimum Log 6 kill for the vegetative organisms listed in Table 1 and a minimum Log 4 kill against *Bacillus stearothermophilus* spores utilizing steam or a minimum Log 4 kill against *Bacillus Subtilis* spores utilizing dry heat, chemicals, or microwave shredding, or

2. For sterilization, a minimum Log 6 kill against *Bacillus stearothermophilus* spores utilizing steam or a minimum Log 6 kill against *Bacillus Subtilis* spores utilizing dry heat, chemicals, or microwave shredding.

Table 1

1. Bacteria

a. *Bacillus* spores – mandatory, species determined by treatment process

Any two

b. *Enterococcus faecalis*

c. *Pseudomonas aeruginosa*

d. *Staphylococcus aureus*

e. *Nocardia* species

2. Mycobacteria species – any one

a. *Mycobacterium bovis*
b. *Mycobacterium fortuitum*
3. Fungus – any one
a. *Candida albicans*
b. *Aspergillus fumigatus*
4. Protozoa – *Giardia intestinalis* or similar
5. Virus – Poliovirus or similar.

(d) Each step of the efficacy testing must be thoroughly described in the application for approval. A detailed description of the treatment process, preparation of organisms, preparation of test loads, recovery of organisms, and raw data must be provided.

(e) To begin the efficacy testing, two challenge loads must be sterilized. These loads must be composed of materials commonly found in biomedical waste (tissues, sharps, plastics, glass, woven materials, blood and blood products, etc.), and must be of adequate quantity to equal the maximum capacity of the treatment system. The test load must be fully described (weight, moisture content, composition, etc.).

(f) The purity of all organisms and spores must be certified by a clinical or commercial laboratory. Each organism must be processed separately and placed in the test load in the most difficult location to treat. Before each test run, the total number of viable test organisms must be determined and documented. Treatment of the test load must take place within thirty minutes of inoculating the load with the test organism.

(g) The test load containing the test organism must be processed without the agent (e.g., chemical, microwaves, etc.) used to kill the test organisms. If this agent is a liquid, it must be replaced with an equal amount of sterile saline solution or tapwater. After the test load has completed one cycle in the treatment device, a minimum of three grab samples must be taken from the test load and the number of test organisms present determined. If the number of organisms recovered after the test run is less than Log 6, the number of organisms originally introduced into the device must be increased, and the run must be performed again, until at least Log 6 organisms are recovered. If the number of organisms recovered from the test run is Log 6 or greater, there is an adequate number of organisms being introduced into the device, and the inoculum size should be equal to this number.

(h) Using the inoculum size determined in the above procedure, the second sterilized test load must be inoculated separately. During these test runs, the chemical or physical agent used to treat the waste must be used.

(i) After each test run is completed, the log kill for that particular organism or spore must be calculated. The number of organisms that were not recovered from the initial (non-treating) test run must be subtracted from the number of organisms that were introduced into the second (treatment) run. The number of organisms that survive the treatment process must be subtracted from the first calculation. The resulting figure is the log kill provided by the treatment process.

(j) Approved alternative treatment processes, except single-use, shall meet the requirements of subsection 64E-16.007(2)(e).

(5) Biomedical waste may be disposed into a sanitary sewer system, an onsite sewage treatment and disposal system, or other system approved to receive such waste by The Department of Environmental Protection or the department, if it is in a liquid or semi-solid form and aerosol formation is minimal.

(6) Body tissues that have been histologically fixed are considered treated biomedical waste. Tissues prepared by frozen sectioning only are not considered treated.

(7) Acute care hospitals, licensed under Chapter 395, F.S., which utilize a certified onsite treatment process involving grinding and treatment, may dispose of such treated biomedical waste in the normal municipal solid waste stream upon notifying the local government responsible for solid waste collection and disposal under the following conditions:

(a) For the purposes of this chapter, certified shall mean that the treatment process is steam treatment, or has been approved as an alternative biomedical waste treatment process under Section 64E-16.007(4), F.A.C.

(b) For the purposes of this chapter, grinding shall also mean shredding or hammermilling.

(c) If grinding takes place prior to treatment, procedures that minimize the chance of exposure to waste handlers must be developed and implemented should the grinder fail or become jammed.

(d) Individuals operating the treatment unit must be trained in all aspects of its operation, including contingency procedures.

(e) Acute care hospitals must inform the department in writing of the installation of the unit at least 30 days prior to placing the unit into service.

(f) Inspection of the unit, including treatment and maintenance records, will occur during the annual inspection for the hospital's biomedical waste permit.

Specific Authority 381.006, 381.0098 FS. Law Implemented 381.006, 381.0098, 395.002(13), 395.1011 FS. History–New 6-19-89, Amended 12-14-92, 1-23-94, 8-20-95, 6-3-97, Formerly 10D-104.007.

64E-16.008 Biomedical Waste Transport.

(1) No registered transporter may knowingly accept biomedical waste for transport unless it has been properly segregated, packaged, and labeled.

(2) Each registered transporter shall provide the generator with a receipt of pick-up.

(3) During transport, no registered transporter shall compact biomedical waste or allow it to leak into the environment.

(4) Transfer of biomedical waste from one transport vehicle to another is not allowed unless the transfer occurs at a permitted storage or treatment facility, except as provided in paragraph 64E-16.008(10)(a), F.A.C. Intermodal transfers of biomedical waste are allowed provided transport shipping seals remain intact.

(5) Any registered transporter who unknowingly fails to comply with subsections (3) or (4) of this section because such biomedical waste has not been properly segregated or separated from other solid wastes by the generating facility is not guilty of a violation under this rule.

(6) No registered transporter shall knowingly deliver biomedical waste for storage or treatment to a facility which does not have a valid permit issued by the department.

(7) All transport vehicles containing biomedical waste shall be visibly identified with the business name, registration number, a 24 hour telephone number, and placards showing the phrase and the international biological hazard symbol as described in paragraph 64E-16.004(2)(a). The symbol shall be at least six inches in diameter.

(8) All transport vehicles containing biomedical waste shall be fully enclosed and secured when unattended.

(9) Registered transporters shall notify the department within one working day by telephone and shall submit a follow-up report to the department within 10 days, in writing, if there is an accident that results in a spill of biomedical waste.

(10) In case of an emergency situation, including mechanical failure, the following is allowed:

(a) If the emergency occurs during transport, biomedical waste may be transferred to another transport vehicle, including a rental vehicle, without being at a storage or treatment facility.

(b) If a rental vehicle is used, the department shall be notified of its use on the first working day after the emergency. A copy of the written authorization from the rental agency stating awareness of the intended use of the vehicle shall be submitted to the department within seven days.

(c) Biomedical waste shall be removed and transported to a permitted storage or treatment facility within 24 hours of the emergency.

(d) Before return to the rental agency, the vehicle shall be decontaminated.

Specific Authority 381.0098 FS. Law Implemented 381.0098 FS. History–New 6-3-97, Formerly 10D-104.0073.

64E-16.009 Registration of Biomedical Waste Transporters.

(1) Biomedical waste transporters shall be registered with the department. Biomedical waste generators transporting less than 25 pounds of their own biomedical waste, in their own transport vehicle, on any single occasion, are exempt from transporter registration, fee, and placarding requirements of this chapter.

(2) Each owner or operator of a transport vehicle shall submit to the department a completed application for registration on form DH 4106, herein incorporated by reference.

(3) Biomedical waste transporter registrations shall expire on September 30 each year. Renewal applications will not be considered complete without the submission of an annual report on form DH 4109, herein incorporated by reference. Biomedical waste transporters with valid registrations, on the effective date of this chapter, shall renew their registration by September 30 following the expiration date of their existing registration.

(4) Registered transporters shall notify the department in writing within 30 days of any changes made to their registration form currently on file with the department.

(5) Any registered biomedical waste transporter is subject to having their biomedical waste transporter registration denied, suspended, or revoked, pursuant to Section 381.0098, F.S., and in accordance with the procedural requirements of Section 120.60, F.S., upon a finding by the department that the transporter:

(a) Has submitted false or inaccurate information in the application or annual report;

(b) Has violated the provisions of any statute or rule which the department is authorized to enforce;

(c) Has refused to allow inspection of records or equipment by department personnel.

Specific Authority 381.0098 FS. Law Implemented 381.0098 FS. History–New 6-3-97, Formerly 10D-104.0074.

64E-16.010 Inspections.

(1) Department personnel shall inspect registered transport vehicles, permitted generators, storage, and treatment facilities at least once a year. Those facilities exempted from the registration and fee requirements under subsection 381.0098(4), shall be inspected at least once every three years. Reinspections may be conducted when a facility is found to be in non-compliance with this chapter. Results of each inspection shall be recorded on a form provided by the department.

(2) To provide consistency of inspections throughout the state, all department personnel who inspect biomedical waste facilities shall attend training annually, which shall be approved by the Bureau of Environmental Health Programs.

Specific Authority 381.006, 381.0098 FS. Law Implemented 381.006, 381.0098 FS. History–New 12-14-92, Amended 1-23-94, 8-20-95, 6-3-97, Formerly 10D-104.0075.

64E-16.011 Permits.

(1) All biomedical waste facilities, except those facilities operating under a Department of Environmental Protection permit, shall obtain a permit from the department annually. Application forms and annual report forms used by the public may be obtained from the environmental health section of the county health department in the county of their location or from the Department of Health, Bureau of Facility Programs, 4052 Bald Cypress Way, Bin A08, Tallahassee, Florida 32399-1710. All forms listed in this section are incorporated by reference.

(a) A biomedical waste generator, who produces or treats less than 25 pounds of biomedical waste in each 30 day period, shall be exempt from all permit and fee requirements of this chapter.

(b) Application for an initial biomedical waste generator permit or exemption from permitting shall be submitted to the department on form DH 4089, Application for Biomedical Waste Generator Permit/Exemption, 8/98. Biomedical waste treatment facilities which were constructed prior to December 31, 1995, or for which an operation permit was submitted to the Department of Environmental Protection prior to December 31, 1995, shall meet the requirements of this chapter at the time of renewal of their existing permit.

(c) Application for an initial biomedical waste storage facility permit shall be submitted to the department on form DH 4107, Application for Biomedical Waste Storage Permit, 8/98.

(d) Application for an initial biomedical waste treatment facility permit shall be submitted to the department on form DH 4111, Application for a Biomedical Waste Treatment Permit, 8/01. Renewals will not be considered complete without the submission of an annual report submitted on form DH 4110, Biomedical Waste Treatment Facility Annual Report, 8/01.

(e) Application for an initial biomedical waste sharps collection program permit shall be submitted to the department on form DH 4108, Application for Biomedical Waste Sharps Collection Program Permit, 8/98.

(f) Permits shall not be transferable from one person to another. In the event of an address or name change, an amended application for permit shall be submitted to the department. A permitted generator may work at a branch office for no more than six hours in any seven day period without applying for an additional permit. These generators must notify the local county health department biomedical waste coordinator of the existence and operating hours of the branch office.

1. In the event of a change of ownership of the facility or a newly constructed facility, an application for an initial permit shall be submitted to the department within 30 days of the commencement of business.

2. When a facility is leased by the owner to a second party for operation, the second party shall apply to the department for an initial permit within 30 days of the commencement of business. The second party shall be held responsible for the operation and maintenance of the facility.

(g) Permits shall expire on September 30 each year. The permit, or a copy thereof, shall be maintained within the facility and shall be made available for review by department personnel.

(2) Persons engaged in a sharps collection program with single or multiple facility locations may operate under a single permit provided:

(a) The sharps collection program is open to the general public;

(b) A list identifying the location of each facility is attached to the application; and

(c) Each facility meets the applicable permit requirements.

Specific Authority 381.006, 381.0098 FS. Law Implemented 381.006, 381.0098 FS. History–New 12-14-92, Amended 1-23-94, 6-3-97, Formerly 10D-104.0076, Amended 11-5-02.

64E-16.012 Fees.

(1) When the facility will be in operation six (6) months or less before the annual renewal date, the annual fee shall be prorated on a quarterly basis. State-owned and operated biomedical waste facilities are exempt from the permit fee.

(2) Fee schedule.

Generator Permit:
(application received by October 1) $55.00
(application received after October 1) $75.00
Treatment Permit:
(application received by October 1) $55.00
(application received after October 1) $75.00
Storage Permit:
(application received by October 1) $55.00
(application received after October 1) $75.00
Transporter Registration (one vehicle):
(application received by October 1) $55.00
(application received after October 1) $75.00
Additional Vehicle $10.00

No fee or combination of fees shall exceed the maximum amount established by the statute.

(3) All fees collected pursuant to this section shall be placed in a specially designated account within the individual county health department trust fund to be used to meet the cost of administering the biomedical waste program described in this chapter.

Specific Authority 381.006, 381.0098(4) FS. Law Implemented 381.006, 381.0098 FS. History–New 12-14-92, Amended 1-23-94, 6-3-97, Formerly 10D-104.0078.

64E-16.013 Enforcement and Penalties.

(1) According to Section 381.0025, F.S., any person who generates, transfers, treats, stores, transports or disposes of biomedical waste in violation of this chapter; or who interferes with, hinders, or opposes any employee of the department in the discharge of his duties, or who impersonates an employee of the department, is chargeable with a misdemeanor of the second degree, punishable as provided in Sections 775.082 and 775.083, F.S.

(2) For violation of any provision of Chapter 64E-016, F.A.C., the department shall deny, suspend or revoke any biomedical waste permit or impose an administrative fine of up to $2500 per day for each violation of this chapter or pursue other enforcement action authorized by law. In determining the type and degree of enforcement action necessary, the department shall take into consideration the following:

(a) The gravity of the violation, including the probability that death or serious physical harm to any person may result or has resulted, the severity of the actual or potential harm, and the extent to which the provisions of the applicable statutes or rules were violated.

(b) Actions taken by the owner or operator to correct violations.

(c) Any previous violations.

Specific Authority 381.006, 381.0098(5) FS. Law Implemented 381.0012, 381.002(13), 381.0025, 381.006, 381.0061, 381.0098, 395.1011, 775.082, 775.083 FS. History–New 6-19-89, Amended 12-14-92, 1-23-94, 6-3-97. Formerly 10D-104.008, Amended 11-5-02.

Appendix E

Spill Response Procedures

"WHAT DO I DO IN THE EVENT OF A SPILL OR LEAK"

WHAT DO I DO IN THE EVENT OF A SPILL OR LEAK?

1. ASSESS THE RISK:

Evacuate the HAZMAT Spill Site of non-essential personnel.
In the event of injury or fire, call 911 with a description of the emergency and location of the accident.
Determine what has spilled, the spill volume, and its risk to health, property and the environment. The Material Safety Data Sheet may provide important emergency information. Determine if you must report this spill (see number 6 below).
Determine if you are prepared and trained to address this spill.
Use the buddy system, never work alone.

2. PROTECT YOURSELF AND OTHERS:

Select the right level of Personal Protective Equipment (PPE), if trained to do so.

3. CONFINE THE SPILL:

Confine the spill, with the right materials, starting at the furthest point, if trained to do so.

4. STOP THE SOURCE:

Stop the source, with the right materials, if trained to do so.

5. CLEANUP THE SPILL:

Evaluate and implement cleanup of the spill, if trained to do so.

6. REPORT:

In all cases, releases involving quantities equal to or exceeding "Reportable Quantity's (RQ'S)" must be reported IMMEDIATELY.

For releases of Extremely Hazardous Substances (Appendix A of 40 CFR Part 355) or CERCLA Hazardous Substances (40 CFR 302.4) equal to or exceeding RQ's, follow these Procedures:

First call 911 then …

Florida State Warning Point (State Emergency Response Commission): 1-800-320-0519 or 1-850-413-9911

National Response Center: 1-800-424-8802

Local Emergency Planning Committee (Treasure Coast Regional Planning Council): 772-221-4060

The Northern Palm Beach County Improvement District (Tanya Quickel @ 561-624-7830) and the District's Environmental Liaison, Environmental Quality, Inc. (561-575-6778, 561-714-4172) should also be contacted.

