EMERGENCY SPILLS:

REGULATIONS, REPORTING REQUIREMENTS AND MANAGEMENT STRATEGIES

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AS A PARTIAL FULFILLMENT OF THE REQUIREMENTS

FOR THE DEGREE OF

MASTER OF SCIENCE IN INDUSTRIAL ENGINEERING

SEPTEMBER 20, 1990

ACKNOWLEDGMENTS

I would like to take the opportunity to dedicate this creative component to my loving parents, Mr. and Mrs. Tharoor Sethumadhavan, who have provided me with unlimited motivation and support throughout my career.

I would also like to dedicate it to my fiance, Miss. Anjala Talwar who has been patiently waiting for me to finish my university career, and for motivating me continuously. I express my deep gratitude to my professor and advisor, Dr Wayne C. Turner for helping me with the research topic.

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I. INTRODUCTION

The field of spill cleanup and response is vibrant and dramatically changing. When hazardous materials are properly handled, they pose little threat or danger. Unfortunately, no matter how careful the planning and how great the care, accidents can and do occur. It is critical that managers do all they can to minimize the effects of such accidents on the environment and the health/safety of those around the spill. This report is intended to familiarize managers of facilities that use and/or generate hazardous waste with the reporting requirements and management strategies involved during an emergency spill.

Managers using hazardous materials find it difficult to cope with laws and regulations governing spill reporting requirements. This is partly due to the fact that the regulations keep getting tighter, and more complicated. Also, the environmental manager has an increasing responsibility to deal with the various environment groups and the media when a spill occurs. The manager is the first source that the media seeks during a spill situation. Managers therefore have to be very careful when making spill related decisions.

Most manufacturing companies do not have well specified measures to quantify the cost impact of spills. Management strategies therefore need to be revitalized to deal with the economic impact as well as the socio-cum-environmental costs of the spill related accidents.

Managers of waste generating facilities, now, more than ever before are involved in many decisions of risk and uncertainty. It is very essential that the decisions taken minimize the long term environmental economics of their manufacturing operations.

II. SCOPE

This report identifies federal agency spill reporting requirements and responses required of manufacturing facilities that use hazardous materials and/or generate hazardous waste. Specifically, the report develops spill reporting requirements for various types of hazardous materials/waste spills. It is intended to be used as a management guide. The content of this report does not cover "permitted" releases (eg. NPDES permits), as it focuses only on unplanned or emergency releases.

Managers of facilities that use hazardous materials find their jobs very challenging as it often requires fast responses. Many decisions must be made that involve risk and uncertainty. This report will also focus on some management strategies that will help managers to become better handler of spills.

III. PROBLEM STATEMENT

This report familiarizes managers of facilities that use and/or generate hazardous waste with the reporting conditions, reporting requirements and management strategies involved during an emergency spill.

IV. TYPES OF SPILL

Spills can be classified either according to the amount discharged or based on their usage. This section will discuss the spill types that managers may come across in their facility. For each spill type, the general reporting requirements and some management strategies are presented in a table format following the spill description.

A. RQ SPILL (Reportable Quantity Spill)

Reportable quantity spills are described as those spills that has reached the environment, and whose release is equal or greater than the quantity that needs reporting. Reportable quantity (RQ) is usually the amount of hazardous material, which when spilled requires notification.

When dealing with such spills, managers require the capability in their facility to determine if the spill that has occurred, has exceeded the reportable quantity. In borderline cases of spills, it is usually always better and safer to report and take action. RQ spills require both cleanup and reporting. Cleanup methods along with type of spill and date cleanup performed should be documented.

In dealing with RQ spills, the Superfund Amendments and Reauthorization Act (SARA) and the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) require notification. SARA and CERCLA provide a table each that list materials that require notification when spills are outside or within facility boundary respectively.

Under SARA, spills are reportable if the spilled material has left the facility boundary and is on the extremely hazardous list, besides having a spill amount greater than the reportable quantity. Such spills should be reported to the state and local commission. It is also a good idea to report it to the National Response Center.

Under CERCLA, spills are reportable if the spilled material has reached the environment and is on the CERCLA hazardous substance list, besides having a spill amount greater than the reportable quantity. In such cases, spills should be reported to the National Response Center (NRC). If in addition, the spills leave the facility boundary, it should be also reported to the state and local commission.

Example:

Your facility stores its supply of bromine in 500 pound drums. While retrieving a drum of bromine, a fork lift driver accidently drops it. The contents spill on the ground, enters the drain and drenches the soil outside the facility. Is notification required? If so, to whom?

Answer: Bromine is on the extremely hazardous list (SARA). The spill has reached the environment and left the facility boundary. From Appendix A, we see that bromine has a RQ of 100 pounds. Since the spilled amount (500 pounds) is greater than the RQ, it requires notification to the state and local commissions. It is also a good idea to report to the National Response Center, though spill is not on CERCLA list.

B. NON REPORTABLE SPILL

Non reportable spills are spills that do not require notification. These spills fall into two category. First, the spill may have a release that is less than the reportable quantity. In this case the spill may have reached the environment (soil, air, etc.), but the amount of spill is less than the quantity that needs reporting. Secondly, non reportable spills can also be considered as spills that have not reached the environment (have been contained) whether or not they have a release greater than the reportable quantity.

In some instances it may be very obvious as to how much quantity has been spilled, and the leaked container or drum can be checked to identify the release quantity. In other instances, the actual spill quantity may not be easily seen or detected. The use of specialized measuring or detecting equipment is essential in these cases.

Non RQ spills do not require reporting, but in almost all cases require cleanup. It is useful to keep in mind that the owner is always liable, therefore cleaning and documenting any spill can prove very useful. Moreover, very rarely should a spill be left unattended. Therefore, it is usually always better to document and cleanup any spill that occurs, as it will prove to be the best strategy in the long run.

Example:

A 5000 pound tank of 10% nitric acid solution is located in your facility. One day, you notice that the tank has ruptured, and the contents emptied onto the ground. Is notification required?

Answer: Nitric acid is only on the CERCLA list. The spill has reached the environment, but it has not left the facility boundary. From Appendix B, we see that nitric acid has a RQ of 1000 pounds. Since 10% of 5000 pounds equal only 500 pounds, this amount is less than the RQ of 1000 pounds. Therefore no reporting is required. It is however advisable to cleanup the spill, and replace the tank.

C. CHRONIC SPILL

Spills need not necessarily occur immediately or in a short span of time. Though most spills fall in this category it is important to realize that spills can also occur in small quantities over a period of time. These spills are referred to as chronic spills in this report.

Chronic spills do not require notification, if the amount of release does not exceed the reportable quantity in a 24 hour time period. It is almost always to the best interest of the facility to cleanup and document the spill.

Example:

Spent methanol drums are stored in a fenced area behind your facility. During your daily inspection of the area, you notice that one of the drums has been leaking, and the waste has soaked the soil. You determine that the waste leaks about 1 gallon a day. Is notification required?

Answer: Methanol is only on the CERCLA list and has a RQ of 5000 pounds. Since the waste leaks only 1 gallon which is much lesser than 5000 pounds in a 24 hour period, notification is not required. However, it is advisable to cleanup the soil, and check regularly to make sure that the soil is free of waste. The leaking drum should immediately be replaced.

D. UST SPILL

Spills from underground storage tanks which usually contain petroleum are referred to as UST spills. When a UST spill occurs, the reporting requirement varies with the amount of petroleum or hazardous substance discharged. If more than 25 gallons of petroleum or a spill of hazardous substance greater than RQ occurs, it is mandatory to report and cleanup the spill. If a spill of petroleum less than 25 gallons, or a hazardous substance less than RQ occurs, only cleanup is required. Reporting is required only if the cleanup cannot be accomplished within 24 hours.

TABLE

The above section is summarized in a table format for easier understanding in Table 1. Besides explaining the regulations for each spill, some management strategies are also presented. For a detailed understanding of the regulations, refer to section V on federal regulations.

The abbreviations used in the table are explained following the table.

TABLE 1 . REGULATIONS AND MANAGEMENT STRATEGIES FOR VARIOUS SPILLS

SPILL DESCRIPTION	REGULATIONS	MANAGEMENT STRATEGIES
1. RQ SPILL - SPILL THAT HAS REACHED ENVIRONMENT AND RELEASE THAT IS GREATER THAN RQ.	REPORTING REQUIRED A) IF SPILL HAS LEFT FACILITY BOUNDARY AND ON SARA OR CERCLA LIST, REPORT TO SC/LC B) IF SPILL HAS NOT LEFT FACILITY BOUNDARY, AND ON CERCLA LIST, REPORT TO SC/LC & NRC	REPORT SPILL WITH ACTION TAKEN TO DATE. DOCUMENT AND SUBMIT CLEANUP PLAN[1] 40 CFR 355 APPENDIX A (SARA) CERCLA LIST 40 CFR 302.4 TABLE 302.4
2. NON REPORTABLE - SPILL THAT HAS BEEN CONTAINED, OR HAS RELEASE NOT GREATER THAN RQ.	NO REPORTING REQUIRED[3] CLEANUP LIKELY REQUIRED. DEVELOP PLAN FOR CLEANUP AND REPORT PLAN AND RESULTS TO STATE FOR GOODWILL.	CLEANUP IN HOUSE[2] TEST TO PROVE IT IS CLEAN. DOCUMENT AND DISPOSE OF PROPERLY. CLEAN UP TO LEVEL OF BACKGROUND.
3. CHRONIC SPILL - SPILL THAT OCCURS OVER A PERIOD OF TIME. RELEASE DOES NOT EXCEED RQ IN 24 HRS	NO REPORTING REQUIRED[3] NO RULES ON CLEANUP OR AS TO HOW MUCH TO CLEANUP. IF CLEANUP IS REQD - MAY HAVE TO TRAIN [29 CFR 1910.120,.121][2]	CLEANUP TO BACKGROUND LEVEL. DISPOSE OF DEBRIS PROPERLY.
4. UST SPILL SPILLS FROM UNDERGROUND STORAGE TANKS.	A) REPORTING AND CLEANUP REQUIRED - PETROLEUM.. > 25 GALS OR AS SPECIFIED. - HAZ SUBSTANCE > RQ REPORT IMMEDIATELY TO NRC (CERCLA), SC/LC (SARA). B) ONLY CLEANUP REQUIRED - PETROLEUM < 25 GALS - HAZ. SUBSTANCE < RQ - REPORT IF CLEANUP NOT POSSIBLE WITHIN 24 HRS	CONTAIN OR IMMEDIATELY REPORT TO THE IMPLEMENTING AGENCY WITHIN 24 HOURS, OR ANY TIME SPECIFIED BY AGENCY PROVIDE PLANS FOR CLEANUP[1] 40 CFR 280.53 SUBPART E

1 When reporting releases, and submitting cleanup plans, the following information is essential [1]:

- Chemical name or identity of any hazardous substance released
- An indication whether the substance is on the Extremely Hazardous Substance list or CERCLA Hazardous Substance list
- Quantity, time, and duration of the release
- Media into which release occurred, and potential health effects and possible treatment
- Precautions to take including evacuation procedures
- Name and telephone number of facility representative
- Response actions to contain the release

2 All cleanup actions and/or emergency response may require training.

OSHA has the responsibility and authority to establish standards for the training of emergency responders and cleanup personnel as stated in 29 CFR 1910.120,1910.121

3 Though no reporting is required, it may be a good practice to report the spill.

Abbreviations used:

RQ	Reportable quantity
SARA	The Superfund Amendments and Reauthorization Act of 1986
CERCLA	The Comprehensive Environmental Response, Compensation, and Liability Act of 1980
SC	State Emergency Response Commission
LC	Local Emergency Planning Committee
NRC	National Response Center
UST	Underground Storage Tanks
HAZ	Hazardous
CFR	Code Of Federal Regulations

V. FEDERAL REGULATIONS

As federal regulations get tighter and more complicated, managers face an uphill task in keeping up with the changing regulations. Moreover, environmental managers have to deal with different and various types of regulations pertaining to spills. This section presents a simplified list of federal regulations to help managers understand the reporting conditions and reporting requirements during an emergency spill. A material search section is also provided under each act, so that further detail can be derived from the federal register where the regulations are listed. In order to better understand the regulatory structure, figure 1 shows how the federal agency acts fit together [2].

A. CERCLA

REPORTING CONDITIONS:

1. If spill reaches the environment
2. On CERCLA list
3. Greater than RQ

REPORTING REQUIREMENTS:

Report to NRC (National Response Center)

NRC Telephone # (1-800-424-8802)

* If in addition, the spill leaves the facility boundary, also report to state and local commission.

MATERIAL SEARCH: (See Appendix B)

CERCLA 102(a)

40 CFR 302.4 Table 302.4

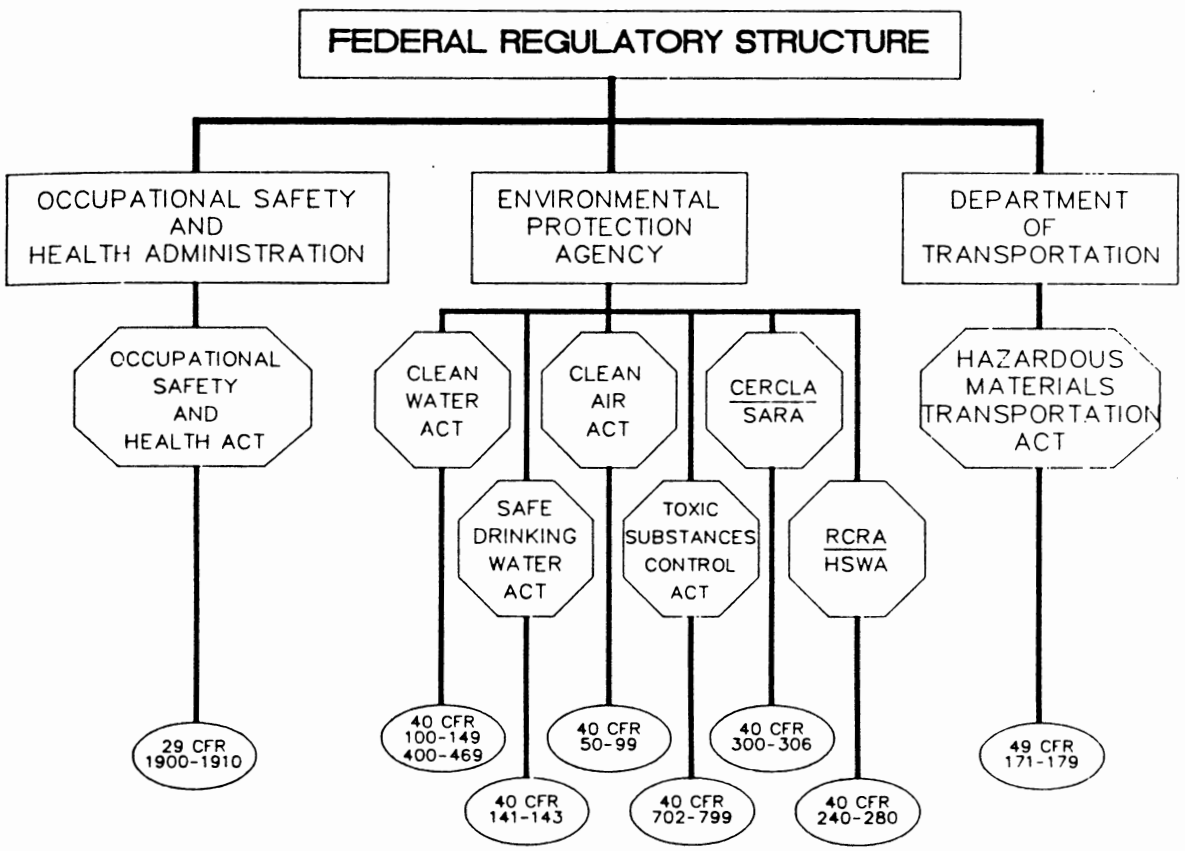

Figure 1. Major federal agencies and acts of Congress governing hazardous materials.

Source: Principles of Hazardous Materials Management

B. SARA

Amends CERCLA, 1986. Provides a system for identifying and cleaning up chemical and hazardous substances released into the air, water, groundwater, and on land.

Hazardous substances - Includes substances listed in CWA, CAA, RCRA, TSCA.

REPORTING CONDITIONS:

1. Spill has left facility boundary
2. On extremely hazardous list (SARA)
3. Greater than RQ

REPORTING REQUIREMENTS:

Report to NRC, and SC/LC (state and local commission)

MATERIAL SEARCH: (See Appendix A)

EHS (Extremely hazardous substances) lists 402 substances.

SARA Section 302

40 CFR 355, Appendix A

C. RCRA I - UST SPILLS

REPORTING CONDITIONS:

I a) Spill or overfill of petroleum, release into environment, greater than 25 gallons or as specified by the implementing agency, or that causes a sheen on nearby surface waters.

b) Spill or overfill of a hazardous substance, release to the environment, greater than the reportable quantity under CERCLA (40 CFR 302)

II a) Petroleum spill or overfill less than 25 gallons or as specified

b) Hazardous substance spill or overfill, less than reportable quantity.

REPORTING REQUIREMENTS:

I a) and b)

1. Contain and immediately clean up spill or overfill.
2. Report to implementing agency within 24 hours or as specified by agency.
3. Begin corrective action in accordance with subpart F.

Note: Spill of a hazardous substance requires reporting immediately rather than 24 hours.

CERCLA - Report to NRC

SARA - Report to state and local commission.

II a) and b)

1. Contain and cleanup immediately.
2. If cleanup cannot be accomplished within 24 hours or as specified, immediately notify implementing agency.

MATERIAL SEARCH:

40 CFR 280.53 Subpart E

Reporting and cleanup of spills and overfills

D. TSCA

REPORTING CONDITIONS:

1. Spills resulting from the release of materials containing PCBs at concentrations of 50 ppm or greater.
2. Applies to spills which occur after May 4, 1987.
3. Excludes from application of final numerical cleanup standards, certain spill situations from its scope.

The exclusions include spills directly into surface waters, drinking water, sewers, grazing lands, and vegetable gardens. These types of spills are subject to final cleanup standards to be estimated at the discretion of the regional office. These spills however are subject to immediate notification requirements, and require general cleanup (40 CFR 761.125 a)

REPORTING REQUIREMENTS:

1. EXCLUSIONS

Surface water, sewers, drinking water

a) Notify appropriate EPA regional office [Office of Pesticides and Toxic Substances Branch].
b) Obtain guidance for appropriate cleanup measures in the shortest possible time after discovery, but in no case later than 24 hours after discovery.

Grazing lands, vegetable gardens

a) Notify the Office of Pesticides and Toxic Substances
b) Decontaminate spill area depending on spill situation.

2. **PCB SPILLS > 10 LBS BY WEIGHT**

a) Notify Office of Pesticides and Toxic Substances Branch

b) Decontaminate spill area under TSCA policy in the shortest possible time after discover, no later than 24 hours.

3. **PCB SPILLS < 10 LBS BY WEIGHT**

a) Require cleanup in order to avoid EPA enforcement liability

b) No notification required

4. **LOW CONCENTRATION SPILLS < 1 LB OF PCB BY WEIGHT [LESS THAN 270 GALLONS OF UNTESTED MINERAL OIL]**

a) Solid surfaces should be double washed/rinsed

b) All indoor, residential surfaces other than vault areas should be cleaned to 10 micrograms per 100 square centimeter by standard commercial wipe tests.

c) All soil within spill area must be excavated and the ground restored to its original configuration by back-filling with clean soil.

d) Cleanup should be completed within 48 hours after the responsible party was notified or became aware of the spill, except in the case of adverse weather such as tornadoes, and hurricanes or civil emergency.

e) Document the cleanup with records and certification of decontamination.

5. HIGH AND LOW CONCENTRATION SPILLS, 1 LB OR MORE OF PCB [270 GALLONS OR MORE OF UNTESTED MINERAL OIL]

a) Notify EPA regional office and NRC

b) Cordon off area

c) Responsible party shall record and document the area of visible contamination

d) Responsible party shall initiate cleanup of all visible traces

e) The above actions should be completed within 24 hours [48 hours for PCB transformers] except in the case of civil emergency, or adverse weather.

f) If there is delay in reaching the site and there is insufficient visible traces of PCBs remaining at spill site, the responsible party must estimate (based on amount of material missing from equipment or container) the area of the spill and immediately cordon off area. The responsible party should then utilize a sampling scheme to identify the spill boundaries.

g) EPA is not placing a time limit on completion of cleanup effort since the time required varies from case to case. EPA expects that decontamination will be achieved promptly

MATERIAL SEARCH:

SUBPART G

40 CFR 761.120 - PCB Spill Cleanup Policy

40 CFR 761.125 - Requirements for PCB Spill Cleanup

E. CAA

As far as unplanned spills or situations are concerned, there is no specific section under Clean Air Act that deals with it. Unplanned emissions and spills are handled in detail by SARA and CERCLA, and therefore reporting conditions and requirements will follow those listed under SARA and CERCLA sections.

Section 303 of the CAA talks about emergency powers, and the information in this section is stated as below.

REPORTING CONDITIONS:

"Not withstanding any other provisions of this Act, the Administrator upon receipt of evidence that a pollution source or combination of sources (including moving sources) is presenting an imminent and substantial endangerment to the health of persons, and that appropriate State or local authorities have not acted to abate such sources, may bring suit on behalf of the United States in the appropriate United States district court to immediately restrain any person causing or contributing to the alleged pollution to stop the emission of air pollutants causing or contributing to such pollution or to take such other action as may be necessary".

F. **CWA**

SECTION 311 - OIL AND HAZARDOUS SUBSTANCE LIABILITY

Section 311 lists RQ for 300 hazardous substances. CERCLA supercedes now. CERCLA lists 700 substances. NRC overrides CWA.

Oil Spills require SPCC (Spill Prevention Control and Countermeasure Plans) as found in 40 CFR 112.

Oil - means oil of any kind or in any form, including but not limited to petroleum, fuel oil, sludge, oil refuse, oil mixed with wastes.

REPORTING CONDITIONS:

Apply to discharges into or upon

1. Navigable waters* of US (or)
2. Adjoining shorelines (or)
3. Waters of contiguous zone (or)
4. Activities under the Outer Continental Shelf Lands Act of 1974 (or)
5. That may affect natural resources belonging to, appertaining to, or under the exclusive management authority of the US.

* Note:

"Navigable waters" means the waters of the United States including but not limited to all waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, and wetlands.

REPORTING REQUIREMENTS:

Report immediately to the National Response Center (NRC) if discharge of oil occurs in such quantities that it has been determined may be harmful to the public health or welfare of the United States, except as provided in section 110.7, include discharges of oil that

a) Violate applicable water quality standards, or

b) Cause a film or sheen upon or discoloration of the surface of the water or adjoining shorelines or cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines.

SPCC required if amount of oil stored is

1,320 gallons above ground or

42,000 gallons below

Spill > 1,000 gallons

2 spills in 12 months

If reporting to the NRC is not practicable or possible, reports may be made to the Coast Guard, or an EPA predesignated On-Scene Coordinator (OSC) for the geographic area where the discharge occurs. All such reports shall be promptly relayed to the NRC.

MATERIAL SEARCH:

CWA Section 311 - Oil and Hazardous Substance Liability

40 CFR 112 - Oil Pollution Prevention (SPCC)

G. EPCRA - SARA TITLE 3

REPORTING CONDITIONS:

1. EXTREMELY HAZARDOUS SUBSTANCES (SARA)
    1. On extremely hazardous list (SARA)
    2. Reaches the environment
    3. Greater than RQ
    4. If spill has left facility boundary

2. CERCLA
    1. On CERCLA list
    2. Reaches the environment
    3. Greater than RQ

REPORTING REQUIREMENTS:

1. SARA

   Report to NRC, and SC/LC (state and local commission)

2. CERCLA

   Report to NRC (National Response Center) 1-800-424-8802

   * If in addition, the spill leaves the facility boundary, also report to SC/LC (state and local commission)

MATERIAL SEARCH:

1. SARA

   EHS (Extremely hazardous substances) lists 402 substances

   40 CFR 355, Appendix A

2. CERCLA

   CERCLA 102(a) lists 717 substances

   40 CFR 302.4 Table 302.4

H. FIFRA

FIFRA controls the manufacture and use of pesticides. It does not set any specific reportable quantities. All new pesticides must be must be registered with the United States EPA which sets tolerance levels for residues before the substance can be used on food crops.

Section 3: Registration of Pesticides

a) All pesticides sold must be registered

b) Pesticides are classified for general use or restricted use (require specially trained applicators).

Section 6: Administrative Review; Suspension

a) EPA may suspend, cancel, or restrict an existing pesticide to prevent unreasonable risk to humans or the environment.

b) When EPA determines that an unreasonable risk exists, it issues a "rebuttable presumption" (RPAR), and provides the opportunity for the registrant to provide evidence before a final decision is made.

Section 12: Unlawful Acts

Prohibits sale of unregistered pesticides

VI. MANAGEMENT STRATEGIES

This section is broken down into four topics. The section focuses on how managers can become a better handler of spills by planning for it. The mandatory issues regarding spills, spill response, and dealing with the media are also emphasized.

A. MANDATORY ISSUES

Discharges of oil and hazardous substances frequently create environmental emergencies that require immediate actions to control the spill. When spills occur, reliable information is needed to evaluate the magnitude and severity of the situation, so that immediate and appropriate action can be taken to protect both the public and the environment effectively. Several plans have been devised by the government to protect the environment and prevent spills. This section will cover regulations pertaining to management of spills. These are mandatory and should be used effectively by all facilities.

1. National Oil and Hazardous Substance Pollution Contingency Plan: 40 CFR 1510

This plan coordinates federal actions to prevent discharges of oil and hazardous substances and to mitigate damages to the environment when discharges occur. The plan provides a framework for the development and coordination of regional and local contingency plans.

2. Spill Prevention Control and Countermeasures (SPCC)

40 CFR 112,151

SPCC plans under Oil Pollution Prevention (40 CFR 112) applies to owners or operators of non-transportation-related onshore and offshore facilities engaged in drilling, producing, gathering, storing, processing, refining, transferring, distributing, or consuming oil and oil products, and which due to their location, could reasonably be expected to discharge oil in harmful quantities as defined in 40 CFR 110.

