

**REGISTRATION GUIDANCE MANUAL  
FOR GENERATORS OF LIQUID INDUSTRIAL  
AND HAZARDOUS WASTE**

**OCTOBER 2000**

**MINISTRY OF THE ENVIRONMENT**

## TABLE OF CONTENTS

	<u>Page</u>
I Introduction	1
II Three-Step Registration Process	2
Step 1 - <u>How to Determine if Registration is Required</u>	
- Introduction	2
- Using the Waste Identification Flowchart	3
- Flowchart Explanations	5
- Summary of Waste Streams Requiring Generator Registration	17
Step 2 - <u>How to Complete and File Your Registration Report</u>	
- Part 1 - Generator Identification	21
- Part 2 - Waste Identification	22
- Part 3 - Waste Management	23
- Filing Reports	24
Step 3 - <u>What Happens After Your Report Has Been Filed</u>	
- Acknowledgment of Registration	25
- Post-Acknowledgment Review	25
- Manifest Requirements	25
- Re-Registration	26
- Information Available to the Public	26
III List of Figures	
Figure 1 - Waste Identification Flowchart	4
Figure 2 - Waste Streams Requiring Generator Registration	20
Figure 3 - Sample Manifest Form	27
Figure 4 - Distribution Of Manifest Forms	28
IV Appendices	
(1) Regulatory Improvements for Hazardous Waste Management - Technical Questions -	<Green>
(2) Ministry of the Environment Waste Classes	<Green>
- Typical MOE Waste Classes	<Green>
(3) Canadian Standard Industrial Classification (SIC) Codes	<Green>
(4) Schedule 1 - Hazardous Industrial Wastes	<Yellow>
(5) Schedule 2(A) - Acute Hazardous Waste Chemicals	<Yellow>
(6) Schedule 2(B) - Hazardous Waste Chemicals	<Yellow>
(7) Schedule 3 - Severely Toxic Contaminants	<Yellow>
(8) Schedule 4 - Leachate Quality Criteria	<Yellow>
(9) Ministry of the Environment Regional and District Offices	<Pink>
(10) Examples - Completed Generator Registration Reports	<Pink>



## **I INTRODUCTION**

This guidance manual has been prepared to help you comply with the generator registration requirements of Regulation 347. Regulation 347 requires waste generators to evaluate their wastes and if found to be Hazardous or Liquid Industrial to register them with the Ministry of the Environment (MOE). It is an offense to store, process, dispose or transport such wastes in Ontario unless the generator has obtained a Generator Registration document issued by the MOE.

Out-of-Province waste generators who transport or dispose of Hazardous or Liquid Industrial Wastes in Ontario must also register these wastes with the MOE. No carrier or receiver will be permitted to accept these wastes from any out-of-province generator who has not obtained a Generator Registration document issued by the MOE.

Regulation 347 provides a comprehensive system for monitoring Hazardous and Liquid Industrial Wastes, from their point of generation, through to their ultimate disposal. This monitoring system provides waste generators with information concerning the treatment or disposal of their wastes. The first step in the management of these wastes is the generator registration program. Information obtained from this program allows the Ministry to develop computerized waste profiles which serve as a basis for the entire waste monitoring and control system.

The registration process includes three steps. The first two steps are the responsibility of the generator. The third involves subsequent Ministry activities and addresses ongoing waste generator requirements.

Step 1 will help you determine whether or not registration of your waste(s) is required. To assist you in this determination, a flowchart and explanations have been provided. If, after using the flowchart, you determine that your wastes are not subject to the registration requirements of Regulation 347, no further action need be taken. However, if your wastes are subject, your site and the wastes must be registered with the MOE.

Step 2 will show you how to complete and file Generator Registration Reports. It explains each line of the report and the information that must be entered.

Step 3 will explain what happens to your Generator Registration Report after you have filed it with the Ministry. It briefly describes the steps to be taken by the Ministry in reviewing your report. It also outlines your ongoing obligations as a waste generator.

Throughout the manual the term Subject Waste is used. Subject Wastes are Hazardous Wastes and Liquid Industrial Wastes.

This guidance manual should be used in conjunction with Regulation 347. The guidance manual has been prepared, for your convenience, to help you interpret the technical requirements of Regulation 347. For the legal requirements, wording and interpretation, refer to the Regulation itself.

## **II THREE-STEP REGISTRATION PROCESS**

### **STEP 1 - HOW TO DETERMINE IF REGISTRATION IS REQUIRED**

#### **Introduction**

All generators of wastes will need to determine whether the wastes they produce or accumulate are subject to registration requirements. Step 1 provides a systematic approach to making this decision using a flowchart and associated explanations. It will also help you determine the Waste Characteristics and corresponding MOE Waste Classes that must be entered on the Generator Registration Report.

The Regulation defines Hazardous Wastes in a manner similar to the United States Environmental Protection Agency. The listing and testing approach assigns specific laboratory tests and criteria wherever possible. Where tests or criteria have not been developed for specific characteristics, such as toxicity, the wastes of concern are listed.

Using this approach, a Hazardous Waste is defined as a waste that meets one of the following:

- 1) It is listed as a Hazardous Industrial Waste in Schedule 1 of Regulation 347;
- 2) It is listed as an Acute Hazardous Waste Chemical or Hazardous Waste Chemical in Schedule 2(A) or 2(B) of Regulation 347;
- 3) It contains Severely Toxic contaminants listed in Schedule 3 of Regulation 347 at a concentration greater than 1 ppm;
- 4) It is identified as being Pathological or Radioactive as presented in Regulation 347;
- 5) It is a mixture of a waste described above in 1, 2 3 or 4 and any other waste or material;
- 6) It is derived-from wastes described above in 1, 2 3 or 4;
- 7) It is identified as being a PCB waste as presented in Regulation 347;
- 8) It exceeds the criteria assigned to the characteristics of Ignitability, Corrosivity or Reactivity; or,
- 9) It produces a leachate containing any of the contaminants listed in Schedule 4 at a concentration equal to or in excess of the concentration specified for that contaminant in Schedule 4 of Regulation 347 using the Toxicity Characteristic Leaching Procedure, Method 1311 that appears in the United States Environmental Protection Agency Publication SW-846 entitled "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", as amended from time to time, or an equivalent test method approved by the Director.

The Regulation also defines Liquid Industrial Wastes and requires that they be registered with the Ministry. These are wastes from industrial or commercial sources that are not Hazardous but that are liquid. For registration purposes, the criterion to determine whether the waste is liquid or not is the Slump Test.

A number of specific exemptions has been provided by the Regulation. Details can be found by following

the flowchart and referring to the related explanations.

Registration is not required in anticipation of wastes that may be generated through spills. Emergency registration procedures are available for spill situations, process aberrations or upsets. Contact your nearest Ministry of the Environment (MOE) district office (Appendix 9) during emergencies for special streamlined registration requirements. Obtaining emergency registration does not eliminate your requirement to submit a generator registration form.

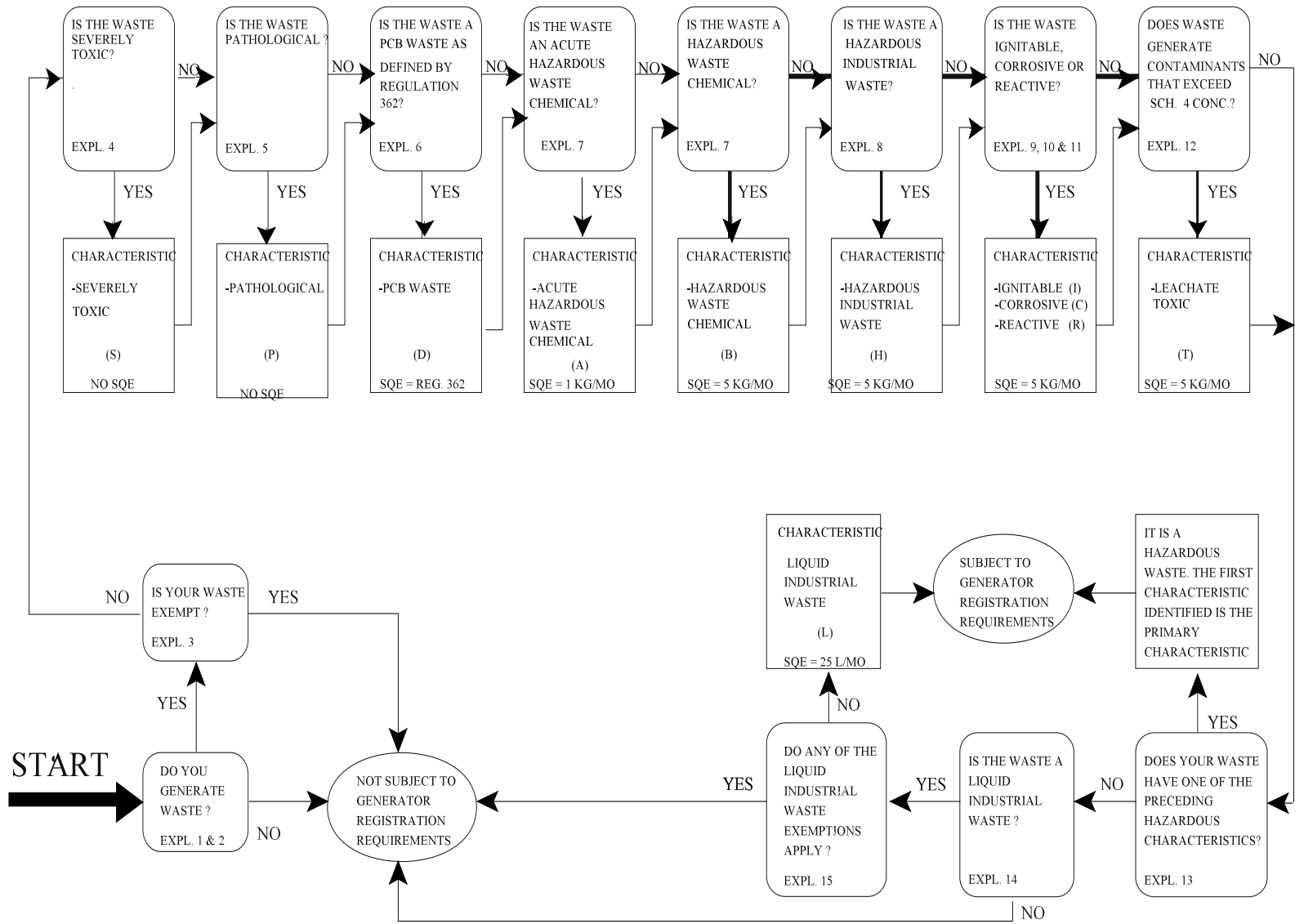
### **Using the Waste Identification Flowchart**

The Waste Identification Flowchart shown in Figure 1 is designed to help you determine by means of a systematic approach, whether or not you must register your facility and its wastes. In addition, the flowchart will help you identify the appropriate Waste Characteristics and Waste Classes. Explanations are referred to throughout the flowchart. These explanations can be found within this manual on the pages immediately following Figure 1.

The flowchart must be followed to its completion to ensure that all characteristics of a particular waste have been identified and prioritized. In those cases where there is more than one hazardous Waste Characteristic, the first identified using the flowchart is defined as the "Primary Characteristic". If a second characteristic is found, it will be defined as the "Secondary Characteristic".

**DO NOT ATTEMPT TO COMPLETE YOUR REGISTRATION REPORT UNTIL YOU HAVE FOLLOWED THE FLOWCHART THROUGH TO COMPLETION AND READ ALL PERTINENT EXPLANATIONS.**

**FIGURE 1: WASTE IDENTIFICATION FLOWCHART**



## **Flowchart Explanations**

**Note: These explanations can only be used along with the flowchart.**

### **Explanation 1 -- Generator**

The Regulation defines generator and waste generating facility (site). The intent is to include any person, by site, who through ownership, management, operation or control, creates or stores wastes. Generators include operators of commercial and manufacturing facilities that produce wastes as well as operators of waste disposal, transfer, bulking, treatment or processing facilities that forward materials off-site for subsequent management.

### **Explanation 2 -- Waste**

Wastes are defined by the *Environmental Protection Act* (EPA) and include all materials that you would normally consider to be waste. Ashes, garbage, industrial waste, commercial waste, and other residues from industrial and commercial activities are included.

All products and by-products from waste transfer, bulking, treatment or processing facilities are considered to be wastes. These include oil recovered from oily water treatment facilities as well as blended or bulked waste solvents destined for either disposal or recycle. Commercial chemical products or by-products, including those that are off-specification or that have exceeded their expiry date, are also considered to be wastes.

Economic value is not a good indicator of whether or not a material is a waste. Waste materials being sold for their heating value or otherwise being reused, recycled, recovered or reclaimed are still wastes. Exemptions are provided if certain conditions are met. See Explanation 3(f) for details.

By-products or intermediates from a series of traditional refining operations, such as mineral or metal recovery, are not wastes. For example, sludges from an electrolytic recovery process for metals, such as nickel or copper, which are subsequently processed to remove precious metals, such as silver or gold, are not considered to be wastes.

### **Explanation 3 -- Exemptions**

A number of exemptions are provided for both Hazardous and Liquid Industrial Wastes. These exempted wastes do not have to comply with registration or manifest requirements. The following are exempted wastes:

(a) **Hauled Sewage:**

Hauled sewage, sometimes referred to as septage, is exempt from the definitions of Liquid Industrial Waste and Hazardous Waste. This includes waste that is suitable for storage, treatment or disposal in a sewage system regulated under Part 8 of the building code if the waste is not fully disposed of at the site where it is produced, other than waste from a sewage works approved under section 53 of the *Ontario Water Resources Act* (OWRA) that is conveyed away from the site by a sewer or waste in a vehicle holding tank. Although exempt from registration, haulers of this waste are required to obtain a Certificate of Approval for a waste management system for transportation and application purposes. In addition, the site where these wastes are to be applied must also have a certificate of approval for a waste disposal site to accept these wastes.

- (b) **Sewage Sludge:**  
Wastes from municipally owned sewage works, or crown owned sewage works subject to an agreement with a municipality and approved under the OWRA are exempt from the definitions of Liquid Industrial Waste and Hazardous Waste. In addition, wastes from privately owned sewage works, that only receive wastes similar in character to domestic sewage, are also exempt. The intent of the qualifying phrase in the preceding sentence is to limit the exemption to those industrial works that treat sewage from persons. The exemption does not apply to industrial sewage.
- (c) **Discharges from On-Site Wastewater Treatment Facilities:**  
Treated wastewater discharged to watercourses from OWRA approved treatment facilities are exempt. However, Hazardous Wastes going to these treatment facilities and any wastes generated by them (other than wastewater), such as sludges or skimmings, are not exempt. See Figure 2 for clarification.
- (d) **Water Treatment Sludges:**  
Wastes from the operation of a water works subject to the OWRA are exempt from the definition of Liquid Industrial Waste.
- (e) **Domestic Wastes:**  
Wastes generated by households are exempt from the definitions of Liquid Industrial Waste and Hazardous Waste. This exemption does not include waste from institutions, hotels, motels, etc.
- (f) **Wastes exempted from Part V of the Act and Regulation 347:**  
The following wastes are exempted from Part V of the Act and Regulation 347:
- 1) Agricultural wastes;
  - 2) Condemned animals or parts thereof at a plant licensed under the *Meat Inspection Act (Ontario)* or an establishment operating under the *Meat Inspection Act (Canada)*;
  - 3) Dead animals to which the *Dead Animal Disposal Act* applies;
  - 4) Inert fill;
  - 5) Rock fill or mill tailings from a mine;
  - 6) hazardous waste or liquid industrial waste transferred by a generator for direct transportation to a site,
    - i. to be wholly used at a site in an ongoing agricultural, commercial, manufacturing or industrial process or operation used principally for functions other than waste management if the process or operation does not involve combustion or land application of the waste, only if the carrier has in his or her possession while transporting the material a document from the owner or operator of the site to which the material is being transported agreeing to accept the material, specifying what use will be made of it and stipulating that the process or operation described in that paragraph is ongoing at the time the material is being transported,
    - ii. to be promptly packaged for retail sale to meet a realistic market demand, or
    - iii. to be offered for retail sale to meet a realistic market demand;

- 7) Residue remaining after metal is recovered from wire and cable and transferred by a generator for direct transportation to a site at which it will be processed for recovery of metal and plastic using a process that does not involve combustion or land application of waste.
- 8) Pickle liquor transferred by a generator for direct transportation to a site at which it is to be wholly utilized as a treatment chemical in,
  - i. A sewage works that is subject to the OWRA, or
  - ii. A wastewater treatment facility that discharges into a sanitary sewer.
- 9) Solid photographic waste that contains silver, including spent chemical recovery cartridges that contain silver, transferred by a generator and destined for a site at which it is to be processed for recovery of silver.

In every sense, wastes described in item 6 above can be used as raw materials and as such are exempt from the registration and all other provisions of the Regulation and Part V of the Act. In order to obtain this exemption, the waste must be used completely, either in a process or operation whose function is other than waste management, or be taken directly for retail sale or prompt packaging before retail sale. It should be noted that the Regulation also addresses wastes that are neither hazardous or liquid industrial.

"Wholly" has not been defined but is intended to mean that all of the wastes must enter the process or operation. Minor modifications to the wastes such as incidental sedimentation in storage tanks where treatment is not intended would be acceptable.

Whether the function of a process is for waste management or not can be determined in most cases by reviewing its viability if the waste were not available. Processes or operations that are not viable without the incoming wastes are deemed to be in the business of waste management. For example, an oily water treatment facility is not viable without oily water. Therefore, the facility is considered to be a waste management facility and the oily water does not meet the requirements of the exemption described in item 6 above. On the other hand, a metal degreasing operation can continue to operate without waste solvents. The supply of waste solvents is simply an alternative which is used to obtain an economic benefit.

Processes that combust the waste or apply the waste to the land are not included in this exemption and thus would not meet the recyclable material requirements described above.

(g) **Oil and Gas Well Wastes:**

Wastes such as drilling fluids and produced waters associated with the exploration, development or production of crude oil or natural gas are exempt from Part V of the EPA. The management of these wastes, also known as oil field brine as defined in Regulation 341 (Deep Well Disposal), is controlled through the provisions of the *Oil, Gas and Salt Resources Act* and the general provisions of the EPA.

(h) **Retail Motor Vehicle Service Station or Service Facility Wastes:**

Wastes resulting from the servicing of motor vehicles at retail motor vehicle service stations or

service facilities are not included in the definition of Subject Waste. These wastes are still defined as Hazardous or Liquid Industrial Wastes and must only be handled at appropriately approved facilities. This exemption is limited to retail motor vehicle service stations or service facilities that have a valid written agreement for the collection and management of their wastes from the servicing of motor vehicles, with a waste management system approved under Part V of the Act to haul such waste off-site.

Such wastes can include waste crankcase oil from oil storage tanks, water removed from gasoline storage tanks and gasoline contaminated groundwater. A guideline has been prepared by the Ontario Petroleum Association in cooperation with the Ministry of the Environment to address the management of these wastes.

(i) **Incinerator Ash:**

Incinerator ash (bottom ash) from the incineration of waste that is neither hazardous nor liquid industrial is exempt from the definition of Hazardous Waste. Incinerator ash does not include fly-ash. Incinerator ash is ash residue which contains less than 10% by weight combustible material.