For further information, contact Environmental Quality, Inc. as follows:

Environmental Quality, Inc.
212 U.S. Highway One, Suite 18
Tequesta, Florida 33469
561-575-6778, 561-575-9996 (fax), 561-714-4172 (cell)
kmurray@eq-inc.com

Appendix F

United States Environmental Protection Agency

40 CFR Part 302.4

List of Hazardous Substances and Reportable Quantities

[Code of Federal Regulations]
[Title 40, Volume 27]
[Revised as of July 1, 2006]
From the U.S. Government Printing Office via GPO Access
[CITE: 40CFR302.4]

[Page 281-326]

TITLE 40--PROTECTION OF ENVIRONMENT

CHAPTER I--ENVIRONMENTAL PROTECTION AGENCY (CONTINUED)

PART 302_DESIGNATION, REPORTABLE QUANTITIES, AND NOTIFICATION--Table of Contents

Sec. 302.4 Designation of hazardous substances.

(a) Listed hazardous substances. The elements and compounds and hazardous wastes appearing in table 302.4 are designated as hazardous substances under section 102(a) of the Act.

(b) Unlisted hazardous substances. A solid waste, as defined in 40 CFR 261.2, which is not excluded from regulation as a hazardous waste under 40 CFR 261.4(b), is a hazardous substance under section 101(14) of the Act if it exhibits any of the characteristics identified in 40 CFR 261.20 through 261.24.

Note: The numbers under the column headed ``CASRN'' are the Chemical Abstracts Service Registry Numbers for each hazardous substance. The ``Statutory Code'' column indicates the statutory source for designating each substance as a CERCLA hazardous substance: ``1'' indicates that the statutory source is section 311(b)(2) of the Clean Water Act, ``2'' indicates that the source is section 307(a) of the Clean Water Act, ``3'' indicates that the source is section 112 of the Clean Air Act, and ``4'' indicates that the source is section 3001 of the Resource Conservation and Recovery Act (RCRA). The ``RCRA Waste Number'' column provides the waste identification numbers assigned to various substances by RCRA regulations. The ``Pounds (kg)'' column provides the reportable quantity adjustment for each hazardous substance in pounds and kilograms. Appendix A to Sec. 302.4, which lists CERCLA hazardous substances in sequential order by CASRN, provides a per-substance grouping of regulatory synonyms (i.e., names by which each hazardous substance is identified in other statutes and their implementing regulations).

Table 302.4--List of Hazardous Substances and Reportable Quantities

[Note: All Comments/Notes Are Located at the End of This Table]

Hazardous substance	CASRN	Statutory codedagger; RCRA waste No.	Final RQ pounds (Kg)

Acenaphthene..... 83-32-9 2
..... 100 (45.4)
Acenaphthylene..... 208-96-8 2
..... 5000 (2270)
Acetaldehyde..... 75-07-0 1,3,4 U001
1000 (454)
Acetaldehyde, chloro-..... 107-20-0 4 P023
1000 (454)

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Acetaldehyde, trichloro-..... 75-87-6 4 U034
5000 (2270)
Acetamide..... 60-35-5 3
..... 100 (45.4)
Acetamide, N-(aminothioxomethyl)-..... 591-08-2 4 P002
1000 (454)
Acetamide, N-(4-ethoxyphenyl)-..... 62-44-2 4 U187
100 (45.4)
Acetamide, N-9H-fluoren-2-yl-..... 53-96-3 3,4 U005
1 (0.454)
Acetamide, 2-fluoro-..... 640-19-7 4 P057
100 (45.4)
Acetic acid..... 64-19-7 1
..... 5000 (2270)
Acetic acid, (2,4-dichlorophenoxy)-, 94-75-7 1,3,4 U240
100 (45.4)
salts & esters.
Acetic acid, ethyl ester..... 141-78-6 4 U112
5000 (2270)
Acetic acid, fluoro-, sodium salt..... 62-74-8 4 P058
10 (4.54)
Acetic acid, lead(2+) salt..... 301-04-2 1,4 U144
10 (4.54)
Acetic acid, thallium(1+) salt..... 563-68-8 4 U214
100 (45.4)
Acetic acid, (2,4,5-trichlorophenoxy)-. 93-76-5 1,4 See
F027 1000 (454)
Acetic anhydride..... 108-24-7 1
..... 5000 (2270)
Acetone..... 67-64-1 4 U002
5000 (2270)
Acetone cyanohydrin..... 75-86-5 1,4 P069
10 (4.54)
Acetonitrile..... 75-05-8 3,4 U003
5000 (2270)
Acetophenone..... 98-86-2 3,4 U004
5000 (2270)
2-Acetylaminofluorene..... 53-96-3 3,4 U005
1 (0.454)
Acetyl bromide..... 506-96-7 1
..... 5000 (2270)
Acetyl chloride..... 75-36-5 1,4 U006
5000 (2270)

1-Acetyl-2-thiourea.....	591-08-2	4	P002
1000 (454)			
Acrolein.....	107-02-8	1,2,3,4	P003
1 (0.454)			
Acrylamide.....	79-06-1	3,4	U007
5000 (2270)			
Acrylic acid.....	79-10-7	3,4	U008
5000 (2270)			
Acrylonitrile.....	107-13-1	1,2,3,4	U009
100 (45.4)			
Adipic acid.....	124-04-9	1	
.....	5000 (2270)		
Aldicarb.....	116-06-3	4	P070
1 (0.454)			
Aldrin.....	309-00-2	1,2,4	P004
1 (0.454)			
Allyl alcohol.....	107-18-6	1,4	P005
100 (45.4)			
Allyl chloride.....	107-05-1	1,3	
.....	1000 (454)		
Aluminum phosphide.....	20859-73-8	4	P006
100 (45.4)			
Aluminum sulfate.....	10043-01-3	1	
.....	5000 (2270)		
4-Aminobiphenyl.....	92-67-1	3	
.....	1 (0.454)		
5-(Aminomethyl)-3-isoxazolol.....	2763-96-4	4	P007
1000 (454)			
4-Aminopyridine.....	504-24-5	4	P008
1000 (454)			
Amitrole.....	61-82-5	4	U011
10 (4.54)			
Ammonia.....	7664-41-7	1	
.....	100 (45.4)		
Ammonium acetate.....	631-61-8	1	
.....	5000 (2270)		
Ammonium benzoate.....	1863-63-4	1	
.....	5000 (2270)		
Ammonium bicarbonate.....	1066-33-7	1	
.....	5000 (2270)		
Ammonium bichromate.....	7789-09-5	1	
.....	10 (4.54)		
Ammonium bifluoride.....	1341-49-7	1	
.....	100 (45.4)		
Ammonium bisulfilte.....	10192-30-0	1	
.....	5000 (2270)		
Ammonium carbamate.....	1111-78-0	1	
.....	5000 (2270)		
Ammonium carbonate.....	506-87-6	1	
.....	5000 (2270)		
Ammonium chloride.....	12125-02-9	1	
.....	5000 (2270)		
Ammonium chromate.....	7788-98-9	1	
.....	10 (4.54)		

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Ammonium citrate, dibasic.............      3012-65-5           1
.........................     5000 (2270)
Ammonium fluoborate...................     13826-83-0           1
.........................     5000 (2270)
Ammonium fluoride.....................     12125-01-8           1
.........................      100 (45.4)
Ammonium hydroxide....................      1336-21-6           1
.........................      1000 (454)
Ammonium oxalate......................      6009-70-7           1
.........................     5000 (2270)
                                           5972-73-6
                                          14258-49-2
Ammonium picrate......................       131-74-8           4  P009
10 (4.54)
Ammonium silicofluoride...............     16919-19-0           1
.........................      1000 (454)
Ammonium sulfamate....................      7773-06-0           1
.........................     5000 (2270)
Ammonium sulfide......................     12135-76-1           1
.........................      100 (45.4)
Ammonium sulfite......................     10196-04-0           1
.........................     5000 (2270)
Ammonium tartrate.....................     14307-43-8           1
.........................     5000 (2270)
                                           3164-29-2
Ammonium thiocyanate..................      1762-95-4           1
.........................     5000 (2270)
Ammonium vanadate.....................      7803-55-6           4  P119
1000 (454)
Amyl acetate..........................       628-63-7           1
.........................     5000 (2270)
    iso-Amyl acetate..................       123-92-2
    sec-Amyl acetate..................       626-38-0
    tert-Amyl acetate.................       625-16-1
Aniline...............................        62-53-3       1,3,4  U012
5000 (2270)

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o-Anisidine...........................        90-04-0           3
.........................      100 (45.4)
Anthracene............................       120-12-7           2
.........................     5000 (2270)
Antimonydagger;dagger;................      7440-36-0           2
.........................     5000 (2270)
ANTIMONY AND COMPOUNDS................           N.A.         2,3
.........................            **
Antimony Compounds....................           N.A.         2,3
.........................            **
Antimony pentachloride................      7647-18-9           1
.........................      1000 (454)
Antimony potassium tartrate...........     28300-74-5           1
.........................      100 (45.4)
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Antimony tribromide...................      7789-61-9           1
.........................      1000 (454)
Antimony trichloride..................     10025-91-9           1
.........................      1000 (454)
Antimony trifluoride..................      7783-56-4           1
.........................      1000 (454)
Antimony trioxide.....................      1309-64-4           1
.........................      1000 (454)
Argentate(1-), bis(cyano-C)-, potassium       506-61-6           4  P099
1 (0.454)
Aroclor 1016..........................     12674-11-2       1,2,3
.........................       1 (0.454)
Aroclor 1221..........................     11104-28-2       1,2,3
.........................       1 (0.454)
Aroclor 1232..........................     11141-16-5       1,2,3
.........................       1 (0.454)
Aroclor 1242..........................     53469-21-9       1,2,3
.........................       1 (0.454)
Aroclor 1248..........................     12672-29-6       1,2,3
.........................       1 (0.454)
Aroclor 1254..........................     11097-69-1       1,2,3
.........................       1 (0.454)
Aroclor 1260..........................     11096-82-5       1,2,3
.........................       1 (0.454)
Aroclors..............................      1336-36-3       1,2,3
.........................       1 (0.454)
Arsenicdagger;dagger;.................      7440-38-2         2,3
.........................       1 (0.454)
Arsenic acid H3AsO4...................      7778-39-4           4  P010
1 (0.454)
ARSENIC AND COMPOUNDS.................           N.A.         2,3
.........................            **
Arsenic Compounds (inorganic including           N.A.         2,3
.........................            **
 arsine).
Arsenic disulfide.....................      1303-32-8           1
.........................       1 (0.454)
Arsenic oxide As2O3...................      1327-53-3         1,4  P012
1 (0.454)
Arsenic oxide As2O5...................      1303-28-2         1,4  P011
1 (0.454)
Arsenic pentoxide.....................      1303-28-2         1,4  P011
1 (0.454)
Arsenic trichloride...................      7784-34-1           1
.........................       1 (0.454)
Arsenic trioxide......................      1327-53-3         1,4  P012
1 (0.454)
Arsenic trisulfide....................      1303-33-9           1
.........................       1 (0.454)
Arsine, diethyl-......................       692-42-2           4  P038
1 (0.454)
Arsinic acid, dimethyl-...............        75-60-5           4  U136
1 (0.454)
Arsonous dichloride, phenyl-..........       696-28-6           4  P036
1 (0.454)
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Asbestosdagger;dagger;dagger;.....	1332-21-4	2,3		
.....	1 (0.454)			
Auramine.....	492-80-8	4	U014	
100 (45.4)				
Azaserine.....	115-02-6	4	U015	
1 (0.454)				
Aziridine.....	151-56-4	3,4	P054	
1 (0.454)				
Aziridine, 2-methyl-.....	75-55-8	3,4	P067	
1 (0.454)				
Azirino[2',3':3,4]pyrrolo[1,2-a]indole-	50-07-7	4	U010	
10 (4.54)				
4,7-dione, 6-amino-8-[[(				
aminocarbonyl)oxy]methyl]-				
1,1a,2,8,8a,8b- hexahydro-8a-methoxy-5-				
methyl-,[1aS- (1aalpha,8beta,8aalpha,				
8balpha)]-.				
Barium cyanide.....	542-62-1	1,4	P013	
10 (4.54)				
Benz[j]aceanthrylene, 1,2-dihydro-3-	56-49-5	4	U157	
10 (4.54)				
methyl-.				
Benz[c]acridine.....	225-51-4	4	U016	
100 (45.4)				
Benzal chloride.....	98-87-3	4	U017	
5000 (2270)				
Benzamide, 3,5-dichloro-N-(1,1-dimethyl-	23950-58-5	4	U192	
5000 (2270)				
2propynyl)-.				
Benz[a]anthracene.....	56-55-3	2,4	U018	
10 (4.54)				
1,2-Benzanthracene.....	56-55-3	2,4	U018	
10 (4.54)				
Benz[a]anthracene, 7,12-dimethyl-.....	57-97-6	4	U094	
1 (0.454)				
Benzenamine.....	62-53-3	1,3,4	U012	
5000 (2270)				
Benzenamine, 4,4'-carbonimidoylbis (N,N	492-80-8	4	U014	
100 (45.4)				
dimethyl-.				
Benzenamine, 4-chloro-.....	106-47-8	4	P024	
1000 (454)				
Benzenamine, 4-chloro-2-methyl-,	3165-93-3	4	U049	
100 (45.4)				
hydrochloride.				
Benzenamine, N,N-dimethyl-4-(phenylazo)-	60-11-7	3,4	U093	
10 (4.54)				
.				
Benzenamine, 2-methyl-.....	95-53-4	3,4	U328	
100 (45.4)				
Benzenamine, 4-methyl-.....	106-49-0	4	U353	
100 (45.4)				
Benzenamine, 4,4'-methylenebis [2-	101-14-4	3,4	U158	
10 (4.54)				
chloro-.				

Benzenamine, 2-methyl-,hydrochloride...	636-21-5	4	U222
100 (45.4)			
Benzenamine, 2-methyl-5-nitro-.....	99-55-8	4	U181
100 (45.4)			
Benzenamine, 4-nitro-.....	100-01-6	4	P077
5000 (2270)			
Benzene \a\.....	71-43-2	1,2,3,4	U019
10 (4.54)			
Benzeneacetic acid, 4-chloro-[alpha]-(4-	510-15-6	3,4	U038
10 (4.54)			
chlorophenyl)-[alpha]-hydroxy-, ethyl			
ester.			
Benzene, 1-bromo-4-phenoxy-.....	101-55-3	2,4	U030
100 (45.4)			
Benzenebutanoic acid, 4-[bis(2-	305-03-3	4	U035
10 (4.54)			
chloroethyl)amino]-.			
Benzene, chloro-.....	108-90-7	1,2,3,4	U037
100 (45.4)			
Benzene, (chloromethyl)-.....	100-44-7	1,3,4	P028
100 (45.4)			

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Benzenediamine, ar-methyl-.....	95-80-7	3,4	U221
10 (4.54)			
	496-72-0		
	823-40-5		
	25376-45-8		
1,2-Benzenedicarboxylic acid, bis(2-	117-81-7	2,3,4	U028
100 (45.4)			
ethylhexyl) ester.			
1,2-Benzenedicarboxylic acid, dibutyl	84-74-2	1,2,3,4	U069
10 (4.54)			
ester.			
1,2-Benzenedicarboxylic acid, diethyl	84-66-2	2,4	U088
1000 (454)			
ester.			
1,2-Benzenedicarboxylic acid, dimethyl	131-11-3	2,3,4	U102
5000 (2270)			
ester.			
1,2-Benzenedicarboxylic acid, dioctyl	117-84-0	2,4	U107
5000 (2270)			
ester.			
Benzene, 1,2-dichloro-.....	95-50-1	1,2,4	U070
100 (45.4)			
Benzene, 1,3-dichloro-.....	541-73-1	2,4	U071
100 (45.4)			
Benzene, 1,4-dichloro-.....	106-46-7	1,2,3,4	U072
100 (45.4)			
Benzene, 1,1'-(2,2-dichloroethylidene)	72-54-8	1,2,4	U060
1 (0.454)			
bis[4-chloro-.			