Exceptions

1. Does not apply to onshore and offshore facilities which, due to their location, could not reasonably be expected to discharge oil into or upon the navigable waters of US
2. Equipment or operations of vessels or transportation-related onshore and offshore facilities which are subjected to authority and control of the Department of Transportation.
3. The underground buried storage capacity of the facility is 42,000 gallons or less of oil
4. The storage capacity, which is not buried, of the facility is 1,320 gallons or less of oil, provided no single container has a capacity in excess of 660 gallons

Similarly, EPA proposed SPCC plans to prevent discharges of hazardous substances from onshore and offshore facilities that are subject to permitting requirements

under the National Pollution Discharge Elimination System (NPDES) of the Clean Water Act (40 CFR 151). Permittees are required to develop plans for best management practices (BMP) to prevent the release of toxic and hazardous pollutants to surface water. The approach for the prevention of hazardous substances pollution is similar to that of Oil Pollution Prevention (40 CFR 112) described earlier.

Guidelines for preparation and implementation of SPCC plans

a. A facility which has experienced one or more spill events within twelve months prior to the effective date of this part (40 CFR 112, 151), should include a written description of each such spill, corrective action taken and plans for preventing recurrence.

b. Where experience indicates a reasonable potential for equipment failure (such as tank overflow, rupture, or leakage), the plan should indicate a prediction of the direction, rate of flow, and the total quantity which could be discharged from the facility as a result of each major type of failure.

c. Appropriate containment and/or diversionary structures or equipment to prevent discharge of oil or hazardous materials from reaching a navigable water course should be provided.

d. In addition, the SPCC plans should provide specific guidelines and conformance procedures in the areas of facility drainage, bulk storage, transfer operations, solid material storage, security, and personnel, training and spill prevention procedures.

3. Preparedness and Prevention - RCRA Subpart C, 40 CFR 265

This plan requires generators, transporters, and treatment, storage, and disposal facilities of hazardous waste to be prepared for spills by making available special equipment and developing prevention systems.

The required equipment includes internal communication or alarm systems, telephone, hand held or two way radio capable of summoning emergency assistance from fire departments, police or state or local emergency teams. Fire control, spill control, and decontamination equipment should be present.

4. Contingency Plan and Emergency Procedures - RCRA Subpart D 40 CFR 265

Contingency plan applies to those mentioned in subpart C above to include a list of all emergency equipment in the facility required in 40 CFR 265 subpart C. List must be kept up-to-date. Plan should include location and physical description of each item on the list, and their capabilities. Equipment must be frequently tested and maintained.

B. EMERGENCY PLANNING

Since most spills occur due to accidents, the key element to managing emergency situations is planning in advance. Besides having mandatory laws that require contingency plans, facilities can also be better prepared by planning. In order to provide an effective spill prevention program, it is important that managers fully utilize proper plant design and effective control systems. All control systems should be approved and committed by top management. Some suggestions for advance planning are listed below.

Suggestions for advance planning

* Maintain up-to-date contingency plans and emergency procedures
* Maintain current preparedness and prevention plan

The above two may be mandatory

* Maintain a tracking system of hazardous materials, so that the amount of material moved during process can be checked
* Assign responsibility to the smallest supervisory unit practicable
* Keep necessary spill prevention equipment in all areas that could serve as a potential spill site
* Provide sound process control and alarm monitoring systems
* Provide thorough training of operating, technical, and maintenance personnel
* Perform proper maintenance of equipment and facilities
* Take worst spill scenario, see what level of expertise is required, and compare with present expertise available
* Develop vulnerability studies on existing operating and maintenance procedures. From these studies, critical portions of the manufacturing process can be singled out and modified to decrease the probability of a spill
* Strict job responsibility. Can probably use a linear responsibility chart to designate responsibilities
* Train employees on all aspects of spill
* Try to work with the EPA and state/local agencies positively
* Develop proper containment procedures

* Show off state-of-the-art spill prevention techniques and equipment
* Remember that the owner is always liable

Action Diagram

The spill prevention program of any plant should include an action diagram or plan to be followed when a spill occurs [3]. A primary consideration of this plan is to prevent the spill from contaminating the environment outside the facility (surface or groundwater, soil, sewer, etc.). Such an action plan should have a definite assignment of responsibility to avoid confusion.

Means of preventing spills from reaching areas outside the plant should also be provided. Examples include:

* providing neutralizing agents near bulk storage areas
* maintaining personnel protective equipment in potential spill locations
* availability of floatation spill-containment booms or absorbent booms for dealing with lighter than water chemicals, and so on.

If the chemicals to be dealt with are known, chemical specific precautions can also be taken. Proper plant drainage, monitoring apparatus, in-plant piping, storage and transportation can all lead to containing hazardous spills and preventing them from reaching the environment.

Potential Spill Survey

A potential spill survey is a very recommended and useful tool towards spill prevention and minimization [4]. The survey should include a list of all materials within the plant that could possibly cause a spill and reach the environment. The list should describe the typical container and storage amounts of each particular material. Based on these figures, the potential spill amount and the quantity that could cause significant damage should be assessed. For each spill candidate, the physical and chemical properties should be prepared, so that it will be easier and more efficient to respond to an actual spill emergency.

In short, the key to preparing for emergency situations is planning in advance. Only by properly understanding the potential spill causes, and their probability of occurring can managers be better prepared for spill situations.

C. SPILL RESPONSE PLANS

Even though proper spill preparedness and prevention plans exist, spills still do occur. The National Oil and Hazardous Substances Pollution Control Plan lists several phases in response to a spill situation. This section will discuss the steps (phases) that a facility or manager need to go through during an actual spill. The systematic phases in response to a spill event are as follows:

Phase 1 - Discovery and Notification

Phase 2 - Evaluation and Initiation of Action

Phase 3 - Contamination and Countermeasures

Phase 4 - Removal, Mitigation, and Disposal

Phase 5 - Documentation and Cost Recovery

Usually the first line supervisor is the first to be involved in a spill alert. Once the site is surveyed, the supervisor should notify the person responsible in the facility (pollution control manager) for spills. A logic diagram is of great importance when handling spills. The diagram lists the orderly way to handle spill and also shows how to get help from other departments within the facility. The diagram decreases the possibility of error, confusion and misunderstanding in handling a spill.

The logic diagram is a very essential tool for all facilities, and therefore it should be a high priority for all facility managers. An example of such a diagram is shown in the following pages. It should be kept in mind when handling spills, that an owner is always liable, and very rarely will a spill be left unattended. It is to the best interest of the individual facility to always perform cleanup on their own, if at all possible. When the state and EPA get involved the cleanup costs are huge and very much more expensive.

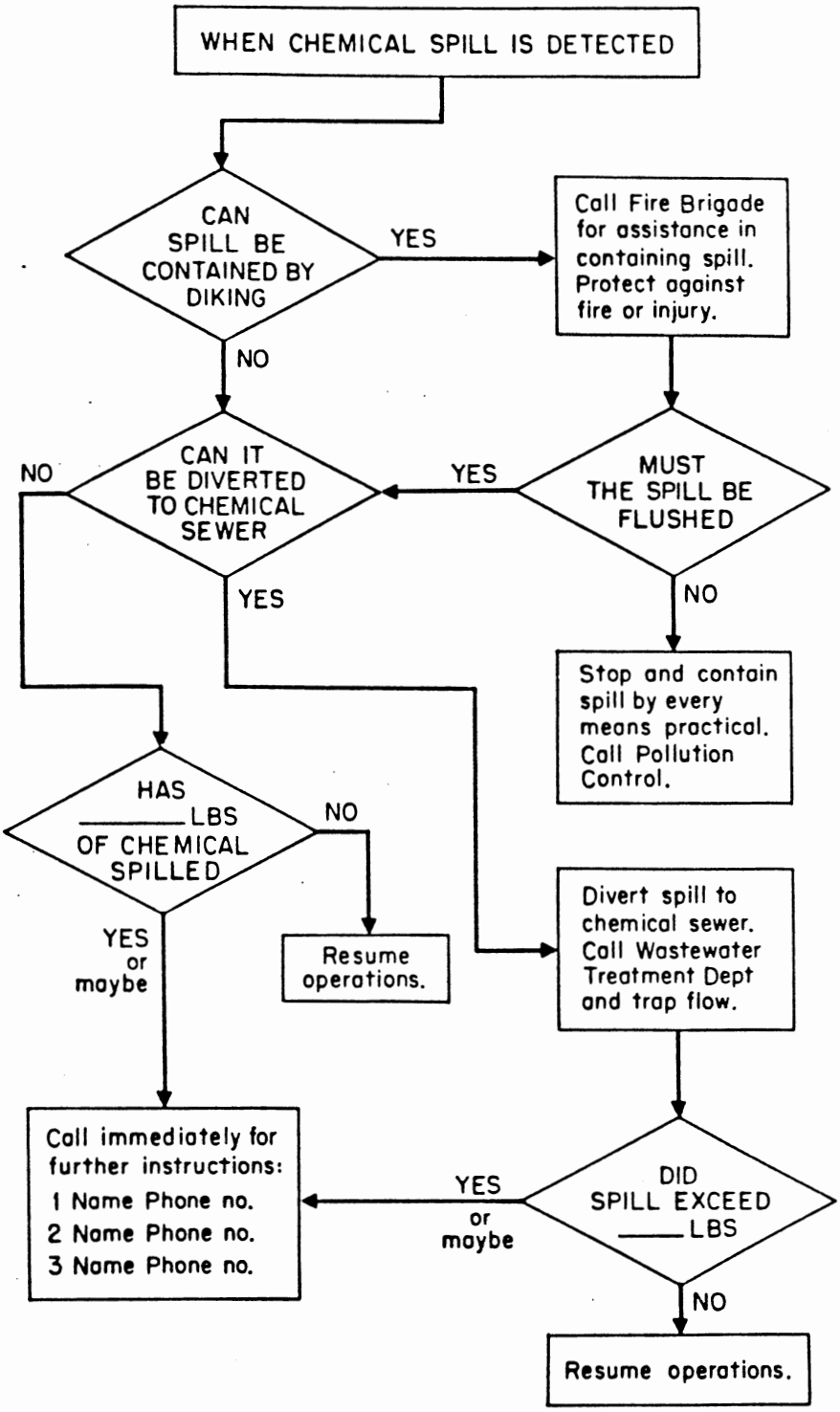

Fig. 2 Spill control procedure for the front-line supervisor.

Source: Hazardous Material Spills Handbook

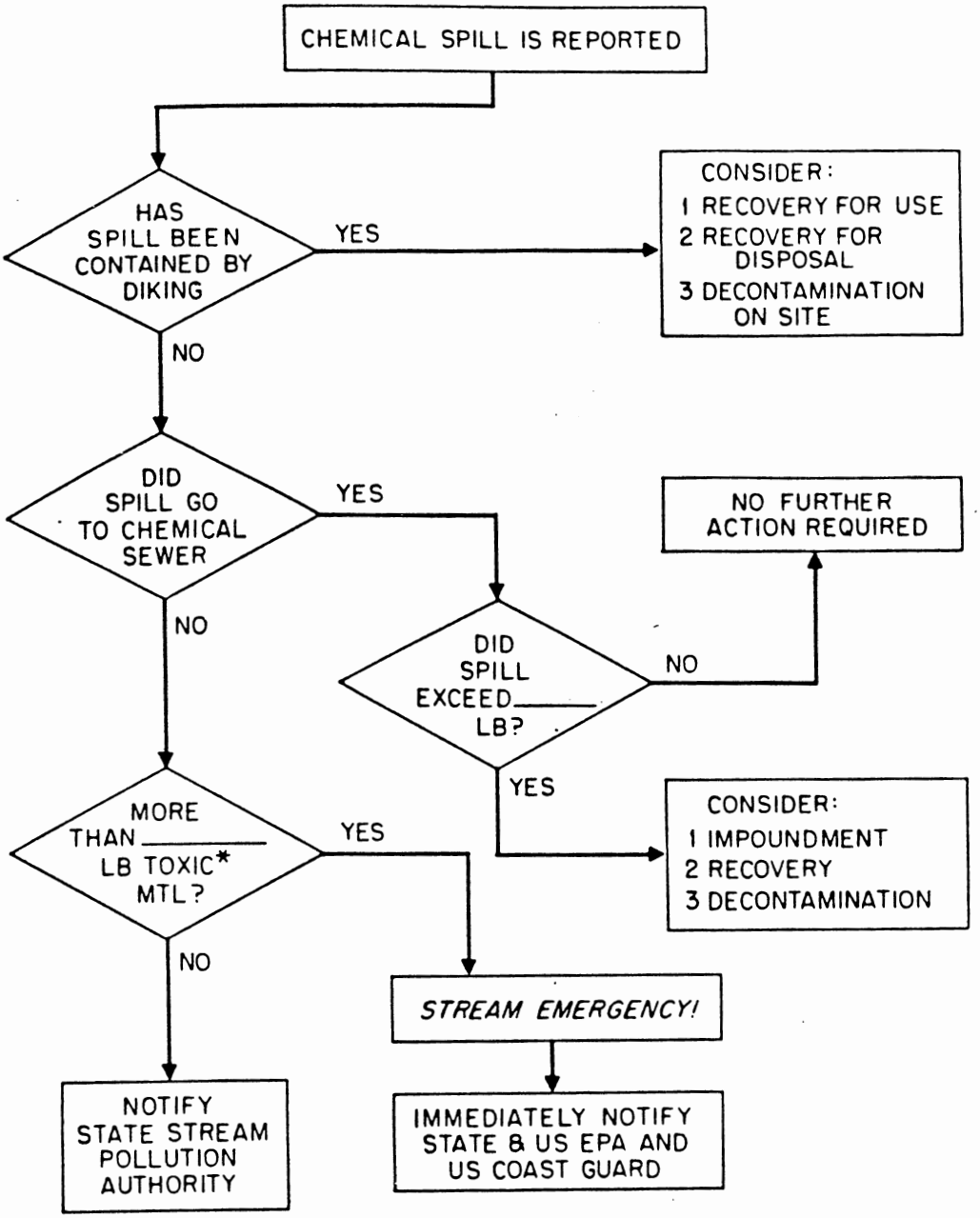

Fig. 3 Spill control action required by the pollution control officer

Source: Hazardous Material Spills Handbook

D. DEALING WITH THE MEDIA

The media should be used effectively as it is the main link between the company and the public. The media should be informed about the actions and precautions taken or of any state-of-the-art equipment available to control spill. The facility should show off effective programs, so that the media has a positive image of your company. The media should be used to your advantage, not only in cases of accidents. Some suggestions to dealing with the media on the scene of an accident are presented below [5]:

Things to do:

1. Accommodate media as much as possible and make news available to them
2. Schedule news conference and avoid written releases
3. Be direct and specific
4. Always tell the truth
5. Hold news conferences immediately after any meeting from which public or media was banned
6. Stick with the representative chosen to deal with the media, or decide immediately who is going to represent.
7. Be in constant contact with the on-scene-coordinator's command post

Things to avoid:

1. Don't argue in front of the press
2. Avoid giving gut opinions or guess situation or solution
3. Avoid personal remarks about other people on scene
4. Don't make off the record comments, they may be printed in the news
5. Avoid bad language
6. Don't hide from media, they can sense it
7. Don't attempt to answer questions beyond your knowledge or expertise
8. Do not allow media to attend your technical meetings
9. Don't be hostile toward the media

The key in working with the media is to understand that they can and should be used positively. By showing off specialized equipment and preventive measures, the public will have a better image of the company. Instead of using the media just to communicate accidents and emergency spills, they should be used to enhance a better public image as well as goodwill of its customers.

VII CONCLUSION

Managers of facilities that use and/or generate hazardous materials, now, more than ever before, are involved in many decisions of risk and uncertainty. Though the ideal situation when dealing with hazardous materials is to minimize or completely eliminate their use, this ultimate goal is never fully accomplished. Therefore accidents involving hazardous materials can and do occur. It is critical that managers do all they can to minimize the effects of such accidents on the environment and the health/safety of those around the spill. As managers are the first source that the media seeks during a spill situation, they have to be very careful when making spill related decisions or when communicating to the media.

Managers can best comply with federal regulations during an emergency spill, by clearly understanding the reporting conditions and reporting required by the various acts under the federal agency. It is always to the best interest of a company to never leave a spill left unattended. Since the owner is always liable, environmental managers have to take all responsibilities to ensure that prompt action is taken during an emergency spill. Planning in advance is the key element when dealing with hazardous materials. Cleaning up a spill should be the last line of defense. It is always best to plan in advance, so that there are less chances of a spill, and even if there is one, its effects are minimal.

In order to ensure that a company's tactical plans are carried out effectively, it is necessary to keep abreast of the rapidly changing regulations. This can be done by continuously monitoring the dynamic changes in the regulations. It is also a good idea to assign this task to someone within the company. By maintaining up-to-date contingency and preparedness and prevention plans, facilities can be better prepared for spills. A potential spill survey is an essential tool for emergency planning.

Finally, utilizing the media effectively is of utmost importance, as it is the main link between the management of a company and the public. The media should be used as a public relations tool to show off state-of-the-art spill prevention equipment and programs, and to portray a positive image to the general public. It should not be considered only during spill accidents, but instead should be made a part of a company's strategic planning.

VIII FURTHER RESEARCH

Since the report focuses only on unplanned emissions, and emergency situations, more research can be utilized to deal with the specific elements of the environment that the spill affects; for example land, water, air etc. Specific means of controlling these elements should be emphasized. A data base can be very useful to deal with spill situations classified according to spill types, media affected, size of spill, regulations, etc.

REFERENCES

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2. Griffin, Roger D. Principles of Hazardous Materials Management, 1989. Lewis Publishers.

3. Weaver, Albert L. Techniques for Hazardous Chemical and Waste Spill Control, 1983. L.A. Weaver Company.

4. Bennett, Feates, and Wilder. Hazardous Material Spills Handbook, 1982. McGraw-Hill Book Company.

5. Smith, Al J. Managing Hazardous Substances Accidents, 1981. McGraw-Hill Book Company.

Personal Interviews:

* Raghu Pakanati, Environmental Engineer, Planning Research Corporation, Dallas, Texas.

* Will Focht, ex EPA, Oklahoma State University, Stillwater, Oklahoma.

Telephone Conversations:

* Curtis Baker, Environmental Manager, Moore Business Forms, Stillwater, Oklahoma. Tel: (405) 377-1400

* E.P.A. RCRA and Superfund Hotline. Tel: 1-800-424-9346

* Toxic Substance Control Act. Tel: (202) 554-1404

* Emergency Planning and Community Right to Know. Tel: 1-800-535-0202

* EPA Region Six, Clean Air Act. Tel: (214) 655-7214

* EPA Region Six, Clean Water Act. Tel: (214) 655-6444

* Texas Tech University Pesticide Hotline. Tel: 1-800-858-7378

APPENDICES

APPENDIX A

LIST OF EXTREMELY HAZARDOUS SUBSTANCES

(SARA)

TABLE 302.4—LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES—Continued

Hazardous Substance	CASRN	Regulatory Synonyms	Statutory RQ	Statutory Code*	Statutory RCRA Waste Number	Proposed RQ Category	Proposed RQ Pounds (Kg)
Phenol, 2,4-dinitro-6-(1-methylpropyl)	88857	Dinoseb	*1	4	P020	B	100 (45.4)
Phosphorous oxychloride	10025873		5,000	1		B	100 (45.4)
Propanedinitrile	109773	Malononitrile	*1	4	U149	B	100 (45.4)
2-Propenamide	79061	Acrylamide	*1	4	U007	C	1,000 (454)
2-Propenenitrile, 2-methyl	126987	Methacrylonitrile	*1	4	U152	B	100 (45.4)
Pyrene	129000		*1	2		C	1,000 (454)
4-Pyridinamine	504245	Pyridine, 4-amino-4-Aminopyridine	*1	4	P008	B	100 (45.4)
Pyridine, 4-amino-	504245	4-Aminopyridine, 4-Pyridinamine	*1	4	P008	B	100 (45.4)
Sodium azide	26628228		*1	4	P105	B	100 (45.4)
Vanadium(V) oxide	1314621	Vanadium pentoxide	1,000	1,4	P120	B	100 (45.4)
Vanadium pentoxide	1314621	Vanadium(V) oxide	1,000	1,4	P120	B	100 (45.4)
Vinyl acetate	108054	Vinyl acetate monomer	1,000	1		C	1,000 (454)
Vinyl acetate monomer	108054	Vinyl acetate	1,000	1		C	1,000 (454)

*—Indicates the statutory source as defined by 1, 2, 3, or 4 below.
1—Indicates that the statutory source for designation of this hazardous substance under CERCLA is CWA Section 311(b)(4).
2—Indicates that the statutory source for designation of this hazardous substance under CERCLA is CWA Section 307(a).
3—Indicates that the statutory source for designation of this hazardous substance under CERCLA is CWA Section 112.
4—Indicates that the statutory source for designation of this hazardous substance under CERCLA is CWA Section 3001.
5a—Indicates that the statutory source for designation of this hazardous substance is CERCLA Section 102(a).

PART 355—EMERGENCY PLANNING AND NOTIFICATION

4. The authority citation for part 355 continues to read as follows:

Authority: 42 U.S.C. 11002 and 11048.

5. Part 355 is amended by revising the following entries to Appendices A and B.

APPENDIX A.—THE LIST OF EXTREMELY HAZARDOUS SUBSTANCES AND THEIR THRESHOLD PLANNING QUANTITIES

[Alphabetical Order]

CAS No.	Chemical Name	Notes	Proposed RQ (pounds)	Threshold planning quantity (pounds)
01752303	Acetone thiosemicarbazide	d	100	1,000/10,000
00079061	Acrylamide	i	1000	1,000/10,000
00814686	Acrylyl chloride	d, f	100	100
00111693	Adiponitrile	d, i	1000	1,000
00107119	Allylamine	d	100	500
00054626	Aminopterin	d	10	500/10,000
00078535	Amiton	d	100	500
03734972	Amiton oxalate	d	100	100/10,000
00300629	Amphetamine	d	100	1,000
00062533	Aniline	i	1000	1,000
00088051	Aniline, 2,4,6-trimethyl-	d	100	500
07783702	Antimony pentafluoride	d	100	500
01397940	Antimycin A	c, d	1000	1,000/10,000
07784421	Arsine	d	1	100
02642719	Azinphos-ethyl	d	100	100/10,000
00098873	Benzal chloride		100	500
00098188	Benzenamine, 3-(trifluoromethyl)-	d	100	500
00100141	Benzene, 1-(chloromethyl)-4-nitro-	d	100	500/10,000
00098055	Benzenearsonic acid	d	10	10/10,000
03615212	Benzimidazole, 4,5-dichloro-2-(trifluoromethyl)-	d, e	100	500/10,000
00140294	Benzyl cyanide	d, f	100	500
15271417	Bicyclo(2.2.1)hepta-ne-2-carbonitrile, 5-chloro-6-((((methylamino) carbonyl)oxy)im	d	100	500/10,000
00534076	Bis(chloromethyl)ketone	d	10	10/10,000
04044659	Brocsanate	d	100	500/10,000
10294345	Boron trichloride	d	100	500

APPENDIX A.—THE LIST OF EXTREMELY HAZARDOUS SUBSTANCES AND THEIR THRESHOLD PLANNING QUANTITIES—Continued

[Alphabetical Order]

CAS No.	Chemical Name	Notes	Proposed RQ (pounds)	Threshold planning quantity (pounds)
07637072	Boron trifluoride	d	100	500
00353424	Boron trifluoride compound with methyl ether	d	1000	1,000
28772567	Bromadiolone	d	100	100/10,000
07726956	Bromine	d, i	100	500
01306190	Cadmium oxide	d	10	100/10,000
02223930	Cadmium stearate	c, d	10	1,000/10,000
00056257	Carbachol chloride	d	100	100/10,000
00051832	Carbamic acid, methyl-, O-[(1,2,4-dimethyl-1,3-dithiolan-2-ylidene)amino]-	d	100	500/10,000
26419738	Carbophenothion	d	100	100/10,000
00786196	Chlormephos	d	100	500
24934916	Chlormequat chloride	d	100	500
00999815	Chloroacetic acid	d, f	100	100/10,000
00079118	Chloroethanol	d	1100	100/10,000
00107073	Chloroethyl chloroformate	d	100	500
00627112	Chlorofenvinfos	d	100	1,000
00470906	Chlorophacinone	d	100	500
03691358	Chloroxuron	d	100	100/10,000
01982474	Chlorthiophos	d	100	500/10,000
21923239	Chromic chloride	d, f	100	500
10025737	Cobalt carbonyl	d	1	1/10,000
10210681	Cobalt, [(2,2'-(1,2-ethanediylbis (nitrilomethylidyne))bis(6-fluorophenolato)](2)-	d, f	10	10/10,000
62207765	Colchicine	d	100	100/10,000
00064868	Coumatetralyl	d, f	10	10/10,000
05836293	Crimidine	d	100	500/10,000
00535897	Cyanogen iodide	d	100	100/10,000
00506785	Cyanogen bromide	d	1000	1,000/10,000
00506683	Cyanophos		100	500/10,000
03838282	Cyanuric fluoride	d	1000	1,000
00675149	Cyclohexylamine	d	100	100
00066819	Cyclohexylamine	d	100	100
00108918	Decaborane(14)	d, i	1000	10,000
17702419	Demeton	d	10	500/10,000
08065483	Demeton-S-methyl	d	100	500
00919866	Diallor	d	100	500
10311849	Diborane	d	100	100/10,000
19287457	Trans-1,4-dichlorobutene	d	10	100
00110576	Dichloromethylphenylsilane	d	100	500
00149746	Dicrotophos	d	100	1,000
00141662	Diethyl chlorophosphate	d	100	100
00814493	Diethylcarbamazine citrate	d, f	100	500
01642542	Digitoxin	d	100	100/10,000
00071636	Diglycidyl ether	c, d	100	100/10,000
02238075	Digoxin	d	100	1,000
20830755	Dimefox	d, f	10	10/10,000
00115264	Dimethyl phosphorochloridothioate	d	100	500
02524030	Dimethyldichlorosilane	d	100	500
00075785	Dimethyl-p-phenylenediamine	d, f	100	500
00099989	Dimethyl sulfide	d	1	10/10,000
00075183	Dimetilan	d	100	100
00644644	Dinoseb	d	100	500/10,000
00088857	Dinoterb	T	100	
01420071	Dioxathion	d	100	500/10,000
00078342	Diphacinone	d	100	500
00082666	Dithiazanine iodide	d	10	10/10,000
00614738	Emetine, dihydrochloride	d	100	500/10,000
00316427	Endothion	d, f	1	1/10,000
02778043	EPN	d	100	500/10,000
02104645	Ergocalciferol	d	100	100/10,000
00050146	Ergotamine tartrate	c, d	100	1,000/10,000
00379793	Ethanesulfonyl chloride, 2-chloro-	d	100	500/10,000
01622328	Ethanesulfonyl chloride, 2-chloro-	d	100	500
01622329	Ethanol, 1,2-dichloro-, acetate	d	100	500
10140871	Ethoprophos	d	100	1,000
13194484	Ethyldibs(2-chloroethyl)amine	d	1000	1,000
00538078	Ethylene fluorohydrin	d, f	100	500
00371620	Ethylthiocyanate	c, d, f	10	10
00542905	Famphur	d	1000	10,000
22224926	Fenitrothion	d	10	10/10,000
00122145	Fensulfothion	d	100	500
00115902	Fluenetil	d, f	100	500
04301532	Fluoroacetic acid	d	100	100/10,000
00144490	Fluoroacetyl chloride	d	10	10/10,000
00359068	Fluorouracil	c, d	10	10
00051218		e	100	500/10,000