(j) **Small Quantities:**

Small quantity exemptions are provided for some waste types under the definitions of Liquid Industrial Waste and Hazardous Waste. The exempted quantities vary and are dependent on the specific Waste Characteristic. As such, this exemption cannot be determined until the waste has been evaluated and the Waste Characteristic established. Small quantity exemptions are discussed under the explanations dealing with each characteristic (Explanations 4 to 15).

(k) **Empty Containers or Inner Liners:**

Empty containers or inner liners may or may not be exempt under the definitions of Liquid Industrial Waste and Hazardous Waste depending on the characteristic of the material they contained. As such, this exemption cannot be determined until the waste has been evaluated and the Waste Characteristic established. Empty container and inner liner exemptions are discussed under the explanations dealing with each characteristic (Explanations 4 to 15).

Empty container is defined by the Regulation and means a container from which wastes and other materials have been removed using common removal practices such as pumping or pouring and that contains less than 2.5 centimetres of material on the bottom of the container.

(l) **Specified Health Care Waste:**

Subject Waste does not include waste from,

- (i) a nursing home under the *Nursing Homes Act*,
- (ii) a home under the *Homes for the Aged and Rest Homes Act*,
- (iii) a home for special care under the *Homes for Special Care Act*,
- (iv) the professional office of a member of the Royal College of Dental Surgeons of Ontario,  
or
- (v) the professional office of a member of the College of Physicians and Surgeons of Ontario;

These health care wastes are still defined as Hazardous or Liquid Industrial Wastes and must only be handled at appropriately approved facilities.

(m) **Selected Waste Depots:**

Selected waste that is collected at selected waste depots is exempt . These wastes are still defined as Hazardous or Liquid Industrial Wastes and must only be handled at appropriately approved facilities. This exemption is limited to selected waste depots that have one or more valid written agreements with a waste management system approved under Part V of the Act to have the selected wastes hauled off-site.

Selected waste can be waste anti-freeze, waste lubricant and waste oil filters that is returned to the depot, typically by people performing maintenance on their own vehicles. A depot can collect a selected waste only if it sells the selected product.

(n) **Other Exemptions:**

There are a number of other exemptions that apply specifically to Liquid Industrial Wastes. These exemptions do not apply to Hazardous Wastes. See Explanation 14 for details of these limited exemptions

**Explanation 4 -- Severely Toxic Wastes**

Wastes that contain any one or more of the contaminants listed in Schedule 3 of Regulation 347 at a concentration greater than 1 part per million are characterized as Severely Toxic. A copy of Schedule 3 is appended to this manual (Appendix 7). Severely Toxic Waste could include pesticides such as 2,4,5-T and pentachlorophenol, but are unlikely to include industrial waste streams.

A mixture of a Severely Toxic Waste and any other waste or material remains Severely Toxic Waste.

Waste that is derived from Severely Toxic Waste remains Severely Toxic Waste unless it is produced in accordance with a certificate of approval that states that, in the opinion of the Section 39 Director, the waste does not have characteristics similar to the characteristics of Severely Toxic waste.

Because of the concern with Severely Toxic Waste, there is no small quantity exemption. Empty containers and inner liners are also Hazardous.

If you generate a waste that is Severely Toxic, you will need to specify the following Waste Characteristic and the appropriate MOE Waste Class on the Generator Registration Report.

- Waste Characteristic** - Severely Toxic (S)
- Waste Class** - Select the 3-digit Waste Class number from Appendix 2 of this manual beside the listing that best describes your waste. Add the letter "S" to this number to specify the above Waste Characteristic, for example, 242S.

**Explanation 5 -- Pathological Wastes**

The following definition in Regulation 347 has been developed to identify Pathological wastes. The descriptions are for the most part self-explanatory.

Pathological waste means,

- i. any part of the human body, including tissues and bodily fluids, but excluding fluids, extracted teeth, hair, nail clippings and the like, that are not infectious,
- ii. any part of the carcass of an animal infected with a communicable disease or suspected by a licensed veterinary practitioner to be infected with a communicable disease, or
- iii. non-anatomical waste infected with communicable disease.

If you are in doubt as to whether or not your waste is Pathological (infectious) you should consult with a licensed medical practitioner or veterinary doctor.

A mixture of a Pathological Waste and any other waste or material remains Pathological Waste.

Waste that is derived from Pathological Waste remains Pathological Waste unless it is produced in accordance with a certificate of approval that states that, in the opinion of the Section 39 Director, the waste does not have characteristics similar to the characteristics of Pathological waste.

Because of the concern with Pathological Wastes, there is no small quantity exemption. Empty containers and liners are also Hazardous unless they have been incinerated, autoclaved or otherwise sterilized to make them non-infectious.

If you generate a waste that is Pathological, you will need to specify the following Waste Characteristic and the appropriate MOE Waste Class on the Generator Registration Report.

Waste Characteristic - Pathological (**P**)  
Waste Class - Select the 3-digit Waste Class number from Appendix 2 beside the listing that best describes your waste. This will most likely be 312. Add the letter "**P**" to this number to specify the above Waste Characteristic, for example, 312P.

#### **Explanation 6 -- PCB (Polychlorinated biphenyl) Wastes**

The legal definition for PCB Wastes is provided in Ontario Regulation 362. Generally, wastes that contain PCBs at concentrations greater than 50 parts per million (ppm), by weight, are PCB Wastes. Refer to Regulation 362 for further details.

Electrical or other equipment that contains PCBs that is still in service does not require registration at this time. However, should the equipment come out of service or the PCB liquid be drained from the equipment, registration would then be required.

PCB Wastes stored on a site, whether or not authorized by any other Regulation, must be registered.

If you generate PCB Wastes or have PCB Wastes stored, you will need to specify the following Waste Characteristic and the appropriate MOE Waste Class on the Generator Registration Report.

Waste Characteristic - PCB Waste (**D**)  
Waste Class - Select the 3-digit Waste Class number from Appendix 2 beside the

listing that best describes your waste. This will most likely be 243. Add the letter "D" to this number to specify the above Waste Characteristic, for example, 243D.

### **Explanation 7 -- Acute Hazardous Waste Chemicals and Hazardous Waste Chemicals**

For wastes that are commercial chemical products or combinations of commercial chemical products, consideration must be given to Schedule 2 Part A - Acute Hazardous Waste Chemicals and Schedule 2 Part B - Hazardous Waste Chemicals of Regulation 347. Copies of these Schedules are appended to this manual (Appendices 5 and 6).

Acute Hazardous Waste Chemicals or Hazardous Waste Chemicals are commercial chemical products or manufacturing intermediates that from time to time are off-specification, or otherwise unacceptable for use. The definition of commercial waste chemicals includes materials such as pharmaceutical or pesticide waste products that contain active ingredients from Schedule 2 Part A or Part B. Active ingredients are chemical constituents that have been included in a formulated product for an intended effect. For example, a waste pesticide formulation that includes dieldrin (listed in Schedule 2 Part A) as an active ingredient would be classified as an Acute Hazardous Waste Chemical.

**IT IS IMPORTANT TO NOTE THAT SCHEDULE 2 PART A AND PART B ARE NOT LISTS OF CONTAMINANTS THAT, IF PRESENT IN A WASTE STREAM, MAKE THE STREAM HAZARDOUS.** Essentially these are lists of products or by-products that are seldom disposed of but, for whatever reason, occasionally become wastes.

Generators of waste chemicals should carefully review Schedule 2 Part A and Part B. These schedules are arranged alphabetically. Since there are a number of ways of naming any chemical, it is recommended that synonyms for each chemical be identified and each synonym compared to the Schedules. For commercial chemical products that are known only by a trade name, the supplier should be contacted to identify the generic name or the active ingredients for comparison with the Schedules.

A mixture of an Acute Hazardous Waste Chemical and any other waste or material remains an Acute Hazardous Waste Chemical. Likewise, a mixture of a Hazardous Waste Chemical and any other waste or material remains a Hazardous Waste Chemical

Waste derived from an Acute Hazardous Waste Chemical remains an Acute Hazardous Waste Chemical unless it is produced in accordance with a certificate of approval that states that, in the opinion of the Section 39 Director, the waste does not have characteristics similar to the characteristics of Acute Hazardous Waste Chemical.

Waste derived from a Hazardous Waste Chemical remains a Hazardous Waste Chemical unless it is produced in accordance with a certificate of approval that states that, in the opinion of the Section 39 Director, the waste does not have characteristics similar to the characteristics of Hazardous Waste Chemical. The same rule applies to waste derived from a Hazardous Waste Chemical.

For wastes listed in SCHEDULE 2 PART A or wastes containing active ingredients from Schedule 2 Part A, the small quantity exemption is 1 kg of waste per month. If you generate more than 1 kg of this type of waste in a one month period, or accumulate more than 1 kg on your site over any period, then registration is required. Containers greater than 20 litres in capacity that contained Schedule 2 Part A

products are Hazardous unless they have been triple rinsed using an appropriate solvent. Inner liners weighing more than 10 kg that contained Schedule 2 Part A products are also Hazardous unless they have been triple rinsed using an appropriate solvent.

If you generate a waste that is found in Schedule 2 Part A or that contains active ingredients from Schedule 2 Part A, you will need to specify the following Waste Characteristic and the appropriate MOE Waste Class on the Generator Registration Report.

**Waste Characteristic** - Acute Hazardous Waste Chemical (**A**)  
**Waste Class** - Select the 3-digit Waste Class number from Appendix 2 beside the listing that best describes your waste. For example, it could be: 148 if the chemical is inorganic, 263 if the chemical is organic, or 261 if the waste is pharmaceutical. Add the letter "A" to this number to specify the above Waste Characteristic, for example, 148A, 263A or 261A.

For wastes found in SCHEDULE 2 PART B or wastes containing active ingredients from Schedule 2 Part B, the small quantity exemption is 5 kg of waste per month. If you generate more than 5 kg of this type of waste in a one month period or accumulate more than 5 kg on your site over any period, registration is required. Empty containers and inner liners are not hazardous.

If you generate a waste that is found in Schedule 2 Part B or that contains active ingredients from Schedule 2 Part B, you will need to specify the following Waste Characteristic and appropriate MOE Waste Class on the Generator Registration Report.

**Waste Characteristic** - Hazardous Waste Chemical (**B**)  
**Waste Class** - Select the 3-digit Waste Class number from Appendix 2 beside the listing that best describes your waste. For example it could be: 148 if the chemical is inorganic, 263 if the chemical is organic or 261 if the waste is a pharmaceutical. Add the letter "B" to specify the above Waste Characteristic, for example, 148B, 263B or 261B.

### **Explanation 8 -- Hazardous Industrial Waste**

Industrial waste streams that are considered to be Hazardous are listed in Schedule 1 of Regulation 347. A copy of Schedule 1 is appended to this manual (Appendix 4). The Schedule contains descriptions of both generic and process-specific waste streams that can be compared to your process waste stream.

A mixture of a Hazardous Industrial Waste and any other waste or material remains Hazardous Industrial Waste.

Waste that is derived from Hazardous Industrial Waste remains Hazardous Industrial Waste unless it is produced in accordance with a certificate of approval that states that, in the opinion of the Section 39 Director, the waste does not have characteristics similar to the characteristics of Hazardous Industrial Waste.

For industrial waste streams, the small quantity exemption is 5 kg per month. If you generate more than 5 kg in a one month period, or accumulate more than 5 kg on your site over any period, registration is

required. Empty containers and inner liners are not hazardous.

If you generate a waste listed in Schedule 1, you will need to specify the following Waste Characteristic and appropriate MOE Waste Class on the Generator Registration Report.

**Waste Characteristic** - Hazardous Industrial Waste (**H**)  
**Waste Class** - listing Select the 3-digit Waste Class number from Appendix 2 beside the that best describes your waste. Add the letter "**H**" to this number to specify the above Waste Characteristic, for example, 211H.

### **Explanation 9 -- Ignitable Wastes**

Wastes that are Ignitable as defined in Regulation 347 by any of the following four criteria are hazardous.

1. It is a liquid, other than an aqueous solution containing less than 24 per cent alcohol by volume, and has a flash point less than 61°C as determined by any of the following test methods:

ASTM D-56-79,  
ASTM D-3243-77,  
ASTM D-3278-78,  
ASTM D-93-79,

or as determined by an equivalent test method approved by the Director.

Examples of Ignitable liquid waste include ethanol, Varsol, gasoline or petroleum distillates.

2. It is a solid and is capable, under standard temperature and pressure, of causing fire due to friction, absorption of moisture, or spontaneous chemical changes and, when ignited, burns so vigorously and persistently that it creates a hazard.

An example of an Ignitable solid waste is sodium metal.

3. It is an ignitable compressed gas as defined by Class 2, Division D of the regulations under the *Transportation of Dangerous Goods Act (Canada)* (TDGA).

Class 2, Division D gases are defined as substances that

- (a) have a critical temperature less than 50°C or an absolute vapour pressure greater than 294 kPa at 50°C; or
- (b) exert an absolute pressure, in the cylinder, packaging tube or tank in which it is contained, greater than 275±1 kPa at 21.1°C or 717±2 kPa at 54.4°C.

and

- (i) are ignitable at normal atmospheric pressure when in a mixture of 13 percent or less by volume with air, or
- (ii) have a flammability range of at least 12.

Examples of ignitable compressed gases include methane (natural gas), butane or butane mixtures, and propane.

4. It is an oxidizing substance as defined by Class 5, Divisions 1 and 2 in the regulations under the TDGA.

This includes substances such as chlorates, permanganates, and nitrates which readily yield oxygen to stimulate, or contribute to, the combustion of other materials. Substances that contain the bivalent -O-O- structure are also considered to be oxidizers.

To assist in your evaluation, Schedule II, List II of the regulations under TDGA lists a number of oxidizing substances as Class 5 dangerous goods. These are substances that have a 5.1 or 5.2 designation in column III of this list. In the same manner, ignitable compressed gases are included in this list with a 2.1 designation.

For Ignitable wastes the small quantity exemption is 5 kg per month. If you generate more than 5 kg in a one month period, or accumulate more than 5 kg on your site over any period, registration is required. Empty containers and liners are not hazardous.

If you generate a waste that is Ignitable, you will need to specify the following Waste Characteristic and appropriate MOE Waste Class on the Generator Registration Report.

**Waste Classification** - Ignitable (I)  
**Waste Class** - Select the 3-digit Waste Class number from Appendix 2 beside the listing that best describes your waste. Add the letter "I" to this number to specify the above Waste Characteristic, for example, 213I.

### **Explanation 10 -- Corrosive Wastes**

Wastes that are Corrosive as defined in Regulation 347 by any of the following two criteria are Hazardous.

1. It is aqueous and has a pH less than or equal to 2.0 or greater than or equal to 12.5 as determined by a pH meter, or
2. It is a liquid and corrodes steel (SAE 1020) at a rate greater than 6.35 millimetres per year at a test temperature of 55°C using the National Association of Corrosion Engineers (NACE) test method TM-01-69 or an equivalent test approved by the Director.

For Corrosive wastes the small quantity exemption is 5 kg per month. If you generate more than 5 kg in a one month period, or accumulate more than 5 kg on your site over any period, registration is required. Empty containers and inner liners are not hazardous.

If you generate a waste that is Corrosive, you will need to specify the following Waste Characteristic and appropriate MOE Waste Class on the Generator Registration Report.

**Waste Characteristic** - Corrosive (C)  
**Waste Class** - Select the 3-digit Waste Class number from Appendix 2 beside the listing that best describes your waste. Add the letter "C" to this number to

specify the above Waste Characteristic, for example, 111C.

### **Explanation 11 -- Reactive Wastes**

The Reactive waste definition presented in Regulation 347 encompasses a number of diverse properties. Generally, the intent is to include wastes that are susceptible to violent/vigorous reactions or are likely to generate toxic fumes. The following criteria are used to define Reactive wastes in Regulation 347.

1. It is normally unstable and readily undergoes violent change without detonating.
2. It reacts violently with water.
3. It forms potentially explosive mixtures with water.
4. When mixed with water it generates toxic gases, vapours or fumes in a quantity sufficient to present danger to human health or the environment.
5. It is a cyanide or sulphide bearing waste which, when exposed to pH conditions between 2.0 and 12.5, can generate toxic gases, vapours or fumes in a quantity sufficient to present danger to human health or the environment.
6. It is capable of detonation or explosive reaction if it is subjected to a strong initiating source or if heated under confinement.
7. It is readily capable of detonation or explosive decomposition or reaction at standard temperature and pressure.
8. It is a Class 1 explosive as defined in regulations under the TDGA. Schedule II List I of TDGR lists most Class 1 explosives.

For Reactive wastes the small quantity exemption is 5 kg per month. If you generate more than 5 kg in a one month period, or accumulate more than 5 kg on your site over any period, then registration is required. Empty containers or inner liners are not Hazardous.

If you generate a waste that is Reactive, you will need to specify the following Waste Characteristic and appropriate MOE Waste Class on the Generator Registration Report.

**Waste Characteristic** - Reactive (**R**)  
**Waste Class** - Select the 3-digit Waste Class number from Appendix 2 beside the listing that best describes your waste. Add the letter "**R**" to this number to specify the above Waste Characteristic, for example, 263R.

### **Explanation 12 -- Leachate Toxic Wastes**

Leachate Toxic Waste means a waste that produces leachate containing any of the contaminants listed in Schedule 4 of Regulation 347 (Appendix 8) at a concentration equal to or in excess of the concentration specified for that contaminant in Schedule 4 using the Toxicity Characteristic Leaching Procedure (TCLP),

Method 1311 that appears in the United States Environmental Protection Agency Publication SW-846 entitled “Test Methods for Evaluating Solid Waste, Physical/Chemical Methods”, as amended from time to time, or an equivalent test method approved by the Director is used to make this determination.

For Leachate Toxic wastes the small quantity exemption is 5 kg of wastes per month. If you generate more than 5 kg in a one month period, or accumulate more than 5 kg on your site over any period, registration is required. Empty containers and liners are not hazardous.

If you generate a waste that is Leachate Toxic, you will need to specify the following Waste Characteristic and appropriate MOE Waste Class on the Generator Registration Report.

**Waste Characteristic** - Leachate Toxic (**T**)  
**Waste Class** - Select the 3-digit Waste Class number from Appendix 2 beside the listing that best describes your waste. Add the letter "**T**" to this number to specify the above Waste Characteristic, for example, 131T.

### **Explanation 13 – Hazardous Wastes**

If a waste exhibits any of the Waste Characteristics discussed in explanations 4 through 12, it is a hazardous waste and is subject to registration provisions. As previously stated, the first characteristic identified in the flow chart is defined as the primary Waste Characteristic for the waste and is used to identify its proper MOE Waste Class during registration. Where it is desirable to manage a number of wastes with different primary characteristics as a single load, the primary characteristic of “A” is chosen as the default. This load is referred to as a “lab pack”. Further information about lab packs can be found in question 7 of Appendix 1.

A number of explanations refer to waste that is derived from waste having the specified Waste Characteristic retaining its original hazardous characteristic. For the purpose of this regulation, a waste is derived from a Hazardous Industrial Waste, an Acute Hazardous Waste Chemical, a Hazardous Waste Chemical, a Severely Toxic Waste, a Pathological Waste or a Radioactive Waste (these hazardous wastes are often referred to as “listed wastes”) if that waste is blended, stabilized, processed, treated or disposed. A waste subject to the “derived from” rule retains its Waste Characteristic even if processed at an approved facility unless the certificate of approval for the facility specifically states that the resultant waste no longer retains the original characteristic.