Benzene, (dichloromethyl)-.....	98-87-3	4	U017
5000 (2270)			
Benzene, 1,3-diisocyanatomethyl-.....	91-08-7	3,4	U223
100 (45.4)			
	584-84-9		
	26471-62-5		
Benzene, dimethyl-.....	1330-20-7	1,3,4	U239
100 (45.4)			
1,3-Benzenediol.....	108-46-3	1,4	U201
5000 (2270)			
1,2-Benzenediol,4-[1-hydroxy-2-(methyl	51-43-4	4	P042
1000 (454)			
amino)ethyl]-.			
Benzeneethanamine, alpha,alpha-dimethyl-	122-09-8	4	P046
5000 (2270)			
.			
Benzene, hexachloro-.....	118-74-1	2,3,4	U127
10 (4.54)			
Benzene, hexahydro-.....	110-82-7	1,4	U056
1000 (454)			
Benzene, methyl-.....	108-88-3	1,2,3,4	U220
1000 (454)			
Benzene, 1-methyl-2,4-dinitro-.....	121-14-2	1,2,3,4	U105
10 (4.54)			
Benzene, 2-methyl-1,3-dinitro-.....	606-20-2	1,2,4	U106
100 (45.4)			
Benzene, (1-methylethyl)-.....	98-82-8	3,4	U055
5000 (2270)			
Benzene, nitro-.....	98-95-3	1,2,3,4	U169
1000 (454)			
Benzene, pentachloro-.....	608-93-5	4	U183
10 (4.54)			
Benzene, pentachloronitro-.....	82-68-8	3,4	U185
100 (45.4)			
Benzenesulfonic acid chloride.....	98-09-9	4	U020
100 (45.4)			
Benzenesulfonyl chloride.....	98-09-9	4	U020
100 (45.4)			
Benzene,1,2,4,5-tetrachloro-.....	95-94-3	4	U207
5000 (2270)			
Benzenethiol.....	108-98-5	4	P014
100 (45.4)			
Benzene,1,1'-(2,2,2-	50-29-3	1,2,4	U061
1 (0.454)			
trichloroethylidene) bis[4-chloro-.			
Benzene,1,1'-(2,2,2-	72-43-5	1,3,4	U247
1 (0.454)			
trichloroethylidene) bis[4-methoxy-.			
Benzene, (trichloromethyl)-.....	98-07-7	3,4	U023
10 (4.54)			
Benzene, 1,3,5-trinitro-.....	99-35-4	4	U234
10 (4.54)			
Benzidine.....	92-87-5	2,3,4	U021
1 (0.454)			

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1,2-Benzisothiazol-3(2H)-one, 1,1-              81-07-2            4  U202
100 (45.4)
 dioxide, & salts.
Benzo[a]anthracene.....................         56-55-3          2,4  U018
10 (4.54)
1,3-Benzodioxole, 5-(1-propenyl)-1.....        120-58-1            4  U141
100 (45.4)
1,3-Benzodioxole, 5-(2-propenyl)-......         94-59-7            4  U203
100 (45.4)
1,3-Benzodioxole, 5-propyl-............         94-58-6            4  U090
10 (4.54)
1,3-Benzodioxol-4-ol, 2,2-dimethyl-,         22961-82-6            4  U364
The Agency may adjust the statutory RQ for this hazardous substance in a
future rulemaking;
  until then the statutory one-pound RQ applies.
Sec.   The adjusted RQs for radionuclides may be found in Appendix B to this
table.
** Indicates that no RQ is being assigned to the generic or broad class.
\a\ Benzene was already a CERCLA hazardous substance prior to the CAA
Amendments of 1990 and received an
  adjusted 10-pound RQ based on potential carcinogenicity in an August 14,
1989, final rule (54 FR 33418). The
  CAA Amendments specify that ``benzene (including benzene from gasoline)''
is a hazardous air pollutant and,
  thus, a CERCLA hazardous substance.
\b\ The CAA Amendments of 1990 list DDE (3547-04-4) as a CAA hazardous air
pollutant. The CAS number, 3547-04-4,
  is for the chemical, p,p'dichlorodiphenylethane. DDE or p,p'-
dichlorodiphenyldichloroethylene, CAS number 72-
  55-9, is already listed in Table 302.4 with a final RQ of 1 pound. The
substance identified by the CAS number
  3547-04-4 has been evaluated and listed as DDE to be consistent with the
CAA section 112 listing, as amended.
\c\ Includes mineral fiber emissions from facilities manufacturing or
processing glass, rock, or slag fibers (or
  other mineral derived fibers) of average diameter 1 micrometer or less.
\d\ Includes mono- and di-ethers of ethylene glycol, diethylene glycol, and
triethylene glycol R-(OCH2CH2)n-OR'
  where:
 n = 1, 2, or 3;
 R = alkyl C7 or less; or
 R = phenyl or alkyl substituted phenyl;
 R' = H or alkyl C7 or less; or
 OR' consisting of carboxylic acid ester, sulfate, phosphate, nitrate, or
sulfonate.
\e\ Includes organic compounds with more than one benzene ring, and which
have a boiling point greater than or
  equal to 100 [deg]C.
\f\ See 40 CFR 302.6(b)(1) for application of the mixture rule to this
hazardous waste.

   Appendix A to Sec.   302.4--Sequential CAS Registry Number List of
                      CERCLA Hazardous Substances
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CASRN	Hazardous substance
50000	Formaldehyde.
50077	Azirino[2',3':3,4]pyrrolo[1,2-a]indole-4,7-dione,6-amino-8-[[(aminocarbonyl)oxy]methyl]-1,1a,2,8,8a, 8b-hexahydro-8a-methoxy-5-methyl-, [1aS-(1aalpha, 8beta,8aalpha,8balpha)]- Mitomycin C.
50180	Cyclophosphamide. 2H-1,3,2-Oxazaphosphorin-2-amine, N,N-bis(2-chloroethyl)tetrahydro-, 2-oxide.
50293	Benzene, 1,1'-(2,2,2- trichloroethylidene)bis[4-chloro-. DDT. 4,4'-DDT.
50328	Benzo[a]pyrene. 3,4-Benzopyrene.
50555	Reserpine. Yohimban-16-carboxylic acid,11,17-dimethoxy-18-[(3 ,4,5-trimethoxybenzoyl)oxy]-, methyl ester (3beta, 16beta,17alpha,18beta,20alpha)-.
51285	Phenol, 2,4-dinitro-. 2,4-Dinitrophenol.
51434	Epinephrine. 1,2-Benzenediol,4-[1-hydroxy-2-(methylamino) ethyl]-.
51796	Carbamic acid, ethyl ester. Ethyl carbamate.

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	Urethane.
52686	Trichlorfon.
52857	Famphur. Phosphorothioic acid, O-[4-[(dimethylamino)sulfonyl]phenyl] O,O-dimethyl ester.
53703	Dibenz[a,h]anthracene. Dibenzo[a,h]anthracene. 1,2:5,6-Dibenzanthracene.
53963	Acetamide, N-9H-fluoren-2-yl-. 2-Acetylaminofluorene.
54115	Nicotine, & salts. Pyridine, 3-(1-methyl-2-pyrrolidinyl)-, (S)-, & salts.
55185	Ethanamine, N-ethyl-N-nitroso-. N-Nitrosodiethylamine.
55630	Nitroglycerine. 1,2,3-Propanetriol, trinitrate.
55914	Diisopropylfluorophosphate (DFP). Phosphorofluororidic acid, bis(1-methylethyl) ester.
56042	Methylthiouracil. 4(1H)-Pyrimidinone, 2,3-dihydro-6-methyl-2-thioxo-.
56235	Carbon tetrachloride. Methane, tetrachloro-.
56382	Parathion. Phosphorothioic acid, O,O-diethyl O-(4-nitrophenyl) ester.
56495	Benz[j]aceanthrylene, 1,2-dihydro-3-methyl-. 3-Methylcholanthrene.

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    56531  Diethylstilbestrol.
           Phenol, 4,4'-(1,2-diethyl-1,2-ethenediyl)bis-, (E).
    56553  Benz[a]anthracene.
           Benzo[a]anthracene.
           1,2-Benzanthracene.
    56724  Coumaphos.
    57147  Hydrazine, 1,1-dimethyl-.
           1,1-Dimethylhydrazine.
    57249  Strychnidin-10-one, & salts.
Strychnin
e, &
salts.
    57476  Pyrrolo[2,3-b]indol-5-ol, 1,2,3,3a,8,8a-hexahydro-1,3a,8-
            trimethyl-, methylcarbamate (ester), (3aS-cis)-
            (Physostigmine).
    57578  beta-Propiolactone.
    57647  Benzoic acid, 2-hydroxy-, compd. with (3aS-cis)-
            1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethylpyrrolo[2,3-b]indol-
            5-yl methylcarbamate ester (1:1) (Physostigmine
            salicylate).
    57749  Chlordane.
           Chlordane, alpha & gamma isomers.
           CHLORDANE (TECHNICAL MIXTURE AND METABOLITES).
           4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8- octachloro-
            2,3,3a,4,7,7a-hexahydro-.
    57976  Benz[a]anthracene, 7,12-dimethyl-.
           7,12-Dimethylbenz[a]anthracene.
    58899  [gamma]-BHC.
           Cyclohexane, 1,2,3,4,5,6-hexachloro-
            (1[alpha],2[alpha],3[beta],4[alpha],5[alpha],6[beta])-.
           Lindane.
           Lindane (all isomers).
    58902  Phenol, 2,3,4,6-tetrachloro-.
           2,3,4,6-Tetrachlorophenol.
    59507  p-Chloro-m-cresol.
           Phenol, 4-chloro-3-methyl-.
    59892  N-Nitrosomorpholine.
    60004  Ethylenediamine-tetraacetic acid (EDTA).
    60117  Benzenamine, N,N-dimethyl-4-(phenylazo)-.
           Dimethyl aminoazobenzene.
           p-Dimethylaminoazobenzene.
    60297  Ethane, 1,1'-oxybis-.
           Ethyl ether.
    60344  Hydrazine, methyl-.
           Methyl hydrazine.
    60355  Acetamide.
    60515  Dimethoate.
           Phosphorodithioic acid, O,O-dimethyl S-[2( methylamino)-2-
            oxoethyl] ester.
    60571  Dieldrin.
           2,7:3,6-Dimethanonaphth[2,3-b]oxirene, 3,4,5,6,9,9-
            hexachloro-1a,2, 2a,3,6,6a,7,7a-octahydro-,
            (1aalpha,2beta,2aalpha,3beta,6beta, 6aalpha,7beta, 7aalpha)-
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    61825  Amitrole.
           1H-1,2,4-Triazol-3-amine.
    62384  Mercury, (acetato-O)phenyl-.
           Phenylmercury acetate.
    62442  Acetamide, N-(4-ethoxyphenyl)-.
           Phenacetin.
    62500  Ethyl methanesulfonate.
           Methanesulfonic acid, ethyl ester.
    62533  Aniline.
           Benzenamine.
    62555  Ethanethioamide.
           Thioacetamide.
    62566  Thiourea.
    62737  Dichlorvos.
    62748  Acetic acid, fluoro-, sodium salt.
           Fluoroacetic acid, sodium salt.
    62759  Methanamine, N-methyl-N-nitroso-.
           N-Nitrosodimethylamine.
    63252  Carbaryl.
           1-Naphthalenol, methylcarbamate.
    64006  Phenol, 3-(1-methylethyl)-, methyl carbamate (m-Cumenyl
            methylcarbamate).
    64186  Formic acid.
    64197  Acetic acid.
    64675  Diethyl sulfate.
    65850  Benzoic acid.
    66751  Uracil mustard.
           2,4-(1H,3H)-Pyrimidinedione, 5-[bis(2-chloroethyl) amino]-.
    67561  Methanol.
           Methyl alcohol.
    67641  Acetone.
           2-Propanone.
    67663  Chloroform.
           Methane, trichloro-.
    67721  Ethane, hexachloro-.
           Hexachloroethane.
    68122  Dimethylformamide.
    70257  Guanidine, N-methyl-N'-nitro-N-nitroso-.
           MNNG.
    70304  Hexachlorophene.
           Phenol, 2,2'-methylenebis[3,4,6-tri- chloro-.
    71363  n-Butyl alcohol.
           1-Butanol.
    71432  Benzene.
    71556  Ethane, 1,1,1-trichloro-.
           Methyl chloroform.
           1,1,1-Trichloroethane.
    72208  Endrin.
Endrin, &
metabolit
es.

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        2,7:3.6-Dimethanonaphth[2,3-b]oxirene,3,4,5,6,9,9-hexachloro-
         1a,2,2a,3,6,6a,7,7a-octahydro-,
         (1aalpha,2beta,2abeta,3alpha, 6alpha,6abeta,7beta,7aalpha)-
         , & metabolites.
72435   Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4- methoxy-.
        Methoxychlor.
72548   Benzene, 1,1'-(2,2-dichloroethylidene)bis[4-chloro-.
        DDD.
        TDE.
        4,4'-DDD.
72559   DDE
        4,4'-DDE.
72571   Trypan blue.
        2,7-Naphthalenedisulfonic acid, 3,3'-[(3,3'-dimethyl-(l,1'-
         biphenyl)-4,4'-diyl)-bis(azo)]bis(5-amino-4-hydroxy)-
         tetrasodium salt.
74839   Bromomethane.
        Methane, bromo-.
        Methyl bromide.
74873   Chloromethane.
        Methane, chloro-.
        Methyl chloride.
74884   Iodomethane
        Methane, iodo-.
        Methyl iodide.
74895   Monomethylamine.
74908   Hydrocyanic acid.
        Hydrogen cyanide.
74931   Methanethiol.
        Methyl mercaptan.
        Thiomethanol.
74953   Methane, dibromo-.
        Methylene bromide.
75003   Chloroethane.
        Ethyl chloride.
75014   Ethene, chloro-.
        Vinyl chloride.
75047   Monoethylamine.
75058   Acetonitrile.
75070   Acetaldehyde.
        Ethanal.
75092   Dichloromethane.
        Methane, dichloro-.
        Methylene chloride.
75150   Carbon disulfide.
75207   Calcium carbide.
75218   Ethylene oxide.
        Oxirane.
75252   Bromoform.
        Methane, tribromo-.
75274   Dichlorobromomethane.
75343   Ethane, 1,1-dichloro-.
        Ethylidene dichloride.
        1,1-Dichloroethane.
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75354  Ethene, 1,1-dichloro-.
       Vinylidene chloride.
       1,1-Dichloroethylene.
75365  Acetyl chloride.
75445  Carbonic dichloride.
       Phosgene.
75503  Trimethylamine.
75558  Aziridine, 2-methyl-.
       2-Methyl aziridine.
       1,2-Propylenimine.
75569  Propylene oxide.
75605  Arsinic acid, dimethyl-.
       Cacodylic acid.
75649  tert-Butylamine.
75694  Methane, trichlorofluoro-.
       Trichloromonofluoromethane.
75718  Dichlorodifluoromethane.
       Methane, dichlorodifluoro-.
75865  Acetone cyanohydrin.
       Propanenitrile, 2-hydroxy-2-methyl-.
       2-Methyllactonitrile.
75876  Acetaldehyde, trichloro-.
       Chloral.
75990  2,2-Dichloropropionic acid.
76017  Ethane, pentachloro-.
       Pentachloroethane.
76448  Heptachlor.
       4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-
        tetrahydro-.
77474  Hexachlorocyclopentadiene.
       1,3-Cyclopentadiene, 1,2,3,4,5,5-hexa- chloro-.
77781  Dimethyl sulfate.
       Sulfuric acid, dimethyl ester.
78002  Plumbane, tetraethyl-.
       Tetraethyl lead.
78591  Isophorone.
78795  Isoprene.
78819  iso-Butylamine.
78831  Isobutyl alcohol.
       1-Propanol, 2-methyl-.
78875  Propane, 1,2-dichloro-.
       Propylene dichloride.
       1,2-Dichloropropane.
78886  2,3-Dichloropropene.
78933  2-Butanone.
       MEK.
       Methyl ethyl ketone.
78999  1,1-Dichloropropane.
79005  Ethane, 1,1,2-trichloro-.
       1,1,2-Trichloroethane.
79016  Ethene, trichloro-.
       Trichloroethylene.
79061  Acrylamide.
       2-Propenamide.
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     79094  Propionic acid.
     79107  Acrylic acid.
            2-Propenoic acid.
     79118  Chloroacetic acid.
     79196  Hydrazinecarbothioamide.
            Thiosemicarbazide.
     79221  Carbonochloridic acid, methyl ester.
            Methyl chlorocarbonate.
     79312  iso-Butyric acid.
     79345  Ethane, 1,1,2,2-tetrachloro-.
            1,1,2,2-Tetrachloroethane.
     79447  Carbamic chloride, dimethyl-.
            Dimethylcarbamoyl chloride.
     79469  Propane, 2-nitro-.
            2-Nitropropane.
     80159  alpha,alpha-Dimethylbenzylhydroperoxide.
            Hydroperoxide, 1-methyl-1-phenylethyl-.
     80626  Methyl methacrylate.
            2-Propenoic acid, 2-methyl-, methyl ester.
     81072  Saccharin, & salts.
            1,2-Benzisothiazol-3(2H)-one, 1,1-dioxide, & salts.
     81812  Warfarin, & salts.
            2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenylbutyl)-, &
             salts.
     82688  Benzene, pentachloronitro-.
            PCNB.
            Pentachloronitrobenzene.
            Quintobenzene.