APPENDIX A.—THE LIST OF EXTREMELY HAZARDOUS SUBSTANCES AND THEIR THRESHOLD PLANNING QUANTITIES—Continued

[Alphabetical Order]

CAS No.	Chemical Name	Notes	Proposed RQ (pounds)	Threshold planning quantity (pounds)
02944229	Fonofos	d	100	500
00107164	Formaldehyde cyanohydrin	d, f	1000	1,000
23422539	Formetanate hydrochloride	d, f	100	500/10,000
02540821	Formothion	d	10	100
17702577	Formparanate	d	100	100/10,000
21548323	Fosthietan	d	100	500
03878191	Fubendazole	d	100	100/10,000
13450903	Gallium trichloride	d	100	500/10,000
04835114	Hexamethylenediamine, N,N'-dibutyl-	d	100	500
07647010	Hydrogen chloride	d, i	100	500
07722841	Hydrogen peroxide (concentration >52%)	d, i	1000	1,000
07783075	Hydrogen selenide	d	1	10
00123319	Hydroquinone	i	100	500/10,000
13463406	Iron, pentacarbonyl-	d	10	100
00297789	Isobenzan	d	100	100/10,000
00078820	Isobutyronitrile	d, f	1000	1,000
00102363	Isocyanic acid, 3,4-dichlorophenyl ester	d	100	500/10,000
04098719	Isophorone diisocyanate	b, d	100	100
00108236	Isopropyl chloroformate	d	1000	1,000
00625558	Isopropyl formate	d	100	500
00119380	Isopropylmethylpyrazolyl dimethylcarbamate	d	100	500
00078977	Lactonitrile	d	1000	1,000
21609905	Leptophos	d	100	500/10,000
00541253	Lewisite	c, d, f	10	10
07580678	Lithium hydride	b, d	10	100
00109773	Malononitrile	T	100	
12108133	Manganese, tricarbonyl methylcyclopentadienyl	d, f	100	100
00051752	Mechlorethamine	c,d	10	10
00950107	Mephosfolan	d	100	500
01600277	Mercuric acetate	d	100	500/10,000
07487947	Mercuric chloride	d	100	500/10,000
21908532	Mercuric oxide	d	100	500/10,000
10476956	Methacrolein diacetate	d	1000	1,000
00760930	Methacrylic anhydride	d	100	500
00126987	Methacrylonitrile	I, T	100	
00920467	Methacryloyl chloride	d	100	100
30674807	Methacryloyloxyethyl isocyanate	d, f	100	100
10265926	Methamidophos	d	100	100/10,000
00558258	Methanesulfonyl fluoride	d	100	1,000
00950378	Methidathion	d	100	500/10,000
00151382	Methoxyethylmercuric acetate	d	100	500/10,000
00624920	Methyl disulfide	d	10	100
00556616	Methyl isothiocyanate	b, d	100	500
03735237	Methyl phenkapton	d	100	500
00676971	Methyl phosphonic dichloride	b, d	100	100
00080637	Methyl 2-chloroacrylate	d	100	500
00079221	Methyl chloroformate		100	500
00502396	Methylmercuric dicyanamide	d	10	500/10,000
00556649	Methyl thiocyanate	d	1000	10,000
00075796	Methyltrichlorosilane	d, f	100	500
00078944	Methyl vinyl ketone	d	10	10
01129415	Metolcarb	d	100	100/10,000
00315184	Mexacarbate		100	500/10,000
02763964	Muscimol	a, f	100	10,000
06923224	Monocrotophos	d	10	10/10,000
00505602	Mustard Gas	d, f	1	500
13463393	Nickel carbonyl		1	1
00065305	Nicotine sulfate	d	10	100/10,000
01122607	Nitrocyclohexane	d	100	500
00091424	Norbormide	d	100	100/10,000
00000000	Organorhodium complex (PMN-82-147)	d	10	10/10,000
00630604	Ouabain	c, d	100	100/10,000
23135220	Oxamyl	d	100	100/10,000
00078717	Oxetane, 3,3-bis(chloromethyl)-	i	100	500
02497076	Oxydisulfoton	d, f	100	500
10028156	Ozone	d	10	100
01910425	Paraquat	d	10	10/10,000
02074502	Paraquat methosulfate	d	10	10/10,000
19624227	Pentaborane	d	10	500
02570265	Pentadecylamine	d	100	100/10,000
00079210	Peracetic acid	d	10	500
00108952	Phenol		100	500/10,000
00097187	Phenol, 2,2'-thiobis(4,6-dichloro-	d	100	100/10,000
00064006	Phenol, 3-(1-methylethyl)-, methylcarbamate	d	100	500/10,000
04418660	Phenol, 2,2'-thiobis[4-chloro-6-methyl-	d	100	100/10,000
00058366	Phenoxarsine, 10, 10'-oxyd	d	100	500/10,000

APPENDIX A.—THE LIST OF EXTREMELY HAZARDOUS SUBSTANCES AND THEIR THRESHOLD PLANNING QUANTITIES—Continued

[Alphabetical Order]

CAS No.	Chemical Name	Notes	Proposed RQ (pounds)	Threshold planning quantity (pounds)
60095861	Phenylhydrazine hydrochloride	d	100	1,000/10,000
02097190	Phenylsilatrane	d, f	100	100/10,000
64104147	Phosacetim	d	100	100/10,000
60947024	Phosfolan	d	100	100/10,000
60732116	Phosmet	d	10	10/10,000
13171216	Phosphamidon	d	100	100
60782699	Phosphonothioic acid, methyl-, S-(2-(bis(1-methylethyl)amino)ethyl) O-ethyl ester	d	10	100
02665307	Phosphonothioic acid, methyl-,O-(4-nitrophenyl) O-phenyl ester	d	100	500
02703131	Phosphonothioic acid, methyl-,O-ethyl O-(4-(methylthio)phenyl) ester	d	10	500
03254835	Phosphoric acid, dimethyl 4-(methylthio)phenyl ester	d	100	500
02587908	Phosphorothioic acid, O,O-dimethyl-S-(2-methylthio)ethyl ester	c, d, e	100	500
10025873	Phosphorus oxychloride		100	500
10026138	Phosphorus pentachloride	b, d	100	500
01314563	Phosphorus pentoxide	b, d	10	10
00057476	Physostigmine	d	100	100/10,000
00057647	Physostigmine, salicylate (1:1)	d	100	100/10,000
00124879	Picrotoxin	d	100	500/10,000
00110894	Piperidine	d	100	1,000
06281130	Piprotal	d	100	100/10,000
23505411	Pirimiphos-ethyl	d	1000	1,000
02631370	Promecarb	d, f	100	500/10,000
00106967	Propargyl bromide	d	1	10
00057578	Propiolactone, beta-	d	10	500
00070699	Propiophenone, 4-amino	d, e	100	100/10,000
00109615	Propyl chloroformate	d	100	500
02275185	Prothoate	d	100	100/10,000
00129000	Pyrene	c	1000	1,000/10,000
00140761	Pyridine, 2-methyl-5-vinyl	d	100	500
01124330	Pyridine, 4-nitro-, 1-oxide	d	100	500/10,000
00504245	Pyridine, 4-Amino-	f	100	500/10,000
23564251	Pyrimnil	d, f	100	100/10,000
14167181	Salcomine	d	100	500/10,000
00107448	Senn	d, f	10	10
07791233	Selenium oxychloride	d	100	500
00563417	Semicarbazide hydrochloride	d	100	1,000/10,000
03037727	Silane, (4-aminobutyl)diethoxymethyl-	d	1000	1,000
26628228	Sodium azide	b	100	500
00124652	Sodium cacodylate	d	100	100/10,000
00131522	Sodium pentachlorophenate	d	100	100/10,000
13410010	Sodium selenate	d	100	100/10,000
10102202	Sodium tellurite	d	100	500/10,000
00900958	Stannane, acetoxytriphenyl-	d, e	10	500/10,000
00060413	Strychnine, sulfate	d	100	100/10,000
03569571	Sulfoxide, 3-chloropropyl octyl	d	100	500
07446095	Sulfur dioxide	d, i	100	500
07783600	Sulfur tetrafluoride	d	100	100
07446119	Sulfur trioxide	b, d	100	100
00077816	Tebun	c, d, f	10	10
13494809	Tellurium	d	100	500/10,000
07783804	Tellurium hexafluoride	d, h	100	100
13071799	Terbufos	d, f	100	100
00597648	Tetraethyltin	c, d	10	100
00075741	Tetramethyllead	c, d, i	100	100
02757186	Thallous malonate	c, d, f	100	100/10,000
02231574	Thiocarbazide	d	100	1,000/10,000
00614789	Thiourea, (2-methylphenyl)-	d	100	500/10,000
07550450	Titanium tetrachloride	d	100	100
01031478	Trasmiphos	d	100	500/10,000
24017478	Trazofos	d	100	500
01558254	Trichloro(chloromethyl)silane	d	10	100
00076028	Trichloroacetyl chloride	d	100	500
27137856	Trichloro(dichlorophenyl)silane	d	100	500
00115218	Trichloroethylsilane	d, f	100	500
00327980	Trichloronate	d, h	100	500
00098135	Trichlorophenylsilane	d, f	100	500
00998301	Triethoxysilane	d	100	500
00075774	Trimethylchlorosilane	d	1000	1,000
00824113	Trimethylolpropane phosphite	d, f	100	100/10,000
01066451	Trimethyltin chloride	d	100	500/10,000
00639587	Triphenyltin chloride	d	100	500/10,000
00555771	Tris(2-chloroethyl)amine	d, f	10	100
02001958	Valinomycin	c, d	100	1,000/10,000
01314621	Vanadium(V) oxide		100	100/10,000
00108054	Vinyl acetate	i	1000	1,000
00129066	Warfarin sodium	d, f	10	100/10,000

APPENDIX A.—THE LIST OF EXTREMELY HAZARDOUS SUBSTANCES AND THEIR THRESHOLD PLANNING QUANTITIES—Continued

[Alphabetical Order]

CAS No.	Chemical Name	Notes	Proposed RQ (pounds)	Threshold planning quantity (pounds)
28347139	Xylylene dichloride	d	100	100/10,000
68270089	Zinc, dichloro(4,4-dimethyl-5(((methylamino)carbonyl)oxy)imino)-pentanenitrile)-, (T-4)-	d	100	100/10,000

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—Until the proposed RQs are finalized, reporting under SARA section 304(a)(2) must be done at the statutory level (see Table 302.4 in this proposed rule for these statutory RQs).
e—New chemicals added that were not part of the original list of 402 substances.
f—Revised TPQ based on new or re-evaluated toxicity data.
g—TPQ is reverted to its calculated value and does not change due to technical review as in proposed rule.
h—The TPQ was revised after proposal due to calculation error.
i—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").

APPENDIX B.—THE LIST OF EXTREMELY HAZARDOUS SUBSTANCES AND THEIR THRESHOLD PLANNING QUANTITIES

[CAS Number Order]

CAS No.	Chemical name	Notes	Proposed RQ (pounds)	Threshold planning quantity (pounds)
00000000	Organorhodium complex (PMN-82-147)	d	10	10/10,000
00050146	Ergocalciferol	c, d	100	1,000/10,000
00051218	Fluorouracil	d	100	500/10,000
00051752	Mechlorethamine	c, d	10	10
00051832	Carbachol chloride	d	100	500/10,000
00054360	Aminopterin	d	10	500/10,000
00056257	Carbhendin	d	100	100/10,000
00057476	Physostigmine	d	100	100/10,000
00057578	Propiolactone, beta-	d	10	500
00057647	Physostigmine, salicylate (1:1)	d	100	100/10,000
00058366	Phenoxarsine, 10, 10'-oxyd-	d	100	500/10,000
00059881	Phenylhydrazine hydrochloride	d	100	1,000/10,000
00060413	Strychnine, sulfate	d	100	100/10,000
00062533	Aniline	i	1000	1,000
00064005	Phenol, 3-(1-methylethyl)-, methylcarbamate	d	100	500/10,000
00064868	Colchicine	d, f	10	10/10,000
00065305	Nicotine sulfate	d	10	100/10,000
00066819	Cyclohexylamine	d	100	100/10,000
00070698	Propiophenone, 4-amino	d, e	100	100/10,000
00071636	Digitoxin	c, d	100	100/10,000
00075183	Dimethyl sulfide	d	100	100
00075741	Tetramethyllead	c, d, i	100	100
00075774	Trimethylchlorosilane	d	1000	1,000
00075785	Dimethyldichlorosilane	d, f	100	500
00075796	Methyltrichlorosilane	d, f	100	500
00076026	Trichloroacetyl chloride	d	100	500
00077818	Tabun	c, d, f	10	10
00078342	Dioxathion	d	100	500
00078535	Amiton	d	100	500
00078717	Oxetane, 3,3-bis(chloromethyl)-	i	100	500
00078820	Isobutyronitrile	d, f	1000	1,000
00078944	Methyl vinyl ketone	d	10	10
00078977	Lactonitrile	d	1000	1,000
00079061	Acrylamide	i	1000	1,000/10,000
00079118	Chloroacetic acid	d	100	100/10,000
00079210	Peracetic acid	d	10	500
00079221	Methyl chloroformate		100	500
00080637	Methyl 2-chloroacrylate	d	100	500
00082666	Diphacinone	d	10	10/10,000
00088051	Aniline, 2,4,6-trimethyl-	d	100	500
00088857	Dinoseb	T	100	
00097187	Phenol, 2,2'-thiobis(4,6-dichloro-	d	100	100/10,000
00098055	Benzenearsonic acid	d	10	10/10,000
00098135	Trichlorophenylsilane	d, f	100	500
00098168	Benzenamine, 3-(trifluoromethyl)-	d	100	500
00098873	Benzal chloride		100	500
00099989	Dimethyl-p-phenylenediamine	d	1	10/10,000
00100141	Benzene, 1-(chloromethyl)-4-nitro-	d	100	500/10,000
00102363	Isocyanic acid, 3,4-dichlorophenyl ester	d	100	500/10,000
00106887	Propargyl bromide	d	1	10
00107073	Chloroethanol	d	100	500
00107119	Allylamine	d	100	500

APPENDIX B

LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES

(CERCLA)

Act, or for the purposes of Section 104 of the Comprehensive Environmental Response, Compensation, and Liability Act or any other response action, any release of source, by-product, or special nuclear material from any processing site designated under section 102(a)(1) or 302(a) of the Uranium Mill Tailings Radiation Control Act of 1978, and (4) the normal application of fertilizer;

"reportable quantity" means that quantity, as set forth in this part, the release of which requires notification pursuant to this part;

"United States" include the several States of the United States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the United States Virgin Islands, the Commonwealth of the Northern Marianas, and any other territory or possession over which the United States has jurisdiction; and

"vessel" means every description of watercraft or other artificial contrivance used, or capable of being used, as a means of transportation on water.

§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.

Table 302.4 — List of Hazardous Substances and Reportable Quantities

Note — The numbers under the column headed "CASRN" are the Chemical Abstracts Service Registry Numbers for each hazardous substance. Other names by which each hazardous substance is identified in other statutes and their implementing regulations are provided in the "Regulatory Synonyms" column. The "Statutory RQ" column lists the RQs for hazardous substances established by section 102 of CERCLA. 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)(4) 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 RCRA section 3001. The "RCRA Waste Number" column provides the waste identification numbers assigned to various substances by RCRA regulations. The column headed "Category" lists the code letters "X," "A," "B," "C," and "D," which are associated with reportable quantities of 1, 10, 100, 1000, and 5000 pounds, respectively. The "Pounds (kg)" column provides the reportable quantity for each hazardous substance in pounds and kilograms.

TABLE 302.4 - LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES

Hazardous Substance	CASRN	Regulatory Synonyms	Statutory			Final RQ	
			RQ	Code	RCRA Waste Number	Category	Pounds (Kg)
Acenaphthene	83329		1*	2		B	100 (45.4)
Acenaphthylene	208968		1*	2		D	5000 (2270)
Acetaldehyde	75070	Ethanal	1000	1,4	U001	C	1000 (454)
Acetaldehyde, chloro-	107200	Chloroacetaldehyde	1*	4	P023	C	1000 (454)
Acetaldehyde, trichloro-	75876	Chloral	1*	4	U034	D	5000 (2270)
Acetamide, N-(aminothioxomethyl)-	591082	1-Acetyl-2-thiourea	1*	4	P002	C	1000 (454)
Acetamide, N-(4-ethoxyphenyl)-	62442	Phenacetin	1*	4	U187	B	100 (45.4)
Acetamide, N-9H-fluoren-2-yl-	53963	2-Acetylaminofluorene	1*	4	U005	X	1 (0.454)
Acetamide, 2-fluoro-	640197	Fluoroacetamide	1*	4	P057	B	100 (45.4)
Acetic acid	64197		1000	1		D	5000 (2270)
Acetic acid, ethyl ester	141786	Ethyl acetate	1*	4	U112	D	5000 (2270)
Acetic acid, fluoro-, sodium salt	62748	Fluoroacetic acid, sodium salt	1*	4	P058	A	10 (4.54)
Acetic acid, lead salt	301042	Lead acetate	5000	1,4	U144	D	5000# (2270)
Acetic acid, thallium(I) salt	563688	Thallium(I) acetate	1*	4	U214	B	100 (45.4)
Acetic anhydride	108247		1000	1		D	5000 (2270)

TABLE 302.4 LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES Continued

Hazardous Substance	CASRN	Regulatory Synonyms	Statutory			Final RQ	
			RQ	Code	RCRA Waste Number	Category	Pounds (Kg)
Acetimidic acid, N-[(methylcarbamoyl)oxy]thio-, methyl ester	16752775	Methomyl	1*	4	P066	B	100 (45.4)
Acetone	67641	2-Propanone	1*	4	U002	D	5000 (2270)
Acetone cyanohydrin	75865	Propanenitrile, 2-hydroxy-2-methyl-2-Methyllactonitrile	10	1,4	P069	A	10 (4.54)
Acetonitrile	75058	Ethanenitrile	1*	4	U003	D	5000 (2270)
3-(alpha-Acetonylbenzyl)-4-hydroxycoumarin and salts	81812	Warfarin	1*	4	P001	B	100 (45.4)
Acetophenone	98862	Ethanone, 1-phenyl-	1*	4	U004	D	5000 (2270)
2-Acetylaminofluorene	53963	Acetamide, N-9H-fluoren-2-yl-	1*	4	U005	X	1 (0.454)
Acetyl bromide	506967		5000	1		D	5000 (2270)
Acetyl chloride	75365	Ethanoyl chloride	5000	1,4	U006	D	5000 (2270)
1-Acetyl-2-thiourea	591082	Acetamide, N-(aminothioxomethyl)-	1*	4	P002	C	1000 (454)
Acrolein	107028	2-Propenal	1	1,2,4	P003	X	1 (0.454)
Acrylamide	79061	2-Propenamide	1*	4	U007	D	5000 (2270)
Acrylic acid	79107	2-Propenoic acid	1*	4	U008	D	5000 (2270)
Acrylonitrile	107131	2-Propenenitrile	100	1,2,4	U009	B	100 (45.4)
Adipic acid	124049		5000	1		D	5000 (2270)
Alanine, 3-[p-bis(2-chloroethyl)amino]phenyl-, L-	148823	Melphalan	1*	4	U150	X	1 (0.454)
Aldicarb	116063	Propanal, 2-methyl-2-(methylthio)-, O-[(methylamino) carbonyl]oxime	1*	4	P070	X	1 (0.454)
Aldrin	309002	1,2,3,4,10-10-Hexachloro-1,4,4a,5,8,8a-hexahydro-1,4,5,8-endo, exo-dimethanonaphthalene	1	1,2,4	P004	X	1 (0.454)
Allyl alcohol	107186	2-Propen-1-ol	100	1,4	P005	B	100 (45.4)
Allyl chloride	107051		1000	1		C	1000 (454)
Aluminum phosphide	20859738		1*	4	P006	B	100 (45.4)
Aluminum sulfate	10043013		5000	1		D	5000 (2270)
2-Amino-1-methyl benzene	95534	o-Toluidine	1*	4	U328	X	1# (0.454)
4-Amino-1-methyl benzene	106490	p-Toluidine	1*	4	U353	X	1# (0.454)
5-(Aminomethyl)-3-isoxazolol	2763964	3(2H)-isoxazolone, 5-(aminomethyl)-	1*	4	P007	C	1000 (454)
4-Aminopyridine	504245	4-Pyridinamine	1*	4	P008	C	1000 (454)
Amitrole	61825	1H-1,2,4-Triazol-3-amine	1*	4	U011	A	10 (4.54)
Ammonia	7664417		100	1		B	100 (45.4)
Ammonium acetate	631618		5000	1		D	5000 (2270)
Ammonium benzoate	1863634		5000	1		D	5000 (2270)
Ammonium bicarbonate	1066337		5000	1		D	5000 (2270)
Ammonium bichromate	7789095		1000	1		A	10 (4.54)
Ammonium bifluoride	1341497		5000	1		B	100 (45.4)
Ammonium bisulfite	10192300		5000	1		D	5000 (2270)
Ammonium carbamate	1111780		5000	1		D	5000 (2270)
Ammonium carbonate	506876		5000	1		D	5000 (2270)
Ammonium chloride	12125029		5000	1		D	5000 (2270)
Ammonium chromate	7788989		1000	1		A	10 (4.54)
Ammonium citrate, dibasic	3012655		5000	1		D	5000 (2270)
Ammonium fluoborate	13826830		5000	1		D	5000 (2270)
Ammonium fluoride	12125018		5000	1		B	100 (45.4)

TABLE 302.4 - LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES — Continued

Hazardous Substance	CASRN	Regulatory Synonyms	Statutory			Final RQ	
			RQ	Code	RCRA Waste Number	Category	Pounds (Kg)
Ammonium hydroxide	1336216		1000	1		C	1000 (454)
Ammonium oxalate	6009707 5972736 14258492		5000	1		D	5000 (2270)
Ammonium picrate	131748	Phenol, 2,4,6-trinitro-, ammonium salt	1*	4	P009	A	10 (4.54)
Ammonium silicofluoride	16919190		1000	1		C	1000 (454)
Ammonium sulfamate	7773060		5000	1		D	5000 (2270)
Ammonium sulfide	12135761		5000	1		B	100 (45.4)
Ammonium sulfite	10196040		5000	1		D	5000 (2270)
Ammonium tartrate	14307438 3164292		5000	1		D	5000 (2270)
Ammonium thiocyanate	1762954		5000	1		D	5000 (2270)
Ammonium vanadate	7803556	Vanadic acid, ammonium salt	1*	4	P119	C	1000 (454)
Amyl acetate iso- sec- tert-	628637 123922 626380 625161		1000	1		D	5000 (2270)
Aniline	62533	Benzenamine	1000	1,4	U012	D	5000 (2270)
Anthracene	120127		1*	2		D	5000 (2270)
Antimony ††	7440360		1*	2		D	5000 (2270)
ANTIMONY AND COMPOUNDS			1*	2			**
Antimony pentachloride	7647189		1000	1		C	1000 (454)
Antimony potassium tartrate	28300745		1000	1		B	100 (45.4)
Antimony tribromide	7789619		1000	1		C	1000 (454)
Antimony trichloride	10025919		1000	1		C	1000 (454)
Antimony trifluoride	7783564		1000	1		C	1000 (454)
Antimony trioxide	1309644		5000	1		C	1000 (454)
Aroclor 1016	12674112	Polychlorinated Biphenyls (PCBs)	10	1,2		X	1 (0.454)
Aroclor 1221	11104282	Polychlorinated Biphenyls (PCBs)	10	1,2		X	1 (0.454)
Aroclor 1232	11141165	Polychlorinated Biphenyls (PCBs)	10	1,2		X	1 (0.454)
Aroclor 1242	53469219	Polychlorinated Biphenyls (PCBs)	10	1,2		X	1 (0.454)
Aroclor 1248	12672296	Polychlorinated Biphenyls (PCBs)	10	1,2		X	1 (0.454)
Aroclor 1254	11097691	Polychlorinated Biphenyls (PCBs)	10	1,2		X	1 (0.454)
Aroclor 1260	11096825	Polychlorinated Biphenyls (PCBs)	10	1,2		X	1 (0.454)
Arsenic ††	7440382		1*	2,3		X	1 (0.454)
Arsenic acid	1327522 7778394		1*	4	P010	X	1 (0.454)
ARSENIC AND COMPOUNDS			1*	2			**
Arsenic disulfide	1303328		5000	1		X	1 (0.454)
Arsenic(III) oxide	1327533	Arsenic trioxide	5000	1,4	P012	X	1 (0.454)
Arsenic(V) oxide	1303282	Arsenic pentoxide	5000	1,4	P011	X	1 (0.454)
Arsenic pentoxide	1303282	Arsenic(V) oxide	5000	1,4	P011	X	1 (0.454)
Arsenic trichloride	7784341		5000	1		X	1 (0.454)
Arsenic trioxide	1327533	Arsenic(III) oxide	5000	1,4	P012	X	1 (0.454)
Arsenic trisulfide	1303339		5000	1		X	1 (0.454)
Arsine, diethyl-	692422	Diethylarsine	1*	4	P038	X	1 (0.454)
Asbestos †††	1332214		1*	2,3		X	1 (0.454)