In a similar manner, a number of explanations indicate that the waste mixed with any other waste or material retains its original hazardous characteristic. For the purpose of this regulation, a Hazardous Industrial Waste, an Acute Hazardous Waste Chemical, a Hazardous Waste Chemical, a Severely Toxic Waste, a Pathological Waste or a Radioactive Waste mixed with any other waste or material retains its Waste Characteristic even if processed at an approved facility unless the certificate of approval for the facility specifically states that the resultant waste no longer retains the original characteristic. This “mixing” rule acts as an incentive to segregate different waste types and deters the dilution of a specified hazardous waste to alter its primary characteristic.

It is sometimes possible for “derived from” or mixed listed waste to become exempt, not captured or “de-listed” from the “derived from” or “mixing” rules. See questions 1, 2, 3, 6 and 7 in Appendix 1 for more information about these rules.

#### **Explanation 14 – Liquid Industrial Wastes**

Liquid Industrial Wastes are also subject to the registration provisions. These wastes are broadly defined to include any liquid waste from industrial, commercial, manufacturing, research or experimental activities. Liquid wastes include wastes that are obvious liquids such as spent acid solutions as well as those sludges that fail the Slump Test included in Regulation 347.

The Slump Test involves placing the waste in question in a 30 cm open inverted cone. The cone is removed and the immediate decrease (slump) in the height of the waste material is measured. If the material slumps such that the original height is reduced by 15 cm or more, the waste is a liquid. Refer to the Slump Test in Regulation 347 for details.

For Liquid Industrial wastes the small quantity exemption is 25 litres per month. If you generate more than 25 litres in a one month period, or accumulate more than 25 litres on your site over any period, registration is required.

If you generate a waste that is Liquid Industrial, you will need to specify the following Waste Characteristic and appropriate MOE Waste Class on the Generator Registration Report.

**Waste Characteristic** - Liquid Industrial Waste (L)  
**Waste Class** - Select the 3-digit Waste Class number from Appendix 2 beside the listing that best describes your waste. Add the letter "L" to this number to specify the above Waste Characteristic, for example, 121L.

#### **Explanation 15 – Liquid Industrial Waste Exemptions**

For the purposes of generator registration, there are a number of exemptions that apply only to Liquid Industrial Wastes. They are as follows:

- (a) Discharges to Sanitary Sewers:  
Wastes or wastewater that are discharged directly by a generator to a sanitary sewer (either municipally owned or privately owned) that is located at the waste generation site are exempt. This exemption does not apply to Hazardous Wastes.
- (b) Food Processing Wastes:  
Non-hazardous wastes from the processing of food are exempt. These wastes can include those from food packing, food processing, food preserving, wineries and cheese making facilities. Grease and other liquid wastes from restaurants and other food preparation facilities are also included in this exemption.
- (c) Waste from the operation of a water works subject to the *Ontario Water Resources Act*.
- (d) Waste from the operation of a sewage works, as referred to in the definition of hazardous waste.
- (d) Drilling fluids and produced waters associated with the exploration, development or production of crude oil or natural gas.
- (e) Processed organic waste.

- (f) Asbestos waste.

### **Summary of Waste Streams Requiring Generator Registration**

Figure 2 summarizes common situations and identifies those waste streams that need to be registered. Descriptions are provided for each of the seven situations outlined. Figure 2 was included to further assist you with the identification of waste streams subject to registration. You will still need to follow through the Waste Identification Flowchart (Figure 1) and the explanations associated with it to ensure that you have identified all of your Subject Wastes.

The following are the descriptions of the seven situations outlined in Figure 2.

#### **1. Private Wastewater Treatment Facilities**

- (a) Hazardous Wastes discharged to on-site private wastewater treatment facilities/processes must be registered. Sludges or skimmings from wastewater treatment facilities must also be registered. Wastewater discharges from these facilities to a watercourse, however, do not require registration.
- (b) For companies that have multi-step OWRA approved wastewater treatment processes, registration is required for all of the independent Hazardous discharges to the final OWRA approved wastewater treatment process. Wastes discharged to intermediate treatment processes do not require registration. Discharges from the final OWRA approved treatment process to watercourse do not require registration.

#### **2. Municipal Sanitary Sewers**

Individual Hazardous Wastes discharged to a municipal sanitary sewer must be registered. A company or laboratory discharging Hazardous Wastes into a drain, which leads to a municipal sewer, must register each individual Hazardous Waste discharged. Laboratory facilities, such as educational, research and quality control laboratories, are required to estimate the types and quantities of Hazardous Wastes disposed of in this manner and to register them accordingly.

#### **3. Off-Site Water Pollution Control Plants**

All Hazardous and Liquid Industrial Wastes that are hauled off-site to an approved OWRA Water Pollution Control Plant (WPCP) are registerable. Wastewater discharges from the approved WPCP do not require registration.

#### **4. On-site Waste Management Facilities**

All Subject Wastes disposed of by means of an on-site waste management facility, such as a landfill, must be registered.

#### **5. On-Site Combustion Facilities**

All Subject Wastes going to an on-site combustion facility, such as a boiler, must be registered.

#### **6. Other On-Site Treatment or Processing Facilities**

Wastes discharged to other on-site processes, such as bulking or blending operations do not need to be registered. Subject Wastes that are subsequently hauled off-site are registerable. Wastes that are bulked or blended and returned back to an on-site process operation are not registerable.

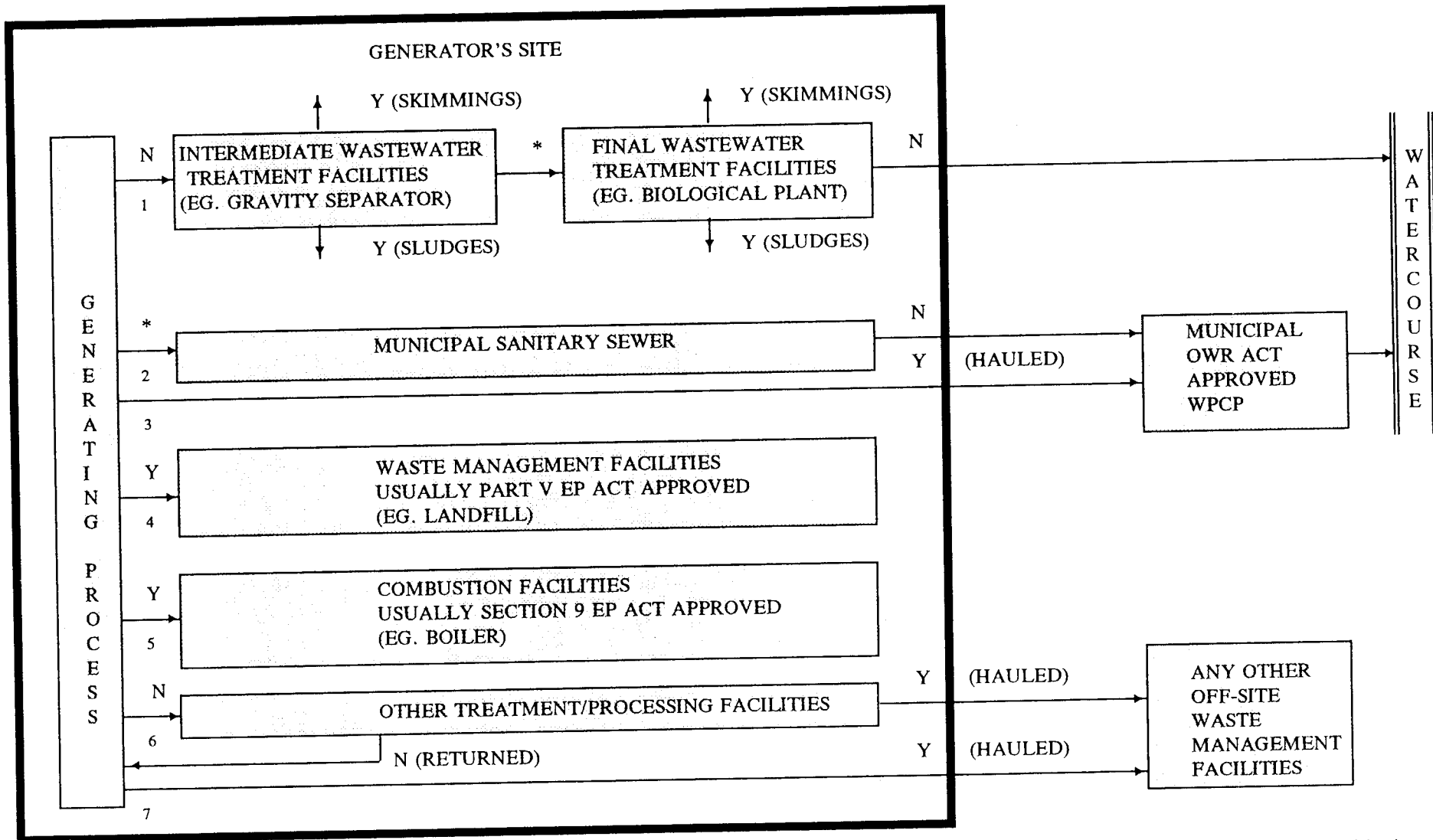
**7. Off-site Waste Management Facilities**

All Subject Wastes that are hauled to an off-site waste management facility are registerable.

**NOTE:**

Waste management or waste treatment facilities can also be waste generating facilities if residues or discharges from these facilities are Subject Wastes.

**FIGURE 2: WASTE STREAMS REQUIRING GENERATOR REGISTRATION**



N - No Registration Required  
 Y - Hazardous, LIW & RSW Registration Required  
 \* - Only Hazardous Waste Registration Required

WPCP - Water Pollution Control Plant  
 LIW - Liquid Industrial Waste  
 RSW - Registerable Solid Waste

**NOTE:** Small quantity exemptions apply to all of the above situations. Any of the above on-site management facilities producing wastes (sludges, skimmings, etc.) become generating facilities and resulting wastes may be subject to registration based on destination.

## **STEP 2 - HOW TO COMPLETE AND FILE YOUR REGISTRATION FORM**

### **DO NOT ATTEMPT STEP 2 UNTIL YOU HAVE FOLLOWED THE FLOWCHART IN STEP 1 THROUGH TO COMPLETION.**

If you determine that you are a generator of Subject Wastes, in Step 1 of this manual, you must complete the Generator Registration Report, file it with the Ministry, and obtain a Generator Registration Number. Since the report is required by Regulation, you cannot register by alternative methods or forms. A photocopy with an original signature is acceptable.

The following provides a detailed description of what is required under each item in the Generator Registration Report. For further clarification see the examples of properly completed reports that are appended to this manual (Appendix 10).

#### **Part 1 - Generator Identification**

The Regulation requires that you register with the Ministry, separately for each site where you produce Subject Wastes. The term site is explicitly defined under the subsequent discussion of Items 7 and 8. It is recognized that some large industrial complexes may have several separate sites within a small area. Separate Generator Registration Reports must be filed for each site, however, in the case of large industrial complexes, the Ministry may issue a single acknowledgement and Generator Registration Number to simplify record management and the completion of manifests.

You must identify your organization, the generating site and a company official in Part 1 of the Generator Registration Report. The following provides a line by line explanation.

**Item 1:**

Check this box if this is a new Generator Registration Report. An Ontario Generator Registration Number will be assigned to your company by the Ministry.

**Item 2:**

Check this box if you have previously registered and this report is a revision. Enter your Ontario Generator Registration Number in the spaces provided.

**Item 3:**

Applicants located outside Ontario should enter the waste site registration number assigned by their Provincial/State environmental authority.

**Items 4, 5, and 6:**

Enter your company name in full, plus the complete mailing address for correspondence from the Ministry.

**Items 7 and 8:**

Enter the location where the wastes listed in Part 2 of the report are generated, even if this site is the same as the mailing address. Each site must be registered separately with the Ministry. Site has been specifically defined and means one property or several contiguous properties, owned or leased by the generator, where passage from one property to the next involves crossing but not traveling along a public highway. Item 8 refers to your local municipality, i.e. city, town, village or township.

It does not refer to a post office location, county or regional municipality.

Item 9:

Enter the name and telephone number of a contact person at the generating site. This person should be familiar with the wastes and in charge of their management. He or she should be able to answer technical questions relating to the Generator Registration Report and be able to provide assistance in the event of an emergency.

Item 10:

Enter the 4-digit Canadian Standard Industrial Classification code for the facility at the site location identified in Items 7 and 8. A list of Canadian SIC codes has been appended to this manual (see Appendix 3). More than one SIC code can apply to a particular facility. Boxes have been provided for up to three SIC codes. Additional SIC codes can be added in the space just to the right of these boxes. In the future, SIC codes will be replaced with the North American Industry Classification System (NAICS) that is currently in use by Statistics Canada.

Item 11:

Enter the total number of wastes, from the site location shown in Items 7 and 8, which are to be registered with this report.

Items 12, 13, 14 and 15:

An official who can act on behalf of the company must sign the report. Consultants or others who are not employees of the company cannot sign. The official's name, position and dated signature must be included. The contact person identified in Item 9 may also be the company official signing the report.

Item 16:

Item 16 will be completed by Ministry staff.

**Part 2 - Waste Identification**

A separate Part 2 of the Generator Registration Report must be completed for each Subject Waste that you generate at the facility identified in Items 7 and 8 from Part 1 of the report. To streamline the review of your wastes, all wastes generated at the same site should be registered at the same time. The following provides an item by item explanation for Part 2 of the report.

Item 1:

Provide a general description of your waste and if appropriate include details such as the physical state, colour, principal components, contaminants and contaminant concentrations. Do not include results from detailed experimental analyses in this box.

Item 2:

Provide a general description of the generating process for the Subject Waste. Where applicable, include details such as a generic process name, feed materials and products. If your waste is generated by pollution control equipment, provide a description of the process or operation that generated the discharge or emission.

Item 3:

Specify the average quantity of Subject Waste generated or accumulated. If the waste is produced continuously, indicate the amount produced per month. If the waste is produced in batches, indicate the amount per batch and the number of batches per month. These numbers are estimates and it is recognized that they will be subject to change. Re-registration is not required if these quantities change.

Item 4:

Enter the Primary Characteristic found in Step 1 of this guidance manual. The Primary Characteristic is the first characteristic of a waste found using the Waste Identification Flowchart.

Enter the data that caused the above characteristic to be selected during your Step 1 review. For example, if a waste is Corrosive, the pH or the results of the corrosion test should be used. If the waste was found to be Ignitable based on a flash point test, then the results of this test should be indicated. Since most waste characteristics vary, a range of data is acceptable. For characteristics such as Reactivity that do not require specific tests, enter the narrative criteria that best describes your waste.

Specify the laboratory or laboratories used to perform the analyses required to generate the above data. If the data was generated using an on-site laboratory, this should be specified.

Where the data has been estimated and is not based on laboratory analyses of the Subject Waste, indicate the basis for the estimate. Company records or reference texts should be indicated.

In the space provided, insert the MOE Waste Class which you identified during Step 1. This will consist of a 3-digit number plus a single letter, e.g. 263A or 121L.

Space is also provided for a Hazardous Waste Number. This number can be found by reference to the federal Transportation of Dangerous Goods Regulations (TDGR) not Regulation 347. For further information, contact Transport Canada (613) 992-4624, Environment Canada (613) 997-3377 or the Dangerous Goods Coordinator at the Ministry of Transportation (905) 704-2500. The Hazardous Waste Number will be required on waste manifests to comply with TDGR.

Enter the approximate specific gravity of your waste and in the space provided enter the letter "S", "L" or "G" if your waste is solid, liquid or gaseous (compressed gases), respectively.

Item 5:

If a Secondary Characteristic was found during your Step 1 review, enter this characteristic at this point. Most wastes will not have a Secondary Characteristic.

Enter the analytical data that caused the above characteristic to be identified. A range of data is acceptable.

**Part 3 - Waste Management**

The Generator Registration Report requires that you identify your principal carrier and receiver for the Subject Wastes listed in Part 2. You do not have to re-register your wastes with the Ministry if you change your carrier or receiver in the future.

Item 1:

Enter the company name, address, and receiver number for the principal waste receiver of the waste you have registered. If you intend to deal with more than one receiver, simply enter the information for the waste receiver that you think will receive the largest portion of the waste you have identified in Part 2. The receiver number to be entered is the number issued by the authority where the facility is located, i.e. MOE, U.S. EPA, Province of Quebec, Michigan, etc.

If your waste is discharged to a municipal sanitary sewer or to an on-site wastewater treatment facility, identify the appropriate municipality, or wastewater treatment facility, as the principal intended receiver. Insert the corresponding Certificate of Approval number for the private wastewater treatment facility in the space provided for the receiver number.

If your waste is disposed of in an on-site landfill, indicate this and insert the Certificate of Approval number for the landfill (Part V, *Environmental Protection Act*).

If your waste is burned on-site then indicate this and insert the Certificate of Approval number for the combustion facility (Section 9, *Environmental Protection Act*).

If PCB wastes stored on-site are being registered, the words "on-site storage" should be entered.

Item 2:

Enter the company name, address, and Ontario carrier number for your principal waste carrier. This number should be obtained directly from your carrier. Do not complete this section for:

- wastes discharged directly into a municipal sanitary sewer,
- wastes discharged to an on-site wastewater treatment facility,
- PCB wastes being stored on-site,
- wastes disposed of in an on-site landfill, wastes burned on-site.

**Filing Reports**

Completed Generator Registration Reports should be filed with the Ministry without delay. If you generate a new waste or your waste changes from that originally declared, you must re-register.

Provisions for emergencies have been provided to ensure that registration does not result in delays. Contact the local regional or district office of this Ministry in the event of such an emergency. Appendix 9 lists all of the regional and district offices of the Ministry of the Environment.

**NOTE: Duplicate copies are not required. Only 1 copy of Page 1 is required for each site and 1 copy of Page 2 for each Subject Waste generated at site.**

Generator Registration Reports can be submitted to the Ministry of the Environment by either using the pre-addressed envelope or mailing them to:

**Environmental Monitoring & Reporting Branch, Area "M"  
Ontario Ministry of the Environment  
135 St. Clair Avenue West  
Toronto, Ontario  
M4V 1P5**

### **STEP 3 - WHAT HAPPENS AFTER YOUR REPORT HAS BEEN FILED**

#### **Acknowledgement of Registration**

When your Generator Registration Report is received by the Ministry of the Environment and the Environmental Monitoring & Reporting Branch (EMRB), it will be reviewed initially by the Environmental Monitoring & Reporting Branch to identify any obvious errors and to ensure that all parts of the report have been completed. The report will be returned and amendments required if any errors or omissions are identified during this review.

Following the initial review, the Ministry will send you a document that will acknowledge that your waste is registered. This acknowledgement will provide you with your Generator Registration Number and waste numbers. You must use these numbers on manifests during all subsequent transactions concerning Subject Wastes that you generate.

#### **Post-Acknowledgement Review**

After the Environmental Monitoring & Reporting Branch of the Ministry has conducted the initial review of your Generator Registration Report, it will be forwarded to the district office of the Ministry that is responsible for your facility. The district office will conduct a detailed post--acknowledgement review that may result in requests for additional information or site visits. The Regulation requires that you supply this information and that the information becomes part of your Generator Registration Report.

When the post-acknowledgement review of your report is complete and the information submitted is considered to be reasonable, no further action will be taken by the Ministry or needs to be taken by you as a waste generator.

It is important for you to note that you, as a waste generator, are responsible for the characterization of your wastes and the information submitted. The Ministry review is only intended to assist you in this process. If your waste is found to be incorrectly characterized or the information on the Generator Registration Report is incorrect even after you have received your "acknowledgement", you are liable for prosecution.