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     83329  Acenaphthene.
     84662  Diethyl phthalate.
            1,2-Benzenedicarboxylic acid, diethyl ester.
     84742  Di-n-butyl phthalate.
            Dibutyl phthalate.
            n-Butyl phthalate.
            1,2-Benzenedicarboxylic acid, dibutyl ester.
     85007  Diquat.
     85018  Phenanthrene.
     85449  Phthalic anhydride.
            1,3-Isobenzofurandione.
     85687  Butyl benzyl phthalate.
     86306  N-Nitrosodiphenylamine.
     86500  Guthion.
     86737  Fluorene.
     86884  alpha-Naphthylthiourea.
            Thiourea, 1-naphthalenyl-.
     87650  Phenol, 2,6-dichloro-.
            2,6-Dichlorophenol.
     87683  Hexachlorobutadiene.
            1,3-Butadiene, 1,1,2,3,4,4-hexachloro-.
     87865  Pentachlorophenol.
            Phenol, pentachloro-.
     88062  Phenol, 2,4,6-trichloro-.
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       2,4,6-Trichlorophenol.
88722  o-Nitrotoluene.
88755  o-Nitrophenol.
       2-Nitrophenol.
88857  Dinoseb.
       Phenol, 2-(1-methylpropyl)-4,6-dinitro-.
90040  o-Anisidine.
91087  Benzene, 1,3-diisocyanatomethyl-.
       Toluene diisocyanate.
       2,4-Toluene diisocyanate.
91203  Naphthalene.
91225  Quinoline.
91587  beta-Chloronaphthalene.
       Naphthalene, 2-chloro-.
       2-Chloronaphthalene.
91598  beta-Naphthylamine.
       2-Naphthalenamine.
91667  N,N-Diethylaniline.
91805  Methapyrilene.
       1,2-Ethanediamine, N,N-dimethyl-N'-2-pyridinyl-N'- (2-
        thienylmethyl)-.
91941  [1,1'-Biphenyl]-4,4'-diamine,3,3'-dichloro-.
       3,3'-Dichlorobenzidine.
92524  Biphenyl.
92671  4-Aminobiphenyl.
92875  Benzidine.
       [1,1'-Biphenyl]-4,4'-diamine.
92933  4-Nitrobiphenyl.
       Propanoic acid, 2-(2,4,5-trichlorophenoxy)-.
       Silvex (2,4,5-TP).
       2,4,5-TP acid.
93765  Acetic acid, (2,4,5-trichlorophenoxy)-.
93721  2,4,5-T.
       2,4,5-T acid.
93798  2,4,5-T esters.
94111  2,4-D Ester.
94586  Dihydrosafrole.
       1,3-Benzodioxole, 5-propyl-.
94597  Safrole.
       1,3-Benzodioxole, 5-(2-propenyl)-.
94791  2,4-D Ester.
94804  2,4-D Ester.
95476  o-Xylene.
95487  o-Cresol.
95501  Benzene, 1,2-dichloro-.
       o-Dichlorobenzene.
       1,2-Dichlorobenzene.
95534  Benzenamine, 2-methyl-.
       o-Toluidine.
95578  o-Chlorophenol.
       Phenol, 2-chloro-.
       2-Chlorophenol.
95807  Benzenediamine, ar-methyl-.
       Toluenediamine.
       2,4-Toluene diamine.
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 95943  Benzene, 1,2,4,5-tetrachloro-.
        1,2,4,5-Tetrachlorobenzene.
 95954  Phenol, 2,4,5-trichloro-.
        2,4,5-Trichlorophenol.
 96093  Styrene oxide.
 96128  Propane, 1,2-dibromo-3-chloro-.
        1,2-Dibromo-3-chloropropane.
 96457  Ethylenethiourea.
        2-Imidazolidinethione.
 97632  Ethyl methacrylate.
        2-Propenoic acid, 2-methyl-, ethyl ester.
 98011  Furfural.
        2-Furancarboxaldehyde.
 98077  Benzene, (trichloromethyl)-.
        Benzotrichloride.
 98099  Benzenesulfonic acid chloride.
        Benzenesulfonyl chloride.
 98828  Benzene, (1-methylethyl)-.
        Cumene.
 98862  Acetophenone.
        Ethanone, 1-phenyl-.
 98873  Benzal chloride.
        Benzene, (dichloromethyl)-.
 98884  Benzoyl chloride.
 98953  Benzene, nitro-.
        Nitrobenzene.
 99081  m-Nitrotoluene.
 99354  Benzene, 1,3,5-trinitro-.
        1,3,5-Trinitrobenzene.
 99558  Benzenamine, 2-methyl-5-nitro-.
        5-Nitro-o-toluidine.
 99650  m-Dinitrobenzene.
 99990  p-Nitrotoluene.
100016  Benzenamine, 4-nitro-.
        p-Nitroaniline.
100027  p-Nitrophenol.
        Phenol, 4-nitro-.
        4-Nitrophenol.
100254  p-Dinitrobenzene.
100414  Ethylbenzene.
100425  Styrene.
100447  Benzene, (chloromethyl)-.
        Benzyl chloride.
100470  Benzonitrile.
100754  N-Nitrosopiperidine.
        Piperidine, 1-nitroso-.
101144  Benzenamine, 4,4'-methylenebis[2-chloro-.
        4,4'-Methylenebis(2-chloroaniline).
101279  Carbamic acid, (3-chlorophenyl)-, 4-chloro-2-butynyl ester
         (Barban).
101553  Benzene, 1-bromo-4-phenoxy-.
        4-Bromophenyl phenyl ether.
101688  MDI.
        Methylene diphenyl diisocyanate.
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    101779  4,4'-Methylenedianiline.
    103855  Phenylthiourea.
            Thiourea, phenyl-.
    105464  sec-Butyl acetate.
    105679  Phenol, 2,4-dimethyl-.
            2,4-Dimethylphenol.
    106423  p-Xylene.

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    106445  p-Cresol.
    106467  Benzene, 1,4-dichloro-.
            p-Dichlorobenzene.
            1,4-Dichlorobenzene.
    106478  Benzenamine, 4-chloro-.
            p-Chloroaniline.
    106490  Benzenamine, 4-methyl-.
            p-Toluidine.
    106503  p-Phenylenediamine.
    106514  p-Benzoquinone.
            2,5-Cyclohexadiene-1,4-dione.
            Quinone.
    106887  1,2-Epoxybutane.
    106898  1-Chloro-2,3-epoxypropane.
            Epichlorohydrin.
            Oxirane, (chloromethyl)-.
    106934  Dibromoethane.
            Ethane, 1,2-dibromo-.
            Ethylene dibromide.
    106990  1,3-Butadiene.
    107028  Acrolein.
            2-Propenal.
    107051  Allyl chloride.
    107062  Ethane, 1,2-dichloro-.
            Ethylene dichloride.
            1,2-Dichloroethane.
    107108  n-Propylamine.
            1-Propanamine.
    107120  Ethyl cyanide.
            Propanenitrile.
    107131  Acrylonitrile.
            2-Propenenitrile.
    107153  Ethylenediamine.
    107186  Allyl alcohol.
            2-Propen-1-ol.
    107197  Propargyl alcohol.
            2-Propyn-1-ol.
    107200  Acetaldehyde, chloro-.
            Chloroacetaldehyde.
    107211  Ethylene glycol.
    107302  Chloromethyl methyl ether.
            Methane, chloromethoxy-.
    107493  Diphosphoric acid, tetraethyl ester.
            Tetraethyl pyrophosphate.
    107926  Butyric acid.
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108054  Vinyl acetate.
        Vinyl acetate monomer.
108101  Hexone.
        Methyl isobutyl ketone.
        4-Methyl-2-pentanone.
108247  Acetic anhydride.
108316  Maleic anhydride.
        2,5-Furandione.
108383  m-Xylene.
108394  m-Cresol.
108463  Resorcinol.
        1,3-Benzenediol.
108601  Dichloroisopropyl ether.
        Propane, 2,2''-oxybis[2-chloro-.
108883  Benzene, methyl-.
        Toluene.
108907  Benzene, chloro-.
        Chlorobenzene.
108941  Cyclohexanone.
108952  Phenol.
108985  Benzenethiol.
        Thiophenol.
109068  Pyridine, 2-methyl-.
        2-Picoline.
109739  Butylamine.
109773  Malononitrile.
        Propanedinitrile.
109897  Diethylamine.
109999  Furan, tetrahydro-.
        Tetrahydrofuran.
110009  Furan.
        Furfuran.
110167  Maleic acid.
110178  Fumaric acid.
110190  iso-Butyl acetate.
110543  Hexane.
110758  Ethene, (2-chloroethoxy)-.
        2-Chloroethyl vinyl ether.
110805  Ethanol, 2-ethoxy-.
        Ethylene glycol monoethyl ether.
110827  Benzene, hexahydro-.
        Cyclohexane.
110861  Pyridine.
111422  Diethanolamine.
111444  Bis(2-chloroethyl) ether.
        Dichloroethyl ether.
        Ethane, 1,1'-oxybis[2-chloro-.
111546  Carbamodithioic acid, 1,2-ethanediylbis-, salts & esters.
        Ethylenebisdithiocarbamic acid, salts & esters.
111911  Bis(2-chloroethoxy) methane.
        Dichloromethoxyethane.
        Ethane, 1,1'-[methylenebis(oxy)]bis(2-chloro-.
114261  Phenol, 2-(1-methylethoxy)-, methylcarbamate.
        Propoxur (Baygon).
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    115026  Azaserine.
            L-Serine, diazoacetate (ester).
    115297  Endosulfan.
            6,9-Methano-2,4,3-benzodioxathiepin, 6,7,8,9,10,10-
             hexachloro-1,5,5a,6,9,9a- hexahydro-, 3-oxide.
    115322  Dicofol.
    116063  Aldicarb.
            Propanal, 2-methyl-2-(methylthio)-, O-
             [(methylamino)carbonyl]oxime.
    117806  Dichlone.
    117817  1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester.
            Bis(2-ethylhexyl)phthalate.
            DEHP.
            Diethylhexyl phthalate.
    117840  Di-n-octyl phthalate.
            1,2-Benzenedicarboxylic acid, dioctyl ester.
    118741  Benzene, hexachloro-.
            Hexachlorobenzene.
    119380  Carbamic acid, dimethyl-, 3-methyl-1-(1-methylethyl)-1H-
             pyrazol-5-yl ester (Isolan).
    119904  [1,1'-Biphenyl]-4,4'-diamine,3,3'-dimethoxy-.
            3,3'-Dimethoxybenzidine.
    119937  [1,1'-Biphenyl]-4,4'-diamine,3,3'- dimethyl-.
            3,3'-Dimethylbenzidine.
    120127  Anthracene.
    120581  Isosafrole.
            1,3-Benzodioxole, 5-(1-propenyl)-.
    120809  Catechol.
    120821  1,2,4-Trichlorobenzene.
    120832  Phenol, 2,4-dichloro-.
            2,4-Dichlorophenol.
    121142  Benzene, 1-methyl-2,4-dinitro-.
            2,4-Dinitrotoluene.
    121211  Pyrethrins.
    121299  Pyrethrins.
    121448  Ethanamine, N,N-diethyl-.
            Triethylamine.
    121697  N,N-Dimethylaniline.

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    121755  Malathion.
    122098  alpha,alpha-Dimethylphenethylamine.
            Benzeneethanamine, alpha,alpha-dimethyl-.
    122429  Carbamic acid, phenyl-, 1-methylethyl ester (Propham).
    122667  Hydrazine, 1,2-diphenyl-.
            1,2-Diphenylhydrazine.
    123319  Hydroquinone.
    123331  Maleic hydrazide.
            3,6-Pyridazinedione, 1,2-dihydro-.
    123386  Propionaldehyde.
    123626  Propionic anhydride.
    123637  Paraldehyde.
            1,3,5-Trioxane, 2,4,6-trimethyl-.
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123739  Crotonaldehyde.
        2-Butenal.
123864  Butyl acetate.
123911  1,4-Diethyleneoxide.
        1,4-Dioxane.
123922  iso-Amyl acetate.
124049  Adipic acid.
124403  Dimethylamine.
        Methanamine, N-methyl-.
124414  Sodium methylate.
124481  Chlorodibromomethane.
126727  Tris(2,3-dibromopropyl) phosphate.
        1-Propanol, 2,3-dibromo-, phosphate (3:1).
126987  Methacrylonitrile.
        2-Propenenitrile, 2-methyl-.
126998  Chloroprene.
127184  Ethene, tertrachloro-.
        Perchloroethylene.
        Tetrachloroethylene.
127822  Zinc phenolsulfonate.
129000  Pyrene.
130154  1,4-Naphthalenedione.
        1,4-Naphthoquinone.
131113  Dimethyl phthalate.
        1,2-Benzenedicarboxylic acid, dimethyl ester.
131748  Ammonium picrate.
        Phenol, 2,4,6-trinitro-, ammonium salt.
131895  Phenol, 2-cyclohexyl-4,6-dinitro-.
        2-Cyclohexyl-4,6-dinitrophenol.
132649  Dibenzofuran.
133062  Captan.
133904  Chloramben.
134327  alpha-Naphthylamine.
        1-Naphthalenamine.
137268  Thioperoxydicarbonic diamide
         ([H2N)C(S)]2S2, tetramethyl-.
        Thiram.
137304  Zinc, bis(dimethylcarbamodithioato-S,S')-, (Ziram).
140885  Ethyl acrylate.
        2-Propenoic acid, ethyl ester.
141786  Acetic acid, ethyl ester.
        Ethyl acetate.
142289  1,3-Dichloropropane.
142712  Cupric acetate.
142847  Dipropylamine.
        1-Propanamine, N-propyl-.
143339  Sodium cyanide Na(CN).
143500  Kepone.
        1,3,4-Metheno-2H-cyclobuta[cd]pentalen-2-
         one,1,1a,3,3a,4,5,5,5a,5b,6-decachlorooctahydro-.
145733  Endothall.
        7-Oxabicyclo[2.2.1]heptane-2,3-dicarboxylic acid.
148823  L-Phenylalanine, 4-[bis(2-chloroethyl)amino]-.
        Melphalan.
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151508  Potassium cyanide K(CN).
151564  Aziridine.
        Ethylenimine.
152169  Diphosphoramide, octamethyl-.
        Octamethylpyrophosphoramide.
156605  Ethene, 1,2-dichloro- (E).
        1,2-Dichloroethylene.
156627  Calcium cyanamide.
189559  Benzo[rst]pentaphene.
        Dibenzo[a,i]pyrene.
191242  Benzo[ghi]perylene.
193395  Indeno(1,2,3-cd)pyrene.
205992  Benzo[b]fluoranthene.
206440  Fluoranthene.
207089  Benzo(k)fluoranthene.
208968  Acenaphthylene.
218019  Chrysene.
225514  Benz[c]acridine.
297972  O,O-Diethyl O-pyrazinyl phosphoro-
         thioate.
        Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester.
298000  Methyl parathion.
        Phosphorothioic acid, O,O-dimethyl O-(4-nitrophenyl) ester.
298022  Phorate.
        Phosphorodithioic acid, O,O-diethyl S-[(ethylthio) methyl]
         ester.
298044  Disulfoton.
        Phosphorodithioic acid, O,O-diethyl S-[2-(ethylthio)ethyl]
         ester.
300765  Naled.
301042  Acetic acid, lead(2+) salt.
        Lead acetate.
302012  Hydrazine.
303344  Lasiocarpine.
        2-Butenoic acid, 2-methyl-, 7-[[2,3-dihydroxy-2-(1-
         methoxyethyl)-3-methyl-1-oxobutoxy]methyl]-2,3,5,7a-
         tetrahydro-1H-pyrrolizin-1-yl ester, [1S-
         [1alpha(Z),7(2S*,3R*), 7aalpha]]-.
305033  Benzenebutanoic acid, 4-[bis(2-chloroethyl)amino]-.
        Chlorambucil.
309002  Aldrin.
        1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-
         1,4,4a,5,8,8a-hexahydro-,
         (1alpha,4alpha,4abeta,5alpha,8alpha, 8abeta)-.
311455  Diethyl-p-nitrophenyl phosphate.
        Phosphoric acid, diethyl 4-nitrophenyl ester.
315184  Mexacarbate.
        Phenol, 4-(dimethylamino)-3,5-dimethyl-, methylcarbamate
         (ester).
319846  alpha--BHC.
319857  beta--BHC.
319868  delta--BHC.
329715  2,5-Dinitrophenol.
330541  Diuron.
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    333415  Diazinon.
    334883  Diazomethane.
    353504  Carbon oxyfluoride.
            Carbonic difluoride.
    357573  Brucine.
            Strychnidin-10-one, 2,3-dimethoxy-.
    460195  Cyanogen.
            Ethanedinitrile.
    463581  Carbonyl sulfide.
    465736  Isodrin.