TABLE 302.4 - LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES — Continued

Hazardous Substance	CASRN	Regulatory Synonyms	Statutory			Final RQ	
			RQ	Code	RCRA Waste Number	Category	Pounds (Kg)
Auramine	492808	Benzenamine, 4,4'-carbonimidoyibis(N,N-dimethyl-	1*	4	U014	B	100 (45.4)
Azaserine	115026	L-Serine, diazoacetate (ester)	1*	4	U015	X	1 (0.454)
Azindine	151564	Ethylenimine	1*	4	P054	X	1 (0.454)
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-	50077	Mitomycin C	1*	4	U010	A	10 (4.54)
Barium cyanide	542621		10	1,4	P013	A	10 (4.54)
Benz[j]aceanthrylene, 1,2-dihydro-3-methyl-	56495	3-Methylcholanthrene	1*	4	U157	A	10 (4.54)
Benz[c]acridine	225514	3,4-Benzacridine	1*	4	U016	B	100 (45.4)
3,4-Benzacridine	225514	Benz[c]acridine	1*	4	U016	X	1# (0.454)
Benzal chloride	98873	Benzene, dichloromethyl-	1*	4	U017	D	5000 (2270)
Benz[a]anthracene	58553	1,2-Benzanthracene Benzo[a]anthracene	1*	2,4	U018	A	10 (4.54)
1,2-Benzanthracene	56553	Benz[a]anthracene Benzo[a]anthracene	1*	2,4	U016	A	10 (4.54)
1,2-Benzathracene, 7,12-dimethyl-	57976	7,12-Dimethylbenz[a] anthracene	1*	4	U094	X	1 (0.454)
Benzenamine	62533	Aniline	1000	1,4	U012	D	5000 (2270)
Benzenamine, 4,4'-carbonimidoylbis(N,N-dimethyl-	492808	Auramine	1*	4	U014	B	100 (45.4)
Benzenamine, 4-chloro-	106478	p-Chloroaniline	1*	4	P024	C	1000 (454)
Benzenamine, 4-chloro-2-methyl-,hydrochloride	3165933	4-Chloro-o-toluidine, hydrochloride	1*	4	U049	B	100 (45.4)
Benzenamine, N,N-dimethyl-4-phenylazo-	60117	Dimethylaminoazobenzene	1*	4	U093	A	10 (4.54)
Benzenamine, 4,4'-methylenebis(2-chloro-	101144	4,4'-Methylenebis(2-chloroaniline)	1*	4	U158	A	10 (4.54)
Benzenamine,2-methyl-, hydrochloride	636215	o-Toluidine hydrochloride	1*	4	U222	B	100 (45.4)
Benzenamine,2-methyl-5-nitro-	99558	5-Nitro-o-toluidine	1*	4	U181	B	100 (45.4)
Benzenamine,4-nitro-	100016	p-Nitroaniline	1*	4	P077	D	5000 (2270)
Benzene	71432		1000	1,2,3,4	U019	A	10 (4.54)
Benzene, 1-bromo-4-phenoxy-	101553	4-Bromophenyl phenyl ether	1*	2,4	U030	B	100 (45.4)
Benzene, chloro-	108907	Chlorobenzene	100	1,2,4	U037	B	100 (45.4)
Benzene, chloromethyl-	100447	Benzyl chloride	100	1,4	P028	B	100 (45.4)
Benzene, 1,2-dichloro-	95501	1,2-Dichlorobenzene o-Dichlorobenzene	100	1,2,4	U070	B	100 (45.4)
Benzene, 1,3-dichloro-	541731	1,3-Dichlorobenzene m-Dichlorobenzene	1*	2,4	U071	B	100 (45.4)
Benzene, 1,4-dichloro-	106467	1,4-Dichlorobenzene p-Dichlorobenzene	100	1,2,4	U072	B	100 (45.4)
Benzene, dichloromethyl-	98873	Benzal chloride	1*	4	U017	D	5000 (2270)
Benzene, 2,4-diisocyanatomethyl-	584849 91087 26471625	Toluene diisocyanate	1*	4	U223	B	100 (45.4)

TABLE 302.4 - LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES — Continued

Hazardous Substance	CASRN	Regulatory Synonyms	Statutory			Final RQ	
			RQ	Code	RCRA Waste Number	Category	Pounds (Kg)
Benzene, dimethyl	1330207	Xylene	1000	1,4	U239	C	1000 (454)
m-	108383	m-					
o-	95476	o-					
p-	106423	p-					
Benzene, hexachloro-	118741	Hexachlorobenzene	1*	2,4	U127	A	10 (4 54)
Benzene, hexahydro-	110827	Cyclohexane	1000	1,4	U056	C	1000 (454)
Benzene, hydroxy-	108952	Phenol	1000	1,2,4	U188	C	1000 (454)
Benzene, methyl-	108883	Toluene	1000	1,2,4	U220	C	1000 (454)
Benzene, 1-methyl-2,4-dinitro-	121142	2,4-Dinitrotoluene	1000	1,2,4	U105	B	100 (45 4)
Benzene, 1-methyl-2,6-dinitro-	606202	2,6-Dinitrotoluene	1000	1,2,4	U106	C	1000# (454)
Benzene, 1,2-methylenedioxy-4-allyl-	94597	Safrole	1*	4	U203	X	1# (0 454)
Benzene, 1,2-methylenedioxy-4-propenyl-	120581	Isosafrole	1*	4	U141	X	1# (0 454)
Benzene, 1,2-methylenedioxy-4-propyl-	94586	Dihydrosafrole	1*	4	U090	X	1# (0 454)
Benzene, 1-methylethyl-	98828	Cumene	1*	4	U055	D	5000 (2270)
Benzene, nitro-	98953	Nitrobenzene	1000	1,2,4	U169	C	1000 (454)
Benzene, pentachloro-	608935	Pentachlorobenzene	1*	4	U183	A	10 (4 54)
Benzene, pentachloronitro-	82688	Pentachloronitrobenzene	1*	4	U185	B	100 (45 4)
Benzene, 1,2,4,5-tetrachloro-	95943	1,2,4,5-Tetrachlorobenzene	1*	4	U207	D	5000 (2270)
Benzene, trichloromethyl-	98077	Benzotrichloride	1*	4	U023	A	10 (4 54)
Benzene, 1,3,5-trinitro-	99354	sym-Trinitrobenzene	1*	4	U234	A	10 (4 54)
Benzeneacetic acid, 4-chloro-alpha-(4-chlorophenyl)-alpha-hydroxy-, ethyl ester	510156	Ethyl 4,4'-dichlorobenzilate	1*	4	U038	A	10 (4 54)
1,2-Benzenedicarboxylic acid anhydride	85449	Phthalic anhydride	1*	4	U190	D	5000 (2270)
1,2-Benzenedicarboxylic acid, [bis(2-ethylhexyl)]ester	117817	Bis(2-ethylhexyl)phthalate	1*	2,4	U028	B	100 (45 4)
1,2-Benzenedicarboxylic acid, dibutyl ester	84742	n-Butyl phthalate Dibutyl phthalate Di-n-butyl phthalate	100	1,2,4	U069	A	10 (4 54)
1,2-Benzenedicarboxylic acid, diethyl ester	84662	Diethyl phthalate	1*	2,4	U088	C	1000 (454)
1,2-Benzenedicarboxylic acid, dimethyl ester	131113	Dimethyl phthalate	1*	2,4	U102	D	5000 (2270)
1,2-Benzenedicarboxylic acid, di-n-octyl ester	117840	Di-n-octyl phthalate	1*	2,4	U107	D	5000 (2270)
1,3-Benzenediol	108463	Resorcinol	1000	1,4	U201	D	5000 (2270)
1,2-Benzenediol,4-[1-hydroxy-2-(methylamino)ethyl]-	51434	Epinephrine	1*	4	P042	C	1000 (454)
Benzenesulfonic acid chloride	98099	Benzenesulfonyl chloride	1*	4	U020	B	100 (45 4)
Benzenesulfonyl chloride	98099	Benzenesulfonic acid chloride	1*	4	U020	B	100 (45 4)
Benzenethiol	108985	Thiophenol	1*	4	P014	B	100 (45 4)
Benzidine	92875	(1,1'-Biphenyl)-4,4'-diamine	1*	2,4	U021	X	1 (0 454)
1,2-Benzisothiazolin-3-one,1,1-dioxide, and salts	81072	Saccharin and salts	1*	4	U202	X	1# (0 454)
Benzo[a]anthracene	56553	Benz[a]anthracene 1,2-Benzanthracene	1*	2,4	U018	A	10 (4 54)
Benzo[b]fluoranthene	205992		1*	2		X	1 (0 454)
Benzo[k]fluoranthene	207089		1*	2		D	5000 (2270)
Benzo[j,k]fluorene	206440	Fluoranthene	1*	2,4	U120	B	100 (45 4)
Benzoic acid	65850		5000	1		D	5000 (2270)

TABLE 302 4 - LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES — Continued

Hazardous Substance	CASRN	Regulatory Synonyms	Statutory			Final RQ	
			RQ	Code	RCRA Waste Number	Category	Pounds (Kg)
Benzonitrile	100470		1000	1		D	5000 (2270)
Benzo(ghi)perylene	191242		1*	2		D	5000 (2270)
Benzo(a)pyrene	50328	3,4-Benzopyrene	1*	2,4	U022	X	1 (0 454)
3,4-Benzopyrene	50328	Benzo[a]pyrene	1*	2,4	U022	X	1 (0 454)
p-Benzoquinone	106514	1,4-Cyclohexadienedione	1*	4	U197	A	10 (4 54)
Benzotrichloride	98077	Benzene, trichloromethyl-	1*	4	U023	A	10 (4 54)
Benzoyl chloride	98884		1000	1		C	1000 (454)
1,2-Benzphenanthrene	218019	Chrysene	1*	2,4	U050	B	100 (45 4)
Benzyl chloride	100447	Benzene, chloromethyl-	100	1,4	P028	B	100 (45 4)
Beryllium ††	7440417	Beryllium dust	1*	2,3,4	P015	B	100 (45 4)
BERYLLIUM AND COMPOUNDS			1*	2			••
Beryllium chloride	7787475		5000	1		X	1 (0 454)
Beryllium dust	7440417	Beryllium	1*	2,3,4	P015	A	10 (4 54)
Beryllium fluoride	7787497		5000	1		X	1 (0 454)
Beryllium nitrate	13597994 7787555		5000	1		X	1 (0 454)
alpha - BHC	319846		1*	2		A	10 (4 54)
beta - BHC	319857		1*	2		X	1 (0 454)
gamma - BHC	58899	Hexachlorocyclohexane (gamma isomer) Lindane	1	1,2,4	U129	X	1 (0.454)
delta - BHC	319868		1*	2		X	1 (0.454)
2,2'-Bioxirane	1464535	1,2,3,4-Diepoxybutane	1*	4	U085	A	10 (4.54)
[1,1'-Biphenyl]-4,4'-diamine	92875	Benzidine	1*	2,4	U021	X	1 (0.454)
[1,1'-Biphenyl]-4,4'-diamine 3,3'dichloro-	91941	3,3'-Dichlorobenzidine	1*	2,4	U073	X	1 (0 454)
[1,1'-Biphenyl]-4,4'-diamine 3,3'-dimethoxy-	119904	3,3'-Dimethoxybenzidine	1*	4	U091	B	100 (45 4)
[1,1'-Biphenyl]-4,4'-diamine 3,3'-dimethyl-	119937	3,3'-Dimethylbenzidine	1*	4	U095	A	10 (4 54)
Bis(2-chloroethoxy) methane	111911	Ethane, 1,1'-[methylenebis (oxy)]bis(2-chloro-	1*	2,4	U024	C	1000 (454)
Bis(2-chloroethyl) ether	111444	Dichloroethyl ether Ethane, 1,1'-oxybis(2-chloro-	1*	2,4	U025	A	10 (4 54)
Bis(2-chloroisopropyl) ether	108601	Propane, 2,2'-oxybis (2-chloro-	1*	2,4	U027	C	1000 (454)
Bis(chloromethyl) ether	542881	Methane, oxybis(chloro-	1*	4	P016	X	1# (0 454)
Bis(dimethylthiocarbamoyl) disulfide	137268	Thiram	1*	4	U244	A	10 (4 54)
Bis(2-ethylhexyl)phthalate	117817	1,2-Benzenedicarboxylic acid, [bis(2-ethylhexyl)] ester	1*	2,4	U028	B	100 (45 4)
Bromine cyanide	506683	Cyanogen bromide	1*	4	U246	C	1000 (454)
Bromoacetone	598312	2-Propanone, 1-bromo-	1*	4	P017	C	1000 (454)
Bromoform	75252	Methane, tribromo-	1*	2,4	U225	B	100 (45 4)
4-Bromophenyl phenyl ether	101563	Benzene, 1-bromo-4-phenoxy-	1*	2,4	U030	B	100 (45 4)
Brucine	357573	Strychnidin-10-one, 2,3-dimethoxy-	1*	4	P018	B	100 (45 4)
1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	87683	Hexachlorobutadiene	1*	2,4	U128	X	1 (0 454)
1-Butanamine, N-butyl-N-nitroso-	924163	N-Nitrosodi-n-butylamine	1*	4	U172	A	10 (4 54)
Butanoic acid, 4-[bis(2-chloroethyl)amino]benzene	305033	Chlorambucil	1*	4	U035	X	1# (0 454)
1-Butanol	71363	n-Butyl alcohol	1*	4	U031	D	5000 (2270)
2-Butanone	78933	Methyl ethyl ketone	1*	4	U159	D	5000 (2270)
2-Butanone peroxide	1338234	Methyl ethyl ketone peroxide	1*	4	U160	A	10 (4 54)

TABLE 302 4 · LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES — Continued

Hazardous Substance	CASRN	Regulatory Synonyms	Statutory			Final RQ	
			RQ	Code	RCRA Waste Number	Category	Pounds (Kg)
2-Butenal	123739 4170303	Crotonaldehyde	100	1,4	U053	B	100 (45 4)
2-Butene, 1,4-dichloro-	764410	1,4-Dichloro-2-butene	1*	4	U074	X	1 (0 454)
Butyl acetate iso- sec- tert-	123864 110190 105464 540885		5000	1		D	5000 (2270)
n-Butyl alcohol	71363	1-Butanol	1*	4	U031	D	5000 (2270)
Butylamine iso- sec- sec- tert-	109739 78819 513495 13952846 75649		1000	1		C	1000 (454)
Butyl benzyl phthalate	85687		1*	2		B	100 (45 4)
n-Butyl phthalate	84742	1,2-Benzenedicarboxylic acid,dibutyl ether Dibutyl phthalate Di-n-butyl phthalate	100	1,2,4	U069	A	10 (4 54)
Butyric acid iso-	107926 79312		5000	1		D	5000 (2270)
Cacodylic acid	75605	Hydroxydimethylarsine oxide	1*	4	U136	X	1 (0 454)
Cadmium ††	7440439		1*	2		A	10 (4 54)
Cadmium acetate	543908		100	1		A	10 (4 54)
CADMIUM AND COMPOUNDS			1*	2			**
Cadmium bromide	7789426		100	1		A	10 (4 54)
Cadmium chloride	10108642		100	1		A	10 (4 54)
Cadmium arsenate	7778441		1000	1		X	1 (0 454)
Calcium arsenite	52740166		1000	1		X	1 (0 454)
Calcium carbide	75207		5000	1		A	10 (4 54)
Calcium chromate	13765190	Chromic acid, calcium salt	1000	1,4	U032	A	10 (4 54)
Calcium cyanide	592018		10	1,4	P021	A	10 (4 54)
Calcium dodecylbenzene sulfonate	26264062		1000	1		C	1000 (454)
Calcium hyprochlorite	7778543		100	1		A	10 (4 54)
Camphene, octachloro-	8001352	Toxaphene	1	1,2,4	P123	X	1 (0 454)
Captan	133062		10	1		A	10# (4 54)
Carbamic acid, ethyl ester	51796	Ethyl carbamate (Urethan)	1*	4	U238	B	100 (45 4)
Carbamic acid, methyl-nitroso-, ethyl ester	615532	N-Nitroso-N-methylurethane	1*	4	U178	X	1 (0 454)
Carbamide, N-ethyl-N-nitroso-	759739	N-Nitroso-N-ethylurea	1*	4	U176	X	1# (0 454)
Carbamide, N-methyl-N-nitroso-	684935	N-Nitroso-N-methylurea	1*	4	U177	X	1# (0 454)
Carbamide, thio-	62566	Thiourea	1*	4	U219	X	1# (0 454)
Carbamimidoselenoic acid	630104	Selenourea	1*	4	P103	C	1000 (454)
Carbamoyl chloride, dimethyl-	79447	Dimethylcarbamoyl chloride	1*	4	U097	X	1 (0 454)
Carbaryl	63252		100	1		B	100 (45 4)
Carboluran	1563662		10	1		A	10 (4 54)
Carbon bisulfide	75150	Carbon disulfide	5000	1,4	P022	B	100 (45 4)
Carbon disulfide	75150	Carbon bisulfide	5000	1,4	P022	B	100 (45 4)
Carbonic acid, dithallium (I) salt	6533739	Thallium(I) carbonate	1*	4	U215	B	100 (45 4)
Carbonochloridic acid, methyl ester	79221	Methyl chlorocarbonate	1*	4	U156	C	1000 (454)
Carbon oxyfluoride	353504	Carbonyl fluoride	1*	4	U033	C	1000 (454)
Carbon tetrachloride	56235	Methane, tetrachloro-	5000	1,2,4	U211	A	10 (4 54)

TABLE 302.4 - LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES — Continued

Hazardous Substance	CASRN	Regulatory Synonyms	Statutory			Final RQ	
			RQ	Code	RCRA Waste Number	Category	Pounds (Kg)
Carbonyl chloride	75445	Phosgene	5000	1,4	P095	A	10 (4.54)
Carbonyl fluoride	353504	Carbon oxyfluoride	1*	4	U033	C	1000 (454)
Chloral	75876	Acetaldehyde, trichloro-	1*	4	U034	D	5000 (2270)
Chlorambucil	305033	Butanoic acid, 4-[bis(2-chloroethyl)amino] benzene-	1*	4	U035	A	10 (4.54)
CHLORDANE (TECHNICAL MIXTURE AND METABOLITES).			1*	2			**
Chlordane	57749	Chlordane, technical 4,7-Methanoindan, 1,2,4,5,6,7,8,8-octachloro-3a,4,7,7a-tetrahydro-	1	1,2,4	U036	X	1 (0.454)
Chlordane, technical	57749	Chlordane 4,7-Methanoindan, 1,2,4,5,6,7,8,8-octachloro-3a,4,7,7a-tetrahydro-	1	1,2,4	U036	X	1 (0.454)
CHLORINATED BENZENES			1*	2			**
CHLORINATED ETHANES			1*	2			**
CHLORINATED NAPHTHALENE			1*	2			**
CHLORINATED PHENOLS			1*	2			**
Chlorine	7782505		10	1		A	10 (4.54)
Chlorine cyanide	506774	Cyanogen chloride	10	1,4	P033	A	10 (4.54)
Chlornaphazine	494031	2-Naphthylamine, N,N-bis (2-chloroethyl)-	1*	4	U026	B	100 (45.4)
Chloroacetaldehyde	107200	Acetaldehyde, chloro-	1*	4	P023	C	1000 (454)
CHLOROALKYL ETHERS			1*	2			**
p-Chloroaniline	106478	Benzenamine, 4-chloro-	1*	4	P024	C	1000 (454)
Chlorobenzene	108907	Benzene, chloro-	100	1,2,4	U037	B	100 (45.4)
4-Chloro-m-cresol	59507	p-Chloro-m-cresol Phenol, 4-chloro-3-methyl-	1*	2,4	U039	D	5000 (2270)
p-Chloro-m-cresol	59507	4-Chloro-m-cresol Phenol, 4-chloro-3-methyl-	1*	2,4	U039	D	5000 (2270)
Chlorodibromomethane	124481	.....	1*	2		B	100 (45.4)
1-Chloro-2,3-epoxypropane	106898	Epichlorohydrin Oxirane, 2-(chloromethyl)-	1000	1,4	U041	C	1000# (454)
Chloroethane	75003	.....	1*	2		B	100 (45.4)
2-Chloroethyl vinyl ether	110758	Ethene, 2-chloroethoxy-	1*	2,4	U042	C	1000 (454)
Chloroform	67663	Methane, trichloro-	5000	1,2,4	U044	A	10 (4.54)
Chloromethyl methyl ether	107302	Methane, chloromethoxy-	1*	4	U046	A	10 (4.54)
beta-Chloronaphthalene	91587	2-Chloronaphthalene Naphthalene, 2-chloro-	1*	2,4	U047	D	5000 (2270)
2-Chloronaphthalene	91587	beta-Chloronaphthalene Naphthalene, 2-chloro-	1*	2,4	U047	D	5000 (2270)
2-Chlorophenol	95578	o-Chlorophenol Phenol, 2-chloro-	1*	2,4	U048	B	100 (45.4)
o-Chlorophenol	95578	2-Chlorophenol Phenol, 2-chloro-	1*	2,4	U048	B	100 (45.4)
4-Chlorophenyl phenyl ether	7005723		1*	2		D	5000 (2270)
1-(o-Chlorophenyl)thiourea	5344821	Thiourea, (2-chlorophenyl)-	1*	4	P026	B	100 (45.4)
3-Chloropropionitrile	542767	Propanenitrile, 3-chloro-	1*	4	P027	C	1000 (454)
Chlorosulfonic acid	7790945		1000	1		C	1000 (454)
4-Chloro-o-toluidine, hydrochloride	3165933	Benzenamine, 4-chloro-2-methyl hydrochloride	1*	4	U049	B	100 (45.4)
Chlorpyrifos	2921882		1	1		X	1 (0.454)
Chromic acetate	1066304		1000	1		C	1000 (454)

TABLE 302 4 - LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES - Continued

Hazardous Substance	CASRN	Regulatory Synonyms	Statutory			Final RQ	
			RQ	Code	RCRA Waste Number	Category	Pounds (Kg)
Chromic acid	11115745 7738945		1000	1		A	10 (4 54)
Chromic acid, calcium salt	13765190	Calcium chromate	1000	1,4	U032	A	10 (4 54)
Chromic sulfate	10101538		1000	1		C	1000 (454)
Chromium ††	7440473		1*	2		D	5000 (2270)
CHROMIUM AND COMPOUNDS			1*	2			**
Chromous chloride	10049055		1000	1		C	1000 (454)
Chrysene	218019	1,2-Benzphenanthrene	1*	2,4	U050	B	100 (45 4)
Cobaltous bromide	7789437		1000	1		C	1000 (454)
Cobaltous formate	544183		1000	1		C	1000 (454)
Cobaltous sulfamate	14017415		1000	1		C	1000 (454)
Coke Oven Emissions	N A		1*	3		X	1 (0 454)
Copper ††	7440508		1*	2		D	5000 (2270)
COPPER AND COMPOUNDS			1*	2			**
Copper cyanide	544923		1*	4	P029	A	10 (4 54)
Coumaphos	56724		10	1		A	10 (4 54)
Creosote	8001589		1*	4	U051	X	1 (0 454)
Cresol(s) m- o- p-	1319773 108394 95487 106445	Cresylic acid	1000	1,4	U052	C	1000# (454)
Cresylic acid m- o- p-	1319773 108394 95487 106445	Cresol(s)	1000	1,4	U052	C	1000# (454)
Crotonaldehyde	123739 4170303	2-Butenal	100	1,4	U053	B	100 (45 4)
Cumene	98828	Benzene, 1-methylethyl-	1*	4	U055	D	5000 (2270)
Cupric acetate	142712		100	1		B	100 (45 4)
Cupric acetoarsenite	12002038		100	1		X	1 (0 454)
Cupric chloride	7447394		10	1		A	10 (4 54)
Cupric nitrate	3251238		100	1		B	100 (45 4)
Cupric oxalate	5893663		100	1		B	100 (45 4)
Cupric sulfate	7758987		10	1		A	10 (4 54)
Cupric sulfate ammoniated	10380297		100	1		B	100 (45 4)
Cupric tartrate	815827		100	1		B	100 (45 4)
CYANIDES			1*	2			**
Cyanides (soluble cyanide salts), not elsewhere specified	57125		1*	4	P030	A	10 (4 54)
Cyanogen	460195		1*	4	P031	B	100 (45 4)
Cyanogen bromide	506683	Bromine cyanide	1*	4	U246	C	1000 (454)
Cyanogen chloride	506774	Chlorine cyanide	10	1,4	P033	A	10 (4 54)
1,4-Cyclohexadienedione	106514	p-Benzoquinone	1*	4	U197	A	10 (4 54)
Cyclohexane	110827	Benzene, hexahydro-	1000	1,4	U056	C	1000 (454)
Cyclohexanone	108941		1*	4	U057	D	5000 (2270)
1,3-Cyclopentadiene 1,2,3,4,5,5-hexachloro-	77474	Hexachlorocyclopentadiene	1	1,2,4	U130	A	10 (4 54)
Cyclophosphamide	50180	2H-1,3,2-Oxazaphosphorine, 2-[bis(2-chloroethyl)amino] tetrahydro-2-oxide	1*	4	U058	A	10 (4 54)
2,4-D Acid	94757	2,4-D, salts and esters 2,4-Dichlorophenoxyacetic acid, salts and esters	100	1,4	U240	B	100 (45 4)

TABLE 302.4 · LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES — Continued