#### **Manifest Requirements**

You are required to use the provincial manifest form for all waste transactions. This form has been in effect administratively since July 1, 1985 to enable you to comply with the federal and provincial dangerous goods transportation requirements. An example of this form is included in Regulation 347. Intact manifests will be available through your carrier.

After the date that you have received your "acknowledgement", you must use your "Generator Registration Number" and appropriate waste numbers when completing Part A of the manifest form for every waste load that is hauled off-site.

If you require assistance completing the manifest form, contact the local district office of the Ministry of the Environment (Appendix 9).

### **Re-Registration**

Essentially, generator registration is a one-time requirement. Once a site has been registered it will not need to be re-registered unless there is some significant change in the information originally submitted. Significant changes include:

- change in company name, address or telephone number
- addition of registerable wastes
- change in Waste Characteristic or Waste Class.

As a waste generator, it is your responsibility to complete and submit a supplementary Generator Registration Report if significant changes have occurred. This report must be sent to the Ministry's Environmental Monitoring & Reporting Branch within 15 days of the date the change occurred.

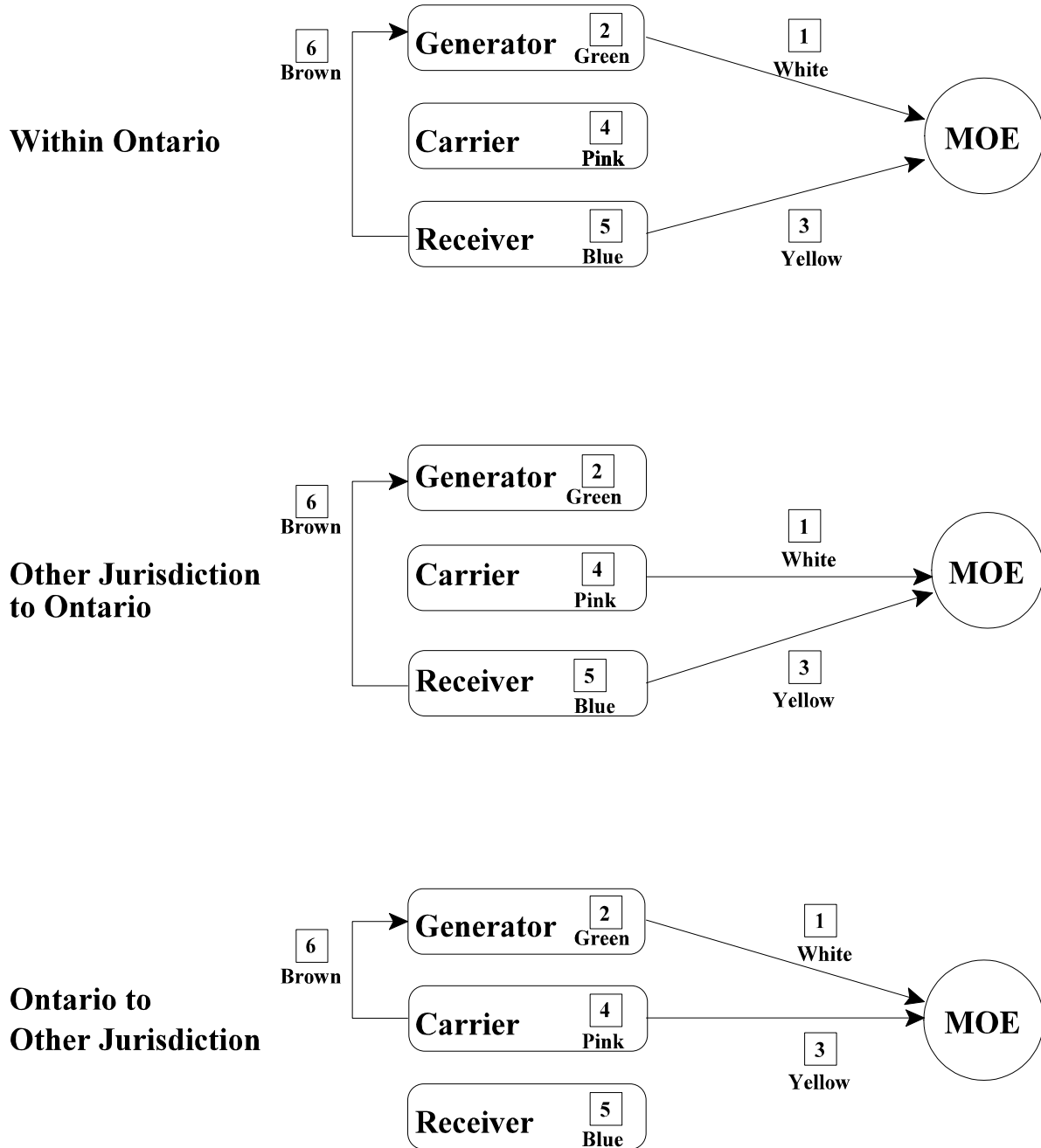
### **Information Available to the Public**

The public will have access to the following information submitted on the Generator Registration Report:

- Company name and address
- Waste numbers
- Volumes generated.

Generator registration and manifest information is available on the Public Information Data Set which can be purchased from the Ministry's Environmental Monitoring & Reporting Branch (416-235-6300) at a cost of \$150.

**FIG. 4 DISTRIBUTION OF MANIFEST FORMS**



**Note:** If copies 1 and 3 are required by the other jurisdiction, photocopies are acceptable for submission to the MOE.

# MANIFEST - MANIFESTE

This Manifest conforms to all Federal and Provincial transport and environmental legislation requiring manifesting.  
Ce manifeste est conforme aux législations fédérale et provinciale sur l'environnement et le transport, requérant un manifeste.



MM99106-5-1

**VOID**

MM99106-5

Manifest Reference No.  
N° de référence du manifeste

<b>A Consignor (Generator) / Expéditeur (Producteur)</b> Provincial ID No. / N° d'id. provincial Company name / Nom de l'entreprise Mailing address / Adresse postale City / Ville Province Postal code / Code postal Shipping site address / Origine de l'expédition City / Ville Province Postal code / Code postal Intended consignee / Destinataire prévu Provincial ID No. / No d'id. provincial Address / Adresse City / Ville Province Postal code / Code postal Receiving site address / Destination de l'expédition City / Ville Province Postal code / Code postal		<b>B Carrier / Transporteur</b> Provincial ID No. / N° d'id. provincial Company name / Nom de l'entreprise Address / Adresse City / Ville Prov. Postal code / Code postal Registration No. / N° d'immatriculation Prov. Vehicle / Véhicule Trailer/Rail Car No. 1 / 1 <sup>er</sup> remorque - wagon Trailer/Rail Car No. 2 / 2 <sup>e</sup> remorque - wagon Point of entry / Point d'entrée Point of exit / Point de sortie <i>Carrier Certification: I declare that I have received waste as offered by the consignor in Part A for delivery to the intended consignee and that the information contained in Part B is complete and correct. / Déclaration du transporteur: J'atteste avoir reçu les déchets offerts par l'expéditeur dans la partie A en vue de leur livraison au destinataire choisi et que les renseignements inscrits à la partie B sont exacts et complets.</i> Name of authorized person (print) / Nom de l'agent autorisé (caractères d'imprimerie) Year / Année Month / Mois Day / Jour Signature Tel. No. / N° de tél. ( )		<b>C Consignee (Receiver) / Destinataire (Réceptionnaire)</b> Provincial ID No. / N° d'id. provincial Consignee information same as Intended Consignee in Part A / L'information à fournir par le destinataire est la même qu'en A <input type="checkbox"/> Yes / Oui <input type="checkbox"/> No, complete the boxed area below Company name / Nom de l'entreprise Address / Adresse City / Ville Province Postal code / Code postal Receiving site address / Destination de l'expédition City / Ville Province Postal code / Code postal Date received / Date de réception Time / Heure Year / Année Month / Mois Day / Jour <input type="checkbox"/> A.M. <input type="checkbox"/> P.M.											
Physical state / État physique	Shipping name of waste / Appellation réglementaire du déchet	Waste identification / Identification du déchet Provincial No. / N° (Quebec-Ontario only) / (Quebec-Ontario seul) TDGA/PIN LTMD/NIP	Quantity shipped / Quantité expédiée	Units L or ou kg unités	Classification	Packing group / Groupe d'emballage	Packaging / Conténants	Codes int-ext.	Quantity received / Quantité reçue	Units L or ou kg unités	Identify any shipment discrepancy problems. Attach addendum if necessary. / Indiquez toute différence relative à l'expédition. Annexer une feuille au besoin.	Handling code / Code de manutention	Packaging / Conténants	Decontamination / Décontamination	Vehicle / Véhicule
Special handling/Emergency instructions / Manutention spéciale/instructions d'urgence <input type="checkbox"/> Attached Ci-jointes <input type="checkbox"/> Below Ci-dessous		Circulation no. - Quebec only / N° de circulation - Réservée au Québec		Date shipped / Date d'expédition Time / Heure Year / Année Month / Mois Day / Jour <input type="checkbox"/> A.M. <input type="checkbox"/> P.M.		Scheduled arrival date / Date d'arrivée prévue Year / Année Month / Mois Day / Jour		If handling code "Other" (specify) / Si code de manutention "divers" spécifiez		If waste to be transferred, specify intended company name / Si les déchets doivent être transférés, précisez le nom du destinataire		Provincial ID No. / N° d'id. provincial		Address / Adresse City / Ville Prov.	
Consignor Certification: I declare that the information contained in Part A is correct and complete. / Déclaration de l'expéditeur: Je déclare que tous les renseignements à la partie A sont vérifiées et complets.															
Name of authorized person (print) / Nom de l'agent autorisé (caractères d'imprimerie)		Signature		Tel. no. / N° de tél. ( )		Signature		Tel. no. / N° de tél. ( )		DO NOT WRITE IN THIS AREA / NE PAS ÉCRIRE DANS CET ESPACE					

## **APPENDIX 1**

Regulatory Improvements for Hazardous Waste Management

- Technical Questions -

## Regulatory Improvements for Hazardous Waste Management - Technical Questions -

The following section is a list of questions that will be frequently asked by users of this manual. The information contained in the questions and answers listed below forms part of the Ministry of the Environment's (MOE) interpretation of the Regulatory Improvements for Hazardous Waste Management. Many of these questions arose during the MOE's consultation on the proposed Regulatory Improvements for Hazardous Waste Management.

1. Question: To what types of waste does the "derived from" rule apply?

Response: The "derived from" rule applies to waste that is derived from a Hazardous Industrial Waste (Schedule 1), an Acute Hazardous Waste Chemical (Schedule 2A), a Hazardous Waste Chemical (Schedule 2B), a Severely Toxic Waste, a Pathological Waste or a Radioactive Waste. A waste is derived from a hazardous waste if it is produced from any of the above hazardous wastes by virtue of it being blended, stabilized, processed, treated or disposed. The "derived from" rule does not apply to characteristic hazardous wastes (Corrosive Waste, Ignitable Waste, Leachate Toxic Waste or Reactive Waste).

2. Question: Is there any way for such wastes to become exempt, or not be captured by this rule?

Response: Yes. There are three potential ways for a waste to become exempt from the "derived from" rule. They are:

- (a) if the waste is specifically listed in Schedules 1.1, 2.1, or 2.2 of the Regulation (Schedule 1.1 now includes exemptions from the "derived from" rule adapted from U.S. regulations that apply to residues from the treatment of specific wastes using very specific treatment processes.);
- (b) if a formal "de-listing" has been received from the MOE for a specific waste, in which case it will eventually be added to Schedules 1.1, 2.1, or 2.2 as part of the regulatory amendment process ; or
- (c) in accordance with a site specific Certificate of Approval issued under Part V of the *Environmental Protection Act* that states that, in the opinion of the Section 39 Director, the waste that is produced in accordance with the certificate of approval does not have characteristics similar to the characteristics of the waste from which it was derived.

3. Question: How does a listed hazardous waste become "de-listed"?

Response: Schedule 1 of Regulation 347 contains descriptions of both generic and process-specific industrial hazardous waste streams. Most of the wastes from specific sources have been listed because of the toxicity of the constituents in those wastes. A listed waste may no longer exhibit hazardous characteristics if a facility uses or processes raw materials differently from the industrial processes considered when the Regulation was written. Regulation 347 provides the opportunity to "delist" or review the status of such a waste, in other words, to exclude it from the Schedule. It is emphasized that this type of review pertains only to a specific waste from a specific facility.

An application to "de-list" a listed hazardous waste must include detailed results of a comprehensive testing and analysis program, demonstrating that the specific waste in

question does not exceed the criteria for which it was originally designated as hazardous. An application is technically evaluated by the MOE's Hazardous Waste Review Committee (HWRC). Upon recommendation by the HWRC, the applicant must then conduct a thorough public consultation program. Both the technical evaluation and the results of the public consultation must be to the satisfaction of the HWRC before it can make a recommendation to "de-list" the waste. If successful, a delisting can be enacted by an amendment to Regulation 347 or by a Certificate of Approval under Part V of the *Environmental Protection Act*.

Further details are provided in the MOE document "Guidance Manual for Hazardous Waste Categorization and Review Program".

4. Question: A number of non-hazardous wastes will now be considered hazardous. Does that mean that landfills that had been accepting such wastes have been accepting hazardous wastes until now?

Response: No, these provisions are not retroactive. Existing landfill sites are environmentally protective. They have been designed and approved to manage the wastes they have been accepting to date. These amendments are part of the MOE's efforts to continually improve the management of wastes that will make the regulations even more environmentally protective. These changes make hazardous waste rules the most stringent in Ontario's history.

5. Question: What impact will the Regulatory Improvements for Hazardous Waste Management have on MOE approved waste sites?

Response: Upon the effective date of these new requirements (March 31, 2001), some sites may no longer be allowed to accept certain wastes they have received in the past unless they obtain a specific amendment to their Certificate of Approval issued by the MOE.

Certain wastes that were previously non-hazardous could become hazardous waste. An example could be a sludge that "passed" the former Leachate Extraction Procedure (LEP) now, following testing using the new Toxicity Characteristic Leaching Procedure (TCLP), "fails" the test for one of the 59 contaminants newly added to Schedule 4. Such a waste would now be hazardous and could not be received at a facility approved only for non-hazardous wastes. Another example could be a waste that previously was either non-hazardous or hazardous based on a tested characteristic but may now be specifically listed under the amended Schedule 1. Such a waste may have previously been able to be received and treated at a waste management facility under its Part V approval but now that it is a listed waste, that facility's waste management approval would need to be amended to reflect this regulatory change.

6. Question: I am planning to decontaminate my industrial property. Based on historical operations, the site was home to an industrial process identified on Schedule 1 or the soil is contaminated with chemicals that appear on Schedule 2 of Regulation 347. Even if there are only a few "hot spots" of contamination, is my entire site a listed hazardous waste because of the "mixture" rule?

Response: Industrial sites are usually contaminated through accidental spills of hazardous waste or

spills of product chemicals or past negligence. Wastes generated from the decontamination of these sites are referred to as remediation wastes - not waste streams created during normal industrial or manufacturing operations. The MOE has decided that strict application of the “mixture” and “derived-from” rules is not appropriate for remediation wastes.

Most spills or contamination due to past negligence result generally in large quantities of soil or soil-like materials containing relatively low concentrations of chemicals. Strict application of the “mixture” and “derived-from” rules to contaminated sites would therefore cause many tonnes of soil or soil-like materials to be regulated as listed hazardous waste despite containing low concentration of chemicals and posing little actual health or environmental threat. Contaminated soils or soil-like materials can still present health or environmental threats if they are not properly handled and/or disposed properly. However, these remediation wastes must be properly assessed and characterized under the provisions of Regulation 347 to determine if they possess any other hazardous waste characteristics. For example, the use of the TCLP on these wastes could still be required to determine if the wastes were hazardous.

7. Question: How is the management of and subsequent registration of waste derived from the management of “lab packs” at a Part V approved waste management facility affected by the “mixture” and “derived-from” rules?

Response: In situations where a number of various wastes are being managed, it is often administratively useful to assume the worst likely hazardous waste characteristic for all the waste and manage them as one load. This situation often arises in laboratories during inventory clean-up and hence the term “lab pack” has been attributed to this scenario. Although not limited to laboratories, “lab packs” involve individual packing of each waste and managing the whole load using either the waste class of 148A (inorganic wastes) or 263A (organic wastes). The primary characteristic of “A” is chosen as it is the first characteristic in the flowchart which is likely to be present in an assortment of different chemicals. For example, a “lab pack” may contain individual containers containing hazardous wastes with characteristics such as “I”, “B”, “C”, “T” and “A”.

At a Part V approved waste management facility, “lab packs” may simply be transferred and shipped out in the same containers that they arrived in. In this situation, these outgoing “lab packs” should be registered as either 148A or 263A.

However, the Part V approval of a waste management facility may allow the “lab packs” to be emptied and the individual waste containers from inside the “lab pack” sorted by characteristic. Contents from these individual containers could then be poured into larger storage containers for bulking purposes, such as pouring the contents of small containers of “I” wastes into a larger storage container of “I” wastes. This type of mixing results in the contents of the larger storage container maintaining an “I” characteristic, despite the small containers of “I” waste originally coming from a “lab pack” with an “A” characteristic.

8. Question: The Leachate Extraction Procedure (LEP), previously in Regulation 347, specified the size and type of vessel to be used in the extraction procedure. Why is there no similar requirement in the procedure for the new TCLP?

Response: The definition of Leachate Toxic Waste in Regulation 347 makes direct reference to the use of the TCLP prescribed in Method 1311 in “Test Methods for Evaluating Solid Waste,

Physical/Chemical Methods”, United States EPA Publication SW-846 as incorporated by reference in S260.11 of SubChapter I - Solid Wastes in regulations under the *Resource Conservation Recovery Act*.

Method 1311, unlike the LEP method, requires two (2) extraction vessels; the Zero-Headspace Extraction Vessel (ZHE) and the Bottle Extraction Vessel (BEV). The ZHE vessel is for use only when the waste is being tested for the mobility of volatile parameters. Method 1311 specifies that the vessels shall have an internal volume of 500-600 ml. When the waste is being evaluated using the nonvolatile extraction, Method 1311 requires the use of a jar with sufficient capacity to hold the sample and the extraction fluid. Headspace is allowed in this vessel.

A full text of the test method can be obtained by either contacting the Ministry’s Public Information Centre at 416-325-4000, by visiting the Ministry’s Environmental Bill of Rights Registry web site at

[http://www.ene.gov.on.ca/envision/env\\_reg/er/documents/2000/RA00E0002.htm](http://www.ene.gov.on.ca/envision/env_reg/er/documents/2000/RA00E0002.htm) or by visiting the USEPA’s web site at <http://www.epa.gov/epaoswer/hazwaste/test/main.htm>.

Work is underway in Canada, sponsored in part by the Canadian Council of Ministers of the Environment, to develop a Canadian standard procedure for the TCLP. Until a time when that work is complete and there is agreement to adopt a Canadian procedure, the Ministry will continue to require that USEPA Method 1311 be used.

9. Question: Is it still necessary to inform the Ministry through Generator Registration, if my process creates wastes that fall into the category of Registerable Solids?

Response: No, as part of the Regulatory Improvements for Hazardous Waste Management, the requirement to register waste that is not Hazardous Waste or Liquid Industrial Waste has been removed. Under the Leachate Extraction Procedure and unrevised Schedule 4 in Regulation 347, waste that produced leachate containing one or more contaminants in concentrations between 10 and 100 times the value indicated in Schedule 4 was considered Registerable Solid waste and was subject to the Generator Registration requirements. This waste was never considered to be hazardous and generators now no longer need to register this waste. This is now consistent with other jurisdictions that have never required this waste to be registered.