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            1,4:5,8-Dimethanonaphthalene,1,2,3,4,10,10-hexachloro-
             1,4,4a,5,8,8a-hexahydro-,
             (1alpha,4alpha,4abeta,5beta,8beta, 8abeta)-.
    492808  Auramine.
            Benzenamine, 4,4'-carbonimidoylbis[N,N-dimethyl-.
    494031  Chlornaphazine.
            Naphthalenamine, N,N'-bis(2-chloro-
             ethyl)-.
    496720  Benzenediamine, ar-methyl-.
            Toluenediamine.
            2,4-Toluene diamine.
    504245  4-Aminopyridine.
            4-Pyridinamine.
    504609  1-Methylbutadiene.
            1,3-Pentadiene.
    506616  Argentate(1-), bis(cyano-C)-, potassium.
            Potassium silver cyanide.
    506649  Silver cyanide Ag(CN).
    506683  Cyanogen bromide (CN)Br.
    506774  Cyanogen chloride (CN)Cl.
    506876  Ammonium carbonate.
    506967  Acetyl bromide.
    509148  Methane, tetranitro-.
            Tetranitromethane.
    510156  Benzeneacetic acid, 4-chloro-[alpha]- (4-chlorophenyl)-
             [alpha]-hydroxy-, ethyl ester.
            Chlorobenzilate.
    513495  sec-Butylamine.
    528290  o-Dinitrobenzene.
    532274  2-Chloroacetophenone.
    534521  4,6-Dinitro-o-cresol, and salts.
            Phenol, 2-methyl-4,6-dinitro-, & salts.
    540738  Hydrazine, 1,2-dimethyl-.
            1,2-Dimethylhydrazine.
    540841  2,2,4-Trimethylpentane.
    540885  tert-Butyl acetate.
    541093  Uranyl acetate.
    541537  Dithiobiuret.
            Thioimidodicarbonic diamide
             [(H2N)C(S)]2NH.
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541731  Benzene, 1,3-dichloro-.
        m-Dichlorobenzene.
        1,3-Dichlorobenzene.
542621  Barium cyanide.
542756  1-Propene, 1,3-dichloro-.
        1,3-Dichloropropene.
542767  Propanenitrile, 3-chloro-.
        3-Chloropropionitrile.
542881  Bis(chloromethyl)ether.
        Dichloromethyl ether.
        Methane, oxybis(chloro-.
543908  Cadmium acetate.
544183  Cobaltous formate.
544923  Copper cyanide Cu(CN).
554847  m-Nitrophenol.
557197  Nickel cyanide Ni(CN)2.
557211  Zinc cyanide Zn(CN)2.
        Zinc cyanide Zn(CN)2.
557346  Zinc acetate.
557415  Zinc formate.
563122  Ethion.
563688  Acetic acid, thallium(1+) salt.
        Thallium(I) acetate.
573568  2,6-Dinitrophenol.
584849  Benzene, 1,3-diisocyanatomethyl-.
        Toluene diisocyanate.
        2,4-Toluene diisocyanate.
591082  Acetamide, N-(aminothioxomethyl)-.
        1-Acetyl-2-thiourea.
592018  Calcium cyanide Ca(CN)2.
592041  Mercuric cyanide.
592858  Mercuric thiocyanate.
592870  Lead thiocyanate.
593602  Vinyl bromide.
594423  Methanesulfenyl chloride, trichloro-.
        Trichloromethanesulfenyl chloride.
598312  Bromoacetone.
        2-Propanone, 1-bromo-.
606202  Benzene, 2-methyl-1,3-dinitro-.
        2,6-Dinitrotoluene.
608731  HEXACHLOROCYCLOHEXANE (all isomers).
608935  Benzene, pentachloro-.
        Pentachlorobenzene.
609198  3,4,5-Trichlorophenol.
610399  3,4-Dinitrotoluene.
615532  Carbamic acid, methylnitroso-, ethyl ester.
        N-Nitroso-N-methylurethane.
621647  Di-n-propylnitrosamine.
        1-Propanamine, N-nitroso-N-propyl-.
624839  Methane, isocyanato-.
        Methyl isocyanate.
625161  tert-Amyl acetate.
626380  sec-Amyl acetate.
628637  Amyl acetate.
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    628864  Fulminic acid, mercury(2+)salt.
            Mercury fulminate.
    630104  Selenourea.
    630206  Ethane, 1,1,1,2-tetrachloro-.
            1,1,1,2-Tetrachloroethane.
    631618  Ammonium acetate.
    636215  Benzenamine, 2-methyl-, hydrochloride.
            o-Toluidine hydrochloride.
    640197  Acetamide, 2-fluoro-.
            Fluoroacetamide.
    644644  Carbamic acid, dimethyl-,1-[(dimethylamino)carbonyl]-5-
             methyl-1H-pyrazol-3-yl ester (Dimetilan).
    680319  Hexamethylphosphoramide.
    684935  N-Nitroso-N-methylurea.
            Urea, N-methyl-N-nitroso-.
    692422  Arsine, diethyl-.
            Diethylarsine.
    696286  Arsonous dichloride, phenyl-.
            Dichlorophenylarsine.
    757584  Hexaethyl tetraphosphate.
            Tetraphosphoric acid, hexaethyl ester.
    759739  N-Nitroso-N-ethylurea.
            Urea, N-ethyl-N-nitroso-.
    764410  1,4-Dichloro-2-butene.
            2-Butene, 1,4-dichloro-.
    765344  Glycidylaldehyde.
            Oxiranecarboxyaldehyde.
    815827  Cupric tartrate.
    822060  Hexamethylene-1,6-diisocyanate.
    823405  Benzenediamine, ar-methyl-.
            Toluenediamine.
            2,4-Toluene diamine.
    924163  N-Nitrosodi-n-butylamine.
            1-Butanamine, N-butyl-N-nitroso-.
    930552  N-Nitrosopyrrolidine.
            Pyrrolidine, 1-nitroso-.
    933755  2,3,6-Trichlorophenol.
    933788  2,3,5-Trichlorophenol.
    959988  alpha-Endosulfan.
   1024573  Heptachlor epoxide.
   1031078  Endosulfan sulfate.
   1066304  Chromic acetate.
   1066337  Ammonium bicarbonate.
   1072351  Lead stearate.

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   1111780  Ammonium carbamate.
   1116547  Ethanol, 2,2'-(nitrosoimino)bis-.
            N-Nitrosodiethanolamine.
   1120714  1,2-Oxathiolane, 2,2-dioxide.
            1,3-Propane sultone.
   1129415  Carbamic acid, methyl-, 3-methylphenyl ester (Metolcarb).
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1185575  Ferric ammonium citrate.
1194656  Dichlobenil.
1300716  Xylenol.
1303282  Arsenic oxide As2O5.
         Arsenic pentoxide.
1303328  Arsenic disulfide.
1303339  Arsenic trisulfide.
1309644  Antimony trioxide.
1310583  Potassium hydroxide.
1310732  Sodium hydroxide.
1314325  Thallic oxide.
         Thallium oxide Tl2O3.
1314621  Vanadium oxide V2O5.
         Vanadium pentoxide.
1314803  Phosphorus pentasulfide.
         Phosphorus sulfide.
         Sulfur phosphide.
1314847  Zinc phosphide Zn3P2.
1314870  Lead sulfide.
1319728  2,4,5-T amines.
1319773  Cresol (cresylic acid).
         Cresols (isomers and mixture).
         Cresylic acid (isomers and mixture).
         Phenol, methyl-.
1320189  2,4-D Ester.
1321126  Nitrotoluene.
1327533  Arsenic oxide As2O3.
         Arsenic trioxide.
1330207  Benzene, dimethyl-.
         Xylene.
         Xylene (mixed).
         Xylenes (isomers and mixture).
1332076  Zinc borate.
1332214  Asbestos.
1333831  Sodium bifluoride.
1335326  Lead subacetate.
         Lead, bis(acetato-O)tetrahydroxytri.
1336216  Ammonium hydroxide.
1336363  Aroclors.
         PCBs.
         POLYCHLORINATED BIPHENYLS.
1338234  Methyl ethyl ketone peroxide.
         2-Butanone peroxide.
1338245  Naphthenic acid.
1341497  Ammonium bifluoride.
1464535  1,2:3,4-Diepoxybutane.
         2,2'-Bioxirane.
1563388  7-Benzofuranol, 2,3-dihydro-2,2-dimethyl- (Carbofuran
          phenol).
1563662  7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-, methylcarbamate.
         Carbofuran.
1582098  Trifluralin.
1615801  Hydrazine, 1,2-diethyl-.
         N,N'-Diethylhydrazine.
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1634044  Methyl tert-butyl ether.
1646884  Propanal, 2-methyl-2-(methylsulfonyl)-, O-
          [(methylamino)carbonyl] oxime (Aldicarb sulfone).
1746016  TCDD.
         2,3,7,8-Tetrachlorodibenzo-p-dioxin.
1762954  Ammonium thiocyanate.
1863634  Ammonium benzoate.
1888717  Hexachloropropene.
         1-Propene, 1,1,2,3,3,3-hexachloro-.
1918009  Dicamba.
1928387  2,4-D Ester.
1928478  2,4,5-T esters.
1928616  2,4-D Ester.
1929733  2,4-D Ester.
2008460  2,4,5-T amines.
2032657  Mercaptodimethur.
         Methiocarb.
         Phenol, (3,5-dimethyl-4-(methylthio)-, methylcarbamate.
2303164  Carbamothioic acid, bis(1-methylethyl)-,
          S-(2,3-dichloro-2-propenyl) ester.
         Diallate.
2303175  Carbamothioic acid, bis(1-methylethyl)-, S-(2,3,3-trichloro-
          2-propenyl) ester (Triallate).
2312358  Propargite.
2545597  2,4,5-T esters.
2631370  Phenol, 3-methyl-5-(1-methylethyl)-, methyl carbamate
          (Promecarb).
2763964  3(2H)-Isoxazolone, 5-(aminomethyl)-.
         5-(Aminomethyl)-3-isoxazolol.
2764729  Diquat
2921882  Chlorpyrifos.
2944674  Ferric ammonium oxalate.
2971382  2,4-D Ester.
3012655  Ammonium citrate, dibasic.
3164292  Ammonium tartrate.
3165933  Benzenamine, 4-chloro-2-methyl-,
          hydrochloride.
         4-Chloro-o-toluidine, hydrochloride.
3251238  Cupric nitrate.
3288582  O,O-Diethyl S-methyl dithiophosphate.
         Phosphorodithioic acid, O,O-diethyl
          S-methyl ester.
3486359  Zinc carbonate.
3547044  DDE.
3689245  Tetraethyldithiopyrophosphate.
         Thiodiphosphoric acid, tetraethyl ester.
3813147  2,4,5-T amines.
4170303  Crotonaldehyde.
         2-Butenal.
4549400  N-Nitrosomethylvinylamine.
         Vinylamine, N-methyl-N-nitroso-.
5344821  Thiourea, (2-chlorophenyl)-.
         1-(o-Chlorophenyl)thiourea.
5893663  Cupric oxalate.
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   5952261  Ethanol, 2,2'-oxybis-, dicarbamate (Diethylene glycol,
             dicarbamate).
   5972736  Ammonium oxalate.
   6009707  Ammonium oxalate.
   6369966  2,4,5-T amines.
   6369977  2,4,5-T amines.
   6533739  Carbonic acid, dithallium(1+) salt.
            Thallium(I) carbonate.
   7005723  4-Chlorophenyl phenyl ether.
   7421934  Endrin aldehyde.
   7428480  Lead stearate.
   7439921  Lead.
   7439976  Mercury.
   7440020  Nickel.
   7440224  Silver.
   7440235  Sodium.
   7440280  Thallium.
   7440360  Antimony.
   7440382  Arsenic.
   7440417  Beryllium.
            Beryllium powder.
   7440439  Cadmium.

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   7440473  Chromium.
   7440508  Copper.
   7440666  Zinc.
   7446084  Selenium dioxide.
            Selenium oxide.
   7446142  Lead sulfate.
   7446186  Sulfuric acid, dithallium(1+) salt.
            Thallium(I) sulfate.
   7446277  Lead phosphate.
            Phosphoric acid, lead(2+) salt (2:3).
   7447394  Cupric chloride.
   7488564  Selenium sulfide SeS2.
   7550450  Titanium tetrachloride.
   7558794  Sodium phosphate, dibasic.
   7601549  Sodium phosphate, tribasic.
   7631892  Sodium arsenate.
   7631905  Sodium bisulfite.
   7632000  Sodium nitrite.
   7645252  Lead arsenate.
   7646857  Zinc chloride.
   7647010  Hydrochloric acid.
            Hydrogen chloride.
   7647189  Antimony pentachloride.
   7664382  Phosphoric acid.
   7664393  Hydrofluoric acid.
            Hydrogen fluoride.
   7664417  Ammonia.
   7664939  Sulfuric acid.
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7681494 Sodium fluoride.
7681529 Sodium hypochlorite.
7697372 Nitric acid.
7699458 Zinc bromide.
7705080 Ferric chloride.
7718549 Nickel chloride.
7719122 Phosphorus trichloride.
7720787 Ferrous sulfate.
7722647 Potassium permanganate.
7723140 Phosphorus.
7733020 Zinc sulfate.
7738945 Chromic acid.
7758294 Sodium phosphate, tribasic.
7758943 Ferrous chloride.
7758954 Lead chloride.
7758987 Cupric sulfate.
7761888 Silver nitrate.
7773060 Ammonium sulfamate.
7775113 Sodium chromate.
7778394 Arsenic acid H3AsO4.
7778441 Calcium arsenate.
7778509 Potassium bichromate.
7778543 Calcium hypochlorite.
7779864 Zinc hydrosulfite.
7779886 Zinc nitrate.
7782414 Fluorine.
7782492 Selenium.
7782505 Chlorine.
7782630 Ferrous sulfate.
7782823 Sodium selenite.
7782867 Mercurous nitrate.
7783008 Selenious acid.
7783064 Hydrogen sulfide H2S.
7783359 Mercuric sulfate.
7783462 Lead fluoride.
7783495 Zinc fluoride.
7783508 Ferric fluoride.
7783564 Antimony trifluoride.
7784341 Arsenic trichloride.
7784409 Lead arsenate.
7784410 Potassium arsenate.
7784465 Sodium arsenite.
7785844 Sodium phosphate, tribasic.
7786347 Mevinphos.
7786814 Nickel sulfate.
7787475 Beryllium chloride.
7787497 Beryllium fluoride.
7787555 Beryllium nitrate.
7788989 Ammonium chromate.
7789006 Potassium chromate.
7789062 Strontium chromate.
7789095 Ammonium bichromate.
7789426 Cadmium bromide.
7789437 Cobaltous bromide.