Hazardous Substance	CASRN	Regulatory Synonyms	Statutory			Final RQ	
			RQ	Code	RCRA Waste Number	Category	Pounds (Kg)
2,4-D Esters	94111 94791 94804 1320189 1928387 1928616 1929733 2971382 25168267 53467111		100	1		B	100 (45.4)
2,4-D, salts and esters	94757	2,4-D Acid 2,4-Dichlorophenoxyacetic acid, salts and esters	100	1,4	U240	B	100 (45.4)
Daunomycin	20830813	5,12-Naphthacenedione, (6S-cis)-8-acetyl-10-[3-amino-2,3,6-trideoxy-alpha-L-lyxe-hexopyranosyl)oxy]-7,8,9,10-tetrahydro-6,8,11-trihydroxy-1-methoxy-	1*	4	U059	A	10 (4.54)
DDD	72548	4,4'-DDD Dichlorodiphenyl dichloroethane TDE	1	1,2,4	U060	X	1 (0.454)
4,4'-DDD	72548	DDD Dichlorodiphenyl dichloroethane TDE	1	1,2,4	U060	X	1 (0.454)
DDE	72559	4,4' DDE	1*	2		X	1 (0.454)
4,4' DDE	72559	DDE	1*	2		X	1 (0.454)
DDT	50293	4,4' DDT Dichlorodiphenyl trichloroethane	1	1,2,4	U061	X	1 (0.454)
4,4' DDT	50293	DDT Dichlorodiphenyl trichloroethane	1	1,2,4	U061	X	1 (0.454)
DDT AND METABOLITES			1*	2			**
Decachlorooctahydro-1,3,4-metheno-2H-cyclobuta[c,d]-pentalen-2-one	143500	Kepone	1	1,4	U142	X	1# (0.454)
Diallate	2303164	S-(2,3-Dichloroallyl) diisopropylthiocarbamate	1*	4	U062	B	100 (45.4)
Diamine	302012	Hydrazine	1*	4	U133	X	1# (0.454)
Diaminotoluene	95807 25376458 496720 823405	Toluenediamine	1*	4	U221	X	1# (0.454)
Diazinon	5333415		1	1		X	1 (0.454)
Dibenz[a,h]anthracene	53703	1,2 5,6-Dibenzanthracene Dibenzo[a,h]anthracene	1*	2,4	U063	X	1 (0.454)
1,2 5,6-Dibenzanthracene	53703	Dibenz[a,h]anthracene Dibenzo[a,h]anthracene	1*	2,4	U063	X	1 (0.454)
Dibenzo[a,h]anthracene	53703	Dibenz[a,h]anthracene 1,2 5,6-Dibenzanthracene	1*	2,4	U063	X	1 (0.454)
1,2 7,8-Dibenzopyrene	189559	Dibenz[a,i]pyrene	1*	4	U064	A	10 (4.54)
Dibenz[a,i]pyrene	189559	1,2 7,8-Dibenzopyrene	1*	4	U064	A	10 (4.54)
1,2-Dibromo-3-chloropropane	96128	Propane, 1,2-dibromo-3-chloro-	1*	4	U066	X	1 (0.454)
Dibutyl phthalate	84742	1,2-Benzenedicarboxylic acid, dibutyl ester Di-n-butyl phthalate n-Butyl phthalate	100	1,2,4	U069	A	10 (4.54)

TABLE 302 4 · LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES — Continued

Hazardous Substance	CASRN	Regulatory Synonyms	Statutory			Final RQ	
			RQ	Code	RCRA Waste Number	Category	Pounds (Kg)
Di-n-butyl phthalate	84742	1,2-Benzenedicarboxylic acid, dibutyl ester n-butyl phthalate Dibutyl phthalate	100	1,2,4	U069	A	10 (4 54)
Dicamba	1918009		1000	1		C	1000 (454)
Dichlobenil	1194658		1000	1		B	100 (45 4)
Dichlone	117606		1	1		X	1 (0 454)
S-(2,3-Dichloroallyl) diisopropylthiocarbamate	2303164	Diallate	1*	4	U062	X	1# (0 454)
3,5-Dichloro-N-(1,1-dimethyl-2-propynyl)benzamide	23950585	Pronamide	1*	4	U192	D	5000 (2270)
Dichlorobenzene (mixed)	25321226		100	1		B	100 (45 4)
1,2-Dichlorobenzene	95501	Benzene, 1,2-dichloro- o-Dichlorobenzene	100	1,2,4	U070	B	100 (45 4)
1,3-Dichlorobenzene	541731	Benzene, 1,3-dichloro- m-Dichlorobenzene	1*	2,4	U071	B	100 (45 4)
1,4-Dichlorobenzene	106467	Benzene, 1,4-dichloro- p-Dichlorobenzene	100	1,2,4	U072	B	100 (45 4)
m-Dichlorobenzene	541731	Benzene, 1,3-dichloro- 1,3-Dichlorobenzene	1*	2,4	U071	B	100 (45 4)
o-Dichlorobenzene	95501	Benzene, 1,2-dichloro- 1,2-Dichlorobenzene	100	1,2,4	U070	B	100 (45 4)
p-Dichlorobenzene	106467	Benzene, 1,4-dichloro- 1,4-Dichlorobenzene	100	1,2,4	U072	B	100 (45 4)
DICHLOROBENZIDINE			1*	2			**
3,3'-Dichlorobenzidine	91941	(1,1'-Biphenyl)-4,4'-diamine,3,3' dichloro-	1*	2,4	U073	X	1 (0 454)
Dichlorobromomethane	75274		1*	2		D	5000 (2270)
1,4-Dichloro-2-butene	764410	2-Butene, 1,4-dichloro-	1*	4	U074	X	1 (0 454)
Dichlorodifluoromethane	75718	Methane, dichlorodifluoro-	1*	4	U075	D	5000 (2270)
Dichlorodiphenyl dichloroethane	72548	DDD 4,4' DDD TDE	1	1,2,4	U060	X	1# (0 454)
Dichlorodiphenyl trichloroethane	50293	DDT 4,4' DDT	1	1,2,4	U061	X	1# (0 454)
1,1-Dichloroethane	75343	Ethane, 1,1-dichloro- Ethylidene dichloride	1*	2,4	U076	C	1000 (454)
1,2-Dichloroethane	107062	Ethane, 1,2-dichloro- Ethylene dichloride	5000	1,2,4	U077	B	100 (45 4)
1,1-Dichloroethylene	75354	Ethane, 1,1-dichloro- Vinylidene chloride	5000	1,2,4	U078	B	100 (45 4)
1,2-trans-Dichloroethylene	156605	Ethene, trans-1,2-dichloro-	1*	2,4	U079	C	1000 (454)
Dichloroethyl ether	111444	Bis (2-chloroethyl) ether Ethane, 1,1'-oxybis(2-chloro-	1*	2,4	U025	A	10 (4 54)
2,4-Dichlorophenol	120832	Phenol, 2,4-dichloro-	1*	2,4	U081	B	100 (45 4)
2,6-Dichlorophenol	87650	Phenol, 2,6-dichloro-	1*	4	U082	B	100 (45 4)
2,4-Dichlorophenoxyacetic acid, salts and esters	94757	2,4-D Acid 2,4-D, salts and esters	100	1,4	U240	B	100 (45 4)
Dichlorophenylarsine	696286	Phenyl dichloroarsine	1*	4	P036	X	1 (0 454)
Dichloropropane	26638197		5000	1		C	1000 (454)
1,1-Dichloropropane	78999						
1,3-Dichloropropane	142289						
1,2-Dichloropropane	78875	Propylene dichloride	5000	1,2,4	U083	C	1000 (454)
Dichloropropane - Dichloropropene (mixture)	8003198		5000	1		B	100 (45 4)
Dichloropropene(s)	26952238		5000	1		B	100 (45 4)
2,3-Dichloropropene	78886						

TABLE 302 4 - LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES — Continued

Hazardous Substance	CASRN	Regulatory Synonyms	Statutory			Final RQ	
			RQ	Code	RCRA Waste Number	Category	Pounds (Kg)
1,3-Dichloropropene	542756	Propene, 1,3-dichloro-	5000	1,2,4	U084	B	100 (45 4)
2,2-Dichloropropionic acid	75990		5000	1		D	5000 (2270)
Dichlorvos	62737		10	1		A	10 (4 54)
Dicofol	115322		5000	1		A	10 (4 54)
Dieldrin	60571	1,2,3,4,10,10-Hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-endo,exo-1,4 5,8-dimethanonaphthalene	1	1,2,4	P037	X	1 (0 454)
1,2,3,4-Diepoxybutane	1464535	2,2'-Bioxirane	1*	4	U085	A	10 (4 54)
Diethylamine	109897		1000	1		B	100 (45 4)
Diethylarsine	692422	Arsine, diethyl-	1*	4	P038	X	1 (0 454)
1,4-Diethylene dioxide	123911	1,4-Dioxane	1*	4	U108	X	1# (0 454)
N,N'-Diethylhydrazine	1615801	Hydrazine, 1,2-diethyl-	1*	4	U086	A	10 (4 54)
O,O-Diethyl S-[2-(ethylthio) ethyl]phosphorodithioate	298044	Disulfoton	1	1,4	P039	X	1 (0 454)
O,O-Diethyl S-methyl dithiophosphate	3288582	Phosphorodithioic acid, O,O-diethyl S-methylester	1*	4	U087	D	5000 (2270)
Diethyl-p-nitrophenyl phosphate	311455	Phosphoric acid, diethyl p-nitrophenyl ester	1*	4	P041	B	100 (45 4)
Diethyl phthalate	84662	1,2-Benzenedicarboxylic acid, diethyl ester	1*	2,4	U088	C	1000 (454)
O,O-Diethyl O-pyrazinyl phosphorothioate	297972	Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester	1*	4	P040	B	100 (45 4)
Diethylstilbestrol	56531	4,4'-Stilbenediol, alpha,alpha'-diethyl-	1*	4	U089	X	1 (0 454)
1,2-Dihydro-3,6-pyridazinedione	12331	Maleic hydrazide	1*	4	U148	D	5000 (2270)
Dihydrosafrole	94586	Benzene, 1,2-methylenedioxy-4-propyl-	1*	4	U090	A	10 (4 54)
Diisopropyl fluorophosphate	55914	Phosphorofluoridic acid, bis(1-methylethyl) ester	1*	4	P043	B	100 (45 4)
1,4,5,8-Dimethano-naphthalene, 1,2,3,4,10,10-10-hexachloro-1,4,4a,5,8 8a-hexahydro-, (1alpha 4alpha,4abeta,5alpha,8alpha 8abeta)	309002	Aldrin	1	1,2,4	P004	X	1 (0 454)
1,4,5,8-Dimethano-naphthalene, 1,2,3,4,10,10-10-hexachloro-1,4,4a,5,8 8a-hexahydro, (1alpha 4alpha,4abeta,5abeta,8beta 8abeta)	465736	Isodrin	1*	4	P060	X	1 (0 454)
2,7,3,6-Dimethano-naphth[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)	60571	Dieldrin	1	1,2,4	P037	X	1 (0 454)
2,7,3,6-Dimethano-naphth[2,3-b]oxirene,3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octa-hydro-, (1aalpha,2beta,2abeta,3alpha,6alpha,6abeta,7beta,7aalpha)	72208	Endrin Endrin, & metabolites	1	1,2,4	P051	X	1 (0 454)

TABLE 302.4 - LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES — Continued

Hazardous Substance	CASRN	Regulatory Synonyms	Statutory			Final RQ	
			RQ	Code	RCRA Waste Number	Category	Pounds (Kg)
Dimethoate	60515	Phosphorodithioic acid, O,O-dimethyl S-[2(methylamino)-2-oxoethyl] ester	1*	4	P044	A	10 (4 54)
Dimethoate	60515	Phosphorodithioic acid, O,O-dimethyl S-[2(methylamino)-2-oxoethyl] ester	1*	4	P044	A	10 (4 54)
3,3'-Dimethoxybenzidine	119904	(1,1'-Biphenyl)-4,4' diamine,3,3' dimethoxy-	1*	4	U091	B	100 (45 4)
Dimethylamine	124403	Methanamine, N-methyl-	1000	1,4	U092	C	1000#= (454)
Dimethylaminoazobenzene	60117	Benzenamine, N,N-dimethyl-4-phenylazo-	1*	4	U093	A	10 (4 54)
7,12-Dimethylbenz[a] anthracene	57976	1,2-Benzanthracene, 7,12-dimethyl-	1*	4	U094	X	1 (0 454)
3,3'-Dimethylbenzidine	119937	(1,1' Biphenyl)-4,4'-diamine,3,3'-dimethyl-	1*	4	U095	A	10 (4 54)
alpha,alpha-Dimethylbenzyl-hydroperoxide	80159	Hydroperoxide, 1-methyl-1-phenylethyl-	1*	4	U096	A	10 (4 54)
3,3-Dimethyl-1-(methylthio)-2-butanone, O-[(methylamino)carbonyl] oxime.	39196184	Thiofanox	1*	4	P045	B	100 (45 4)
Dimethylcarbamoyl chloride	79447	Carbamoyl chloride, dimethyl-	1*	4	U097	X	1 (0 454)
1,1-Dimethylhydrazine	57147	Hydrazine, 1,1-dimethyl-	1*	4	U098	A	10 (4 54)
1,2-Dimethylhydrazine	540738	Hydrazine, 1,2-dimethyl-	1*	4	U099	X	1 (0 454)
O,O-Dimethyl O-p-nitrophenyl phosphorothioate	298000	Methyl parathion	100	1,4	P071	B	100#= (45 4)
Dimethylnitrosamine	62759	N-Nitrosodimethylamine	1*	2,4	P082	X	1= (0 454)
alpha,alpha-Dimethylphenethylamine	122098	Ethanamine, 1,1-dimethyl-2-phenyl-	1*	4	P046	D	5000 (2270)
2,4-Dimethylphenol	105679	Phenol, 2,4-dimethyl-	1*	2,4	U101	B	100 (45 4)
Dimethyl phthalate	131113	1,2-Benzenedicarboxylic acid, dimethyl ester	1*	2,4	U102	D	5000 (2270)
Dimethyl sulfate	77781	Sulfuric acid, dimethyl ester	1*	4	U103	B	100 (45 4)
Dinitrobenzene (mixed)	25154545		1000	1		B	100 (45 4)
m-	99650						
o-	528290						
p-	100254						
4,6-Dinitro-o-cresol and salts	534521	Phenol, 2,4-dinitro-6-methyl-, and salts	1*	2,4	P047	A	10 (4 54)
4,6-Dinitro-o-cyclohexylphenol	131895	Phenol, 2-cyclohexyl-4,6-dinitro-	1*	4	P034	B	100 (45 4)
Dinitrophenol	25550587		1000	1		A	10 (4 54)
2,5-	329715						
2,6-	573568						
2,4-Dinitrophenol	51285	Phenol, 2,4-dinitro-	1000	1,2,4	P048	A	10 (4 54)
Dinitrotoluene	25321146		1000	1,2		A	10 (4 54)
3,4-Dinitrotoluene	610399						
2,4-Dinitrotoluene	121142	Benzene, 1-methyl-2,4-dinitro-	1000	1,2,4	U105	A	10 (4 54)
2,6-Dinitrotoluene	606202	Benzene, 2-methyl-1,3-dinitro-	1000	1,2,4	U106	B	100 (45 4)
Dinoseb	88857	Phenol, 2,4-dinitro-6-(1-methylpropyl)-	1*	4	P020	C	1000 (454)

TABLE 302.4 - LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES - Continued

Hazardous Substance	CASRN	Regulatory Synonyms	Statutory			Final RQ	
			RQ	Code	RCRA Waste Number	Category	Pounds (Kg)
Di-n-octyl phthalate	117840	1,2-Benzenedicarboxylic acid, di-n-octyl ester	1*	2,4	U107	D	5000 (2270)
1,4-Dioxane	123911	1,4-Diethylene dioxide	1*	4	U108	X	1# (0.454)
DIPHENYLHYDRAZINE			1*	2			**
1,2-Diphenylhydrazine	122667	Hydrazine, 1,2-diphenyl-	1*	2,4	U109	A	10 (4.54)
Diphosphoramide, octamethyl-	152169	Octamethylpyrophosphoramide	1*	4	P085	B	100 (45.4)
Dipropylamine	142847	1-Propanamine, N-propyl-	1*	4	U110	D	5000 (2270)
Di-n-propylnitrosamine	621647	N-Nitrosodi-n-propylamine	1*	2,4	U111	A	10 (4.54)
Diquat	85007 2764729		1000	1		C	1000 (454)
Disulfoton	298044	O,O-Diethyl S-[2-(ethylthio) ethyl] phosphorodithioate	1	1,4	P039	X	1 (0.454)
2,4-Dithiobiuret	541537	Thioimidodicarbonic diamide	1*	4	P049	B	100 (45.4)
Dithiopyrophosphoric acid, tetraethyl ester	3689245	Tetraethyldithiopyrophosphate	1*	4	P109	B	100 (45.4)
Diuron	330541		100	1		B	100 (45.4)
Dodecylbenzenesulfonic acid	27176870		1000	1		C	1000 (454)
Endosulfan	115297	5-Norbornene-2,3-dimethanol,1,4,5,6,7,7-hexachloro, cyclic sulfite	1	1,2,4	P050	X	1 (0.454)
alpha - Endosulfan	959988		1*	2		X	1 (0.454)
beta - Endosulfan	33213659		1*	2		X	1 (0.454)
ENDOSULFAN AND METABOLITES			1*	2			**
Endosulfan sulfate	1031078		1*	2		X	1 (0.454)
Endothall	145733	7-Oxabicyclo[2.2.1]heptane-2,3-dicarboxylic acid	1*	4	P088	C	1000 (454)
Endrin	72208	1,2,3,4,10,10-Hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-end o,endo-1,4:5,8-dimethanonaphthalene	1	1,2,4	P051	X	1 (0.454)
Endrin aldehyde	7421934		1*	2		X	1 (0.454)
ENDRIN AND METABOLITES			1*	2			**
Epichlorohydrin	106898	1-Chloro-2,3-epoxypropane Oxirane, 2-(chloromethyl)-	1000	1,4	U041	B	100 (45.4)
Epinephrine	51434	1,2-Benzenediol, 4-[1-hydroxy-2-(methylamino)ethyl]-	1*	4	P042	C	1000 (454)
Ethanal	75070	Acetaldehyde	1000	1,4	U001	C	1000 (454)
Ethanamine, 1,1-dimethyl-2-phenyl-	122098	alpha,alpha-Dimethylphenethylamine	1*	4	P046	D	5000 (2270)
Ethanamine, N-ethyl-N-nitroso-	55185	N-Nitrosodiethylamine	1*	4	U174	X	1 (0.454)
Ethane, 1,2-dibromo-	106934	Ethylene dibromide	1000	1,4	U067	X	1 (0.454)
Ethane, 1,1-dichloro-	75343	1,1-Dichloroethane Ethylidene dichloride	1*	2,4	U076	C	1000 (454)
Ethane, 1,2-dichloro-	107062	1,2-Dichloroethane Ethylene dichloride	5000	1,2,4	U077	B	100 (45.4)
Ethane, 1,1,1,2,2,2-hexachloro-	67721	Hexachloroethane	1*	2,4	U131	B	100 (45.4)
Ethane, 1,1'-[methylenebis (oxy)]bis[2-chloro-	111911	Bis(2-chloroethoxy) methane	1*	2,4	U024	C	1000 (454)
Ethane, 1,1'-oxybis-	60297	Ethyl ether	1*	4	U117	B	100 (45.4)
Ethane, 1,1'-oxybis[2-chloro-	111444	Bis (2-chloroethyl) ether Dichloroethyl ether	1*	2,4	U025	A	10 (4.54)

TABLE 302.4 - LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES — Continued

Hazardous Substance	CASRN	Regulatory Synonyms	Statutory			Final RQ	
			RQ	Code	RCRA Waste Number	Category	Pounds (Kg)
Ethane, pentachloro-	76017	Pentachloroethane	1*	4	U184	A	10 (4.54)
Ethane, 1,1,1,2-tetrachloro-	630206	1,1,1,2-Tetrachloroethane	1*	4	U208	B	100 (45.4)
Ethane, 1,1,2,2-tetrachloro-	79345	1,1,2,2-Tetrachloroethane	1*	2,4	U209	B	100 (45.4)
Ethane, 1,1,2-trichloro-	79005	1,1,2-Trichloroethane	1*	2,4	U227	B	100 (45.4)
Ethane, 1,1,1-trichloro-2,2-bis(p-methoxyphenyl)-	72435	Methoxychlor	1	1,4	U247	X	1 (0.454)
1,2-Ethanediylbiscarbamodithioic acid	111546	Ethylenebis(dithiocarbamic acid)	1*	4	U114	D	5000 (2270)
Ethanenitrile	75058	Acetonitrile	1*	4	U003	D	5000 (2270)
Ethanethioamide	62555	Thioacetamide	1*	4	U218	A	10 (4.54)
Ethanol, 2,2'-(nitrosoimino) bis-	1116547	N-Nitrosodiethanolamine	1*	4	U173	X	1 (0.454)
Ethanone, 1-phenyl-	98862	Acetophenone	1*	4	U004	D	5000 (2270)
Ethanoyl chloride	75365	Acetyl chloride	5000	1,4	U006	D	5000 (2270)
Ethenamine, N-methyl-N-nitroso-	4549400	N-Nitrosomethylvinylamine	1*	4	P084	A	10 (4.54)
Ethene, chloro-	75014	Vinyl chloride	1*	2,3,4	U043	X	1 (0.454)
Ethene, 2-chloroethoxy-	110758	2-Chloroethyl vinyl ether	1*	2,4	U042	C	1000 (454)
Ethene, 1,1-dichloro-	75354	1,1-Dichloroethylene Vinylidene chloride	5000	1,2,4	U078	B	100 (45.4)
Ethene, tetrachloro-	127184	Tetrachloroethylene	1*	2,4	U210	X	1# (0.454)
Ethene, 1,2-dichloro-	156605	1,2-trans-Dichloroethylene	1*	2,4	U079	C	1000 (454)
Ethion	563122		10	1		A	10 (4.54)
2-Ethoxyethanol	110805	Ethylene glycol monoethyl ether	1*	4	U359	X	1# (0.454)
Ethyl acetate	141786	Acetic acid, ethyl ester	1*	4	U112	D	5000 (2270)
Ethyl acrylate	140885	2-Propenoic acid, ethyl ester	1*	4	U113	C	1000 (454)
Ethylbenzene	100414		1000	1,2		C	1000 (454)
Ethyl carbamate (Urethan)	51796	Carbamic acid, ethyl ester	1*	4	U238	B	100 (45.4)
Ethyl cyanide	107120	Propanenitrile	1*	4	P101	A	10 (4.54)
Ethyl 4,4'-dichlorobenzilate	510156	Benzeneacetic acid, 4-chloro-alpa-(4-chlorophenyl)-alpha-hydroxy-, ethyl ester.	1*	4	U038	X	1# (0.454)
Ethylene dibromide	106934	Ethane, 1,2-dibromo-	1000	1,4	U067	X	1 (0.454)
Ethylene dichloride	107062	1,2-Dichloroethane Ethane, 1,2-dichloro-	5000	1,2,4	U077	B	100 (45.4)
Ethylene glycol monoethyl ether	110805	2-Ethoxyethanol	1*	4	U359	X	1# (0.454)
Ethylene oxide	75218	Oxirane	1*	4	U115	X	1# (0.454)
Ethylenebis(dithiocarbamic acid)	111546	1,2-Ethanediylbiscarbamodithioic acid	1*	4	U114	D	5000 (2270)
Ethylenediamine	107153		1000	1		D	5000 (2270)
Ethylenediamine tetraacetic acid (EDTA)	60004		5000	1		D	5000 (2270)
Ethylenethiourea	96457	2-Imidazolidinethione	1*	4	U116	A	10 (4.54)
Ethylenimine	151564	Aziridine	1*	4	P054	X	1 (0.454)
Ethyl ether	60297	Ethane, 1,1'-oxybis-	1*	4	U117	B	100 (45.4)
Ethylidene dichloride	75343	1,1-Dichloroethane Ethane, 1,1-dichloro-	1*	2,4	U076	C	1000 (454)
Ethyl methacrylate	97632	2-Propenoic acid, 2-methyl-, ethyl ester	1*	4	U118	C	1000 (454)
Ethyl methanesulfonate	62500	Methanesulfonic acid, ethyl ester	1*	4	U119	X	1 (0.454)

TABLE 302.4 - LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES — Continued

Hazardous Substance	CASRN	Regulatory Synonyms	Statutory			Final RQ	
			RQ	Code	RCRA Waste Number	Category	Pounds (Kg)
Famphur	52857	Phosphorothioic acid, O,O-dimethyl-O-[p-[(dimethylamino)-sulfonyl]phenyl] ester	1*	4	P097	C	1000 (454)
Ferric ammonium citrate	1185575		1000	1		C	1000 (454)
Ferric ammonium oxalate	2944674 55488874		1000	1		C	1000 (454)
Ferric chloride	7705080		1000	1		C	1000 (454)
Ferric fluoride	7783508		100	1		B	100 (45.4)
Ferric nitrate	10421484		1000	1		C	1000 (454)
Ferric sulfate	10028225		1000	1		C	1000 (454)
Ferrous ammonium sulfate	10045893		1000	1		C	1000 (454)
Ferrous chloride	7758943		100	1		B	100 (45.4)
Ferrous sulfate	7720787 7782630		1000	1		C	1000 (454)
Fluoroacetic acid, sodium salt	62748	Acetic acid, fluoro-, sodium salt	1*	4	P058	A	10 (4.54)
Fluoranthene	206440	Benzo[j,k]fluorene	1*	2,4	U120	B	100 (45.4)
Fluorene	86737		1*	2		D	5000 (2270)
Fluorine	7782414		1*	4	P056	A	10 (4.54)
Fluoroacetamide	640197	Acetamide, 2-fluoro-	1*	4	P057	B	100 (45.4)
Formaldehyde	50000	Methylene oxide	1000	1,4	U122	B	100 (45.4)
Formic acid	64186	Methanoic acid	5000	1,4	U123	D	5000 (2270)
Fulminic acid, mercury(II)salt	628864	Mercury fulminate	1*	4	P065	A	10 (4.54)
Fumaric acid	110178		5000	1		D	5000 (2270)
Furan	110009	Furfuran	1*	4	U124	B	100 (45.4)
Furan, tetrahydro-	109999	tetrahydrofuran	1*	4	U213	C	1000 (454)
2,5-Furancarboxaldehyde	98011	Furfural	1000	1,4	U125	D	5000 (2270)
2-Furandione	108316	Maleic anhydride	5000	1,4	U147	D	5000 (2270)
Furfural	98011	2-Furancarboxaldehyde	1000	1,4	U125	D	5000 (2270)
Furfuran	110009	Furan	1*	4	U124	B	100 (45.4)
D-Glucopyranose, 2-deoxy-2-(3-methyl-3-nitrosoureido)-	18883664	Streptozotocin	1*	4	U206	X	1# (0.454)
Glycidylaldehyde	765344	1-Propanal, 2,3-epoxy-	1*	4	U126	A	10 (4.54)
Guanidine, N-nitroso-N-methyl-N'-nitro-	70257	N-Methyl-N'-nitro-N-nitrosoguanidine	1*	4	U163	A	10 (4.54)
Guthion	86500		1	1		X	1 (0.454)
HALOETHERS			1*	2			••
HALOMETHANES			1*	2			••
Heptachlor	76448	4,7-Methano-1H-indene,1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-	1	1,2,4	P059	X	1 (0.454)
HEPTACHLOR AND METABOLITES			1*	2			••
Heptachlor epoxide	1024573		1*	2		X	1 (0.454)
Hexachlorobenzene	118741	Benzene, hexachloro-	1*	2,4	U127	A	10 (4.54)
Hexachlorobutadiene	87683	1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	1*	2,4	U128	X	1 (0.454)
HEXACHLOROCYCLOHEXANE (all isomers)	608731		1*	2			••
Hexachlorocyclohexane (gamma isomer)	58899	gamma - BHC Lindane	1	1,2,4	U129	X	1 (0.454)
Hexachlorocyclopentadiene	77474	1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-	1	1,2,4	U130	A	10 (4.54)