**APPENDIX 2**

Ministry of the Environment

Waste Classes

## **INORGANIC WASTES**

### **Acid Solutions**

### **Examples**

- 111 Spent pickle liquor  
Acid solutions of sulphuric and hydrochloric acids containing ferrous salts from steel pickling.
- 112 Acid solutions, sludges and residues containing heavy metals  
Solutions of sulphuric, hydrochloric and nitric acids containing copper, nickel, chromium, zinc, cadmium, tin, lead or other heavy metals; chromic acid waste; acidic emission control sludges from secondary lead smelting.
- 113 Acid solutions, sludges and residues containing other metals and non-metals  
Solutions of sulphuric, hydrochloric, hydrofluoric and nitric acids containing sodium, potassium, calcium, magnesium or aluminum; equipment cleaning acids; cation regenerant; reactor acid washes; catalyst acid and acid washes.
- 114 Other inorganic acid wastes  
Off-specification acids; by-product hydrochloric acid; dilute acid solutions; acid test residues.

### **Alkaline Solutions**

### **Examples**

- 121 Alkaline solutions, sludges and residues containing heavy metals  
Metal finishing wastes; plating baths; spent solutions containing metals such as copper, zinc, tin, cadmium; case hardening sludges; spent cyanide destruction residues; dewatered solids from metal and cyanide finishing wastes and cyanide destruction.
- 122 Alkaline solutions, sludges and residues containing other metals and non-metals, not containing cyanides  
Alkaline solutions from aluminum surface coating and etching; alkali cleaner waste; waste lime sludges and slurries; anion regenerants.
- 123 Alkaline phosphates  
Bonderizing waste; zinc phosphates; ferrous phosphates; phosphate cleaners.

### **Aqueous Salts**

### **Examples**

- 131 Neutralized solutions, sludges and residues containing heavy metals  
Metal finishing waste treatment sludges containing copper, chromium, zinc, nickel or cadmium; neutral salt bath sludges and washes; lime sludge from metal finishing waste treatment; dewatered solids from these processes
- 132 Neutralized solutions, sludges and residues containing other metals  
Aluminum surface coating treatment sludges; alum and gypsum sludges.
- 133 Brines, chlor-alkali sludges and residues  
Waste brines from chlor-alkali plants; neutralized hydrochloric acid; brine treatment sludges; dewatered solids from brine treatment.
- 134 Wastes containing sulphides  
Petroleum aqueous refinery condensates.
- 135 Waste containing other reactive anions  
Waste containing chlorates; hypochlorite; bromate or thiosulphate.

### **Miscellaneous Inorganic Wastes and Mixed Wastes**

### **Examples**

- 141 Inorganic waste from pigment manufacturing  
Wastewater and sludges from the production of chrome yellow, molybdate orange, zinc yellow, chrome green and iron pigments; dewatered solids from these sources.
- 142 Primary lead, zinc and copper smelting wastes  
Slurries, sludges and surface impoundment solids; treatment plant sludges; anode slimes and leachate residues; dewatered solids from these sources.

143 Residues from steel making	Emission control sludges and dusts; precipitator residues from steel plants; dewatered solids from these sources.
144 Liquid tannery waste sludges	Lime waste mixtures; chrome tan liquors; dehairing solutions and sludges.
145 Wastes from the use of paints, pigments and coatings	Paint spray booth sludges and wastes; paper coating wastes; ink sludges; paint sludges.
146 Other specified inorganic sludges, slurries or solids	Flue gas scrubber wastes; wet fly ash; dust collector wastes; metal dust and abrasives wastes; foundry sands; mud sediment and water; tank bottoms from waste storage tanks that contained mixed inorganic wastes; heavy sludges from waste screening/filtration at transfer/processing sites not otherwise specified in this table.
147 Chemical fertilizer wastes	Solutions, sludges and residues containing ammonia, urea, nitrates and phosphates from nitrogen fertilizer plants.
148 Miscellaneous waste inorganic chemicals	Waste inorganic chemicals including laboratory, surplus or off-specification chemicals, that are not otherwise specified in this table.
149 Landfill leachate	Surface run-off and leachate collected from landfill sites.
150 Inert inorganic wastes	Sand and water from catch basins at car washes; slurries from the polishing and cutting of marble.

## **ORGANIC WASTES**

### **Non-halogenated Spent Solvents**

### **Examples**

211 Aromatic solvents and residues	Benzene, toluene, xylene solvents and residues.
212 Aliphatic solvents and residues	Acetone, methylethylketone and residues, alcohols, cyclohexane and residues.
213 Petroleum distillates	Varsol, white spirits and petroleum distillates.

### **Fuels**

### **Examples**

221 Light fuels	Gasoline, kerosene, diesel, tank drainings/washings/bottoms, spill clean-up residues.
222 Heavy fuels	Bunker, asphalts, tank drainings/washings/bottoms, spill clean-up residues.

### **Resins and Plastics**

### **Examples**

231 Latex wastes	Waste latexes, latex crumb and residues.
232 Polymeric resins	Polyester, epoxy, urethane, phenolic resins, intermediates and solvent mixtures.
233 Other polymeric wastes	Off-specification materials, discarded materials from reactors

### **Halogenated Organic Wastes**

### **Examples**

241 Halogenated solvents and residues	Spent halogenated solvents and residues such as perchloroethylene, halogenated still bottoms; residues and catalysts from trichloroethylene and carbon tetrachloride (dry cleaning solvents); halogenated hydrocarbon manufacturing or recycling processes.
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242 Halogenated pesticides and herbicides 2,4-D, 2,4,5-T wastes, chlordane, mirex, silvex, pesticide solutions and residues.

243 Polychlorinated biphenyls (PCB) Askarel liquids such as Aroclor, Pydraul, Pyranol, Therminol FR, Inerteen, and other PCB contaminated materials.

### **Oily Wastes**

### **Examples**

251 Waste oils/sludges (petroleum based) Oil/water separator sludge; dissolved air flotation skimming; heavy oil tank drainage; slop oil and emulsions.

252 Waste crankcase oils and lubricants Collected service station waste oils; industrial lubricants; bulk waste oils.

253 Emulsified oils Soluble oils; waste cutting oils; machine oils.

254 Oily water/waste oil from waste transfer/processing sites Waste oil and oily water limited to classes 251, 252 and 253 that have been bulked/blended/processed at a waste transfer/processing site.

### **Miscellaneous Organic Wastes and Mixed Wastes**

### **Examples**

261 Pharmaceuticals Pharmaceutical and veterinary pharmaceutical wastes other than biologicals and vaccines; solid residues and liquids from veterinary arsenical compounds.

262 Detergents and soaps Laundry wastes.

263 Miscellaneous waste organic chemicals Waste organic chemicals including laboratory surplus or off-specification chemicals that are not otherwise specified in this table.

264 Photo processing wastes Photochemical solutions, washes and sludges.

265 Graphic arts wastes Adhesives; glues; miscellaneous washes; etch solutions.

266 Phenolic waste streams Cresylic acid; caustic phenolates; phenolic oils; creosote.

267 Organic acids Carboxylic or fatty acids; formic, acetic, propionic acid wastes; sulphamic and other organic acids that may be amenable to incineration.

268 Amines Waste ethanolamines; urea; tolidene; Flexzone waste; Monex waste.

269 Organic non-halogenated pesticide and herbicide wastes Organophosphorus chemical wastes; arsenicals; wastes from MSMA and cacodylic acid.

270 Other specified organic sludges, slurries and solids Tank bottoms from mixed organic waste bulking tanks at waste transfer sites; mixed sludges from waste screening/filtration at waste transfer/processing sites not otherwise specified in this table.

### **Processed Organic Wastes from Transfer Stations**

### **Examples**

281 Non-halogenated rich organics Blended/bulked non-halogenated solvents, oils and other rich organics prepared at transfer/processing sites for incineration.

282 Non-halogenated lean organics Blended/bulked aqueous wastes prepared at transfer/processing sites for incineration and contaminated with non-halogenated solvents, non-halogenated oils and other non-halogenated organics.

**Plant and Animal Wastes****Examples**

311 Organic tannery wastes

Fleshings; trimmings; vegetable tan liquors; Bate solutions.

312 Pathological wastes

Human anatomical waste; infected animal carcasses; other non-anatomical waste infected with communicable diseases; biologicals and vaccines.

**Explosive Manufacturing Wastes****Examples**

321 Wastes from the manufacture of explosives and detonation products

Wastewater treatment sludges; spent carbon; red/pink waters from TNT manufacturing; residues from lead base initiating compounds.

**Compressed Gases****Examples**

331 Waste compressed gases, including cylinders

Methane (natural gas); nitrous or nitric oxide; propane; butane.

**TYPICAL MOE WASTE CLASSES \***  
(combination of 3 digit waste number and waste characteristic)

<b>WASTE CLASSES</b>	<b>EXAMPLES</b>
112C	Corrosive acidic wastes, e.g. battery acid
122C	Corrosive alkaline waste, e.g. alkaline cleaners
145H	Paint wastes and coatings, alkyd or oil based
145L	Paint wastes and coatings, latex or water based
146T	Solid waste with metal contaminants, e.g. some foundry sands, soils, metal dust
148A	Miscellaneous inorganic chemicals, e.g. lab packs
211H	Aromatic solvents, e.g. benzene, toluene, xylene
212H	Aliphatic solvents, e.g. acetone, methyl ethyl ketone (MEK)
212L	Ethylene glycol (antifreeze)
213I	Petroleum distillates, e.g. Varsol
221I	Light fuels, e.g. gasoline, kerosene, diesel
241H	Halogenated solvents, e.g. perchloroethylene (perc from dry cleaners)
243D	PCBs
251L	Oil and water mixtures/sludges (non-emulsified)
252L	Crankcase (engine) oil, lubricants, grease
252T	Crankcase (engine) oil, lubricants containing heavy metals, e.g. lead
253L	Emulsified oil and water, e.g. cutting oil
263A	Miscellaneous organic chemicals, e.g. lab packs
264L	Photo finishing waste, e.g. developer
264T	Photo finishing waste, e.g. fixer
312P	Pathological/biomedical/infectious

\* For other wastes, please follow the instructions in this manual.

**APPENDIX 3**

Canadian Standard Industrial

Classification Codes

## CLASSIFICATION STRUCTURE

### LIST OF DIVISIONS, MAJOR GROUPS, GROUPS AND CLASSES

#### **DIVISION A - AGRICULTURAL AND RELATED SERVICE INDUSTRIES**

##### **Major Group 01 - Agricultural Industries**

##### 011 Livestock Farms (Except Animal Specialties)

- 0111 Dairy Farms
- 0112 Cattle Farms
- 0113 Hog Farms
- 0114 Poultry and Egg Farms
- 0115 Sheep and Goat Farms
- 0119 Livestock Combination Farms

##### 012 Other Animal Specialty Farms

- 0121 Honey and Other Apiary Product Farms
- 0122 Horse and Other Equine Farms
- 0123 Furs and Skins, Ranch
- 0129 Other Animal Specialty Farms n.e.c.

##### 013 Field Crop Farms

- 0131 Wheat Farms
- 0132 Small-Grain Farms (Except Wheat)
- 0133 Oilseed Farms (Except Corn)
- 0134 Grain Corn Farms
- 0135 Forage, Seed and Hay Farms
- 0136 Dry Field Pea and Bean Farms
- 0137 Tobacco Farms
- 0138 Potato Farms
- 0139 Other Field Crop Farms

##### 014 Field Crop Combination Farms

- 0141 Field Crop Combination Farms

##### 015 Fruit and Other Vegetable Farms

- 0151 Fruit Farms
- 0152 Other Vegetable Farms
- 0159 Fruit and Vegetable Combination Farms

##### 016 Horticultural Specialties

- 0161 Mushrooms
- 0162 Greenhouse Products
- 0163 Nursery Products
- 0169 Other Horticultural Specialties

##### 017 Livestock, Field Crop and Horticultural Combination Farms

- 0171 Livestock, Field Crop and Horticultural Combination Farms

##### **Major Group 02 - Service Industries Incidental to Agriculture**

##### 021 Services Incidental to Livestock and Animal Specialties

- 0211 Veterinary Services
- 0212 Farm Animal Breeding Services (Except Poultry)
- 0213 Poultry Services
- 0219 Other Services Incidental to Livestock and Animal Specialties

##### 022 Services Incidental to Agricultural Crops

- 0221 Soil Preparation, Planting and Cultivating Services
- 0222 Crop Dusting and Spraying Services
- 0223 Harvesting, Baling and Threshing Services
- 0229 Other Services Incidental to Agricultural Crops

##### 023 Other Services Incidental to Agriculture

- 0231 Agricultural Management and Consulting Services
- 0239 Other Services Incidental to Agriculture n.e.c.

#### **DIVISION B - FISHING AND TRAPPING INDUSTRIES**

##### **Major Group 03 - Fishing and Trapping Industries**

##### 031 Fishing Industries

- 0311 Salt Water Fishing Industry
- 0312 Inland Fishing Industry

##### 032 Services Incidental to Fishing

- 0321 Services Incidental to Fishing

##### 033 Trapping

- 0331 Furs and Skins, Wild
- 0339 Other Trapping

#### **DIVISION C - LOGGING AND FORESTRY INDUSTRIES**

##### **Major Group 04 - Logging Industry**

##### 041 Logging Industry

- 0411 Logging Industry

##### **Major Group 05 - Forestry Services Industry**

##### 051 Forestry Services Industry

0511Forestry Services Industry

## **DIVISION D - MINING (INCLUDING MILLING), QUARRYING AND OIL WELL INDUSTRIES**

### **Major Group 06 - Mining Industries**

061Metal Mines

0611Gold Mines

0612Copper and Copper-Zinc Mines

0613Nickel-Copper Mines

0614Silver-Lead-Zinc Mines

0615Molybdenum Mines

0616Uranium Mines

0617Iron Mines

0619Other Metal Mines

062Non-Metal Mines (Except Coal)

0621Asbestos Mines

0622Peat Industry

0623Gypsum Mines

0624Potash Mines

0625Salt Mines

0629Other Non-Metal Mines (Except Coal)

063Coal Mines

0631Bituminous Coal Mines

0632Subbituminous Coal Mines

0633Lignite Mines

### **Major Group 07 - Crude Petroleum and Natural Gas Industries**

071Crude Petroleum and Natural Gas Industries

0711Conventional Crude Oil and Natural Gas  
Industry

0712Non-Conventional Crude Oil Industry

### **Major Group 08 - Quarry and Sand Pit Industries**

081Stone Quarries

0811Granite Quarries

0812Limestone Quarries

0813Marble Quarries

0814Sandstone Quarries

0815Shale Quarries

082Sand and Gravel Pits

0821Sand and Gravel Pits

### **Major Group 09 - Service Industries Incidental to Mineral Extraction**

091Service Industries Incidental to Crude Petroleum and  
Natural Gas

0911Contract Drilling, Oil and Gas Industry

0919Other Service Industries Incidental to Crude  
Petroleum and Natural Gas

092Service Industries Incidental to Mining

0921Contract Drilling Industry (Except Oil and Gas)

0929Other Service Industries Incidental to Mining

## **DIVISION E - MANUFACTURING INDUSTRIES**

### **Major Group 10 - Food Industries**

101Meat and Poultry Products Industries

1011Meat and Meat Products Industry (Except  
Poultry)

1012Poultry Products Industry

102Fish Products Industry

1021Fish Products Industry

103Fruit and Vegetable Industries

1031Canned and Preserved Fruit and Vegetable  
Industry

1032Frozen Fruit and Vegetable Industry

104Dairy Products Industries

1041Fluid Milk Industry

1049Other Dairy Product Industries

105Flour, Prepared Cereal Food and Feed Industries

1051Cereal Grain Flour Industry

1052Prepared Flour Mixes and Prepared Cereal  
Foods Industry

1053Feed Industry

106Vegetable Oil Mills (Except Corn Oil)

1061Vegetable Oil Mills (Except Corn Oil)

107Bakery Products Industries

1071Biscuit Industry

1072Bread and Other Bakery Products Industry

108Sugar and Sugar Confectionery Industries

1081Cane and Beet Sugar Industry

1082Chewing Gum Industry

1083Sugar and Chocolate Confectionery Industry

109Other Food Products Industries

1091Tea and Coffee Industry

1092Dry Pasta Products Industry

1093Potato Chip, Pretzel and Popcorn Industry

1094Malt and Malt Flour Industry

1099Other Food Products Industries n.e.c.

### **Major Group 11 - Beverage Industries**

111Soft Drink Industry

1111Soft Drink Industry

112Distillery Products Industry

1121Distillery Products Industry

113Brewery Products Industry

1131Brewery Products Industry

114Wine Industry

1141Wine Industry

#### **Major Group 12 - Tobacco Products Industries**

121Leaf Tobacco Industry

1211Leaf Tobacco Industry

122Tobacco Products Industry

1221Tobacco Products Industry

#### **Major Group 15 - Rubber Products Industries**

151Tire and Tube Industry

1511Tire and Tube Industry

152Rubber Hose and Belting Industry

1521Rubber Hose and Belting Industry

159Other Rubber Products Industries

1599Other Rubber Products Industries

#### **Major Group 16 - Plastic Products Industries**

161Foamed and Expanded Plastic Products Industry

1611Foamed and Expanded Plastic Products Industry

162Plastic Pipe and Pipe Fittings Industry

1621Plastic Pipe and Pipe Fittings Industry

163Plastic Film and Sheeting Industry

1631Plastic Film and Sheeting Industry

169Other Plastic Products Industries

1691Plastic Bag Industry

1699Other Plastic Products Industries n.e.c.

#### **Major Group 17 - Leather and Allied Products Industries**

171Leather and Allied Products Industries

1711Leather Tanneries

1712Footwear Industry

1713Luggage, Purse and Handbag Industry

1719Other Leather and Allied Products Industries

#### **Major Group 18 - Primary Textile Industries**

181Man-Made Fibre and Filament Yarn Industry

1811Man-Made Fibre and Filament Yarn Industry

182Spun Yarn and Woven Cloth Industries

1821Wool Yarn and Woven Cloth Industry

1829Other Spun Yarn and Woven Cloth Industries

183Broad Knitted Fabric Industry

1831Broad Knitted Fabric Industry

#### **Major Group 19 - Textile Products Industries**

191Natural Fibres Processing and Felt Products Industry

1911Natural Fibres Processing and Felt Products Industry

192Carpet, Mat and Rug Industry

1921Carpet, Mat and Rug Industry

193Canvas and Related Products Industry

1931Canvas and Related Products Industry

199Other Textile Products Industries

1991Narrow Fabric Industry

1992Contract Textile Dyeing and Finishing Industry

1993Household Products of Textile Materials Industry

1994Hygiene Products of Textile Materials Industry

1995Tire Cord Fabric Industry

1999Other Textile Products Industries n.e.c.

#### **Major Group 24 - Clothing Industries**

243Men's and Boys' Clothing Industries

2431Men's and Boys' Coat Industry

2432Men's and Boys' Suit and Jacket Industry

2433Men's and Boys' Pants Industry

2434Men's and Boys' Shirt and Underwear Industry

2435Men's and Boys' Clothing Contractors

244Women's Clothing Industries

2441Women's Coat and Jacket Industry

2442Women's Sportswear Industry

2443Women's Dress Industry

2444Women's Blouse and Shirt Industry

2445Women's Clothing Contractors

245Children's Clothing Industry

2451Children's Clothing Industry

249Other Clothing and Apparel Industries

2491Sweater Industry

2492Occupational Clothing Industry

2493Glove Industry

2494Hosiery Industry

2495Fur Goods Industry

2496Foundation Garment Industry

2499Other Clothing and Apparel Industries n.e.c.