7789619	Antimony tribromide.
7790945	Chlorosulfonic acid.
7791120	Thallium chloride TlCl.
7803512	Hydrogen phosphide.
	Phosphine.
7803556	Ammonium vanadate.
	Vanadic acid, ammonium salt.
8001352	Chlorinated camphene.
	Toxaphene.
8003198	Dichloropropane--Dichloropropene (mixture).
8003347	Pyrethrins.
8014957	Sulfuric acid.
10022705	Sodium hypochlorite.
10025873	Phosphorus oxychloride.
10025919	Antimony trichloride.
10026116	Zirconium tetrachloride.
10028225	Ferric sulfate.
10031591	Sulfuric acid, dithallium(1+) salt.
	Thallium(I) sulfate.
10039324	Sodium phosphate, dibasic.
10043013	Aluminum sulfate.
10045893	Ferrous ammonium sulfate.
10045940	Mercuric nitrate.
10049055	Chromous chloride.
10099748	Lead nitrate.
10101538	Chromic sulfate.
10101630	Lead iodide.
10101890	Sodium phosphate, tribasic.
10102064	Uranyl nitrate.
10102188	Sodium selenite.
10102439	Nitric oxide.
	Nitrogen oxide NO.
10102440	Nitrogen dioxide.
	Nitrogen oxide NO2.
10102451	Nitric acid, thallium(1+) salt.
	Thallium(I) nitrate.
10102484	Lead arsenate.
10108642	Cadmium chloride.
10124502	Potassium arsenite.
10124568	Sodium phosphate, tribasic.
10140655	Sodium phosphate, dibasic.
10192300	Ammonium bisulfite.
10196040	Ammonium sulfite.
10361894	Sodium phosphate, tribasic.
10380297	Cupric sulfate, ammoniated.
10415755	Mercurous nitrate.
10421484	Ferric nitrate.
10544726	Nitrogen dioxide.
	Nitrogen oxide NO2.
10588019	Sodium bichromate.
10605217	Carbamic acid, 1H-benzimidazol-2-yl, methyl ester (Carbendazim).
11096825	Aroclor 1260.
11097691	Aroclor 1254.

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  11104282  Aroclor 1221.
  11115745  Chromic acid.
  11141165  Aroclor 1232.
  12002038  Cupric acetoarsenite.

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  12039520  Selenious acid, dithallium(1+) salt.
            Thallium (I) selenite.
  12054487  Nickel hydroxide.
  12125018  Ammonium fluoride.
  12125029  Ammonium chloride.
  12135761  Ammonium sulfide.
  12672296  Aroclor 1248.
  12674112  Aroclor 1016.
  12771083  Sulfur monochloride.
  13463393  Nickel carbonyl Ni(CO)4, (T-4)-.
  13560991  2,4,5-T salts.
  13597994  Beryllium nitrate.
  13746899  Zirconium nitrate.
  13765190  Calcium chromate.
            Chromic acid H2CrO4, calcium salt.
  13814965  Lead fluoborate.
  13826830  Ammonium fluoborate.
  13952846  sec-Butylamine.
  14017415  Cobaltous sulfamate.
  14216752  Nickel nitrate.
  14258492  Ammonium oxalate.
  14307358  Lithium chromate.
  14307438  Ammonium tartrate.
  14639975  Zinc ammonium chloride.
  14639986  Zinc ammonium chloride.
  14644612  Zirconium sulfate.
  15339363  Manganese, bis(dimethylcarbamodithioato-S,S')- (Manganese
             dimethyldithiocarbamate).
  15699180  Nickel ammonium sulfate.
  15739807  Lead sulfate.
  15950660  2,3,4-Trichlorophenol.
  16721805  Sodium hydrosulfide.
  16752775  Ethanimidothioic acid, N-[[(methylamino)carbonyl] oxy]-,
             methyl ester.
            Methomyl.
  16871719  Zinc silicofluoride.
  16919190  Ammonium silicofluoride.
  16923958  Zirconium potassium fluoride.
  17702577  Methanimidamide, N,N-dimethyl-N'-[2-methyl-4-
             [[(methylamino)carbonyl]oxy]phenyl]-(Formparanate).
  17804352  Carbamic acid, [1-[(butylamino)carbonyl]-1H-benzimidazol-2-
             yl]-, methyl ester (Benomyl).
  18883664  D-Glucose, 2-deoxy-2[[(methylnitrosoamino)-carbonyl]amino]-.
            Glucopyranose, 2-deoxy-2-(3-methyl-3-nitrosoureido)-, D-.
            Streptozotocin.
  20816120  Osmium oxide OsO4, (T-4)-.
            Osmium tetroxide.
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20830813	Daunomycin.
	5,12-Naphthacenedione, 8-acetyl-10-[(3-amino-2,3,6-trideoxy-alpha-L-lyxo-hexopyranosyl)oxy]-7,8,9,10-tetrahydro-6,8,11-trihydroxy-1-methoxy-, (8S-cis)-.
20859738	Aluminum phosphide.
22781233	1,3-Benzodioxol-4-ol, 2,2-dimethyl-, methyl carbamate (Bendiocarb).
22961826	1,3-Benzodioxol-4-ol, 2,2-dimethyl-, (Bendiocarb phenol).
23135220	Ethanimidothioic acid, 2-(dimethylamino)-N-[[(methylamino)carbonyl]oxy]-2-oxo-, methyl ester (Oxamyl).
23422539	Methanimidamide, N,N-dimethyl-N'-[3-[[(methylamino)carbonyl]oxy]phenyl]-, monohydrochloride (Formetanate hydrochloride).
23564058	Carbamic acid, [1,2-phenylenebis(iminocarbonothioyl)]bis-, dimethyl ester (Thiophanate-methyl).
23950585	Benzamide, 3,5-dichloro-N-(1,1- dimethyl-2-propynyl)-.
	Pronamide.
25154545	Dinitrobenzene (mixed).
25154556	Nitrophenol (mixed).
25155300	Sodium dodecylbenzenesulfonate.
25167822	Trichlorophenol.
25168154	2,4,5-T esters.
25168267	2,4-D Ester.
25321146	Dinitrotoluene.
25321226	Dichlorobenzene.
25376458	Benzenediamine, ar-methyl-.
	Toluenediamine.
	2,4-Toluene diamine.
25550587	Dinitrophenol.
26264062	Calcium dodecylbenzenesulfonate.
26419738	1,3-Dithiolane-2-carboxaldehyde, 2,4-dimethyl-, O-[(methylamino)carbonyl]oxime (Tirpate).
26471625	Benzene, 1,3-diisocyanatomethyl-.
	Toluene diisocyanate.
	2,4-Toluene diisocyanate.
26628228	Sodium azide.
26638197	Dichloropropane.
26952238	Dichloropropene.
27176870	Dodecylbenzenesulfonic acid.
27323417	Triethanolamine dodecylbenzene sulfonate.
27774136	Vanadyl sulfate.
28300745	Antimony potassium tartrate.
30525894	Paraformaldehyde.
30558431	Ethanimidothioic acid, 2-(dimethylamino)-N-hydroxy-2-oxo-, methyl ester (A2213).
32534955	2,4,5-TP esters.
33213659	beta - Endosulfan.
36478769	Uranyl nitrate.
37211055	Nickel chloride.
39196184	Thiofanox.
	2-Butanone, 3,3-dimethyl-1-(methylthio)-,O-[(methylamino)carbonyl] oxime.
42504461	Isopropanolamine dodecylbenzenesulfonate.
52628258	Zinc ammonium chloride.

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  52652592  Lead stearate.
  52740166  Calcium arsenite.
  52888809  Carbamothioic acid, dipropyl-, S-(phenylmethyl) ester
             (Prosulfocarb).
  53467111  2,4-D Ester.
  53469219  Aroclor 1242.
  55285148  Carbamic acid, [(dibutylamino)thio]methyl-, 2,3-dihydro-2,2-
             dimethyl-7-benzofuranyl ester (Carbosulfan).
  55488874  Ferric ammonium oxalate.
  56189094  Lead stearate.
  59669260  Ethanimidothioic acid, N,N'-
             [thiobis[(methylimino)carbonyloxy]]bis-, dimethyl ester
             (Thiodicarb).
  61792072  2,4,5-T esters.
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Appendix B to Sec. 302.4--Radionuclides

Radionuclide	Atomic Number	Final RQ Ci (Bq)
Radionuclides@	.....	1&(3.7E 10)
Actinium-224	89	100 (3.7E 12)
Actinium-225	89	1 (3.7E 10)
Actinium-226	89	10 (3.7E 11)
Actinium-227	89	0.001 (3.7E 7)
Actinium-228	89	10 (3.7E 11)
Aluminum-26	13	10 (3.7E 11)
Americium-237	95	1000 (3.7E 13)

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Americium-238	95	100 (3.7E 12)
Americium-239	95	100 (3.7E 12)
Americium-240	95	10 (3.7E 11)
Americium-241	95	0.01 (3.7E 8)
Americium-242m	95	0.01 (3.7E 8)
Americium-242	95	100 (3.7E 12)
Americium-243	95	0.01 (3.7E 8)
Americium-244m	95	1000 (3.7E 13)
Americium-244	95	10 (3.7E 11)
Americium-245	95	1000 (3.7E 13)
Americium-246m	95	1000 (3.7E 13)
Americium-246	95	1000 (3.7E 13)
Antimony-115	51	1000 (3.7E 13)
Antimony-116m	51	100 (3.7E 12)
Antimony-116	51	1000 (3.7E 13)
Antimony-117	51	1000 (3.7E 13)
Antimony-118m	51	10 (3.7E 11)
Antimony-119	51	1000 (3.7E 13)
Antimony-120 (16 min)	51	1000 (3.7E 13)
Antimony-120 (5.76 day)	51	10 (3.7E 11)
Antimony-122	51	10 (3.7E 11)

Antimony-124m	51	1000 (3.7E 13)
Antimony-124	51	10 (3.7E 11)
Antimony-125	51	10 (3.7E 11)
Antimony-126m	51	1000 (3.7E 13)
Antimony-126	51	10 (3.7E 11)
Antimony-127	51	10 (3.7E 11)
Antimony-128 (10.4 min)	51	1000 (3.7E 13)
Antimony-128 (9.01 hr)	51	10 (3.7E 11)
Antimony-129	51	100 (3.7E 12)
Antimony-130	51	100 (3.7E 12)
Antimony-131	51	1000 (3.7E 13)
Argon-39	18	1000 (3.7E 13)
Argon-41	18	10 (3.7E 11)
Arsenic-69	33	1000 (3.7E 13)
Arsenic-70	33	100 (3.7E 12)
Arsenic-71	33	100 (3.7E 12)
Arsenic-72	33	10 (3.7E 11)
Arsenic-73	33	100 (3.7E 12)
Arsenic-74	33	10 (3.7E 11)
Arsenic-76	33	100 (3.7E 12)
Arsenic-77	33	1000 (3.7E 13)
Arsenic-78	33	100 (3.7E 12)
Astatine-207	85	100 (3.7E 12)
Astatine-211	85	100 (3.7E 12)
Barium-126	56	1000 (3.7E 13)
Barium-128	56	10 (3.7E 11)
Barium-131m	56	1000 (3.7E 13)
Barium-131	56	10 (3.7E 11)
Barium-133m	56	100 (3.7E 12)
Barium-133	56	10 (3.7E 11)
Barium-135m	56	1000 (3.7E 13)
Barium-139	56	1000 (3.7E 13)
Barium-140	56	10 (3.7E 11)
Barium-141	56	1000 (3.7E 13)
Barium-142	56	1000 (3.7E 13)
Berkelium-245	97	100 (3.7E 12)
Berkelium-246	97	10 (3.7E 11)
Berkelium-247	97	0.01 (3.7E 8)
Berkelium-249	97	1 (3.7E 10)
Berkelium-250	97	100 (3.7E 12)
Beryllium-7	4	100 (3.7E 12)
Beryllium-10	4	1 (3.7E 10)
Bismuth-200	83	100 (3.7E 12)
Bismuth-201	83	100 (3.7E 12)
Bismuth-202	83	1000 (3.7E 13)
Bismuth-203	83	10 (3.7E 11)
Bismuth-205	83	10 (3.7E 11)
Bismuth-206	83	10 (3.7E 11)
Bismuth-207	83	10 (3.7E 11)
Bismuth-210m	83	0.1 (3.7E 9)
Bismuth-210	83	10 (3.7E 11)
Bismuth-212	83	100 (3.7E 12)
Bismuth-213	83	100 (3.7E 12)
Bismuth-214	83	100 (3.7E 12)
Bromine-74m	35	100 (3.7E 12)

Bromine-74	35	100 (3.7E 12)
Bromine-75	35	100 (3.7E 12)
Bromine-76	35	10 (3.7E 11)
Bromine-77	35	100 (3.7E 12)
Bromine-80m	35	1000 (3.7E 13)
Bromine-80	35	1000 (3.7E 13)
Bromine-82	35	10 (3.7E 11)
Bromine-83	35	1000 (3.7E 13)
Bromine-84	35	100 (3.7E 12)
Cadmium-104	48	1000 (3.7E 13)
Cadmium-107	48	1000 (3.7E 13)
Cadmium-109	48	1 (3.7E 10)
Cadmium-113m	48	0.1 (3.7E 9)
Cadmium-113	48	0.1 (3.7E 9)
Cadmium-115m	48	10 (3.7E 11)
Cadmium-115	48	100 (3.7E 12)
Cadmium-117m	48	10 (3.7E 11)
Cadmium-117	48	100 (3.7E 12)
Calcium-41	20	10 (3.7E 11)
Calcium-45	20	10 (3.7E 11)
Calcium-47	20	10 (3.7E 11)
Californium-244	98	1000 (3.7E 13)
Californium-246	98	10 (3.7E 11)
Californium-248	98	0.1 (3.7E 9)
Californium-249	98	0.01 (3.7E 8)
Californium-250	98	0.01 (3.7E 8)
Californium-251	98	0.01 (3.7E 8)
Californium-252	98	0.1 (3.7E 9)
Californium-253	98	10 (3.7E 11)
Californium-254	98	0.1 (3.7E 9)
Carbon-11	6	1000 (3.7E 13)
Carbon-14	6	10 (3.7E 11)
Cerium-134	58	10 (3.7E 11)
Cerium-135	58	10 (3.7E 11)
Cerium-137m	58	100 (3.7E 12)
Cerium-137	58	1000 (3.7E 13)
Cerium-139	58	100 (3.7E 12)
Cerium-141	58	10 (3.7E 11)
Cerium-143	58	100 (3.7E 12)
Cerium-144	58	1 (3.7E 10)
Cesium-125	55	1000 (3.7E 13)
Cesium-127	55	100 (3.7E 12)
Cesium-129	55	100 (3.7E 12)
Cesium-130	55	1000 (3.7E 13)
Cesium-131	55	1000 (3.7E 13)
Cesium-132	55	10 (3.7E 11)
Cesium-134m	55	1000 (3.7E 13)
Cesium-134	55	1 (3.7E 10)
Cesium-135m	55	100 (3.7E 12)
Cesium-135	55	10 (3.7E 11)
Cesium-136	55	10 (3.7E 11)
Cesium-137	55	1 (3.7E 10)
Cesium-138	55	100 (3.7E 12)
Chlorine-36	17	10 (3.7E 11)
Chlorine-38	17	100 (3.7E 12)

Chlorine-39	17	100 (3.7E 12)
Chromium-48	24	100 (3.7E 12)
Chromium-49	24	1000 (3.7E 13)
Chromium-51	24	1000 (3.7E 13)
Cobalt-55	27	10 (3.7E 11)
Cobalt-56	27	10 (3.7E 11)
Cobalt-57	27	100 (3.7E 12)
Cobalt-58m	27	1000 (3.7E 13)
Cobalt-58	27	10 (3.7E 11)