TABLE 302 4 -LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES Continued

Hazardous Substance	CASRN	Regulatory Synonyms	Statutory			Final RQ	
			RQ	Code	RCRA Waste Number	Category	Pounds (Kg)
1,2,3,4,10,10-Hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-endo,endo-1,4,5,8-dimethanonaphthalene	72208	Endrin	1	1,2,4	P051	X	1 (0 454)
1,2,3,4,10,10-Hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-endo,exo-1,4 5,8-dimethanonaphthalene	60571	Dieldrin	1	1,2,4	P037	X	1# (0 454)
Hexachloroethane	67721	Ethane, 1,1,1,2,2,2-hexachloro-	1*	2,4	U131	B	100 (45 4)
Hexachlorohexahydro-endo,endo-dimethanonaphthalene	465736	1,2,3,4,10,10-Hexachloro-1,4,4a,5,8,8a-hexahydro-1,4,5,8-endo,endo-dimethanonaphthalene	1*	4	P060	X	1 (0 454)
1,2,3,4,10,10-Hexachloro-1,4,4a,5,8,8a-hexahydro-1,4,5,8-endo,endo-dimethanonaphthalene	465736	Hexachlorohexahydro-endo,endo-dimethanonaphthalene	1*	4	P060	X	1 (0 454)
1,2,3,4,10-10-Hexachloro-1,4,4a,5,8,8a-hexahydro-1,4:5,8-endo,exo-dimethanonaphthalene	309002	Aldrin	1	1,2,4	P004	X	1# (0 454)
Hexachlorophene	70304	2,2'-Methylenebis(3,4,6-trichlorophenol)	1*	4	U132	B	100 (45 4)
Hexachloropropene	1888717	1-Propene, 1,1,2,3,3,3-hexachloro-	1*	4	U243	C	1000 (454)
Hexaethyl tetraphosphate	757584	Tetraphosphoric acid, hexaethyl ester	1*	4	P062	B	100 (45 4)
Hydrazine	302012	Diamine	1*	4	U133	X	1 (0 454)
Hydrazine, 1,2-diethyl-	1615801	N,N'-Diethylhydrazine	1*	4	U086	A	10 (4 54)
Hydrazine, 1,1-dimethyl-	57147	1,1-Dimethylhydrazine	1*	4	U098	A	10 (4 54)
Hydrazine, 1,2-dimethyl-	540738	1,2-Dimethylhydrazine	1*	4	U099	X	1 (0 454)
Hydrazine, 1,2-diphenyl-	122667	1,2-Diphenylhydrazine	1*	2,4	U109	A	10 (4 54)
Hydrazine, methyl-	60344	Methyl hydrazine	1*	4	P068	A	10 (4 54)
Hydrazinecarbothioamide	79196	Thiosemicarbazide	1*	4	P116	B	100 (45 4)
Hydrochloric acid	7647010	.....	5000	1		D	5000 (2270)
Hydrocyanic acid	74908	Hydrogen cyanide	10	1,4	P063	A	10 (4 54)
Hydrofluoric acid	7664393	Hydrogen fluoride	5000	1,4	U134	B	100 (45 4)
Hydrogen cyanide	74908	Hydrocyanic acid	10	1,4	P063	A	10 (4 54)
Hydrogen fluoride	7664393	Hydrofluoric acid	5000	1,4	U134	B	100 (45 4)
Hydrogen phosphide	7803512	Phosphine	1*	4	P096	B	100 (45 4)
Hydrogen sulfide	7783064	Hydrosulfuric acid Sulfur hydride	100	1,4	U135	B	100 (45 4)
Hydroperoxide, 1-methyl-1-phenylethyl-	80159	alpha,alpha-Dimethylbenzyl-hydroperoxide	1*	4	U096	A	10 (4 54)
Hydrosulfuric acid	7783064	Hydrosulfuric acid Sulfur hydride	100	1,4	U135	B	100 (45 4)
Hydroxydimethylarsine oxide	75605	Cacodylic acid	1*	4	U136	X	1# (0 454)
2-Imidazolidinethione	96457	Ethylenethiourea	1*	4	U116	A	10 (4 54)
Indeno(1,2,3-cd)pyrene	193395	1,10-(1,2-Phenylene)pyrene	1*	2,4	U137	X	1# (0 454)
Isobutyl alcohol	78831	1-Propanol, 2-methyl-	1*	4	U140	B	100 (45 4)
Isocyanic acid, methyl ester	624839	Methyl isocyanate	1*	4	P064	X	1# (0 454)
Isophorone	78591		1*	2		D	5000 (2270)
Isoprene	78795		1000	1		B	100 (45 4)

TABLE 302.4 - LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES — Continued

Hazardous Substance	CASRN	Regulatory Synonyms	Statutory			Final RQ	
			RQ	Code	RCRA Waste Number	Category	Pounds (Kg)
Isopropanolamine dodecylbenzenesulfonate	42504461		1000	1		C	1000 (454)
Isosafrole	120581	Benzene, 1,2-methylenedioxy-4-propenyl-	1*	4	U141	B	100 (45.4)
3(2H)-Isoxazolone, 5-(aminomethyl)-	2763964	5-(Aminomethyl)-3-isoxazolol	1*	4	P007	C	1000 (454)
Kepone	143500	Decachlorooctahydro-1,3,4-metheno-2H-cyclobuta[c,d]-pentalen-2-one	1	1,4	U142	X	1 (0.454)
Lasiocarpine	303344		1*	4	U143	A	10 (4.54)
Lead ††	7439921		1*	2		X	1# (0.454)
Lead acetate	301042	Acetic acid, lead salt	5000	1,4	U144	D	5000# (2270)
LEAD AND COMPOUNDS			1*	2			**
Lead arsenate	7784409 7645252 10102484		5000	1		X	1 (0.454)
Lead chloride	7758954		5000	1		B	100 (45.4)
Lead fluoborate	13814965		5000	1		B	100 (45.4)
Lead fluoride	7783462		1000	1		B	100 (45.4)
Lead iodide	10101630		5000	1		B	100 (45.4)
Lead nitrate	10099748		5000	1		B	100# (45.4)
Lead phosphate	7446277	Phosphoric acid, lead salt	1*	4	U145	X	1# (0.454)
Lead stearate	7428480 1072351 56189094 52652592		5000	1		D	5000 (2270)
Lead subacetate	1335326		1*	4	U146	B	100 (45.4)
Lead sulfate	15739807 7446142		5000	1		B	100 (45.4)
Lead sulfide	1314870		5000	1		D	5000 (2270)
Lead thiocyanate	592870		5000	1		B	100 (45.4)
Lindane	58899	gamma - BHC Hexachlorocyclohexane (gamma isomer)	1	1,2,4	U129	X	1 (0.454)
Lithium chromate	14307358		1000	1		A	10 (4.54)
Malathion	121755		10	1		B	100 (45.4)
Maleic acid	110167		5000	1		D	5000 (2270)
Maleic anhydride	108316	2,5-Furandione	5000	1,4	U147	D	5000 (2270)
Maleic hydrazide	123331	1,2-Dihydro-3,6-pyridazinedione	1*	4	U148	D	5000 (2270)
Malononitrile	109773	Propanedinitrile	1*	4	U149	C	1000 (454)
Melphalan	148823	Alanine, 3-[p-bis (2-chloroethyl)amino] phenyl-,L-	1*	4	U150	X	1 (0.454)
Mercaptodimethur	2032657		100	1		A	10 (4.54)
Mercuric cyanide	592041		1	1		X	1 (0.454)
Mercuric nitrate	10045940		10	1		A	10 (4.54)
Mercuric sulfate	7783359		10	1		A	10 (4.54)
Mercuric thiocyanate	592858		10	1		A	10 (4.54)
Mercurous nitrate	10415755 7782867		10	1		A	10 (4.54)
Mercury	74395785		1*	2,3,4	U151	X	1 (0.454)
MERCURY AND COMPOUNDS			1*	2			**
Mercury, (acetato-O) phenyl-	62384	Phenylmercuric acetate	1*	4	P092	B	100 (45.4)

TABLE 302 4 · LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES Continued

Hazardous Substance	CASRN	Regulatory Synonyms	Statutory			Final RQ	
			RQ	Code	RCRA Waste Number	Category	Pounds (Kg)
Mercury fulminate	628864	Fulminic acid, mercury(II)salt	1*	4	P065	A	10 (4 54)
Methacrylonitrile	126987	2-Propenenitrile, 2-methyl-	1*	4	U152	C	1000 (454)
Methanamine, N-methyl-	124403	Dimethylamine	1000	1,4	U092	C	1000 (454)
Methane, bromo-	74839	Methyl bromide	1*	2,4	U029	C	1000 (454)
Methane, chloro-	74873	Methyl chloride	1*	2,4	U045	B	100 (45 4)
Methane, chloromethoxy-	107302	Chloromethyl methyl ether	1*	4	U046	A	10 (4 54)
Methane, dibromo-	74953	Methylene bromide	1*	4	U068	C	1000 (454)
Methane, dichloro-	75092	Methylene chloride	1*	2,4	U080	C	1000 (454)
Methane, dichlorodifluoro-	75718	Dichlorodifluoromethane	1*	4	U075	D	5000 (2270)
Methane, iodo-	74884	Methyl iodide	1*	4	U138	B	100 (45 4)
Methane, oxybis(chloro-	542881	Bis(chloromethyl) ether	1*	4	P016	A	10 (4 54)
Methane, tetrachloro-	58235	Carbon tetrachloride	5000	1,2,4	U211	A	10 (4 54)
Methane, tetranitro-	509148	Tetranitromethane	1*	4	P112	A	10 (4 54)
Methane, tribromo-	75252	Bromoform	1*	2,4	U225	B	100 (45 4)
Methane, trichloro-	67663	Chloroform	5000	1,2,4	U044	A	10 (4 54)
Methane, trichlorofluoro-	75694	Trichloromonofluoromethane	1*	4	U121	D	5000 (2270)
Methanesulfonic acid, ethyl ester	62500	Ethyl methanesulfonate	1*	4	U119	X	1 (0 454)
Methanethiol	74931	Methylmercaptan Thiomethanol	100	1,4	U153	B	100 (45 4)
Methanesulfenyl chloride, trichloro-	594423	Trichloromethanesulfenyl chloride	1*	4	P118	B	100 (45 4)
4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-	76448	Heptachlor	1	1,2,4	P059	X	1 (0 454)
Methanoic acid	64186	Formic acid	5000	1,4	U123	D	5000 (2270)
4,7-Methanoindan, 1,2,4,5,6,7,8,8-octachloro-3a,4,7,7a-tetrahydro-	57749	Chlordane Chlordane, technical	1	1,2,4	U036	X	1 (0 454)
Methanol	67561	Methyl alcohol	1*	4	U154	D	5000 (2270)
Methapyrilene	91805	Pyridine, 2,[(2-dimethylamino)-2-thenylamino]	1*	4	U155	D	5000 (2270)
Methomyl	16752775	Acetimidic acid, N-[(methylcarbamoyl)oxy]thio-, methyl ester.	1*	4	P066	B	100 (45 4)
Methoxychlor	72435	Ethane, 1,1,1-trichloro-2,2-bis(p-methoxyphenyl)-	1	1,4	U247	X	1 (0 454)
Methyl alcohol	67561	Methanol	1*	4	U154	D	5000 (2270)
2-Methylaziridine	75558	1,2-Propylenimine	1*	4	P067	X	1# (0 454)
Methyl bromide	74839	Methane, bromo-	1*	2,4	U029	C	1000 (454)
1-Methylbutadiene	504609	1,3-Pentadiene	1*	4	U186	B	100 (45 4)
Methyl chloride	74873	Methane, chloro-	1*	2,4	U045	B	100 (45 4)
Methyl chlorocarbonate	79221	Carbonochloridic acid, methyl ster	1*	4	U158	C	1000 (454)
Methyl chloroform	71556	1,1,1-Trichloroethane	1*	2,4	U226	C	1000 (454)
4,4'-Methylenebis(2-chloroaniline)	101144	Benzenamine, 4,4'-methylenebis(2-chloro-	1*	4	U158	A	10 (4 54)
2,2'-Methylenebis(3,4,6-trichlorophenol)	70304	Hexachlorophene	1*	4	U132	B	100 (45 4)
3-Methylcholanthrene	56495	Benz[j]aceanthrylene, 1,2-dihydro-3-methyl-	1*	4	U157	A	10 (4 54)
Methylene bromide	74953	Methane, dibromo-	1*	4	U068	C	1000 (454)
Methylene chloride	75092	Methane, dichloro-	1*	2,4	U080	C	1000 (454)
Methylene oxide	50000	Formaldehyde	1000	1,4	U122	C	1000# (454)

TABLE 302.4 - LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES Continued

Hazardous Substance	CASRN	Regulatory Synonyms	Statutory			Final RQ	
			RQ	Code	RCRA Waste Number	Category	Pounds (Kg)
Methyl ethyl ketone	78933	2-Butanone	1*	4	U159	D	5000 (2270)
Methyl ethyl ketone peroxide	1338234	2-Butanone peroxide	1*	4	U160	A	10 (4.54)
Methyl hydrazine	60344	Hydrazine, methyl-	1*	4	P068	A	10 (4.54)
Methyl iodide	74884	Methane, iodo-	1*	4	U138	B	100 (45.4)
Methyl isobutyl ketone	108101	4-Methyl-2-pentanone	1*	4	U161	D	5000 (2270)
Methyl isocyanate	624839	Isocyanic acid, methyl ester	1*	4	P064		##
2-Methyllactonitrile	75865	Acetone cyanohydrin Propanenitrile, 2-hydroxy-2-methyl-	10	1,4	P069	A	10 (4.54)
Methylmercaptan	74931	Methonethiol Thiomethanol	100	1,4	U153	B	100 (45.4)
Methyl methacrylate	80626	2-Propenoic acid, 2-methyl-, methyl ester	5000	1,4	U162	C	1000 (454)
N-Methyl-N'-nitro-N-nitrosoguanidine	70257	Guanidine, N-nitroso-N-methyl-N'-nitro-	1*	4	U163	X	1# (0.454)
Methyl parathion	298000	O,O-Dimethyl O-p-nitrophenyl phosphorothioate	100	1,4	P071	B	100 (45.4)
4-Methyl-2-pentanone	108101	Methyl isobutyl ketone	1*	4	U161	D	5000 (2270)
Methylthiouracil	56042	4(1H)-Pyrimidinone, 2,3-dihydro-6-methyl-2-thioxo-	1*	4	U164	A	10 (4.54)
Mevinphos	7786347		1	1		A	10 (4.54)
Mexacarbate	315184		1000	1		C	1000 (454)
Mitomycin C	50077	Azirino(2',3' 3,4)pyrrolo (1,2-a)indole-4,7-dione,6-amino-8-[((amin ocarbonyl) oxy)methyl]- 1,1a,2,8,8a, 8b-hexahydro-8a-methoxy-5-methyl-	1*	4	U010	A	10 (4.54)
Monoethylamine	75047		1000	1		B	100 (45.4)
Monomethylamine	74895		1000	1		B	100 (45.4)
Naled	300765		10	1		A	10 (4.54)
5,12-Naphthacenedione, (8S-cis)-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-	20830813	Daunomycin	1*	4	U059	A	10 (4.54)
Naphthalene	91203		5000	1,2,4	U165	B	100 (45.4)
Naphthalene, 2-chloro-	91587	beta-Chloronaphthalene 2-Chloronaphthalene	1*	2,4	U047	D	5000 (2270)
1,4-Naphthalenedione	130154	1,4-Naphthoquinone	1*	4	U166	D	5000 (2270)
2,7-Naphthalenedisulfonic acid,3,3'-[(3,3'-dimethyl-(1,1'-biphenyl)-4,4'-diyl)-bis(azo)]bis(5-amino-4-hydroxy)- tetrasodium salt	72571	Trypan blue	1*	4	U236	A	10 (4.54)
Naphthenic acid	1338245		100	1		B	100 (45.4)
1,4-Naphthoquinone	130154	1,4-Naphthalenedione	1*	4	U166	D	5000 (2270)
1-Naphthylamine	134327	alpha-Naphthylamine	1*	4	U167	X	1# (0.454)
2-Naphthylamine	91598	beta-Naphthylamine	1*	4	U168	X	1# (0.454)
alpha-Naphthylamine	134327	1-Naphthylamine	1*	4	U167	B	100 (45.4)
beta-Naphthylamine	91598	2-Naphthylamine	1*	4	U168	A	10 (4.54)
2-Naphthylamine, N,N-bis(2-chloroethyl)-	494031	Chlornaphazine	1*	4	U026	B	100 (45.4)
alpha-Naphthylthiourea	86884	Thiourea, 1-naphthalenyl-	1*	4	P072	B	100 (45.4)
Nickel ††	7440020		1*	2		B	100 (45.4)
NICKEL AND COMPOUNDS			1*	2			**

TABLE 302 4 - LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES — Continued

Hazardous Substance	CASRN	Regulatory Synonyms	Statutory			Final RQ	
			RQ	Code	RCRA Waste Number	Category	Pounds (Kg)
Nickel ammonium sulfate	15699180		5000	1		B	100 (45 4)
Nickel carbonyl	13463393	Nickel tetracarbonyl	1*	4	P073	A	10 (4 54)
Nickel chloride	7718549 37211055		5000	1		B	100 (45 4)
Nickel cyanide	557197	Nickel(II) cyanide	1*	4	P074	A	10 (4 54)
Nickel(II) cyanide	557197	Nickel cyanide	1*	4	P074	A	10 (4 54)
Nickel hydroxide	12054487		1000	1		A	10 (4 54)
Nickel nitrate	14216752		5000	1		B	100 (45 4)
Nickel sulfate	7786814		5000	1		B	100 (45 4)
Nickel tetracarbonyl	13463393	Nickel carbonyl	1*	4	P073	X	1# (0 454)
Nicotine and salts	54115	Pyridine, (S)-3-(1-methyl-2-pyrrolidinyl)-, and salts	1*	4	P075	B	100 (45 4)
Nitric acid	7697372		1000	1		C	1000 (454)
Nitric oxide	10102439	Nitrogen(II) oxide	1*	4	P076	A	10 (4 54)
p-Nitroaniline	100016	Benzenamine, 4-nitro-	1*	4	P077	D	5000 (2270)
Nitrobenzene	98953	Benzene, nitro-	1000	1,2,4	U169	C	1000 (454)
Nitrogen dioxide	10102440 10544726	Nitrogen(IV) oxide	1000	1,4	P078	A	10 (4 54)
Nitrogen(II) oxide	10102439	Nitric oxide	1*	4	P076	A	10 (4 54)
Nitrogen(IV) oxide	10102440 10544726	Nitrogen dioxide	1000	1,4	P078	A	10 (4 54)
Nitroglycerine	55630	1,2,3-Propanetriol, trinitrate-	1*	4	P081	A	10 (4 54)
Nitrophenol (mixed)	25154556		1000	1		B	100 (45 4)
m-	554847						
o-	88755	2-Nitrophenol					
p-	100027	4-Nitrophenol Phenol, 4-nitro-					
p-Nitrophenol	100027	4-Nitrophenol Phenol, 4-nitro-	1000	1,2,4	U170	B	100 (45 4)
2-Nitrophenol	88755	o-Nitrophenol	1000	1,2		B	100 (45 4)
4-Nitrophenol	100027	p-Nitrophenol Phenol, 4-nitro-	1000	1,2,4	U170	B	100 (45 4)
NITROPHENOLS			1*	2			**
2-Nitropropane	79469	Propane, 2-nitro-	1*	4	U171	X	1# (0 454)
NITROSAMINES			1*	2			**
N-Nitrosodi-n-butylamine	924163	1-Butanamine, N-butyl-N-nitroso-	1*	4	U172	A	10 (4 54)
N-Nitrosodiethanolamine	1116547	Ethanol, 2,2'-(nitrosimino)bis-	1*	4	U173	X	1 (0 454)
N-Nitrosodiethylamine	55185	Ethanamine, N-ethyl-N-nitroso-	1*	4	U174	X	1 (0 454)
N-Nitrosodimethylamine	62759	Dimethylnitrosamine	1*	2,4	P082	A	10 (4 54)
N-Nitrosodiphenylamine	86306		1*	2		B	100 (45 4)
N-Nitrosodi-n-propylamine	621647	Di-n-propylnitrosamine	1*	2,4	U111	X	1# (0 454)
N-Nitroso-N-ethylurea	759739	Carbamide, N-ethyl-N-nitroso-	1*	4	U176	X	1 (0 454)
N-Nitroso-N-methylurea	684935	Carbamide, N-methyl-N-nitroso-	1*	4	U177	X	1 (0 454)
N-Nitroso-N-methylurethane	615532	Carbamic acid, methylnitroso-, ethyl ester	1*	4	U178	X	1 (0 454)
N-Nitrosomethylvinylamine	4549400	Ethenamine N-methyl-N-nitroso-	1*	4	P084	A	10 (4 54)
N-Nitrosopiperidine	100754	Pyridine, hexahydro-N-nitroso-	1*	4	U179	A	10 (4 54)
N-Nitrosopyrrolidine	930552	Pyrrole, tetrahydro-N-nitroso-	1*	4	U180	X	1 (0 454)

TABLE 302.4 LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES — Continued

Hazardous Substance	CASRN	Regulatory Synonyms	Statutory			Final RQ	
			RQ	Code	RCRA Waste Number	Category	Pounds (Kg)
Nitrotoluene	1321126		1000	1		C	1000 (454)
m-	99081						
o-	88722						
p-	99990						
5-Nitro-o-toluidine	99558	Benzenamine, 2-methyl-5-nitro-	1*	4	U181	B	100 (45.4)
5-Norbornene-2,3-dimethanol,1,4,5,6,7,7-hexachloro, cyclic sulfite	115297	Endosulfan	1	1,2,4	P050	X	1 (0.454)
Octamethylpyrophosphoramide	152169	Diphosphoramide, octamethyl-	1*	4	P085	B	100 (45.4)
Osmium oxide	20816120	Osmium tetroxide	1*	4	P087	C	1000 (454)
Osmium tetroxide	20816120	Osmium oxide	1*	4	P087	C	1000 (454)
7-Oxabicyclo[2.2.1]heptane-2,3-dicarboxylic acid	145733	Endothall	1*	4	P088	C	1000 (454)
1,2-Oxathiolane, 2,2-dioxide	1120714	1,3-Propane sultone	1*	4	U193	A	10 (4.54)
2H-1,3,2-Oxazaphosphorine, 2-[bis(2-chloroethyl)amino] tetrahydro-2-oxide	50180	Cyclophosphamide	1*	4	U058	A	10 (4.54)
Oxirane	75218	Ethyleneoxide	1*	4	U115	X	1# (0.454)
Oxirane, 2-(chloromethyl)-	106898	1-Chloro-2,3-epoxypropane Epichlorohydrin	1000	1,4	U041	B	100 (45.4)
Paraformaldehyde	30525894		1000	1		C	1000 (454)
Paraldehyde	123637	1,3,5-Trioxane, 2,4,6-trimethyl-	1*	4	U182	C	1000 (454)
Parathion	56362	Phosphorothioic acid, O,O-diethyl O-(p-nitrophenyl) ester	1	1,4	P089	A	10 (4.54)
Pentachlorobenzene	608935	Benzene, pentachloro-	1*	4	U183	A	10# (4.54)
Pentachloroethane	76017	Ethane, pentachloro-	1*	4	U184	A	10 (4.54)
Pentachloronitrobenzene	82688	Benzene, pentachloronitro-	1*	4	U185	B	100 (45.4)
Pentachlorophenol	87865	Phenol, pentachloro-	10	1,2,4	U242	A	10 (4.54)
1,3-Pentadiene	504609	1-Methylbutadiene	1*	4	U186	B	100 (45.4)
Phenacetin	62442	Acetamide, N-(4-ethoxyphenyl)-	1*	4	U187	B	100 (45.4)
Phenanthrene	85018		1*	2		D	5000 (2270)
Phenol	108952	Benzene, hydroxy-	1000	1,2,4	U188	C	1000 (454)
Phenol, 2-chloro-	95578	2-Chlorophenol o-Chlorophenol	1*	2,4	U048	B	100 (45.4)
Phenol, 4-chloro-3-methyl-	59507	4-Chloro-m-cresol p-Chloro-m-cresol	1*	2,4	U039	D	5000 (2270)
Phenol, 2-cyclohexyl-4,6-dinitro-	131895	4,6-Dinitro-o-cyclohexylphenol	1*	4	P034	B	100 (45.4)
Phenol, 2,4-dichloro-	120832	2,4-Dichlorophenol	1*	2,4	U081	B	100 (45.4)
Phenol, 2,6-dichloro-	87650	2,6-Dichlorophenol	1*	4	U082	B	100 (45.4)
Phenol, 2,4-dimethyl-	105679	2,4-Dimethylphenol	1*	2,4	U101	B	100 (45.4)
Phenol, 2,4-dinitro-	51285	2,4-Dinitrophenol	1000	1,2,4	P048	A	10 (4.54)
Phenol, 2,4-dinitro-6-(1-methylpropyl)-	88857	Dinoseb	1*	4	P020	C	1000 (454)
Phenol, 2,4-dinitro-6-methyl-, and salts	534521	4,6-Dinitro-o-cresol and salts	1*	2,4	P047	A	10 (4.54)
Phenol, 4-nitro-	100027	p-Nitrophenol 4-Nitrophenol	1000	1,2,4	U170	B	100 (45.4)
Phenol, pentachloro-	87865	Pentachlorophenol	10	1,2,4	U242	A	10# (4.54)
Phenol, 2,3,4,6-tetrachloro-	58902	2,3,4,6-Tetrachlorophenol	1*	4	U212	A	10 (4.54)
Phenol, 2,4,5-trichloro-	95954	2,4,5-Trichlorophenol	10	1,4	U230	A	10 (4.54)
Phenol, 2,4,6-trichloro-	88062	2,4,6-Trichlorophenol	10	1,2,4	U231	A	10 (4.54)