#### **Major Group 25 - Wood Industries**

251Sawmill, Planing Mill and Shingle Mill Products

Industries

- 2511Shingle and Shake Industry
- 2512Sawmill and Planing Mill Products Industry  
(Except Shingles and Shakes)

252Veneer and Plywood Industries

- 2521Hardwood Veneer and Plywood Industry
- 2522Softwood Veneer and Plywood Industry

254Sash, Door and Other Millwork Industries

- 2541Prefabricated Wooden Buildings Industry
- 2542Wooden Kitchen Cabinet and Bathroom Vanity  
Industry
- 2543Wooden Door and Window Industry
- 2549Other Millwork Industries

256Wooden Box and Pallet Industry

- 2561Wooden Box and Pallet Industry

258Coffin and Casket Industry

- 2581Coffin and Casket Industry

259Other Wood Industries

- 2591Wood Preservation Industry
- 2592Particle Board Industry
- 2593Wafer Board Industry
- 2599Other Wood Industries n.e.c.

**Major Group 26 - Furniture and Fixture  
Industries**

261Household Furniture Industries

- 2611Wooden Household Furniture Industry
- 2612Upholstered Household Furniture Industry
- 2619Other Household Furniture Industries

264Office Furniture Industries

- 2641Metal Office Furniture Industry
- 2649Other Office Furniture Industries

269Other Furniture and Fixture Industries

- 2691Bed Spring and Mattress Industry
- 2692Hotel, Restaurant and Institutional Furniture and  
Fixture Industry
- 2699Other Furniture and Fixture Industries n.e.c.

**Major Group 27 - Paper and allied Product  
Industries**

271Pulp and Paper Industries

- 2711Pulp Industry
- 2712Newsprint Industry
- 2713Paperboard Industry
- 2714Building Board Industry
- 2719Other Paper Industries

272Asphalt Roofing Industry

- 2721Asphalt Roofing Industry

273Paper Box and Bag Industries

- 2731Folding Carton and Set-Up Box Industry
- 2732Corrugated Box Industry
- 2733Paper Bag Industry

279Other Converted Paper Products Industries

- 2791Coated and Treated Paper Industry
- 2792Stationery Paper Products Industry
- 2793Paper Consumer Products Industry
- 2799Other Converted Paper Products Industries n.e.c.

**Major Group 28 - Printing, Publishing and Allied  
Industries**

281Commercial Printing Industries

- 2811Business Forms Printing Industry
- 2819Other Commercial Printing Industries

282Platemaking, Typesetting and Bindery Industry

- 2821Platemaking, Typesetting and Bindery Industry

283Publishing Industries

- 2831Book Publishing Industry
- 2839Other Publishing Industries

284Combined Publishing and Printing Industries

- 2841Newspaper, Magazine and Periodical(Combined  
Publishing and Printing) Industry
- 2849Other Combined Publishing and Printing  
Industries

**Major Group 29 - Primary Metal Industries**

291Primary Steel Industries

- 2911Ferro-Alloys Industry
- 2912Steel Foundries
- 2919Other Primary Steel Industries

292Steel Pipe and Tube Industry

- 2921Steel Pipe and Tube Industry

294Iron Foundries

- 2941Iron Foundries

295Non-Ferrous Metal Smelting and Refining Industries

- 2951Primary Production of Aluminum Industry
- 2959Other Primary Smelting and Refining of  
Non-Ferrous Metal Industries

296Aluminum Rolling, Casting and Extruding Industry

- 2961Aluminum Rolling, Casting and Extruding  
Industry

297Copper and Copper Alloy Rolling, Casting and  
Extruding Industry

- 2971Copper and Copper Alloy Rolling, Casting and  
Extruding Industry

299Other Rolled, Cast and Extruded Non-Ferrous Metal Product Industries  
2999Other Rolled, Cast and Extruded Non-Ferrous Metal Products Industries

**Major Group 30 - Fabricated Metal Products Industries (Except Machinery and Transportation Equipment Industries)**

301Power Boiler and Heat Exchanger Industry  
3011Power Boiler and Heat Exchanger Industry

302Fabricated Structural Metal Products Industries  
3021Metal Tanks (Heavy Gauge) Industry  
3022Plate Work Industry  
3023Pre-Engineered Metal Buildings Industry (Except Portable)  
3029Other Fabricated Structural Metal Products Industries

303Ornamental and Architectural Metal Products Industries  
3031Metal Door and Window Industry  
3032Prefabricated Portable Metal Buildings Industry  
3039Other Ornamental and Architectural Metal Products Industries

304Stamped, Pressed and Coated Metal Products Industries  
3041Custom Coating of Metal Products Industry  
3042Metal Closure and Container Industry  
3049Other Stamped and Pressed Metal Products Industries

305Wire and Wire Products Industries  
3051Upholstery and Coil Spring Industry  
3052Wire and Wire Rope Industry  
3053Industrial Fastener Industry  
3059Other Wire Products Industries

306Hardware, Tool and Cutlery Industries  
3061Basic Hardware Industry  
3062Metal Dies, Moulds and Patterns Industry  
3063Hand Tool and Implement Industry  
3069Other Hardware and Cutlery Industries

307Heating Equipment Industry  
3071Heating Equipment Industry

308Machine Shop Industry  
3081Machine Shop Industry

309Other Metal Fabricating Industries  
3091Metal Plumbing Fixtures and Fittings Industry  
3092Metal Valve Industry  
3099Other Metal Fabricating Industries n.e.c.

**Major Group 31 - Machinery Industries (Except**

**Electrical Machinery)**

311Agricultural Implement Industry  
3111Agricultural Implement Industry

312Commercial Refrigeration and Air Conditioning Equipment Industry  
3121Commercial Refrigeration and Air Conditioning Equipment Industry

319Other Machinery and Equipment Industries  
3191Compressor, Pump and Industrial Fan Industry  
3192Construction and Mining Machinery and Materials Handling Equipment Industry  
3193Sawmill and Woodworking Machinery Industry  
3194Turbine and Mechanical Power Transmission Equipment Industry  
3199Other Machinery and Equipment Industries n.e.c.

**Major Group 32 - Transportation Equipment Industries**

321Aircraft and Aircraft Parts Industry  
3211Aircraft and Aircraft Parts Industry

323Motor Vehicle Industry  
3231Motor Vehicle Industry

324Truck and Bus Body and Trailer Industries  
3241Truck and Bus Body Industry  
3242Commercial Trailer Industry  
3243Non-Commercial Trailer Industry  
3244Mobile Home Industry

325Motor Vehicle Parts and Accessories Industries  
3251Motor Vehicle Engine and Engine Parts Industry  
3252Motor Vehicle Wiring Assemblies Industry  
3253Motor Vehicle Stampings Industry  
3254Motor Vehicle Steering and Suspension Parts Industry  
3255Motor Vehicle Wheel and Brake Industry  
3256Plastic Parts and Accessories for Motor Vehicles Industry  
3257Motor Vehicle Fabric Accessories Industry  
3259Other Motor Vehicle Accessories, Parts and Assemblies Industries

326Railroad Rolling Stock Industry  
3261Railroad Rolling Stock Industry

327Shipbuilding and Repair Industry  
3271Shipbuilding and Repair Industry

328Boatbuilding and Repair Industry  
3281Boatbuilding and Repair Industry

329Other Transportation Equipment Industries

3299Other Transportation Equipment Industries

**Major Group 33 - Electrical and Electronic Products Industries**

331Small Electrical Appliance Industry

3311Small Electrical Appliance Industry

332Major Appliance Industry (Electric and Non-Electric)

3321Major Appliance Industry (Electric and Non-Electric)

333Electric Lighting Industries

3331Lighting Fixture Industry

3332Electric Lamp and Shade Industry (Except Bulb and Tube)

3333Electric Lamp (Bulb and Tube) Industry

334Record Player, Radio and Television Receiver Industry

3341Record Player, Radio and Television Receiver Industry

335Communication and Other Electronic Equipment Industries

3351Telecommunication Equipment Industry

3352Electronic Parts and Components Industry

3359Other Communication and Electronic Equipment Industries

336Office, Store and Business Machine Industries

3361Electronic Computing and Peripheral Equipment Industry

3362Electronic Office, Store and Business Machine Industry

3369Other Office, Store and Business Machine Industries

337Electrical Industrial Equipment Industries

3371Electrical Transformer Industry

3372Electrical Switchgear and Protective Equipment Industry

3379Other Electrical Industrial Equipment Industry

338Communications and Energy Wire and Cable Industry

3381Communications and Energy Wire and Cable Industry

339Other Electrical Products Industries

3391Battery Industry

3392Non-Current Carrying Wiring Devices Industry

3399Other Electrical Product Industries n.e.c.

**Major Group 35 - Non-Metallic Mineral Products Industries**

351Clay Products Industries

3511Clay Products Industry (From Domestic Clay)

3512Clay Products Industry (From Imported Clay)

352Hydraulic Cement Industry

3521Hydraulic Cement Industry

354Concrete Products Industries

3541Concrete Pipe Industry

3542Structural Concrete Products Industry

3549Other Concrete Products Industries

355Ready-Mix Concrete Industry

3551Ready-Mix Concrete Industry

356Glass and Glass Products Industries

3561Primary Glass and Glass Containers Industry

3562Glass Products Industry (Except Glass Containers)

357Abrasives Industry

3571Abrasives Industry

358Lime Industry

3581Lime Industry

359Other Non-Metallic Mineral Products Industries

3591Refractories Industry

3592Asbestos Products Industry

3593Gypsum Products Industry

3594Non-Metallic Mineral Insulating Materials Industry

3599Other Non-Metallic Mineral Products Industries n.e.c.

**Major Group 36 - Refined Petroleum and Coal Products Industries**

361Refined Petroleum Products Industries

3611Refined Petroleum Products Industry (Except Lubricating Oil and Grease)

3612Lubricating Oil and Grease Industry

369Other Petroleum and Coal Products Industries

3699Other Petroleum and Coal Products Industries

**Major Group 37 - Chemical and Chemical Products Industries**

371Industrial Chemicals Industries n.e.c.

3711Industrial Inorganic Chemical Industries n.e.c.

3712Industrial Organic Chemical Industries n.e.c.

372Agricultural Chemical Industries

3721Chemical Fertilizer and Fertilizer Materials Industry

3722Mixed Fertilizer Industry

3729Other Agricultural Chemical Industries

373Plastic and Synthetic Resin Industry

3731Plastic and Synthetic Resin Industry  
374Pharmaceutical and Medicine Industry  
3741Pharmaceutical and Medicine Industry

375Paint and Varnish Industry  
3751Paint and Varnish Industry

376Soap and Cleaning Compounds Industry  
3761Soap and Cleaning Compounds Industry

377Toilet Preparations Industry  
3771Toilet Preparations Industry

379Other Chemical Products Industries  
3791Printing Ink Industry  
3792Adhesives Industry  
3799Other Chemical Products Industries n.e.c.

### **Major Group 39 - Other Manufacturing Industries**

391Scientific and Professional Equipment Industries  
3911Indicating, Recording and Controlling Instruments Industry  
3912Other Instruments and Related Products Industry  
3913Clock and Watch Industry  
3914Ophthalmic Goods Industry

392Jewellery and Precious Metal Industries  
3921Jewellery and Silverware Industry  
3922Precious Metal Secondary Refining Industry

393Sporting Goods and Toy Industries  
3931Sporting Goods Industry  
3932Toys and Games Industry

397Sign and Display Industry  
3971Sign and Display Industry

399Other Manufactured Products Industries  
3991Broom, Brush and Mop Industry  
3992Button, Buckle and Clothes Fastener Industry  
3993Floor Tile, Linoleum and Coated Fabric Industry  
3994Musical Instrument and Sound Recording Industry  
3999Other Manufactured Products Industries n.e.c.

## **DIVISION F - CONSTRUCTION INDUSTRIES**

### **Major Group 40 - Building, Developing and General Contracting Industries**

401Residential Building and Development  
4011Single Family Housing  
4012Apartment and Other Multiple Housing  
4013Residential Renovation

402Non-Residential Building and Development  
4021Manufacturing and Light Industrial Building  
4022Commercial Building  
4023Institutional Building

### **Major Group 41 - Industrial and Heavy (Engineering) Construction Industries**

411Industrial Construction (Other Than Buildings)  
4111Power Plants (Except Hydroelectric)  
4112Gas, Oil and Other Energy Related Structures (Except Pipelines)  
4113Gas and Oil Pipelines  
4119Other Industrial Construction

412Highway and Heavy Construction  
4121Highways, Streets and Bridges  
4122Waterworks and Sewage Systems  
4123Hydroelectric Power Plants and Related Structures (Except Transmission Lines)  
4124Power and Telecommunication Transmission Lines  
4129Other Heavy Construction

### **Major Group 42 - Trade Contracting Industries**

421Site Work  
4211Wrecking and Demolition  
4212Water Well Drilling  
4213Septic System Installation  
4214Excavating and Grading  
4215Equipment Rental (With Operator)  
4216Asphalt Paving  
4217Fencing Installation  
4219Other Site Work

422Structural and Related Work  
4221Piledriving Work  
4222Form Work  
4223Steel Reinforcing  
4224Concrete Pouring and Finishing  
4225Precast Concrete Installation  
4226Rough and Framing Carpentry  
4227Structural Steel Erection  
4229Other Structural and Related Work

423Exterior Close-in Work  
4231Masonry Work  
4232Siding Work  
4233Glass and Glazing Work  
4234Insulation Work  
4235Roof Shingling  
4236Sheet Metal and Built-Up Roofing  
4239Other Exterior Close-In Work

424Plumbing, Heating and Air Conditioning, Mechanical Work  
4241Plumbing

4242 Dry Heating and Gas Piping Work  
4243 Wet Heating and Air Conditioning Work  
4244 Sheet Metal and Other Duct Work

425 Mechanical Specialty Work

4251 Process Piping Work  
4252 Automatic Sprinkler System Installation  
4253 Commercial Refrigeration Work  
4254 Environmental Control Work  
4255 Millwright and Rigging  
4256 Thermal Insulation Work  
4259 Other Mechanical Specialty Work

426 Electrical Work

4261 Electrical Work

427 Interior and Finishing Work

4271 Plastering and Stucco Work  
4272 Drywall Work  
4273 Acoustical Work  
4274 Finish Carpentry  
4275 Painting and Decorating Work  
4276 Terrazzo and Tile Work  
4277 Hardwood Flooring Installation  
4278 Resilient Flooring and Carpet Work  
4279 Other Interior and Finishing Work

429 Other Trade Work

4291 Elevator and Escalator Installation  
4292 Ornamental and Miscellaneous Fabricated Metal Installation  
4293 Residential Swimming Pool Installation  
4299 Other Trade Work n.e.c.

**Major Group 44 - Service Industries Incidental to Construction**

441 Project Management, Construction

4411 Project Management, Construction

449 Other Services Incidental to Construction

4491 Land Developers  
4499 Other Services Incidental to Construction n.e.c.

**DIVISION G - TRANSPORTATION AND STORAGE INDUSTRIES**

**Major Group 45 - Transportation Industries**

451 Air Transport Industries

4511 Scheduled Air Transport Industry  
4512 Non-Scheduled Air Transport, Chartered, Industry  
4513 Non-Scheduled Air Transport, Specialty, Industry

452 Service Industries Incidental to Air Transport

4521 Airport Operations Industry  
4522 Aircraft Rental Industry  
4523 Aircraft Servicing Industry  
4529 Other Service Industries Incidental to Air Transport

453 Railway Transport and Related Service Industries

4531 Railway Transport Industry  
4532 Service Industry Incidental to Railway Transport

454 Water Transport Industries

4541 Freight and Passenger Water Transport Industry  
4542 Ferry Industry  
4543 Marine Towing Industry  
4544 Ship Chartering Industry  
4549 Other Water Transport Industries

455 Service Industries Incidental to Water Transport

4551 Marine Cargo Handling Industry  
4552 Harbour and Port Operation Industry  
4553 Marine Salvage Industry  
4554 Piloting Service, Water Transport Industry  
4555 Marine Shipping Agencies Industry  
4559 Other Service Industries Incidental to Water Transport

456 Truck Transport Industries

4561 General Freight Trucking Industry  
4562 Used Goods Moving and Storage Industry  
4563 Bulk Liquids Trucking Industry  
4564 Dry Bulk Materials Trucking Industry  
4565 Forest Products Trucking Industry  
4569 Other Truck Transport Industries

457 Public Passenger Transit Systems Industries

4571 Urban Transit Systems Industry  
4572 Interurban and Rural Transit Systems Industry  
4573 School Bus Operations Industry  
4574 Charter and Sightseeing Bus Services Industry  
4575 Limousine Service to Airports and Stations Industry

458 Other Transportation Industries

4581 Taxicab Industry  
4589 Other Transportation Industries n.e.c.

459 Other Service Industries Incidental to Transportation

4591 Highway, Street and Bridge Maintenance Industry  
4592 Freight Forwarding Industry  
4599 Other Service Industries Incidental to Transportation n.e.c.

**Major Group 46 - Pipeline Transport Industries**

461 Pipeline Transport Industries

4611 Natural Gas Pipeline Transport Industry  
4612 Crude Oil Pipeline Transport Industry

4619Other Pipeline Transport Industries

**Major Group 47 - Storage and Warehousing Industries**

471Grain Elevator Industry

4711Grain Elevator Industry

479Other Storage and Warehousing Industries

4791Refrigerated Warehousing Industry

4799Other Storage and Warehousing Industries n.e.c.

**DIVISION H - COMMUNICATION AND OTHER UTILITY INDUSTRIES**

**Major Group 48 - Communication Industries**

481Telecommunication Broadcasting Industries

4811Radio Broadcasting Industry

4812Television Broadcasting Industry

4813Combined Radio and Television Broadcasting Industry

4814Cable Television Industry

482Telecommunication Carriers Industry

4821Telecommunication Carriers Industry

483Other Telecommunication Industries

4839Other Telecommunication Industries

484Postal and Courier Service Industries

4841Postal Service Industry

4842Courier Service Industry

**Major Group 49 - Other Utility Industries**

491Electric Power Systems Industry

4911Electric Power Systems Industry

492Gas Distribution Systems Industry

4921Gas Distribution Systems Industry

493Water Systems Industry

4931Water Systems Industry

499Other Utility Industries n.e.c.

4999Other Utility Industries n.e.c.