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Cobalt-60m	27	1000 (3.7E 13)
Cobalt-60	27	10 (3.7E 11)
Cobalt-61	27	1000 (3.7E 13)
Cobalt-62m	27	1000 (3.7E 13)
Copper-60	29	100 (3.7E 12)
Copper-61	29	100 (3.7E 12)
Copper-64	29	1000 (3.7E 13)
Copper-67	29	100 (3.7E 12)
Curium-238	96	1000 (3.7E 13)
Curium-240	96	1 (3.7E 10)
Curium-241	96	10 (3.7E 11)
Curium-242	96	1 (3.7E 10)
Curium-243	96	0.01 (3.7E 8)
Curium-244	96	0.01 (3.7E 8)
Curium-245	96	0.01 (3.7E 8)
Curium-246	96	0.01 (3.7E 8)
Curium-247	96	0.01 (3.7E 8)
Curium-248	96	0.001 (3.7E 7)
Curium-249	96	1000 (3.7E 13)
Dysprosium-155	66	100 (3.7E 12)
Dysprosium-157	66	100 (3.7E 12)
Dysprosium-159	66	100 (3.7E 12)
Dysprosium-165	66	1000 (3.7E 13)
Dysprosium-166	66	10 (3.7E 11)
Einsteinium-250	99	10 (3.7E 11)
Einsteinium-251	99	1000 (3.7E 13)
Einsteinium-253	99	10 (3.7E 11)
Einsteinium-254m	99	1 (3.7E 10)
Einsteinium-254	99	0.1 (3.7E 9)
Erbium-161	68	100 (3.7E 12)
Erbium-165	68	1000 (3.7E 13)
Erbium-169	68	100 (3.7E 12)
Erbium-171	68	100 (3.7E 12)
Erbium-172	68	10 (3.7E 11)
Europium-145	63	10 (3.7E 11)
Europium-146	63	10 (3.7E 11)
Europium-147	63	10 (3.7E 11)
Europium-148	63	10 (3.7E 11)
Europium-149	63	100 (3.7E 12)
Europium-150 (12.6 hr)	63	1000 (3.7E 13)
Europium-150 (34.2 yr)	63	10 (3.7E 11)
Europium-152m	63	100 (3.7E 12)

Europium-152	63	10 (3.7E 11)
Europium-154	63	10 (3.7E 11)
Europium-155	63	10 (3.7E 11)
Europium-156	63	10 (3.7E 11)
Europium-157	63	10 (3.7E 11)
Europium-158	63	1000 (3.7E 13)
Fermium-252	100	10 (3.7E 11)
Fermium-253	100	10 (3.7E 11)
Fermium-254	100	100 (3.7E 12)
Fermium-255	100	100 (3.7E 12)
Fermium-257	100	1 (3.7E 10)
Fluorine-18	9	1000 (3.7E 13)
Francium-222	87	100 (3.7E 12)
Francium-223	87	100 (3.7E 12)
Gadolinium-145	64	100 (3.7E 12)
Gadolinium-146	64	10 (3.7E 11)
Gadolinium-147	64	10 (3.7E 11)
Gadolinium-148	64	0.001 (3.7E7)
Gadolinium-149	64	100 (3.7E 12)
Gadolinium-151	64	100 (3.7E 12)
Gadolinium-152	64	0.001 (3.7E 7)
Gadolinium-153	64	10 (3.7E 11)
Gadolinium-159	64	1000 (3.7E 13)
Gallium-65	31	1000 (3.7E 13)
Gallium-66	31	10 (3.7E 11)
Gallium-67	31	100 (3.7E 12)
Gallium-68	31	1000 (3.7E 13)
Gallium-70	31	1000 (3.7E 13)
Gallium-72	31	10 (3.7E 11)
Gallium-73	31	100 (3.7E 12)
Germanium-66	32	100 (3.7E 12)
Germanium-67	32	1000 (3.7E 13)
Germanium-68	32	10 (3.7E 11)
Germanium-69	32	10 (3.7E 11)
Germanium-71	32	1000 (3.7E 13)
Germanium-75	32	1000 (3.7E 13)
Germanium-77	32	10 (3.7E 11)
Germanium-78	32	1000 (3.7E 13)
Gold-193	79	100 (3.7E 12)
Gold-194	79	10 (3.7E 11)
Gold-195	79	100 (3.7E 12)
Gold-198m	79	10 (3.7E 11)
Gold-198	79	100 (3.7E 12)
Gold-199	79	100 (3.7E 12)
Gold-200m	79	10 (3.7E 11)
Gold-200	79	1000 (3.7E 13)
Gold-201	79	1000 (3.7E 13)
Hafnium-170	72	100 (3.7E 12)
Hafnium-172	72	1 (3.7E 10)
Hafnium-173	72	100 (3.7E 12)
Hafnium-175	72	100 (3.7E 12)
Hafnium-177m	72	1000 (3.7E 13)
Hafnium-178m	72	0.1 (3.7E 9)
Hafnium-179m	72	100 (3.7E 12)
Hafnium-180m	72	100 (3.7E 12)

Hafnium-181	72	10 (3.7E 11)
Hafnium-182m	72	100 (3.7E 12)
Hafnium-182	72	0.1 (3.7E 9)
Hafnium-183	72	100 (3.7E 12)
Hafnium-184	72	100 (3.7E 12)
Holmium-155	67	1000 (3.7E 13)
Holmium-157	67	1000 (3.7E 13)
Holmium-159	67	1000 (3.7E 13)
Holmium-161	67	1000 (3.7E 13)
Holmium-162m	67	1000 (3.7E 13)
Holmium-162	67	1000 (3.7E 13)
Holmium-164m	67	1000 (3.7E 13)
Holmium-164	67	1000 (3.7E 13)
Holmium-166m	67	1 (3.7E 10)
Holmium-166	67	100 (3.7E 12)
Holmium-167	67	100 (3.7E 12)
Hydrogen-3	1	100 (3.7E 12)
Indium-109	49	100 (3.7E 12)
Indium-110 (69.1 min)	49	100 (3.7E 12)
Indium-110 (4.9 hr)	49	10 (3.7E 11)
Indium-111	49	100 (3.7E 12)
Indium-112	49	1000 (3.7E 13)
Indium-113m	49	1000 (3.7E 13)
Indium-114m	49	10 (3.7E 11)
Indium-115m	49	100 (3.7E 12)
Indium-115	49	0.1 (3.7E 9)
Indium-116m	49	100 (3.7E 12)
Indium-117m	49	100 (3.7E 12)
Indium-117	49	1000 (3.7E 13)
Indium-119m	49	1000 (3.7E 13)
Iodine-120m	53	100 (3.7E 12)
Iodine-120	53	10 (3.7E 11)
Iodine-121	53	100 (3.7E 12)
Iodine-123	53	10 (3.7E 11)
Iodine-124	53	0.1 (3.7E 9)
Iodine-125	53	0.01 (3.7E 8)
Iodine-126	53	0.01 (3.7E 8)
Iodine-128	53	1000 (3.7E 13)
Iodine-129	53	0.001 (3.7E 7)
Iodine-130	53	1 (3.7E 10)
Iodine-131	53	0.01 (3.7E 8)
Iodine-132m	53	10 (3.7E 11)
Iodine-132	53	10 (3.7E 11)

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Iodine-133	53	0.1 (3.7E 9)
Iodine-134	53	100 (3.7E 12)
Iodine-135	53	10 (3.7E 11)
Iridium-182	77	1000 (3.7E 13)
Iridium-184	77	100 (3.7E 12)
Iridium-185	77	100 (3.7E 12)
Iridium-186	77	10 (3.7E 11)
Iridium-187	77	100 (3.7E 12)

Iridium-188	77	10 (3.7E 11)
Iridium-189	77	100 (3.7E 12)
Iridium-190m	77	1000 (3.7E 13)
Iridium-190	77	10 (3.7E 11)
Iridium-192m	77	100 (3.7E 12)
Iridium-192	77	10 (3.7E 11)
Iridium-194m	77	10 (3.7E 11)
Iridium-194	77	100 (3.7E 12)
Iridium-195m	77	100 (3.7E 12)
Iridium-195	77	1000 (3.7E 13)
Iron-52	26	100 (3.7E 12)
Iron-55	26	100 (3.7E 12)
Iron-59	26	10 (3.7E 11)
Iron-60	26	0.1 (3.7E 9)
Krypton-74	36	10 (3.7E 11)
Krypton-76	36	10 (3.7E 11)
Krypton-77	36	10 (3.7E 11)
Krypton-79	36	100 (3.7E 12)
Krypton-81	36	1000 (3.7E 13)
Krypton-83m	36	1000 (3.7E 13)
Krypton-85m	36	100 (3.7E 12)
Krypton-85	36	1000 (3.7E 13)
Krypton-87	36	10 (3.7E 11)
Krypton-88	36	10 (3.7E 11)
Lanthanum-131	57	1000 (3.7E 13)
Lanthanum-132	57	100 (3.7E 12)
Lanthanum-135	57	1000 (3.7E 13)
Lanthanum-137	57	10 (3.7E 11)
Lanthanum-138	57	1 (3.7E 10)
Lanthanum-140	57	10 (3.7E 11)
Lanthanum-141	57	1000 (3.7E 13)
Lanthanum-142	57	100 (3.7E 12)
Lanthanum-143	57	1000 (3.7E 13)
Lead-195m	82	1000 (3.7E 13)
Lead-198	82	100 (3.7E 12)
Lead-199	82	100 (3.7E 12)
Lead-200	82	100 (3.7E 12)
Lead-201	82	100 (3.7E 12)
Lead-202m	82	10 (3.7E 11)
Lead-202	82	1 (3.7E 10)
Lead-203	82	100 (3.7E 12)
Lead-205	82	100 (3.7E 12)
Lead-209	82	1000 (3.7E 13)
Lead-210	82	0.01 (3.7E 8)
Lead-211	82	100 (3.7E 12)
Lead-212	82	10 (3.7E 11)
Lead-214	82	100 (3.7E 12)
Lutetium-169	71	10 (3.7E 11)
Lutetium-170	71	10 (3.7E 11)
Lutetium-171	71	10 (3.7E 11)
Lutetium-172	71	10 (3.7E 11)
Lutetium-173	71	100 (3.7E 12)
Lutetium-174m	71	10 (3.7E 11)
Lutetium-174	71	10 (3.7E 11)
Lutetium-176m	71	1000 (3.7E 13)

Lutetium-176	71	1 (3.7E 10)
Lutetium-177m	71	10 (3.7E 11)
Lutetium-177	71	100 (3.7E 12)
Lutetium-178m	71	1000 (3.7E 13)
Lutetium-178	71	1000 (3.7E 13)
Lutetium-179	71	1000 (3.7E 13)
Magnesium-28	12	10 (3.7E 11)
Manganese-51	25	1000 (3.7E 13)
Manganese-52m	25	1000 (3.7E 13)
Manganese-52	25	10 (3.7E 11)
Manganese-53	25	1000 (3.7E 13)
Manganese-54	25	10 (3.7E 11)
Manganese-56	25	100 (3.7E 12)
Mendelevium-257	101	100 (3.7E 12)
Mendelevium-258	101	1 (3.7E 10)
Mercury-193m	80	10 (3.7E 11)
Mercury-193	80	100 (3.7E 12)
Mercury-194	80	0.1 (3.7E 9)
Mercury-195m	80	100 (3.7E 12)
Mercury-195	80	100 (3.7E 12)
Mercury-197m	80	1000 (3.7E 13)
Mercury-197	80	1000 (3.7E 13)
Mercury-199m	80	1000 (3.7E 13)
Mercury-203	80	10 (3.7E 11)
Molybdenum-90	42	100 (3.7E 12)
Molybdenum-93m	42	10 (3.7E 11)
Molybdenum-93	42	100 (3.7E 12)
Molybdenum-99	42	100 (3.7E 12)
Molybdenum-101	42	1000 (3.7E 13)
Neodymium-136	60	1000 (3.7E 13)
Neodymium-138	60	1000 (3.7E 13)
Neodymium-139m	60	100 (3.7E 12)
Neodymium-139	60	1000 (3.7E 13)
Neodymium-141	60	1000 (3.7E 13)
Neodymium-147	60	10 (3.7E 11)
Neodymium-149	60	100 (3.7E 12)
Neodymium-151	60	1000 (3.7E 13)
Neptunium-232	93	1000 (3.7E 13)
Neptunium-233	93	1000 (3.7E 13)
Neptunium-234	93	10 (3.7E 11)
Neptunium-235	93	1000 (3.7E 13)
Neptunium-236 (1.2 E 5 yr)	93	0.1 (3.7E 9)
Neptunium-236 (22.5 hr)	93	100 (3.7E 12)
Neptunium-237	93	0.01 (3.7E 8)
Neptunium-238	93	10 (3.7E 11)
Neptunium-239	93	100 (3.7E 12)
Neptunium-240	93	100 (3.7E 12)
Nickel-56	28	10 (3.7E 11)
Nickel-57	28	10 (3.7E 11)
Nickel-59	28	100 (3.7E 12)
Nickel-63	28	100 (3.7E 12)
Nickel-65	28	100 (3.7E 12)
Nickel-66	28	10 (3.7E 11)
Niobium-88	41	100 (3.7E 12)
Niobium-89 (66 min)	41	100 (3.7E 12)

Niobium-89 (122 min)	41	100 (3.7E 12)
Niobium-90	41	10 (3.7E 11)
Niobium-93m	41	100 (3.7E 12)
Niobium-94	41	10 (3.7E 11)
Niobium-95m	41	100 (3.7E 12)
Niobium-95	41	10 (3.7E 11)
Niobium-96	41	10 (3.7E 11)
Niobium-97	41	100 (3.7E 12)
Niobium-98	41	1000 (3.7E 13)
Osmium-180	76	1000 (3.7E 13)
Osmium-181	76	100 (3.7E 12)
Osmium-182	76	100 (3.7E 12)
Osmium-185	76	10 (3.7E 11)
Osmium-189m	76	1000 (3.7E 13)
Osmium-191m	76	1000 (3.7E 13)
Osmium-191	76	100 (3.7E 12)
Osmium-193	76	100 (3.7E 12)
Osmium-194	76	1 (3.7E 10)
Palladium-100	46	100 (3.7E 12)
Palladium-101	46	100 (3.7E 12)
Palladium-103	46	100 (3.7E 12)
Palladium-107	46	100 (3.7E 12)

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Palladium-109	46	1000 (3.7E 13)
Phosphorus-32	15	0.1 (3.7E 9)
Phosphorus-33	15	1 (3.7E 10)
Platinum-186	78	100 (3.7E 12)
Platinum-188	78	100 (3.7E 12)
Platinum-189	78	100 (3.7E 12)
Platinum-191	78	100 (3.7E 12)
Platinum-193m	78	100 (3.7E 12)
Platinum-193	78	1000 (3.7E 13)
Platinum-195m	78	100 (3.7E 12)
Platinum-197m	78	1000 (3.7E 13)
Platinum-197	78	1000 (3.7E 13)
Platinum-199	78	1000 (3.7E 13)
Platinum-200	78	100 (3.7E 12)
Plutonium-234	94	1000 (3.7E 13)
Plutonium-235	94	1000 (3.7E 13)
Plutonium-236	94	0.1 (3.7E 9)
Plutonium-237	94	1000 (3.7E 13)
Plutonium-238	94	0.01 (3.7E 8)
Plutonium-239	94	0.01 (3.7E 8)
Plutonium-240	94	0.01 (3.7E 8)
Plutonium-241	94	1 (3.7E 10)
Plutonium-242	94	0.01 (3.7E 8)
Plutonium-243	94	1000 (3.7E 13)
Plutonium-244	94	0.01 (3.7E 8)
Plutonium-245	94	100 (3.7E 12)
Polonium-203	84	100 (3.7E 12)
Polonium-205	84	100 (3.7E 12)
Polonium-207	84	10 (3.7E 11)