TABLE 302 4 · LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES — Continued

Hazardous Substance	CASRN	Regulatory Synonyms	Statutory			Final RQ	
			RQ	Code	RCRA Waste Number	Category	Pounds (Kg)
Phenol, 2,4,6-trinitro-, ammonium salt	131748	Ammonium picrate	1*	4	P009	A	10 (4 54)
Phenyl dichloroarsine	696286	Dichlorophenylarsine	1*	4	P036	X	1# (0 454)
1,10-(1,2-Phenylene)pyrene	193395	Indeno(1,2,3-cd)pyrene	1*	2,4	U137	B	100 (45 4)
Phenylmercuric acetate	62384	Mercury, (acetato-O)phenyl-	1*	4	P092	B	100 (45 4)
N-Phenylthiourea	103855	Thiourea, phenyl-	1*	4	P093	B	100 (45 4)
Phorate	298022	Phosphorodithioic acid, O,O-diethyl S-(ethylthio), methyl ester	1*	4	P094	A	10 (4 54)
Phosgene	75445	Carbonyl chloride	5000	1,4	P095	A	10 (4 54)
Phosphine	7803512	Hydrogen phosphide	1*	4	P096	B	100 (45 4)
Phosphoric acid	7664382		5000	1		D	5000 (2270)
Phosphoric acid, diethyl p-nitrophenyl ester	311455	Diethyl-p-nitrophenyl phosphate	1*	4	P041	B	100 (45 4)
Phosphoric acid, lead salt	7446277	Lead phosphate	1*	4	U145	X	1# (0 454)
Phosphorodithioic acid, O,O-diethyl S-methylester	3288582	O,O-Diethyl S-methyl dithiophosphate	1*	4	U087	D	5000 (2270)
Phosphorodithioic acid, O,O-diethyl S-(ethylthio), methyl ester	298022	Phorate	1*	4	P094	A	10 (4 54)
Phosphorodithioic acid, O,O-dimethyl S-[2(methylamino)-2-oxoethyl] ester	60515	Dimethoate	1*	4	P044	A	10 (4 54)
Phosphorofluoridic acid, bis(1-methylethyl) ester	55914	Diisopropyl fluorophosphate	1*	4	P043	B	100 (45 4)
Phosphorothioic acid, O,O-diethyl O-(p-nitrophenyl) ester	56382	Parathion	1	1,4	P089	A	10 (4 54)
Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester	297972	O,O-Diethyl O-pyrazinyl phosphorothioate	1*	4	P040	B	100 (45 4)
Phosphorothioic acid, O,O-dimethyl O-[p-[(dimethylamino)-sulfonyl] phenyl] ester	52857	Famphur	1*	4	P097	C	1000 (454)
Phosphorus	7723140		1	1		X	1 (0 454)
Phosphorus oxychloride	10025873		5000	1		C	1000 (454)
Phosphorus pentasulfide	1314803	Phosphorus sulfide Sulfur phosphide	100	1,4	U189	B	100 (45 4)
Phosphorus sulfide	1314803	Phosphorus pentasulfide Sulfur phosphide	100	1,4	U189	B	100 (45 4)
Phosphorus trichloride	7719122		5000	1		C	1000 (454)
PHTHALATE ESTERS			1*	2			**
Phthalate anhydride	85449	1,2-Benzenedicarboxylic acid anhydride	1*	4	U190	D	5000 (2270)
2-Picoline	109068	Pyridine,2-methyl-	1*	4	U191	D	5000 (2270)
Plumbane, tetraethyl-	78002	Tetraethyl lead	100	1,4	P110	A	10# (4 54)
POLYCHLORINATED BIPHENYLS (PCBs)	1336363 12674112 11104282 11141165 53469219 12672296 11097691 11096825	Aroclors Aroclor 1016 Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260	10	1,2		X	1 (0 454)

TABLE 302.4 - LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES - Continued

Hazardous Substance	CASRN	Regulatory Synonyms	Statutory			Final RQ	
			RQ	Code	RCRA Waste Number	Category	Pounds (Kg)
POLYNUCLEAR AROMATIC HYDROCARBONS			1•	2			••
Potassium arsenate	7784410		1000	1		X	1 (0.454)
Potassium arsenite	10124502		1000	1		X	1 (0.454)
Potassium bichromate	7778509		1000	1		A	10 (4.54)
Potassium chromate	7789006		1000	1		A	10 (4.54)
Postassium cyanide	151508		10	1,4	P098	A	10 (4.54)
Potassium hydroxide	1310583		1000	1		C	1000 (454)
Potassium permanganate	7722647		100	1		B	100 (45.4)
Potassium silver cyanide	506616		1•	4	P099	X	1 (0.454)
Pronamide	23950585	3,5-Dichloro-N-(1,1-dimethyl-2-propynyl) benzamide	1•	4	U192	D	5000 (2270)
1-Propanal, 2,3-epoxy-	765344	Glycidylaldehyde	1•	4	U126	X	1# (0.454)
Propanal, 2-methyl-2-(methylthio)-,O-[(methylamino)carbonyl] oxime	116063	Aldicarb	1•	4	P070	X	1 (0.454)
1-Propanamine	107108	n-Propylamine	1•	4	U194	D	5000 (2270)
1-Propanamine, N-propyl-	142847	Dipropylamine	1•	4	U110	D	5000 (2270)
Propane, 1,2-dibromo-3-chloro-	96128	1,2-Dibromo-3-chloropropane	1•	4	U066	X	1 (0.454)
Propane, 2-nitro-	79469	2-Nitropropane	1•	4	U171	X	1# (0.454)
Propane, 2,2'-oxybis(2-chloro-	108601	Bis(2-chloroisopropyl) ether	1•	2,4	U027	C	1000 (454)
1,3-Propane sultone	1120714	1,2-Oxathiolane, 2,2-dioxide	1•	4	U193	A	10 (4.54)
Propanedinitrile	109773	Malononitrile	1•	4	U149	C	1000 (4.54)
Propanenitrile	107120	Ethyl cyanide	1•	4	P101	A	10 (4.54)
Propanenitrile, 3-chloro-	542767	3-Chloropropionitrile	1•	4	P027	C	1000 (454)
Propanenitrile, 2-hydroxy-2-methyl-	75865	Acetone cyanohydrin 2-Methyllactonitrile	10	1,4	P069	A	10 (4.54)
1,2,3-Propanetriol, trinitrate-	55630	Nitroglycerine	1•	4	P081	A	10 (4.54)
1-Propanol, 2,3-dibromo-, phosphate (3:1)	126727	Tris(2,3-dibromopropyl) phosphate	1•	4	U235	A	10 (4.54)
1-Propanol, 2-methyl-	78831	Isobutyl alcohol	1•	4	U140	D	5000 (2270)
2-Propanone	67641	Acetone	1•	4	U002	D	5000 (2270)
2-Propanone, 1-bromo-	598312	Bromoacetone	1•	4	P017	C	1000 (454)
Propargite	2312358		10	1		A	10 (4.54)
Propargyl alcohol	107197	2-Propyn-1-ol	1•	4	P102	C	1000 (454)
2-Propenal	107028	Acrolein	1	1,2,4	P003	X	1 (0.454)
2-Propenamide	79061	Acrylamide	1•	4	U007	D	5000 (2270)
Propene, 1,3-dichloro-	542756	1,3-Dichloropropene	5000	1,2,4	U084	B	100# (45.4)
1-Propene, 1,1,2,3,3,3-hexachloro-	1888717	Hexachloropropene	1•	4	U243	C	1000 (454)
2-Propenenitrile	107131	Acrylonitrile	100	1,2,4	U009	B	100 (45.4)
2-Propenenitrile, 2-methyl-	126987	Methacrylonitrile	1•	4	U152	C	1000 (454)
2-Propenoic acid	79107	Acrylic acid	1•	4	U008	D	5000 (2270)
2-Propenoic acid, ethyl ester	140885	Ethyl acrylate	1•	4	U113	C	1000 (454)
2-Propenoic acid, 2-methyl-, ethyl ester	97632	Ethyl methacrylate	1•	4	U118	C	1000 (454)
2-Propenoic acid, 2-methyl-, methyl ester	80626	Methyl methacrylate	5000	1,4	U162	C	1000 (454)
2-Propen-1-ol	107186	Allyl alcohol	100	1,4	P005	B	100 (45.4)
Propionic acid	79094		5000	1		D	5000 (2270)

TABLE 302 4 · LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES — Continued

Hazardous Substance	CASRN	Regulatory Synonyms	Statutory			Final RQ	
			RQ	Code	RCRA Waste Number	Category	Pounds (Kg)
Propionic acid, 2-(2,4,5-trichlorophenoxy)-	93721	Silvex 2,4,5-TP acid	100	1,4	U233	B	100 (45 4)
Propionic anhydride	123626		5000	1		D	5000 (2270)
n-Propylamine	107108	1-Propanamine	1*	4	U194	D	5000 (2270)
Propylene dichloride	78875	1,2-Dichloropropane	5000	1,2,4	U083	C	1000 (454)
Propylene oxide	75569		5000	1		B	100 (45 4)
1,2-Propylenimine	75558	2-Methylaziridine	1*	4	P067	X	1 (0 454)
2-Propyn-1-ol	107197	Propargyl alcohol	1*	4	P102	C	1000 (454)
Pyrene	129000		1*	2		D	5000 (2270)
Pyrethrins	121299 121211 8003347		1000	1		X	1 (0 454)
4-Pyridinamine	504245	4-Aminopyridine	1*	4	P008	C	1000 (454)
Pyridine	110661		1*	4	U196	C	1000 (454)
Pyridine, 2-[(2-(dimethylamino)ethyl)-2-thenylamino]-	91805	Methapyrilene	1*	4	U155	D	5000 (2270)
Pyridine, hexahydro-N-nitroso-	100754	N-Nitrosopiperidine	1*	4	U179	C	1000 (454)
Pyridine, 2-methyl-	109068	2-Picoline	1*	4	U191	D	5000 (2270)
Pyridine, (S)-3-(1-methyl-2-pyrrolidinyl)-, and salts	54115	Nicotine and salts	1*	4	P075	B	100 (45 4)
4(1H)-Pyrimidinone, 2,3-dihydro-6-methyl-2-thioxo-	56042	Methylthiouracil	1*	4	U164	A	10 (4 54)
Pyrophosphoric acid, tetraethyl ester	107493	Tetraethyl pyrophosphate	100	1,4	P111	A	10 (4 54)
Pyrrole, tetrahydro-N-nitroso-	930552	N-Nitrosopyrrolidine	1*	4	U180	X	1 (0 454)
Quinoline	91225		1000	1		D	5000 (2270)
RADIONUCLIDES			1*	3		X	§
Reserpine	50555	Yohimban-16-carboxylic acid,11,17-dimethoxy-18-[(3,4,5-trimethoxybenzoyl) oxy]-, methyl ester.	1*	4	U200	D	5000 (2270)
Resorcinol	108463	1,3-Benzenediol	1000	1,4	U201	D	5000 (2270)
Saccharin and salts	81072	1,2-Benzisothiazolin-3-one,1,1-dioxide, and salts	1*	4	U202	X	1# (0 454)
Safrole	94597	Benzene, 1,2-methylenedioxy-4-allyl-	1*	4	U203	B	100 (45 4)
Selenious acid	7783008		1*	4	U204	A	10 (4 54)
Selenium ††	7782492		1*	2		B	100 (45 4)
SELENIUM AND COMPOUNDS			1*	2			**
Selenium dioxide	7446084	Selenium oxide	1000	1,4	U204	A	10 (4 54)
Selenium disulfide	7488564	Sulfur selenide	1*	4	U205	A	10 (4 54)
Selenium oxide	7446084	Selenium dioxide	1000	1,4	U204	A	10 (4 54)
Selenourea	630104	Carbamimidoselenoic acid	1*	4	P103	C	1000 (454)
L-Serine, diazoacetate (ester)	115026	Azaserine	1*	4	U015	X	1 (0 454)
Silver ††	7440224		1*	2		C	1000 (454)
SILVER AND COMPOUNDS			1*	2			**
Silver cyanide	506649		1*	4	P104	X	1 (0 454)
Silver nitrate	7761888		1	1		X	1 (0 454)
Silvex	93721	Propionic acid, 2-(2,4,5-trichlorophenoxy)- 2,4,5-TP acid	100	1,4	U233	B	100 (45 4)
Sodium	7440235		1000	1		A	10 (4 54)
Sodium arsenate	7631892		1000	1		X	1 (0 454)
Sodium arsenite	7784465		1000	1		X	1 (0 454)

TABLE 302.4 - LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES — Continued

Hazardous Substance	CASRN	Regulatory Synonyms	Statutory			Final RQ	
			RQ	Code	RCRA Waste Number	Category	Pounds (Kg)
Sodium azide	26628228		1•	4	P105	C	1000 (454)
Sodium bichromate	10588019		1000	1		A	10 (4.54)
Sodium bifluoride	1333831		5000	1		B	100 (4.54)
Sodium bisulfite	7631905		5000	1		D	5000 (2270)
Sodium chromate	7775113		1000	1		A	10 (4.54)
Sodium cyanide	143339		10	1,4	P106	A	10 (4.54)
Sodium dodecylbenzene sulfonate	25155300		1000	1		C	1000 (454)
Sodium fluoride	7681494		5000	1		C	1000 (454)
Sodium hydrosulfide	16721805		5000	1		D	5000 (2270)
Sodium hydroxide	1310732		1000	1		C	1000 (454)
Sodium hypochlorite	7681529 10022705		100	1		B	100 (4.54)
Sodium methylate	124414		1000	1		C	1000 (454)
Sodium nitrite	7632000		100	1		B	100# (45.4)
Sodium phosphate, dibasic	7558794 10039324 10140655		5000	1		D	5000 (2270)
Sodium phosphate, tribasic	7601549 7785844 10101890 10361894 7758294 10124568		5000	1		D	5000 (2270)
Sodium selenite	10102188 7782623		1000	1		B	100 (45.4)
4,4'-Stilbenediol, alpha, alpha'-diethyl-	56531	Diethylstilbestrol	1•	4	U089	X	1# (0.454)
Streptozotocin	18883664	D-Glucopyranose, 2-deoxy-2(3-methyl-3-nitrosoureido)-	1•	4	U206	X	1 (0.454)
Strontium chromate	7789062		1000	1		A	10 (4.54)
Strychnidin-10-one, and salts	57249	Strychnine and salts	10	1,4	P108	A	10 (4.54)
Strychnidin-10-one, 2,3-dimethoxy-	357573	Brucine	1•	4	P018	A	10 (4.54)
Strychnine and salts	57249	Strychnidin-10-one, and salts	10	1,4	P108	A	10 (4.54)
Styrene	100425		1000	1		C	1000 (454)
Sulfur hydride	7783064	Hydrogen sulfide Hydrosulfuric acid	100	1,4	U135	B	100# (45.4)
Sulfur monochloride	12771083		1000	1		C	1000 (454)
Sulfur phosphide	1314803	Phosphorus pentasulfide Phosphorus sulfide	100	1,4	U189	B	100 (45.4)
Sulfur selenide	7488564	Selenium disulfide	1•	4	U205	X	1# (0.454)
Sulfuric acid	7664939 8014957		1000	1		C	1000 (454)
Sulfuric acid, dimethyl ester	77781	Dimethyl sulfate	1•	4	U103	B	100 (45.4)
Sulfuric acid, thallium(I) salt	7446186 10031591	Thallium(I) sulfate	1000	1,4	P115	B	100# (45.4)
2,4,5-T	93765	2,4,5-T acid 2,4,5-Trichlorophenoxyacetic acid	100	1,4	U232	C	1000 (454)
2,4,5-T acid	93765	2,4,5-T 2,4,5-Trichlorophenoxyacetic acid	100	1,4	U232	C	1000 (454)
2,4,5-T amines	2008460 6369966 6369977 1319728 3813147		100	1		D	5000 (2270)

TABLE 302 4 - LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES — Continued

Hazardous Substance	CASRN	Regulatory Synonyms	Statutory			Final RQ	
			RQ	Code	RCRA Waste Number	Category	Pounds (Kg)
2,4,5-T esters	93798 2545597 61792072 1928478 25168154		100	1		C	1000 (454)
2,4,5-T salts	13560991		100	1		C	1000 (454)
TDE	72548	DDD 4,4'-DDD Dichlorodiphenyl dichloroethane	1	1,2,4	U060	X	1 (0 454)
1,2,4,5-Tetrachlorobenzene	95943	Benzene, 1,2,4,5-tetrachloro-	1*	4	U207	D	5000 (2270)
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	1746016		1*	2		X	1 (0 454)
1,1,1,2-Tetrachloroethane	630206	Ethane,1,1,1,2-tetrachloro-	1*	4	U208	B	100 (45 4)
1,1,2,2-Tetrachloroethane	79345	Ethane,1,1,2,2-tetrachloro-	1*	2,4	U209	B	100 (45 4)
Tetrachloroethylene	127184	Ethene, 1,1,2,2-tetrachloro-	1*	2,4	U210	X	1# (0 454)
2,3,4,6-Tetrachlorophenol	58902	Phenol, 2,3,4,6-tetrachloro-	1*	4	U212	A	10 (4 54)
Tetraethyldithiopyro-phosphate	3689245	Dithiopyrophosphoric acid, tetraethyl ester	1*	4	P109	B	100 (45 4)
Tetraethyl lead	78002	Plumbane, tetraethyl-	100	1,4	P110	A	10 (4 54)
Tetraethyl pyrophosphate	107493	Pyrophosphoric acid, tetraethyl ester	100	1,4	P111	A	10 (4 54)
Tetrahydrofuran	109999	Furan, tetrahydro-	1*	4	U213	C	1000 (454)
Tetranitromethane	509148	Methane, tetranitro-	1*	4	P112	A	10 (4 54)
Tetraphosphoric acid, hexaethyl ester	757584	Hexaethyl tetraphosphate	1*	4	P062	B	100 (45 4)
Thallic oxide	1314325	Thallium(III) oxide	1*	4	P113	B	100 (45 4)
Thallium ††	7440280		1*	2		C	1000 (454)
THALLIUM AND COMPOUNDS			1*	2			**
Thallium(I) acetate	563688	Acetic acid, thallium(I) salt	1*	4	U214	B	100 (45 4)
Thallium(I) carbonate	6533739	Carbonic acid, dithallium(I) salt	1*	4	U215	B	100 (45 4)
Thallium(I) chloride	7791120		1*	4	U216	B	100 (45 4)
Thallium(I) nitrate	10102451		1*	4	U217	B	100 (45 4)
Thallium(III) oxide	1314325	Thallic oxide	1*	4	P113	B	100 (45 4)
Thallium(I) selenide	12039620		1*	4	P114	C	1000 (454)
Thallium(I) sulfate	7446186 10031591	Sulfuric acid, thallium(I) salt	1000	1,4	P115	B	100 (45 4)
Thioacetamide	62555	Ethanethioamide	1*	4	U218	A	10 (4 54)
Thiofanox	39196184	3,3-Dimethyl-1-(methylthio)-2-butanone, O-[(methylamino)carbonyl] oxime	1*	4	P045	B	100 (45 4)
Thioimidodicarbonic diamide	541537	2,4-Dithiobiuret	1*	4	P049	B	100 (45 4)
Thiomethanol	74931	Methanethiol Methylmercaptan	100	1,4	U153	B	100 (45 4)
Thiophenol	108985	Benzenethiol	1*	4	P014	B	100 (45 4)
Thiosemicarbazide	79196	Hydrazinecarbothioamide	1*	4	P116	B	100 (45 4)
Thiourea	62566	Carbamide, thio-	1*	4	U219	A	10 (4 54)
Thiourea, (2-chlorophenyl)-	5344821	1-(o-Chlorophenyl)thiourea	1*	4	P026	B	100 (45 4)
Thiourea, 1-naphthalenyl-	86884	alpha-Naphthylthiourea	1*	4	P072	B	100 (45 4)
Thiourea, phenyl-	103855	N-Phenylthiourea	1*	4	P093	B	100 (45 4)
Thiram	137268	Bis(dimethylthiocarbamoyl) disulfide	1*	4	U244	A	10 (4 54)
Toluene	108883	Benzene, methyl-	1000	1,2,4	U220	C	1000 (454)

TABLE 302.4 · LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES — Continued

Hazardous Substance	CASRN	Regulatory Synonyms	Statutory			Final RQ	
			RQ	Code	RCRA Waste Number	Category	Pounds (Kg)
Toluenediamine	95807 25376458 496720 823405	Diaminotoluene	1*	4	U221	A	10 (4 54)
Toluene diisocyanate	584849 91087 26471625	Benzene, 2,4-diisocyanatomethyl-	1*	4	U223	B	100 (45 4)
o-Toluidine	95534	2-Amino-1-methyl benzene	1*	4	U328	B	100 (45 4)
p-Toluidine	106490	4-Amino-1-methyl benzene	1*	4	U353	B	100 (45 4)
o-Toluidine hydrochloride	636215	Benzenamine, 2-methyl-, hydrochloride	1*	4	U222	B	100 (45 4)
Toxaphene	8001352	Camphene, octachloro-	1	1,2,4	P123	X	1 (0 454)
2,4,5-TP acid	93721	Propionic acid, 2-(2,4,5-trichlorophenoxy)- Silvex	100	1,4	U233	B	100 (45 4)
2,4,5-TP acid esters	32534955		100	1		B	100 (45 4)
1H-1,2,4-Triazol-3-amine	61825	Amitrole	1*	4	U011	A	10 (4 54)
Trichlorfon	52686		1000	1		B	100 (45 4)
1,2,4-Trichlorobenzene	120821		1*	2		B	100 (45.4)
1,1,1-Trichloroethane	71556	Methyl chloroform	1*	2,4	U226	C	1000 (454)
1,1,2-Trichloroethane	79005	Ethane, 1,1,2-trichloro-	1*	2,4	U227	B	100 (45.4)
Trichloroethene	79016	Trichloroethylene	1000	1,2,4	U228	B	100 (45.4)
Trichloroethylene	79016	Trichloroethene	1000	1,2,4	U228	B	100 (45.4)
Trichloromethanesulfenyl chloride	594423	Methanesulfenyl chloride, trichloro-	1*	4	P118	B	100 (45 4)
Trichloromonofluoromethane	75694	Methane, trichlorofluoro-	1*	4	U121	D	5000 (2270)
Trichlorophenol 2,3,4-Trichlorophenol 2,3,5-Trichlorophenol 2,3,6-Trichlorophenol 3,4,5-Trichlorophenol	25167822 15950660 933788 933755 609198		10	1		A	10 (4 54)
2,4,5-Trichlorophenol	95954	Phenol, 2,4,5-trichloro-	10	1,4	U230	A	10 (4 54)
2,4,6-Trichlorophenol	88062	Phenol, 2,4,6-trichloro-	10	1,2,4	U231	A	10 (4 54)
2,4,5-Trichlorophenoxyacetic acid	93765	2,4,5-T 2,4,5-T acid	100	1,4	U232	C	1000 (454)
Triethanolamine dodecylbenzenesulfonate	27323417		1000	1		C	1000 (454)
Triethylamine	121448		5000	1		D	5000 (2270)
Trimethylamine	75503		1000	1		B	100 (45 4)
sym-Trinitrobenzene	99354	Benzene, 1,3,5-trinitro-	1*	4	U234	A	10# (4 54)
1,3,5-Trioxane, 2,4,6-trimethyl-	123637	Paraldehyde	1*	4	U182	C	1000 (454)
Tris(2,3-dibromopropyl) phosphate	126727	1-Propanol, 2,3-dibromo-, phosphate (3 1)	1*	4	U235	A	10 (4 54)
Trypan blue	72571	2,7-Naphthalenedisulfonic acid, 3,3 -[(3,3'-dimethyl-(1,1'-biphenyl)-4,4'-diyl)-bis(azo)]bis(5-amino-4-hydroxy)-tetrasodium salt	1*	4	U236	A	10 (4 54)

TABLE 302 4 · LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES — Continued