**DIVISION I - WHOLESALE TRADE INDUSTRIES**

**Major Group 50 - Farm Products Industries, Wholesale**

501Farm Products, Wholesale

5011Livestock, Wholesale

5012Grain, Wholesale

5019Other Farm Products, Wholesale

**Major Group 51 - Petroleum Products Industries, Wholesale**

511Petroleum Products, Wholesale

5111Petroleum Products, Wholesale

**Major Group 52 - Food, Beverage, Drug and Tobacco Industries, Wholesale**

521Food, Wholesale

5211Confectionery, Wholesale

5212Frozen Foods (Packaged), Wholesale

5213Dairy Products, Wholesale

5214Poultry and Eggs, Wholesale

5215Fish and Seafood, Wholesale

5216Fresh Fruit and Vegetables, Wholesale

5217Meat and Meat Products, Wholesale

5219Other Foods, Wholesale

522Beverages, Wholesale

5221Beverages, Wholesale

523Drugs and Toilet Preparations, Wholesale

5231Drugs, Wholesale

5232Toilet Soaps and Preparations, Wholesale

5239Drug Sundries and Other Drugs and Toilet Preparations, Wholesale

524Tobacco Products, Wholesale

5241Tobacco Products, Wholesale

**Major Group 53 - Apparel and Dry Goods Industries, Wholesale**

531Apparel, Wholesale

5311Men's and Boys' Clothing and Furnishings, Wholesale

5312Women's, Misses' and Children's Outerwear, Wholesale

5313Women's, Misses' and Children's Hosiery, Underwear and Apparel Accessories, Wholesale

5314Footwear, Wholesale

5319Other Apparel, Wholesale

532Dry Goods, Wholesale

5321Piece Goods, Wholesale

5329Notions and Other Dry Goods, Wholesale

**Major Group 54 - Household Goods Industries, Wholesale**

541Electrical and Electronic Household Appliances Parts, Wholesale

5411Electrical Household Appliances, Wholesale

5412Electronic Household Appliances, Wholesale

542Household Furniture, Wholesale  
5421Household Furniture, Wholesale

543Household Furnishings, Wholesale  
5431China, Glassware, Crockery and Pottery,  
Wholesale  
5432Floor Coverings, Wholesale  
5433Linens, Draperies and Other Textile Furnishing,  
Wholesale  
5439Other Household Furnishings, Wholesale

**Major Group 55 - Motor Vehicle, Parts and  
Accessories Industries, Wholesale**

551Motor Vehicles, Wholesale  
5511Automobiles, Wholesale  
5512Trucks and Buses, Wholesale  
5519Other Motor Vehicles and Trailers, Wholesale

552Motor Vehicle Parts and Accessories, Wholesale  
5521Tires and Tubes, Wholesale  
5529Other Motor Vehicle Parts and Accessories,  
Wholesale

**Major Group 56 - Metals, Hardware, Plumbing,  
Heating and Building Materials Industries,  
Wholesale**

561Metal and Metal Products, Wholesale  
5611Iron and Steel Primary Forms and Structural  
Shapes, Wholesale  
5612Other Iron and Steel Products, Wholesale  
5613Non-Ferrous Metal and Metal Products,  
Wholesale  
5619Combination Metal and Metal Products,  
Wholesale

562Hardware and Plumbing, Heating and Air  
Conditioning Equipment and Supplies, Wholesale  
5621Hardware, Wholesale  
5622Plumbing, Heating and Air Conditioning  
Equipment and Supplies, Wholesale

563Lumber and Building Materials, Wholesale  
5631Lumber, Plywood and Millwork, Wholesale  
5632Paint, Glass and Wallpaper, Wholesale  
5639Other Building Materials, Wholesale

**Major Group 57 - Machinery, Equipment and  
Supplies Industries, Wholesale**

571Farm Machinery, Equipment and Supplies, Wholesale  
5711Farm Machinery, Equipment and Supplies,  
Wholesale

572Construction, Forestry and Mining Machinery,  
Equipment and Supplies, Wholesale  
5721Construction and Forestry Machinery,

Equipment and Supplies, Wholesale  
5722Mining Machinery, Equipment and Supplies,  
Wholesale

573Industrial Machinery, Equipment and Supplies,  
Wholesale  
5731Industrial Machinery, Equipment and Supplies,  
Wholesale

574Electrical and Electronic Machinery, Equipment and  
Supplies, Wholesale  
5741Electrical Wiring Supplies and Electrical  
Construction Material, Wholesale  
5742Electrical Generating and Transmission  
Equipment and Supplies, Wholesale  
5743Electronic Machinery, Equipment and Supplies,  
Wholesale  
5749Other Electrical and Electronic Machinery,  
Equipment and Supplies, Wholesale

579Other Machinery, Equipment and Supplies,  
Wholesale  
5791Office and Store Machinery, Equipment and  
Supplies, Wholesale  
5792Service Machinery, Equipment and Supplies,  
Wholesale  
5793Professional Machinery, Equipment and  
Supplies, Wholesale  
5799Other Machinery, Equipment and Supplies  
n.e.c., Wholesale

**Major Group 59 - Other Products Industries,  
Wholesale**

591Waste Materials, Wholesale  
5911Automobile Wrecking  
5919Other Waste Materials, Wholesale

592Paper and Paper Products, Wholesale  
5921Newsprint, Wholesale  
5922Stationery and Office Supplies, Wholesale  
5929Other Paper and Paper Products, Wholesale

593Agricultural Supplies, Wholesale  
5931Agricultural Feeds, Wholesale  
5932Seeds and Seed Processing, Wholesale  
5939Agricultural Chemical and Other Farm Supplies,  
Wholesale

594Toys, Amusement and Sporting Goods, Wholesale  
5941Toys, Novelties and Fireworks, Wholesale  
5942Amusement and Sporting Goods, Wholesale

595Photographic Equipment and Musical Instruments  
and Supplies, Wholesale  
5951Photographic Equipment and Supplies,  
Wholesale  
5952Musical Instruments and Accessories, Wholesale

596 Jewellery and Watches, Wholesale  
5961 Jewellery and Watches, Wholesale

597 Industrial and Household Chemicals, Wholesale  
5971 Industrial and Household Chemicals, Wholesale

598 General Merchandise, Wholesale  
5981 General Merchandise, Wholesale

599 Other Products n.e.c., Wholesale  
5991 Books, Periodicals and Newspapers, Wholesale  
5992 Second-Hand Goods, Wholesale (Except  
Machinery and Automotive)  
5993 Forest Products, Wholesale  
5999 Other Products n.e.c., Wholesale

## **DIVISION J - RETAIL TRADE INDUSTRIES**

### **Major Group 60 - Food, Beverage and Drug Industries, Retail**

601 Food Stores  
6011 Food (Groceries) Stores  
6012 Food (Specialty) Stores

602 Liquor, Wine and Beer Stores  
6021 Liquor Stores  
6022 Wine Stores  
6023 Beer Stores

603 Prescription Drugs and Patent Medicine Stores  
6031 Pharmacies  
6032 Patent Medicine and Toiletries Stores

### **Major Group 61 - Shoe, Apparel, Fabric and Yarn Industries, Retail**

611 Shoe Stores  
6111 Shoe Stores

612 Men's Clothing Stores  
6121 Men's Clothing Stores

613 Women's Clothing Stores  
6131 Women's Clothing Stores

614 Clothing Stores n.e.c.  
6141 Clothing Stores n.e.c.

615 Fabric and Yarn Stores  
6151 Fabric and Yarn Stores

### **Major Group 62 - Household Furniture, Appliances and Furnishings Industries, Retail**

621 Household Furniture Stores  
6211 Household Furniture Stores (With Appliances

and Furnishings)  
6212 Household Furniture Stores (Without Appliances  
and Furnishings)  
6213 Furniture Refinishing and Repair Shops

622 Appliance, Television, Radio and Stereo Stores  
6221 Appliance, Television, Radio and Stereo Stores  
6222 Television, Radio and Stereo Stores  
6223 Appliance, Television, Radio and Stereo Repair  
Shops

623 Household Furnishings Stores  
6231 Floor Covering Stores  
6232 Drapery Stores  
6239 Other Household Furnishings Stores

### **Major Group 63 - Automotive Vehicles, Parts and Accessories Industries, Sales and Service**

631 Automobile Dealers  
6311 Automobile (New) Dealers  
6312 Automobile (Used) Dealers

632 Recreational Vehicle Dealers  
6321 Motor Home and Travel Trailer Dealers  
6322 Boats, Outboard Motors and Boating  
Accessories Dealers  
6323 Motorcycle and Snowmobile Dealers  
6329 Other Recreational Vehicle Dealers

633 Gasoline Service Stations  
6331 Gasoline Service Stations

634 Automotive Parts and Accessories Stores  
6341 Home and Auto Supply Stores  
6342 Tire, Battery, Parts and Accessories Stores

635 Motor Vehicle Repair Shops  
6351 Garages (General Repairs)  
6352 Paint and Body Repair Shops  
6353 Muffler Replacement Shops  
6354 Motor Vehicle Glass Replacement Shops  
6355 Motor Vehicle Transmission Repair and  
Replacement Shops  
6359 Other Motor Vehicle Repair Shops

639 Other Motor Vehicle Services  
6391 Car Washes  
6399 Other Motor Vehicle Services n.e.c.

### **Major Group 64 - General Retail Merchandising Industries**

641 General Merchandise Stores  
6411 Department Stores  
6412 General Stores  
6413 Other General Merchandise Stores

### **Major Group 65 - Other Retail Store Industries**

- 651 Book and Stationery Stores
  - 6511 Book and Stationery Stores
- 652 Florists, Lawn and Garden Centres
  - 6521 Florist Shops
  - 6522 Lawn and Garden Centres
- 653 Hardware, Paint, Glass and Wallpaper Stores
  - 6531 Hardware Stores
  - 6532 Paint, Glass and Wallpaper Stores
- 654 Sporting Goods and Bicycle Shops
  - 6541 Sporting Goods Stores
  - 6542 Bicycle Shops
- 655 Musical Instrument and Record Stores
  - 6551 Musical Instrument Stores
  - 6552 Record and Tape Stores
- 656 Jewellery Stores and Watch and Jewellery Repair Shops
  - 6561 Jewellery Stores
  - 6562 Watch and Jewellery Repair Shops
- 657 Camera and Photographic Supply Stores
  - 6571 Camera and Photographic Supply Stores
- 658 Toy, Hobby, Novelty and Souvenir Stores
  - 6581 Toy and Hobby Stores
  - 6582 Gift, Novelty and Souvenir Stores
- 659 Other Retail Stores
  - 6591 Second-Hand Merchandise Stores n.e.c.
  - 6592 Opticians' Shops
  - 6593 Art Galleries and Artists' Supply Stores
  - 6594 Luggage and Leather Goods Stores
  - 6595 Monument and Tombstone Dealers
  - 6596 Pet Stores
  - 6597 Coin and Stamp Dealers
  - 6598 Mobile Home Dealers
  - 6599 Other Retail Stores n.e.c.

### **Major Group 69 - Non-Store Retail Industries**

- 691 Vending Machine Operators
  - 6911 Vending Machine Operators
- 692 Direct Sellers
  - 6921 Direct Sellers

## **DIVISION K - FINANCE AND INSURANCE INDUSTRIES**

### **Major Group 70 - Deposit Accepting Intermediary Industries**

- 701 Central Bank
  - 7011 Central Bank
- 702 Chartered Banks and Other Banking-Type Intermediaries
  - 7021 Chartered Banks
  - 7029 Other Banking-Type Intermediaries
- 703 Trust Companies
  - 7031 Trust Companies
- 704 Deposit Accepting Mortgage Companies
  - 7041 Deposit Accepting Mortgage Companies (Except Cooperatives)
  - 7042 Cooperative Mortgage Companies
- 705 Credit Unions
  - 7051 Local Credit Unions
  - 7052 Central Credit Unions
- 709 Other Deposit Accepting Intermediaries
  - 7099 Other Deposit Accepting Intermediaries

### **Major Group 71 - Consumer and Business Financing Intermediary Industries**

- 711 Consumer Loan Companies
  - 7111 Consumer Loan Companies
- 712 Business Financing Companies
  - 7121 Sales Finance Companies
  - 7122 Credit Card Companies
  - 7123 Factoring Companies
  - 7124 Financial Leasing Companies
  - 7125 Venture Capital Companies
  - 7129 Other Business Financing Companies

### **Major Group 72 - Investment Intermediary Industries**

- 721 Portfolio Investment Intermediaries
  - 7211 Investment (Mutual) Funds
  - 7212 Retirement Savings Funds
  - 7213 Segregated Funds
  - 7214 Investment Companies
  - 7215 Holding Companies
- 722 Mortgage Companies
  - 7221 Mortgage Investment Companies
  - 7222 Real Estate Investment Trusts
  - 7229 Other Mortgage Companies
- 729 Other Investment Intermediaries
  - 7291 Trusteed Pension Funds
  - 7292 Estate, Trust and Agency Funds
  - 7299 Other Investment Intermediaries n.e.c.

### **Major Group 73 - Insurance Industries**

731Life Insurers

7311Life Insurers

732Deposit Insurers

7321Deposit Insurers

733Property and Casualty Insurers

7331Health Insurers

7339Other Property and Casualty Insurers

### **Major Group 74 - Other Financial Intermediary Industries**

741Security Brokers and Dealers

7411Investment Dealers

7412Stock Brokers

7413Commodity Brokers

742Mortgage Brokers

7421Mortgage Brokers

743Security and Commodity Exchanges

7431Stock Exchanges

7432Commodity Exchanges

749Other Financial Intermediaries n.e.c.

7499Other Financial Intermediaries n.e.c.

### **DIVISION L - REAL ESTATE OPERATOR AND INSURANCE AGENT INDUSTRIES**

#### **Major Group 75 - Real Estate Operator Industries (Except Developers)**

751Operators of Buildings and Dwellings

7511Operators of Residential Buildings and Dwellings

7512Operators of Non-Residential Buildings

759Other Real Estate Operators

7599Other Real Estate Operators

#### **Major Group 76 - Insurance and Real Estate Agent Industries**

761Insurance and Real Estate Agencies

7611Insurance and Real Estate Agencies

### **DIVISION M - BUSINESS SERVICE INDUSTRIES**

Major Group 77 - Business Service Industries

771Employment Agencies and Personnel Suppliers

7711Employment Agencies

7712Personnel Suppliers

772Computer and Related Services

7721Computer Services

7722Computer Equipment Maintenance and Repair

773Accounting and Bookkeeping Services

7731Offices of Chartered and Certified Accountants

7739Other Accounting and Bookkeeping Services

774Advertising Services

7741Advertising Agencies

7742Media Representatives

7743Outdoor Display and Billboard Advertising

7749Other Advertising Services

775Architectural, Engineering and Other Scientific and Technical Services

7751Offices of Architects

7752Offices of Engineers

7759Other Scientific and Technical Services

776Offices of Lawyers and Notaries

7761Offices of Lawyers and Notaries

777Management Consulting Services

7771Management Consulting Services

779Other Business Services

7791Security and Investigation Services

7792Credit Bureau Services

7793Collection Agencies

7794Customs Brokers

7795Telephone Answering Services

7796Duplicating Services

7799Other Business Services n.e.c.

### **DIVISION N - GOVERNMENT SERVICE INDUSTRIES**

#### **Major Group 81 - Federal Government Service Industries**

811Defence Services

8111Defence Services

812Protective Services

8121Courts of Law

8122Correctional Services

8123Police Services

8125Regulatory Services

8129Other Protective Services

813Labour, Employment and Immigration Services

8131Labour and Employment Services

8132Immigration Services

8139Other Labour, Employment and Immigration Services

814Foreign Affairs and International Assistance

8141Foreign Affairs

8142International Assistance

815General Administrative Services

8151Executive and Legislative Administration

8152Finance and Economic Administration

8153Taxation Administration

8154Intergovernmental Affairs Administration

8159Other General Administrative Services

816Human Resource Administration

8161Health Administration

8162Social Service Administration

8163Education Administration

8164Recreation and Culture Administration

817Economic Services Administration

8171Transportation and Communication Administration

8172Resource Conservation and Industrial Development Administration

8173Environment Administration

8174Housing Administration

8175Regional Planning and Development Administration

8176Research Administration

**Major Group 82 - Provincial and Territorial Government Service Industries**

822Protective Services

8221Courts of Law

8222Correctional Services

8223Police Services

8224Firefighting Services

8225Regulatory Services

8229Other Protective Services

823Labour and Employment Services

8231Labour and Employment Services

825General Administrative Services

8251Executive and Legislative Administration

8252Finance and Economic Administration

8253Taxation Administration

8254Intergovernmental Affairs Administration

8259Other General Administrative Services

826Human Resource Administration

8261Health Administration

8262Social Service Administration

8263Education Administration

8264Recreation and Culture Administration

827Economic Services Administration

8271Transportation and Communication Administration

8272Resource Conservation and Industrial Development Administration

8273Environment Administration

8274Housing Administration

8275Regional Planning and Development Administration

8276Research Administration

**Major Group 83 - Local Government Service Industries**

832Protective Services

8321Courts of Law

8322Correctional Services

8323Police Services

8324Firefighting Services

8325Regulatory Services

8329Other Protective Services

835General Administrative Services

8351Executive and Legislative Administration

8352Finance and Economic Administration

8353Taxation Administration

8354Intergovernmental Affairs Administration

8359Other General Administrative Services

836Human Resource Administration

8361Health Administration

8362Social Service Administration

8363Education Administration

8364Recreation and Culture Administration

837Economic Services Administration

8371Transportation Administration

8372Resource Conservation and Industrial Development Administration

8373Environment Administration

8374Housing Administration

8375Regional Planning and Development Administration

**Major Group 84 - International and Other Extra-Territorial Government Service Industries**

841International and Other Extra-Territorial Agencies

8411International and Other Extra-Territorial Agencies

**DIVISION O - EDUCATIONAL SERVICE INDUSTRIES**

**Major Group 85 - Educational Service Industries**

851Elementary and Secondary Education

8511Elementary and Secondary Education

852Post-Secondary Non-University Education  
8521Post-Secondary Non-University Education

853University Education  
8531University Education

854Library Services  
8541Library Services

855Museums and Archives  
8551Museums and Archives

859Other Educational Services  
8599Other Educational Services

## **DIVISION P - HEALTH AND SOCIAL SERVICE INDUSTRIES**

### **Major Group 86 - Health and Social Service Industries**

861Hospitals  
8611General Hospitals  
8612Rehabilitation Hospitals  
8613Extended Care Hospitals  
8614Mental (Psychiatric) Hospitals  
8615Addiction Hospitals  
8616Nursing Stations and Outpost Hospitals  
8617Children's (Paediatric) Hospitals  
8619Other Specialty Hospitals

862Other Institutional Health and Social Services  
8621Homes for Personal and Nursing Care  
8622Homes for Physically Handicapped and/or Disabled  
8623Homes for Mentally Retarded  
8624Homes for Mentally Handicapped and/or Disabled  
8625Homes for Emotionally Disturbed Children  
8626Homes for Alcohol/Drug Addicts  
8627Homes for Children in Need of Protection  
8628Homes for Single Mothers  
8629Other Institutional Health and Social Services n.e.c.