Polonium-210	84	0.01 (3.7E 8)
Potassium-40	19	1 (3.7E 10)
Potassium-42	19	100 (3.7E 12)
Potassium-43	19	10 (3.7E 11)
Potassium-44	19	100 (3.7E 12)
Potassium-45	19	1000 (3.7E 13)
Praseodymium-136	59	1000 (3.7E 13)
Praseodymium-137	59	1000 (3.7E 13)
Praseodymium-138m	59	100 (3.7E 12)
Praseodymium-139	59	1000 (3.7E 13)
Praseodymium-142m	59	1000 (3.7E 13)
Praseodymium-142	59	100 (3.7E 12)
Praseodymium-143	59	10 (3.7E 11)
Praseodymium-144	59	1000 (3.7E 13)
Praseodymium-145	59	1000 (3.7E 13)
Praseodymium-147	59	1000 (3.7E 13)
Promethium-141	61	1000 (3.7E 13)
Promethium-143	61	100 (3.7E 12)
Promethium-144	61	10 (3.7E 11)
Promethium-145	61	100 (3.7E 12)
Promethium-146	61	10 (3.7E 11)
Promethium-147	61	10 (3.7E 11)
Promethium-148m	61	10 (3.7E 11)
Promethium-148	61	10 (3.7E 11)
Promethium-149	61	100 (3.7E 12)
Promethium-150	61	100 (3.7E 12)
Promethium-151	61	100 (3.7E 12)
Protactinium-227	91	100 (3.7E 12)
Protactinium-228	91	10 (3.7E 11)
Protactinium-230	91	10 (3.7E 11)
Protactinium-231	91	0.01 (3.7E 8)
Protactinium-232	91	10 (3.7E 11)
Protactinium-233	91	100 (3.7E 12)
Protactinium-234	91	10 (3.7E 11)
Radium-223	88	1 (3.7E 10)
Radium-224	88	10 (3.7E 11)
Radium-225	88	1 (3.7E 10)
Radium-226[Phi]	88	0.1 (3.7E 9)
Radium-227	88	1000 (3.7E 13)
Radium-228	88	0.1 (3.7E 9)
Radon-220	86	0.1 (3.7E 9)
Radon-222	86	0.1 (3.7E 9)
Rhenium-177	75	1000 (3.7E 13)
Rhenium-178	75	1000 (3.7E 13)
Rhenium-181	75	100 (3.7E 12)
Rhenium-182 (12.7 hr)	75	10 (3.7E 11)
Rhenium-182 (64.0 hr)	75	10 (3.7E 11)
Rhenium-184m	75	10 (3.7E 11)
Rhenium-184	75	10 (3.7E 11)
Rhenium-186m	75	10 (3.7E 11)
Rhenium-186	75	100 (3.7E 12)
Rhenium-187	75	1000 (3.7E 13)
Rhenium-188m	75	1000 (3.7E 13)
Rhenium-188	75	1000 (3.7E 13)
Rhenium-189	75	1000 (3.7E 13)

Rhodium-99m	45	100 (3.7E 12)
Rhodium-99	45	10 (3.7E 11)
Rhodium-100	45	10 (3.7E 11)
Rhodium-101m	45	100 (3.7E 12)
Rhodium-101	45	10 (3.7E 11)
Rhodium-102m	45	10 (3.7E 11)
Rhodium-102	45	10 (3.7E 11)
Rhodium-103m	45	1000 (3.7E 13)
Rhodium-105	45	100 (3.7E 12)
Rhodium-106m	45	10 (3.7E 11)
Rhodium-107	45	1000 (3.7E 13)
Rubidium-79	37	1000 (3.7E 13)
Rubidium-81m	37	1000 (3.7E 13)
Rubidium-81	37	100 (3.7E 12)
Rubidium-82m	37	10 (3.7E 11)
Rubidium-83	37	10 (3.7E 11)
Rubidium-84	37	10 (3.7E 11)
Rubidium-86	37	10 (3.7E 11)
Rubidium-88	37	1000 (3.7E 13)
Rubidium-89	37	1000 (3.7E 13)
Rubidium-87	37	10 (3.7E 11)
Ruthenium-94	44	1000 (3.7E 13)
Ruthenium-97	44	100 (3.7E 12)
Ruthenium-103	44	10 (3.7E 11)
Ruthenium-105	44	100 (3.7E 12)
Ruthenium-106	44	1 (3.7E 10)
Samarium-141m	62	1000 (3.7E 13)
Samarium-141	62	1000 (3.7E 13)
Samarium-142	62	1000 (3.7E 13)
Samarium-145	62	100 (3.7E 12)
Samarium-146	62	0.01 (3.7E 8)
Samarium-147	62	0.01 (3.7E 8)
Samarium-151	62	10 (3.7E 11)
Samarium-153	62	100 (3.7E 12)
Samarium-155	62	1000 (3.7E 13)
Samarium-156	62	100 (3.7E 12)
Scandium-43	21	1000 (3.7E 13)
Scandium-44m	21	10 (3.7E 11)
Scandium-44	21	100 (3.7E 12)
Scandium-46	21	10 (3.7E 11)
Scandium-47	21	100 (3.7E 12)
Scandium-48	21	10 (3.7E 11)
Scandium-49	21	1000 (3.7E 13)
Selenium-70	34	1000 (3.7E 13)
Selenium-73m	34	100 (3.7E 12)
Selenium-73	34	10 (3.7E 11)
Selenium-75	34	10 (3.7E 11)
Selenium-79	34	10 (3.7E 11)
Selenium-81m	34	1000 (3.7E 13)
Selenium-81	34	1000 (3.7E 13)
Selenium-83	34	1000 (3.7E 13)
Silicon-31	14	1000 (3.7E 13)
Silicon-32	14	1 (3.7E 10)
Silver-102	47	100 (3.7E 12)
Silver-103	47	1000 (3.7E 13)

Silver-104m	47	1000 (3.7E 13)

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Silver-104	47	1000 (3.7E 13)
Silver-105	47	10 (3.7E 11)
Silver-106m	47	10 (3.7E 11)
Silver-106	47	1000 (3.7E 13)
Silver-108m	47	10 (3.7E 11)
Silver-110m	47	10 (3.7E 11)
Silver-111	47	10 (3.7E 11)
Silver-112	47	100 (3.7E 12)
Silver-115	47	1000 (3.7E 13)
Sodium-22	11	10 (3.7E 11)
Sodium-24	11	10 (3.7E 11)
Strontium-80	38	100 (3.7E 12)
Strontium-81	38	1000 (3.7E 13)
Strontium-83	38	100 (3.7E 12)
Strontium-85m	38	1000 (3.7E 13)
Strontium-85	38	10 (3.7E 11)
Strontium-87m	38	100 (3.7E 12)
Strontium-89	38	10 (3.7E 11)
Strontium-90	38	0.1 (3.7E 9)
Strontium-91	38	10 (3.7E 11)
Strontium-92	38	100 (3.7E 12)
Sulfur-35	16	1 (3.7E 10)
Tantalum-172	73	100 (3.7E 12)
Tantalum-173	73	100 (3.7E 12)
Tantalum-174	73	100 (3.7E 12)
Tantalum-175	73	100 (3.7E 12)
Tantalum-176	73	10 (3.7E 11)
Tantalum-177	73	1000 (3.7E 13)
Tantalum-178	73	1000 (3.7E 13)
Tantalum-179	73	1000 (3.7E 13)
Tantalum-180m	73	1000 (3.7E 13)
Tantalum-180	73	100 (3.7E 12)
Tantalum-182m	73	1000 (3.7E 13)
Tantalum-182	73	10 (3.7E 11)
Tantalum-183	73	100 (3.7E 12)
Tantalum-184	73	10 (3.7E 11)
Tantalum-185	73	1000 (3.7E 13)
Tantalum-186	73	1000 (3.7E 13)
Technetium-93m	43	1000 (3.7E 13)
Technetium-93	43	100 (3.7E 12)
Technetium-94m	43	100 (3.7E 12)
Technetium-94	43	10 (3.7E 11)
Technetium-96m	43	1000 (3.7E 13)
Technetium-96	43	10 (3.7E 11)
Technetium-97m	43	100 (3.7E 12)
Technetium-97	43	100 (3.7E 12)
Technetium-98	43	10 (3.7E 11)
Technetium-99m	43	100 (3.7E 12)
Technetium-99	43	10 (3.7E 11)
Technetium-101	43	1000 (3.7E 13)

Technetium-104	43	1000 (3.7E 13)
Tellurium-116	52	1000 (3.7E 13)
Tellurium-121m	52	10 (3.7E 11)
Tellurium-121	52	10 (3.7E 11)
Tellurium-123m	52	10 (3.7E 11)
Tellurium-123	52	10 (3.7E 11)
Tellurium-125m	52	10 (3.7E 11)
Tellurium-127m	52	10 (3.7E 11)
Tellurium-127	52	1000 (3.7E 13)
Tellurium-129m	52	10 (3.7E 11)
Tellurium-129	52	1000 (3.7E 13)
Tellurium-131m	52	10 (3.7E 11)
Tellurium-131	52	1000 (3.7E 13)
Tellurium-132	52	10 (3.7E 11)
Tellurium-133m	52	1000 (3.7E 13)
Tellurium-133	52	1000 (3.7E 13)
Tellurium-134	52	1000 (3.7E 13)
Terbium-147	65	100 (3.7E 12)
Terbium-149	65	100 (3.7E 12)
Terbium-150	65	100 (3.7E 12)
Terbium-151	65	10 (3.7E 11)
Terbium-153	65	100 (3.7E 12)
Terbium-154	65	10 (3.7E 11)
Terbium-155	65	100 (3.7E 12)
Terbium-156m (5.0 hr)	65	1000 (3.7E 13)
Terbium-156m (24.4 hr)	65	1000 (3.7E 13)
Terbium-156	65	10 (3.7E 11)
Terbium-157	65	100 (3.7E 12)
Terbium-158	65	10 (3.7E 11)
Terbium-160	65	10 (3.7E 11)
Terbium-161	65	100 (3.7E 12)
Thallium-194m	81	100 (3.7E 12)
Thallium-194	81	1000 (3.7E 13)
Thallium-195	81	100 (3.7E 12)
Thallium-197	81	100 (3.7E 12)
Thallium-198m	81	100 (3.7E 12)
Thallium-198	81	10 (3.7E 11)
Thallium-199	81	100 (3.7E 12)
Thallium-200	81	10 (3.7E 11)
Thallium-201	81	1000 (3.7E 13)
Thallium-202	81	10 (3.7E 11)
Thallium-204	81	10 (3.7E 11)
Thorium-226	90	100 (3.7E 12)
Thorium-227	90	1 (3.7E 10)
Thorium-228	90	0.01 (3.7E 8)
Thorium-229	90	0.001 (3.7E 7)
Thorium-230	90	0.01 (3.7E 8)
Thorium-231	90	100 (3.7E 12)
Thorium-232[Phi]	90	0.001 (3.7E 7)
Thorium-234	90	100 (3.7E 12)
Thulium-162	69	1000 (3.7E 13)
Thulium-166	69	10 (3.7E 11)
Thulium-167	69	100 (3.7E 12)
Thulium-170	69	10 (3.7E 11)
Thulium-171	69	100 (3.7E 12)

Thulium-172	69	100 (3.7E 12)
Thulium-173	69	100 (3.7E 12)
Thulium-175	69	1000 (3.7E 13)
Tin-110	50	100 (3.7E 12)
Tin-111	50	1000 (3.7E 13)
Tin-113	50	10 (3.7E 11)
Tin-117m	50	100 (3.7E 12)
Tin-119m	50	10 (3.7E 11)
Tin-121m	50	10 (3.7E 11)
Tin-121	50	1000 (3.7E 13)
Tin-123m	50	1000 (3.7E 13)
Tin-123	50	10 (3.7E 11)
Tin-125	50	10 (3.7E 11)
Tin-126	50	1 (3.7E 10)
Tin-127	50	100 (3.7E 12)
Tin-128	50	1000 (3.7E 13)
Titanium-44	22	1 (3.7E 10)
Titanium-45	22	1000 (3.7E 13)
Tungsten-176	74	1000 (3.7E 13)
Tungsten-177	74	100 (3.7E 12)
Tungsten-178	74	100 (3.7E 12)
Tungsten-179	74	1000 (3.7E 13)
Tungsten-181	74	100 (3.7E 12)
Tungsten-185	74	10 (3.7E 11)
Tungsten-187	74	100 (3.7E 12)
Tungsten-188	74	10 (3.7E 11)
Uranium-230	92	1 (3.7E 10)
Uranium-231	92	1000 (3.7E 13)
Uranium-232	92	0.01 (3.7E 8)
Uranium-233	92	0.1 (3.7E 9)
Uranium-234[phis]	92	0.1 (3.7E 9)
Uranium-235[phis]	92	0.1 (3.7E 9)
Uranium-236	92	0.1 (3.7E 9)
Uranium-237	92	100 (3.7E 12)
Uranium-238[phis]	92	0.1& (3.7E 9)

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Uranium-239	92	1000 (3.7E 13)
Uranium-240	92	1000 (3.7E 13)
Vanadium-47	23	1000 (3.7E 13)
Vanadium-48	23	10 (3.7E 11)
Vanadium-49	23	1000 (3.7E 13)
Xenon-120	54	100 (3.7E 12)
Xenon-121	54	10 (3.7E 11)
Xenon-122	54	100 (3.7E 12)
Xenon-123	54	10 (3.7E 11)
Xenon-125	54	100 (3.7E 12)
Xenon-127	54	100 (3.7E 12)
Xenon-129m	54	1000 (3.7E 13)
Xenon-131m	54	1000 (3.7E 13)
Xenon-133m	54	1000 (3.7E 13)
Xenon-133	54	1000 (3.7E 13)
Xenon-135m	54	10 (3.7E 11)

Xenon-135	54	100 (3.7E 12)
Xenon-138	54	10 (3.7E 11)
Ytterbium-162	70	1000 (3.7E 13)
Ytterbium-166	70	10 (3.7E 11)
Ytterbium-167	70	1000 (3.7E 13)
Ytterbium-169	70	10 (3.7E 11)
Ytterbium-175	70	100 (3.7E 12)
Ytterbium-177	70	1000 (3.7E 13)
Ytterbium-178	70	1000 (3.7E 13)
Yttrium-86m	39	1000 (3.7E 13)
Yttrium-86	39	10 (3.7E 11)
Yttrium-87	39	10 (3.7E 11)
Yttrium-88	39	10 (3.7E 11)
Yttrium-90m	39	100 (3.7E 12)
Yttrium-90	39	10 (3.7E 11)
Yttrium-91m	39	1000 (3.7E 13)
Yttrium-91	39	10 (3.7E 11)
Yttrium-92	39	100 (3.7E 12)
Yttrium-93	39	100 (3.7E 12)
Yttrium-94	39	1000 (3.7E 13)
Yttrium-95	39	1000 (3.7E 13)
Zinc-62	30	100 (3.7E 12)
Zinc-63	30	1000 (3.7E 13)
Zinc-65	30	10 (3.7E 11)
Zinc-69m	30	100 (3.7E 12)
Zinc-69	30	1000 (3.7E 13)
Zinc-71m	30	100 (3.7E 12)
Zinc-72	30	100 (3.7E 12)
Zirconium-86	40	100 (3.7E 12)
Zirconium-88	40	10 (3.7E 11)
Zirconium-89	40	100 (3.7E 12)
Zirconium-93	40	1 (3.7E 10)
Zirconium-95	40	10 (3.7E 11)
Zirconium-97	40	10 (3.7E 11)

Ci--Curie. The curie represents a rate of radioactive decay. One curie is the quantity of any radioactive nuclide which undergoes 3.7E 10 disintegrations per second.

Bq--Becquerel. The becquerel represents a rate of radioactive decay. One becquerel is the quantity of any radioactive nuclide which undergoes one disintegration per second. One curie is equal to 3.7E 10 becquerel.

@--Final RQs for all radionuclides apply to chemical compounds containing the radionuclides and elemental forms regardless of the diameter of pieces of solid material.

&--The adjusted RQ of one curie applies to all radionuclides not otherwise listed. Whenever the RQs in table 302.4 and this appendix to the table are in conflict, the lowest RQ shall apply. For example, uranyl acetate and uranyl nitrate have adjusted RQs shown in table 302.4 of 100 pounds, equivalent to about one-tenth the RQ level for uranium-238 listed in this appendix.

E--Exponent to the base 10. For example, 1.3E 2 is equal to 130 while 1.3E 3 is equal to 1300.

m--Signifies a nuclear isomer which is a radionuclide in a higher energy metastable state relative to the parent isotope.

[phis]--Notification requirements for releases of mixtures or solutions of radionuclides can be found in Sec. 302.6(b) of this rule. Final RQs for the following four common radionuclide mixtures are provided: radium-226 in secular equilibrium with its daughters (0.053 curie); natural uranium (0.1 curie); natural uranium in secular equilibrium with its daughters (0.052 curie); and natural thorium in secular equilibrium with its daughters (0.011 curie).

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Editorial Note: For Federal Register citations affecting Sec. 302.4, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and on GPO Access.