Hazardous Substance	CASRN	Regulatory Synonyms	Statutory			Final RQ	
			RQ	Code	RCRA Waste Number	Category	Pounds (Kg)
Unlisted Hazardous Wastes			1*	4			
Characteristic of Ignitability			1*	4	D001	B	100 (45 4)
Characteristic of Corrosivity			1*	4	D002	B	100 (45 4)
Characteristic of Reactivity			1*	4	D003	B	100 (45 4)
Characteristic of EP Toxicity							
Arsenic			1*	4	D004	X	1 (0 454)
Barium			1*	4	D005	C	1000 (454)
Cadmium			1*	4	D006	A	10 (4 54)
Chromium			1*	4	D007	A	10 (4 54)
Lead			1*	4	D008	X	1## (0 454)
Mercury			1*	4	D009	X	1 (0 454)
Selenium			1*	4	D010	A	10# (4 54)
Silver			1*	4	D011	X	1 (0 454)
Endrin			1	1,4	D012	X	1 (0 454)
Lindane			1	1,4	D013	X	1 (0 454)
Methoxychlor			1	1,4	D014	X	1 (0 454)
Toxaphene			1	1,4	D015	X	1 (0 454)
2,4-D			100	1,4	D016	B	100 (45 4)
2,4,5-TP			100	1,4	D017	B	100 (45 4)
Uracil, 5-[bis(2-chloroethyl) amino]-	66751	Uracil mustard	1*	4	U237	A	10 (4 54)
Uracil mustard	66751	Uracil, 5-[bis(2-chloroethyl) amino]-	1*	4	U237	A	10 (4 54)
Uranyl acetate	541093		5000	1		B	100 (45 4)
Uranyl nitrate	10102064 36478769		5000	1		B	100 (45 4)
Urea, N-ethyl-N-nitroso-	759739	N-Nitroso-N-ethylurea	1*	4	U176	X	1 (0 454)
Urea, N-methyl-N-nitroso	684935	N-Nitroso-N-methylurea	1*	4	U177	X	1 (0 454)
Vanadic acid, ammonium salt	7803556	Ammonium vanadate	1*	4	P119	C	1000 (454)
Vanadium(V) oxide	1314621	Vanadium pentoxide	1000	1 4	P120	C	1000 (454)
Vanadium pentoxide	1314621	Vanadium(V) oxide	1000	1 4	P120	C	1000 (454)
Vanadyl sulfate	27774136		1000	1		C	1000 (454)
Vinyl acetate	108054		1000	1		D	5000 (2270)
Vinyl chloride	75014	Ethene, chloro-	1*	2 3 4	U043	X	1 (0 454)
Vinylidene chloride	75354	1,1-Dichloroethylene Ethene, 1,1-dichloro-	5000	1 2 4	U078	B	100 (45 4)
Warfarin	81812	3-(alpha-Acetonylbenzyl)-4-hydroxycoumarin and salts	1*	4	P001	B	100 (45 4)
Xylene (mixed)	1330207	Benzene, dimethyl	1000	1 4	U239	C	1000 (454)
m-	108383	m-					
o-	95476	o-					
p-	106423	p-					
Xylenol	1300716		1000	1		C	1000 (454)
Yohimban-16-carboxylic acid 11,17-dimethoxy-18-[(3,4,5-trimethoxybenzoyl)oxy]-, methylester	50555	Reserpine	1*	4	U200	D	5000 (2270)
Zinc ††	7440666		1*	2		C	1000 (454)
ZINC AND COMPOUNDS			1*	2			**
Zinc acetate	557346		1000	1		C	1000 (454)
Zinc ammonium chloride	52628258 14639975 14639986		5000	1		C	1000 (454)
Zinc borate	1332076		1000	1		C	1000 (454)
Zinc bromide	7699458		5000	1		C	1000 (454)

TABLE 302.4 - LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES — Continued

Hazardous Substance	CASRN	Regulatory Synonyms	Statutory			Final RQ	
			RQ	Code	RCRA Waste Number	Category	Pounds (Kg)
Zinc carbonate	3486359		1000	1		C	1000 (454)
Zinc chloride	7646857		5000	1		C	1000 (454)
Zinc cyanide	557211		10	1,4	P121	A	10 (4.54)
Zinc fluoride	7783495		1000	1		C	1000 (454)
Zinc formate	557415		1000	1		C	1000 (454)
Zinc hydrosulfite	7779864		1000	1		C	1000 (454)
Zinc nitrate	7779886		5000	1		C	1000 (454)
Zinc phenolsulfonate	127822		5000	1		D	5000 (2270)
Zinc phosphide	1314847		1000	1,4	P122	B	100 (45.4)
Zinc silicofluoride	16871719		5000	1		D	5000 (2270)
Zinc sulfate	7733020		1000	1		C	1000 (454)
Zirconium nitrate	13746899		5000	1		D	5000 (2270)
Zirconium potassium fluoride	16923958		5000	1		C	1000 (454)
Zirconium sulfate	14644612		5000	1		D	5000 (2270)
Zirconium tetrachloride	10026116		5000	1		D	5000 (2270)
F001			1*	4	F001	A	10 (4.54)
The following spent halogenated solvents used in degreasing, all spent solvent mixtures/blends used in degreasing containing, before use, a total of ten percent or more (by volume) of one or more of the above halogenated solvents or those solvents listed in F002, F004, and F005, and still bottoms from the recovery of these spent solvents and spent solvent mixtures.							
(a) Tetrachloroethylene	127184		1*	2,4	U210	B	100 (45.4)
(b) Trichloroethylene	79016		1000	1,2,4	U228	B	100 (45.4)
(c) Methylene chloride	75092		1*	2,4	U080	C	1000 (454)
(d) 1,1,1-Trichloroethane	71556		1*	2,4	U226	C	1000 (454)
(e) Carbon tetrachloride	56235		5000	1,2,4	U211	A	10 (4.54)
(f) Chlorinated fluorocarbons	N.A.					D	5000 (2270)
F002			1*	4	F002	A	10 (4.54)
The following spent halogenated solvents, all spent solvent mixtures/blends containing, before use, a total of ten percent or more (by volume) of one or more of the above halogenated solvents or those listed in F001, F004, F005, and still bottoms from the recovery of these spent solvents and spent solvent mixtures							
(a) Tetrachloroethylene	127184		1*	2,4	U210	B	100 (45.4)
(b) Methylene chloride	75092		1*	2,4	U080	C	1000 (454)
(c) Trichloroethylene	79016		1000	1,2,4	U228	B	100 (45.4)
(d) 1,1,1-Trichloroethane	71556		1*	2,4	U226	C	1000 (454)
(e) Chlorobenzene	108907		100	1,2,4	U037	B	100 (45.4)
(f) 1,1,2-Trichloro-1,2,2-trifluoroethane	76131					D	5000 (2270)
(g) o-Dichlorobenzene	95501		100	1,2,4	U070	B	100 (45.4)
(h) Trichlorofluoromethane	75694		1*	4	U121	D	5000 (2270)
(i) 1,1,2-Trichloroethane	79005		1*	2,4	U227	B	100 (45.4)

TABLE 302 4 · LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES — Continued

Hazardous Substance	CASRN	Regulatory Synonyms	Statutory			Final RQ	
			RQ	Code	RCRA Waste Number	Category	Pounds (Kg)
F003 The following spent non-halogenated solvents: xylene, acetone, ethyl acetate, ethylbenzene, ethyl ether, methyl isobutyl ketone, n-butyl alcohol, cyclohexanone, and methanol; all spent solvent mixtures/blends containing, before use, only the above spent non-halogenated solvents; and all spent solvent mixtures/blends containing, before use, one or more of the above non-halogenated solvents, and a total of ten percent or more (by volume) of one or:			1*	4	F003	B	100 (45 4)
(a) Xylene (mixed)	1330207		1000	1,4	U239	C	1000 (454)
(b) Acetone	67641		1*	4	U002	D	5000 (2270)
(c) Ethyl acetate	141786		1*	4	U112	D	5000 (2270)
(d) Ethylbenzene	100414		1000	1,2		C	1000 (454)
(e) Ethyl ether	60297		1*	4	U117	B	100 (45 4)
(f) Methyl isobutyl ketone	108101		1*	4	U161	D	5000 (2270)
(g) n-Butyl alcohol	71363		1*	4	U031	D	5000 (2270)
(h) Cyclohexanone	108941		1*	4	U057	D	5000 (2270)
(i) Methanol	67561		1*	4	U154	D	5000 (2270)
F004 The following spent non-halogenated solvents and the still bottoms from the recovery of these solvents			1*	4	F004	C	1000 (454)
(a) Cresols/Cresylic acid	1319773		1000	1,4	U052	C	1000 (454)
(b) Nitrobenzene	98953		1000	1,2,4	U169	C	1000 (454)
F005 The following spent non-halogenated solvents and the still bottoms from the recovery of these solvents			1*	4	F005	B	100 (45 4)
(a) Toluene	108883		1000	1,2,4	U220	C	1000 (454)
(b) Methyl ethyl ketone	78933		1*	4	U159	D	5000 (2270)
(c) Carbon disulfide	75150		5000	1,4	P022	B	100 (45 4)
(d) Isobutanol	78831		1*	4	U140	D	5000 (2270)
(e) Pyridine	110861		1*	4	U196	C	1000 (454)
F006 Wastewater treatment sludges from electroplating operations except from the following processes (1) sulfuric acid anodizing of aluminum, (2) tin plating on carbon steel, (3) zinc plating (segregated basis) on carbon steel, (4) aluminum or zinc-aluminum plating on carbon steel, (5) cleaning/stripping associated with tin, zinc and aluminum plating on carbon steel, and (6) chemical etching and milling of aluminum			1*	4	F006	A	10 (4 54)

TABLE 302.4 - LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES -- Continued

Hazardous Substance	CASRN	Regulatory Synonyms	Statutory			Final RQ	
			RQ	Code	RCRA Waste Number	Category	Pounds (Kg)
F007 Spent cyanide plating bath solutions from electroplating operations (except for precious metals electroplating spent cyanide plating bath solutions)			1*	4	F007	A	10 (4.54)
F008 Plating bath sludges from the bottom of plating baths from electroplating operations where cyanides are used in the process (except for precious metals electroplating plating bath sludges)			1*	4	F008	A	10 (4.54)
F009 Spent stripping and cleaning bath solutions from electroplating operations where cyanides are used in the process (except for precious metals electroplating spent stripping and cleaning bath solutions)			1*	4	F009	A	10 (4.54)
F010 Quenching bath sludge from oil baths from metal heat treating operations where cyanides are used in the process (except for precious metals heat treating quenching bath sludges)			1*	4	F010	A	10 (4.54)
F011 Spent cyanide solutions from salt bath pot cleaning from metal heat treating operations (except for precious metals heat treating spent cyanide solutions from salt bath pot cleaning)			1*	4	F011	A	10 (4.54)
F012 Quenching wastewater treatment sludges from metal heat treating operations where cyanides are used in the process (except for precious metals heat treating quenching wastewater treatment sludges)			1*	4	F012	A	10 (4.54)
F019 Wastewater treatment sludges from the chemical conversion coating of aluminum			1*	4	F019	A	10 (4.54)
F020 Wastes (except wastewater and spent carbon from hydrogen chloride purification from the production or manufacturing use (as a reactant chemical intermediate or component in a formulating process) of tri- or tetrachlorophenol, or of			1*	4	F020	X	1 (0.454)

TABLE 302 4 - LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES — Continued

Hazardous Substance	CASRN	Regulatory Synonyms	Statutory			Final RQ	
			RQ	Code	RCRA Waste Number	Category	Pounds (Kg)
intermediates used to produce their pesticide derivatives. (This listing does not include wastes from the production of hexachlorophene from highly purified 2,4,5-tri-chlorophenol.							
F021 Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of pentachlorophenol, or of intermediates used to produce its derivatives.			1*	4	F021	X	1 (0 454)
F022 Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tetra-, penta-, or hexa-chlorobenzenes under alkaline conditions.			1*	4	F022	X	1 (0 454)
F023 Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tri- and tetrachlorophenols (This listing does not include wastes from equipment used only for the production or use of hexachlorophene from highly purified 2,4,5-trichlorophenol.)			1*	4	F023	X	1 (0.454)
F024 Wastes, including but not limited to distillation residues, heavy ends, tars, and reactor cleanout wastes, from the production of chlorinated aliphatic hydrocarbons, having carbon content from one to five, utilizing free radical catalyzed processes (This listing does not include light ends, spent filters and filter aids, spent dessicants(sic), wastewater, wastewater treatment sludges, spent catalysts, and wastes listed in Section 261 32.)			1*	4	F024	X	1 (0 454)

TABLE 302.4 - LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES — Continued

Hazardous Substance	CASRN	Regulatory Synonyms	Statutory			Final RQ	
			RQ	Code	RCRA Waste Number	Category	Pounds (Kg)
F026 Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for the manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tetra-, penta-, or hexachlorobenzene under alkaline conditions.			1*	4	F026	X	1 (0.454)
F027 Discarded unused formulations containing tri-, tetra-, or pentachlorophenol or discarded unused formulations containing compounds derived from these chlorophenols. (This listing does not include formulations containing hexachlorophene synthesized from prepurified 2,4,5-trichlorophenol as the sole component.)			1*	4	F027	X	1 (0.454)
F028 Residues resulting from the incineration or thermal treatment of soil contaminated with EPA Hazardous Waste Nos. F020, F021, F022, F023, F026, and F027.			1*	4	F028	X	1 (0.454)
K001 Bottom sediment sludge from the treatment of wastewaters from wood preserving processes that use creosote and/or pentachlorophenol			1*	4	K001	X	1 (0.454)
K002 Wastewater treatment sludge from the production of chrome yellow and orange pigments			1*	4	K002		#
K003 Wastewater treatment sludge from the production of molybdate orange pigments			1*	4	K003		#
K004 Wastewater treatment sludge from the production of zinc yellow pigments			1*	4	K004	A	10 (4.54)
K005 Wastewater treatment sludge from the production of chrome green pigments			1*	4	K005		#

TABLE 302.4 - LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES — Continued

Hazardous Substance	CASRN	Regulatory Synonyms	Statutory			Final RQ	
			RQ	Code	RCRA Waste Number	Category	Pounds (Kg)
K006 Wastewater treatment sludge from the production of chrome oxide green pigments (anhydrous and hydrated)			1*	4	K006	A	10 (4.54)
K007 Wastewater treatment sludge from the production of iron blue pigments			1*	4	K007	A	10 (4.54)
K008 Oven residue from the production of chrome oxide green pigments			1*	4	K008	A	10 (4.54)
K009 Distillation bottoms from the production of acetaldehyde from ethylene			1*	4	K009	A	10 (4.54)
K010 Distillation side cuts from the production of acetaldehyde from ethylene			1*	4	K010	A	10 (4.54)
K011 Bottom stream from the wastewater stripper in the production of acrylonitrile			1*	4	K011	A	10 (4.54)
K013 Bottom stream from the acetonitrile column in the production of acrylonitrile			1*	4	K013	A	10 (4.54)
K014 Bottoms from the acetonitrile purification column in the production of acrylonitrile			1*	4	K014	D	5000 (2270)
K015 Still bottoms from the distillation of benzyl chloride			1*	4	K015	A	10 (4.54)
K016 Heavy ends or distillation residues from the production of carbon tetrachloride			1*	4	K016	X	1 (0.454)
K017 Heavy ends (still bottoms) from the purification column in the production of epichlorohydrin			1*	4	K017	A	10 (4.54)
K018 Heavy ends from the fractionation column in ethyl chloride production			1*	4	K018	X	1 (0.454)
K019 Heavy ends from the distillation of ethylene dichloride in ethylene dichloride production			1*	4	K019	X	1 (0.454)
K020 Heavy ends from the distillation of vinyl chloride in vinyl chloride monomer production			1*	4	K020	X	1 (0.454)

TABLE 302.4 · LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES — Continued

Hazardous Substance	CASRN	Regulatory Synonyms	Statutory			Final RQ	
			RQ	Code	RCRA Waste Number	Category	Pounds (Kg)
K021 Aqueous spent antimony catalyst waste from fluoromethanes production			1*	4	K021	A	10 (4 54)
K022 Distillation bottom tars from the production of phenol/acetone from cumene			1*	4	K022	X	1 (0 454)
K023 Distillation light ends from the production of phthalic anhydride from naphthalene			1*	4	K023	D	5000 (2270)
K024 Distillation bottoms from the production of phthalic anhydride from naphthalene			1*	4	K024	D	5000 (2270)
K025 Distillation bottoms from the production of nitrobenzene by the nitration of benzene			1*	4	K025	A	10 (4 54)
K026 Stripping still tails from the production of methyl ethyl pyridines			1*	4	K026	C	1000 (454)
K027 Centrifuge and distillation residues from toluene diisocyanate production			1*	4	K027	A	10 (4 54)
K028 Spent catalyst from the hydrochlorinator reactor inthe production of 1,1,1-trichloroethane			1*	4	K028	X	1 (0 454)
K029 Waste from the product steam stripper in the production of 1,1,1-trichloroethane			1*	4	K029	X	1 (0 454)
K030 Column bottoms or heavy ends from the combined production of trichloroethylene and perchloroethylene			1*	4	K030	X	1 (0 454)
K031 By-product salts generated in the production of MSMA and cacodylic acid			1*	4	K031	X	1 (0 454)
K032 Wastewater treatment sludge from the production of chlordane			1*	4	K032	A	10 (4 54)
K033 Wastewater and scrub water from the chlorination of cyclopentadiene in the production of chlordane			1*	4	K033	A	10 (4 54)
K034 Filter solids from the filtration of hexachlorocyclopentadiene in the production of chlordane			1*	4	K034	A	10 (4 54)

TABLE 302.4 · LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES — Continued

Hazardous Substance	CASRN	Regulatory Synonyms	Statutory			Final RQ	
			RQ	Code	RCRA Waste Number	Category	Pounds (Kg)
K035 Wastewater treatment sludges generated in the production of creosote			1*	4	K035	X	1 (0.454)
K036 Still bottoms from toluene reclamation distillation in the production of disulfoton			1*	4	K036	X	1 (0.454)
K037 Wastewater treatment sludges from the production of disulfoton			1*	4	K037	X	1 (0.454)
K038 Wastewater from the washing and stripping of phorate production			1*	4	K038	A	10 (4.54)
K039 Filter cake from the filration of diethylphosphorodithioic acid in the production of phorate			1*	4	K039	A	10 (4.54)
K040 Wastewater treatment sludge from the production of phorate			1*	4	K040	A	10 (4.54)
K041 Wastewater treatment sludge from the production of toxaphene			1*	4	K041	X	1 (0.454)
K042 Heavy ends or distillation residues from the distillation of tetra-chlorobenzene in the production of 2,4,5-T			1*	4	K042	A	10 (4.54)
K043 2,6-Dichlorophenol waste from the production of 2,4-D			1*	4	K043	A	10 (4.54)
K044 Wastewater treatment sludges from the manufacturing and processing of explosives			1*	4	K044	A	10 (4.54)
K045 Spent carbon from the treatment of wastewater containing explosives			1*	4	K045	A	10 (4.54)
K046 Wastewater treatment sludges from the manufacturing, formulation and loading of lead-based initiating compounds			1*	4	K046	B	100 (45.4)
K047 Pink/red water from TNT operations			1*	4	K047	A	10 (4.54)
K048 Dissolved air flotation (DAF) float from the petroleum refining industry			1*	4	K048		#

TABLE 302.4 - LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES - Continued

Hazardous Substance	CASRN	Regulatory Synonyms	Statutory			Final RQ	
			RQ	Code	RCRA Waste Number	Category	Pounds (Kg)
K049 Slop oil emulsion solids from the petroleum refining industry			1*	4	K049		#
K050 Heat exchanger bundle cleaning sludge from the petroleum refining industry			1*	4	K050	A	10 (4 54)
K051 API separator sludge from the petroleum refining industry			1*	4	K051		#
K052 Tank bottoms (leaded) from the petroleum refining industry			1*	4	K052	A	10# (4 54)
K060 Ammonia still lime sludge from coking operations			1*	4	K060	X	1 (0 454)
K061 Emission control dust/sludge from the primary production of steel in electric furnaces			1*	4	K061		#
K062 Spent pickle liquor from steel finishing operations			1*	4	K062		#
K064 Acid plant blowdown slurry/sludge resulting from thickening of blowdown slurry from primary copper production.			1*	4	K064		##
K065 Surface impoundment solids contained in and dredged from surface impoundments at primary lead smelting facilities.			1*	4	K065		##
K066 Sludge from treatment of process wastewater and/or acid plant blowdown from primary zinc production.			1*	4	K066		##
K069 Emission control dust/sludge from secondary lead smelting			1*	4	K069		#
K071 Brine purification muds from the mercury cell process in chlorine production, where separately prepurified brine is not used			1*	4	K071	X	1 (0 454)
K073 Chlorinated hydrocarbon waste from the purification step of the diaphragm cell process using graphite anodes in chlorine production			1*	4	K073	A	10 (4 54)

TABLE 302 4 - LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES – Continued

Hazardous Substance	CASRN	Regulatory Synonyms	Statutory			Final RQ	
			RQ	Code	RCRA Waste Number	Category	Pounds (Kg)
K083 Distillation bottoms from aniline extraction			1*	4	K083	B	100 (45.4)
K084 Wastewater treatment sludges generated during the production of veterinary pharmaceuticals from arsenic or organoarsenic compounds			1*	4	K084	X	1 (0.454)
K085 Distillation or fractionation column bottoms from the production of chlorobenzenes			1*	4	K085	A	10 (4.54)
K086 Solvent washes and sludges, caustic washes and sludges, or water washes and sludges from cleaning tubs and equipment used in the formulation of ink from pigments, driers, soaps, and stabilizers containing chromium and lead			1*	4	K086		#
K087 Decanter tank tar sludge from coking operations			1*	4	K087	B	100 (45.4)
K088 Spent potliners from primary aluminum reduction.			1*	4	K1088		#
K090 Emission control dust or sludge from ferrochromium-silicon production.			1*	4	K090		#
K091 Emission control dust or sludge from ferrochromium production.			1*	4	K091		#
K093 Distillation light ends from the production of phthalic anhydride from orthoxylene			1*	4	K093	D	5000 (2270)
K094 Distillation bottoms from the production of phthalic anhydride from orthoxylene			1*	4	K094	D	5000 (2270)
K095 Distillation bottoms from the production of 1,1,1-trichloroethane			1*	4	K095	B	100 (45.4)
K096 Heavy ends from the heavy ends column from the production of 1,1,1-trichloroethane			1*	4	K096	B	100 (45.4)
K097 Vacuum stripper discharge from the chlordane chlorinator in the production of chlordane			1*	4	K097	X	1 (0.454)

TABLE 302.4 - LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES — Continued

Hazardous Substance	CASRN	Regulatory Synonyms	Statutory			Final RQ	
			RQ	Code	RCRA Waste Number	Category	Pounds (Kg)
K098 Untreated process wastewater from the production of toxaphene			1*	4	K098	X	1 (0.454)
K099 Untreated wastewater from the production of 2,4-D			1*	4	K099	A	10 (4.54)
K100 Waste leaching solution from acid leaching of emission control dust/sludge from secondary lead smelting (Components of this waste are identicalwith those of K069).			1*	4	K100		#
K101 Distillation tar residues from the distillation of aniline-based compounds in the production of veterinary phamaceuticals from arsenic or organo-arsenic compounds			1*	4	K101	X	1 (0.454)
K102 Residue from the use of activated carbon for decolorization in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds			1*	4	K102	X	1 (0.454)
K103 Process residues from aniline extraction from the production of aniline			1*	4	K103	B	100 (45.4)
K104 Combined wastewater streams generated from nitrobenzene/aniline chlorobenzenes			1*	4	K104	A	10 (4.54)
K105 Separated aqueous stream from the reactor product washing step in the production of chlorobenzenes			1*	4	K105	A	10 (4.54)
K106 Wastewater treatment sludge from the mercury cell process in chlorine production			1*	4	K106	X	1 (0.454)
K111 Product washwaters from the production of dinitrotoluene via nitration of toluene			1*	4	K111	A	10 (4.54)
K112 Reaction by-product water from the drying column in the production of toluenediamine via hydrogenation of dinitrotoluene			1*	4	K112	A	10 (4.54)

TABLE 302.4 - LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES – Continued

Hazardous Substance	CASRN	Regulatory Synonyms	Statutory			Final RQ	
			RQ	Code	RCRA Waste Number	Category	Pounds (Kg)
K113 Condensed liquid light ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.			1*	4	K113	A	10 (4.54)
K114 Vicinals from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.			1*	4	K114	A	10 (4.54)
K115 Heavy ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.			1*	4	K115	A	10 (4.54)
K116 Organic condensate from the solvent recovery column in the production of toluene diisocyanate via phosgenation of toluenediamine.			1*	4	K116	A	10 (4.54)
K117 Wastewater from the reaction vent gas scrubber in the production of ethylene bromide via bromination of ethene.			1*	4	K117	X	1 (0.454)
K118 Spent absorbent solids from purification of ethylene dibromide in the production of ethylene dibromide.			1*	4	K118	X	1 (0.454)
K123 Process wastewater (including supernates, filtrates, and washwaters) from the production of ethylenebisdithiocarbamic acid and its salts.			1*	4	K123	A	10 (4.54)
K124 Reactor vent scrubber water from the production of ethylenebisdithiocarbamic acid and it salts.			1*	4	K124	A	10 (4.54)
K125 Filtration, evaporation, and centrifugation solids from the production of ethylenebisdithiocarbamic acid and its salts.			1*	4	K125	A	10 (4.54)
K126 Baghouse dust and floor sweepings in milling and packaging operations from the production or formulation of ethylenebisdithiocarbamic acid and its salts			1*	4	K126	A	10 (4.54)

TABLE 302.4 - LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES – Continued

Hazardous Substance	CASRN	Regulatory Synonyms	Statutory			Final RQ	
			RQ	Code	RCRA Waste Number	Category	Pounds (Kg)
K131 Wastewater from the reactor and spent sulfuric acid from the acid dryer in the production of methyl bromide.			100	4	K131	X	100 (45.4)
K132 Spent absorbent and wastewater solids from the production of methyl bromide.			1000	4	K132	X	1000 (454)
K136 Still bottoms from the purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene.			1*	4	K136	X	1 (0.454)

† - indicates the statutory source as defined by 1, 2, 3, or 4 below
†† - no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is equal to or exceeds 100 micrometers (0.004 inches)
††† - The RQ for asbestos is limited to friable forms only
1 - indicates that the statutory source for designation of this hazardous substance under CERCLA is CWA Section 311(b)(4)
2 - indicates that the statutory source for designation of this hazardous substance under CERCLA is CWA Section 307(a)
3 - indicates that the statutory source for designation of this hazardous substance under CERCLA is CAA Section 112
4 - indicates that the statutory source for designation of this hazardous substance under CERCLA is RCRA Section 3001
1* - indicates that the 1-pound RQ is a CERCLA statutory RQ
- indicates that the RQ is subject to change when the assessment of potential carcinogenicity and/or chronic toxicity is completed
- The Agency may adjust the RQ for this hazardous substance in a future rulemaking, until then the statutory RQ applies
** - indicates that no RQ is being assigned to the generic or broad class
§ - the adjusted RQs for radionuclides may be found in Appendix B to this table.