863Non-institutional Health Services  
8631Ambulance Services  
8632Drug Addiction and Alcoholism Treatment Clinics  
8633Health Rehabilitation Clinics  
8634Home Care Services (Including Home Nursing)  
8635Public Health Clinics/Community Health Centres  
8639Other Non-institutional Health Services

864Non-institutional Social Services  
8641Child Day-Care and Nursery School Services

8642Child Welfare Services  
8643Family Planning Services  
8644Sheltered Workshops  
8645Home-Maker Services  
8646Meal Services (Non-Commercial)  
8647Social Rehabilitation Services  
8648Crisis Intervention  
8649Other Non-Institutional Social Services

865Offices of Physicians, Surgeons and Dentists, Private Practice  
8651Offices of Physicians, General Practice  
8652Offices of Physicians and Surgeons, Specialists  
8653Offices of Dentists, General Practice  
8654Offices of Dentists, Specialists

866Offices or Other Health Practitioners  
8661Offices of Chiropractors and Osteopaths  
8662Offices of Nurses, Registered  
8663Offices of Nurses, Practical  
8664Offices or Nutritionists/Dietitians  
8665Offices of Physiotherapists/Occupational Therapists  
8666Offices of Optometrists  
8667Offices of Podiatrists and Chiropodists  
8668Offices of Denturists  
8669Offices of Other Health Practitioners

867Offices of Social Services Practitioners  
8671Offices of Psychologists  
8672Offices of Social Workers  
8679Offices of Other Social Service Practitioners

868Medical and Other Health Laboratories  
8681Medical Laboratories  
8682Radiological Laboratories  
8683Combined Medical and Radiological Laboratories  
8684Public Health Laboratories  
8685Blood Bank Laboratories  
8689Other Health Laboratories

869Health and Social Service Associations and Agencies  
8691Health Care and Public Safety Promotion Associations and Agencies  
8692Health Care Standards Agencies  
8693Health Care Research Agencies  
8694Social Service Planning and Advocacy Agencies  
8699Other Health and Social Service Associations and Agencies

## **DIVISION Q - ACCOMMODATION, FOOD AND BEVERAGE SERVICE INDUSTRIES**

### **Major Group 91 - Accommodation Service Industries**

911Hotels, Motels and Tourist Courts

9111Hotels and Motor Hotels  
9112Motels  
9113Tourist Courts and Cabins  
9114Guest Houses and Tourist Homes

912Lodging Houses and Residential Clubs  
9121Lodging Houses and Residential Clubs

913Camping Grounds and Travel Trailer Parks  
9131Camping Grounds and Travel Trailer Parks

914Recreation and Vacation Camps  
9141Outfitters (Hunting and Fishing Camps)  
9149Other Recreation and Vacation Camps

**Major Group 92 - Food and Beverage Service Industries**

921Food Services  
9211Restaurants, Licensed  
9212Restaurants, Unlicensed (including Drive-ins)  
9213Take-Out Food Services  
9214Caterers

922Taverns, Bars and Night Clubs  
9221Taverns, Bars and Night Clubs

**DIVISION R - OTHER SERVICE INDUSTRIES**

**Major Group 96 - Amusement and Recreational Service Industries**

961Motion Picture, Audio and Video Production and Distribution  
9611Motion Picture and Video Production  
9612Motion Picture and Video Distribution  
9613Motion Picture Laboratories and Video Production Facilities  
9614Sound Recording Services  
9619Other Motion Picture, Audio and Video Services

962Motion Picture Exhibition  
9621Regular Motion Picture Theatres  
9622Outdoor Motion Picture Theatres  
9629Other Motion Picture Exhibition

963Theatrical and Other Staged Entertainment Services  
9631Entertainment Production Companies and Artists  
9639Other Theatrical and Staged Entertainment Services

964Commercial Spectator Sports  
9641Professional Sports Clubs  
9642Professional Athletes and Promoters on Own Account  
9643Horse Race Tracks

9644Other Race Tracks

965Sports and Recreation Clubs and Services  
9651Golf Courses  
9652Curling Clubs  
9653Skiing Facilities  
9654Boat Rentals and Marinas  
9659Other Sports and Recreation Clubs

966Gambling Operations  
9661Gambling Operations

969Other Amusement and Recreational Services  
9691Bowling Alleys and Billiard Parlours  
9692Amusement Park, Carnival and Circus Operations  
9693Dance Halls, Studios and Schools  
9694Coin-Operated Amusement Services  
9695Roller Skating Facilities  
9696Botanical and Zoological Gardens  
9699Other Amusement and Recreational Services n.e.c.

**Major Group 97 - Personal and Household Service Industries**

971Barber and Beauty Shops  
9711Barber Shops  
9712Beauty Shops  
9713Combination Barber and Beauty Shops

972Laundries and Cleaners  
9721Power Laundries and/or Dry Cleaners  
9722Distributors and/or Agents for Dry Cleaners  
9723Self-Serve Laundries and/or Dry Cleaners  
9724Valet Services, Pressing and/or Repair  
9725Linen Supply  
9726Carpet Cleaning  
9729Other Laundry and Dry Cleaning Services

973Funeral Services  
9731Funeral Homes  
9732Cemeteries and Crematoria

974Private Households  
9741Private Households

979Other Personal and Household Services  
9791Shoe Repair  
9792Fur Cleaning, Repair and Storage  
9799Other Personal and Household Services n.e.c.

**Major Group 98 - Membership Organization Industries**

981Religious Organizations  
9811Religious Organizations

982Business Associations  
9821Business Associations

983Professional Membership Associations  
9831Professional Health and Social Service  
Membership Associations  
9839Other Professional Membership Associations

984Labour Organizations  
9841Labour Organizations

985Political Organizations  
9851Political Organizations

986Civic and Fraternal Organizations  
9861Civic and Fraternal Organizations

**Major Group 99 - Other Service Industries**

991Machinery, and Equipment Rental and Leasing  
Services  
9911Industrial Machinery and Equipment Rental and  
Leasing  
9912Audio-Visual Equipment Rental and Leasing  
9913Office Furniture and Machinery, Rental and  
Leasing  
9919Other Machinery and Equipment Rental and  
Leasing

992Automobile and Truck Rental and Leasing Services  
9921Automobile and Truck Rental and Leasing  
Services

993Photographers  
9931Photographers

994Other Repair Services  
9941Electric Motor Repair  
9942Welding  
9949Other Repair Services n.e.c.

995Services to Buildings and Dwellings  
9951Disinfecting and Exterminating Services  
9952Window Cleaning Services  
9953Janitorial Services  
9959Other Services to Buildings and Dwellings

996Travel Services  
9961Ticket and Travel Agencies  
9962Tour Wholesalers and Operators

999Other Services n.e.c.  
9991Parking Lots and Parking Garages  
9999Other Services n.e.c.

**APPENDIX 4**

Schedule 1

Hazardous Industrial Wastes

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Excerpt from the Regulation prepared for purposes of convenience only,  
and for accurate reference recourse should be had to the official volumes.

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## SCHEDULE 1

### HAZARDOUS INDUSTRIAL WASTES

#### Hazardous Industrial Waste from Non-Specific Sources

USEPA HAZARDOUS WASTE NO.	INDUSTRY AND NO.	WASTE
F001	NA9301	The following spent halogenated solvents used in degreasing: Tetrachloroethylene, trichloroethylene, methylene chloride, 1,1,1-trichloroethane, carbon tetrachloride, and chlorinated fluorocarbons; all spent solvent mixtures/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.
F002	NA9302	The following spent halogenated solvents: Tetrachloroethylene, methylene chloride, trichloroethylene, 1,1,1-trichloroethane, chlorobenzene, 1,1,2-trichloro-1,2,2-trifluoroethane, ortho-dichlorobenzene, trichlorofluoromethane, and 1,1,2-trichloroethane; all spent solvent mixtures/blends containing, before use, a total of ten per cent or more (by volume) of one or more of the above halogenated solvents or those listed in F001, F004, or F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.
F003	NA9303	The following spent non-halogenated solvents: Xylene, acetone, ethyl acetate, ethyl benzene, 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 more of those solvents listed in F001, F002, F004, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.
F004	NA9304	The following spent non-halogenated solvents: Cresols and cresylic acid, and nitrobenzene; all spent solvent mixtures/blends containing, before use, a total of ten percent or more (by volume) of one or more of the above non-halogenated solvents or those solvents listed in F001, F002, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.
F005	NA9305	The following spent non-halogenated solvents: Toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, benzene, 2-ethoxyethanol, and 2-nitropropane; all spent solvent mixtures/blends containing, before use, a total of ten percent or more (by volume) of one or more of the above non-halogenated solvents or those solvents listed in F001, F002, or F004; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.
F006	NA9306	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.

F007	NA9308	Spent cyanide plating bath solutions from electroplating operations
F008	NA9309	Plating bath residues from the bottom of plating baths from electroplating operations where cyanides are used in the process.
F009	NA9310	Spent stripping and cleaning bath solutions from electroplating operations where cyanides are used in the process.
F010	NA9311	Quenching bath residues from oil baths from metal heat treating operations where cyanides are used in the process.
F011	NA9312	Spent cyanide solutions from salt bath pot cleaning from metal heat treating operations.
F012	NA9313	Quenching waste water treatment sludges from metal heat treating operations where cyanides are used in the process.
F019	NA9307	Wastewater treatment sludges from the chemical conversion coating of aluminum except from zirconium phosphating in aluminum can washing when such phosphating is an exclusive conversion coating process.
F020		Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tri- or tetrachlorophenol, or of intermediates used to produce their pesticide derivatives. (This listing does not include wastes from the production of Hexachlorophene from highly purified 2,4,5- trichlorophenol.).
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.
F022		Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tetra-, penta-, or hexachlorobenzenes under alkaline conditions.
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.).
F024		Process wastes, including but not limited to, distillation residues, heavy ends, tars, and reactor cleanout wastes, from the production of certain chlorinated aliphatic hydrocarbons by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution. (This listing does not include wastewaters, wastewater treatment sludges, spent catalysts, and wastes listed in Schedules 2A or 2B.).

F025		Condensed light ends, spent filters and filter aids, and spent desiccant wastes from the production of certain chlorinated aliphatic hydrocarbons, by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution.
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.
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.).
F028		Residues resulting from the incineration or thermal treatment of soil contaminated with EPA Hazardous Waste Nos. F020, F021, F022, F023, F026 and F027.
F032		Wastewaters (except those that have not come into contact with process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that currently use or have previously used chlorophenolic formulations (except potentially cross-contaminated wastes that have had the F032 waste code deleted in accordance with § 261.35 <sup>1</sup> or potentially cross-contaminated wastes that are otherwise currently regulated as hazardous wastes (i.e., F034 or F035), and where the generator does not resume or initiate use of chlorophenolic formulations). This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol.
F034		Wastewaters (except those that have not come into contact with process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that use creosote formulations. This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol.
F035		Wastewaters (except those that have not come into contact with process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that use inorganic preservatives containing arsenic or chromium. This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol.

F037		Petroleum refinery primary oil/water/solids separation sludge—Any sludge generated from the gravitational separation of oil/water/solids during the storage or treatment of process wastewaters and oily cooling wastewaters from petroleum refineries. Such sludges include, but are not limited to, those generated in: oil/water/solids separators; tanks and impoundments; ditches and other conveyances; sumps; and stormwater units receiving dry weather flow. Sludge generated in stormwater units that do not receive dry weather flow, sludges generated from non-contact once-through cooling waters segregated for treatment from other process or oily cooling waters, sludges generated in aggressive biological treatment units as defined in § 261.31(b)(2) <sup>1</sup> (including sludges generated in one or more additional units after wastewaters have been treated in aggressive biological treatment units) and K051 wastes are not included in this listing. This listing does include residuals generated from processing or recycling oil-bearing hazardous secondary materials excluded under § 261.4(a)(12)(i) <sup>1</sup> , if those residuals are to be disposed of.
F038		Petroleum refinery secondary (emulsified) oil/water/solids separation sludge—Any sludge and/or float generated from the physical and/or chemical separation of oil/water/solids in process wastewaters and oily cooling wastewaters from petroleum refineries. Such wastes include, but are not limited to, all sludges and floats generated in: induced air flotation (IAF) units, tanks and impoundments, and all sludges generated in DAF units. Sludges generated in stormwater units that do not receive dry weather flow, sludges generated from non-contact once-through cooling waters segregated for treatment from other process or oily cooling waters, sludges and floats generated in aggressive biological treatment units as defined in § 261.31(b)(2) <sup>1</sup> (including sludges and floats generated in one or more additional units after wastewaters have been treated in aggressive biological treatment units) and F037, K048, and K051 wastes are not included in this listing.
F039		Leachate (liquids that have percolated through land disposed wastes) resulting from the disposal of more than one restricted waste classified as hazardous under subpart D of this part. (Leachate resulting from the disposal of one or more of the following EPA Hazardous Wastes and no other Hazardous Wastes retains its EPA Hazardous Waste Number(s): F020, F021, F022, F026, F027, and/or F028.).

### Hazardous Industrial Waste from Specific Sources

USEPA HAZARDOUS WASTE NO.	INDUSTRY AND NO.	WASTE
Wood preservation:		
K001	NA9316	Bottom sediment sludge from the treatment of wastewaters from wood preserving processes that use creosote and/or pentachlorophenol.
Inorganic pigments:		
K002	NA9317	Wastewater treatment sludge from the production of chrome yellow and orange pigments.
K003	NA9318	Wastewater treatment sludge from the production of molybdate orange pigments.

USEPA HAZARDOUS WASTE NO.	INDUSTRY AND NO.	WASTE
K004	NA9319	Wastewater treatment sludge from the production of zinc yellow pigments.
K005	NA9320	Wastewater treatment sludge from the production of chrome green pigments.
K006	NA9321	Wastewater treatment sludge from the production of chrome oxide green pigments (anhydrous and hydrated).
K007	NA9322	Wastewater treatment sludge from the production of iron blue pigments.
K008	NA9323	Oven residue from the production of chrome oxide green pigments.
Organic chemicals:		
K009	NA9324	Distillation bottoms from the production of acetaldehyde from ethylene.
K010	NA9325	Distillation side cuts from the production of acetaldehyde from ethylene.
K011	NA9326	Bottom stream from the wastewater stripper in the production of acrylonitrile.
K013	NA9327	Bottom stream from the acetonitrile column in the production of acrylonitrile.
K014	NA9328	Bottoms from the acetonitrile purification column in the production of acrylonitrile.
K015	NA9329	Still bottoms from the distillation of benzyl chloride.
K016	NA9330	Heavy ends or distillation residues from the production of carbon tetrachloride.
K017	NA9331	Heavy ends (still bottoms) from the purification column in the production of epichlorohydrin.
K018	NA9332	Heavy ends from the fractionation column in ethyl chloride production.
K019	NA9333	Heavy ends from the distillation of ethylene dichloride in ethylene dichloride production.
K020	NA9334	Heavy ends from the distillation of vinyl chloride in vinyl chloride monomer production.
K021	NA9335	Aqueous spent antimony catalyst waste from fluoromethanes production.
K022	NA9336	Distillation bottom tars from the production of phenol/acetone from cumene.
K023	NA9337	Distillation light ends from the production of phthalic anhydride from naphthalene.

USEPA HAZARDOUS WASTE NO.	INDUSTRY AND NO.	WASTE
K024	NA9338	Distillation bottoms from the production of phthalic anhydride from naphthalene.
K025	NA9341	Distillation bottoms from the production of nitrobenzene by the nitration of benzene.
K026	NA9342	Stripping still tails from the production of methyl ethyl pyridines.
K027	NA9343	Centrifuge and distillation residues from toluene diisocyanate production.
K028	NA9344	Spent catalyst from the hydrochlorinator reactor in the productions of 1,1,1trichloroethane.
K029	NA9345	Waste from the product stream stripper in the production of 1,1,1trichloroethane.
K030	NA9348	Column bottoms or heavy ends from the combined production of trichloroethylene and perchloroethylene.
K083	NA9349	Distillation bottoms from aniline production.
K085	NA9352	Distillation or fractionation column bottoms from the production of chlorobenzenes.
K093	NA9339	Distillation light ends from the production of phthalic anhydride from orthoxylene.
K094	NA9340	Distillation bottoms from the production of phthalic anhydride from orthoxylene.
K095	NA9346	Distillation bottoms from the production of 1,1,1trichloroethane.
K096	NA9347	Heavy ends from the heavy ends column from the production of 1,1,1trichloroethane.
K103	NA9350	Process residues from aniline extraction from the production of aniline.
K104	NA9351	Combined wastewater streams generated from nitrobenzene/aniline production.
K105	NA9353	Separated aqueous stream from the reactor product washing step in the production of chlorobenzenes.
K107		Column bottoms from product separation from the production of 1,1-dimethyl-hydra-zine (UDMH) from carboxylic acid hydrazines.
K108		Condensed column overheads from product separation and condensed reactor vent gases from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides.
K109		Spent filter cartridges from product purification from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides.

USEPA HAZARDOUS WASTE NO.	INDUSTRY AND NO.	WASTE
K110		Condensed column overheads from intermediate separation from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides.
K111		Product washwaters from the production of dinitrotoluene via nitration of toluene
K112		Reaction by-product water from the drying column in the production of toluenediamine via hydrogenation of dinitrotoluene.
K113		Condensed liquid light ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.
K114		Vicinals from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.
K115		Heavy ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.
K116		Organic condensate from the solvent recovery column in the production of toluene diisocyanate via phosgenation of toluenediamine.
K117		Wastewater from the reactor vent gas scrubber in the production of ethylene dibromide via bromination of ethene.
K118		Spent adsorbent solids from purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene.
K136		Still bottoms from the purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene.
K140		Floor sweepings, off-specification product and spent filter media from the production of 2,4,6-tribromophenol.
K149		Distillation bottoms from the production of alpha- (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups, (This waste does not include still bottoms from the distillation of benzyl chloride.)
K150		Organic residuals, excluding spent carbon adsorbent, from the spent chlorine gas and hydrochloric acid recovery processes associated with the production of alpha-( or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups.
K151		Wastewater treatment sludges, excluding neutralization and biological sludges, generated during the treatment of wastewaters from the production of alpha-( or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups.

USEPA HAZARDOUS WASTE NO.	INDUSTRY AND NO.	WASTE
K156		Organic waste (including heavy ends, still bottoms, light ends, spent solvents, filtrates, and decantates) from the production of carbamates and carbamoyl oximes. (This listing does not apply to wastes generated from the manufacture of 3-iodo-2-propynyl n-butylcarbamate.).
K157		Wastewaters (including scrubber waters, condenser waters, washwaters, and separation waters) from the production of carbamates and carbamoyl oximes. (This listing does not apply to wastes generated from the manufacture of 3-iodo-2-propynyl n-butylcarbamate.)
K158		Bag house dusts and filter/separation solids from the production of carbamates and carbamoyl oximes. (This listing does not apply to wastes generated from the manufacture of 3-iodo-2-propynyl n-butylcarbamate.).
K159		Organics from the treatment of thiocarbamate wastes
K161		Purification solids (including filtration, evaporation, and centrifugation solids), bag house dust and floor sweepings from the production of dithiocarbamate acids and their salts. (This listing does not include K125 or K126.)
Inorganic chemicals:		
K071	NA9390	Brine purification muds from the mercury cell process in chlorine production, where separately prepurified brine is not used.
K073	NA9391	Chlorinated hydrocarbon waste from the purification step of the diaphragm cell process using graphite anodes in chlorine production.
K106	NA9392	Wastewater treatment sludge from the mercury cell process in chlorine production.
Pesticides:		
K031	NA9354	Byproduct salts generated in the production of MSMA and cacodylic acid.
K032	NA9355	Wastewater treatment sludge from the production of chlordane.
K033	NA9356	Wastewater and scrub water from the chlorination of cyclopentadiene in the production of chlordane.
K034	NA9357	Filter solids from the filtration of hexachlorocyclopentadiene in the production of chlordane.
K035	NA9359	Wastewater treatment sludges generated in the production of creosote.
K036	NA9360	Still bottoms from toluene reclamation distillation in the production of disulphoton.
K037	NA9361	Wastewater treatment sludges from the production of disulphoton.

USEPA HAZARDOUS WASTE NO.	INDUSTRY AND NO.	WASTE
K038	NA9362	Wastewater from the washing and stripping of phorate production.
K039	NA9363	Filter cake from the filtration of diethyl phosphorodithioic acid in the production of phorate.
K040	NA9364	Wastewater treatment sludge from the production of phorate.
K041	NA9365	Wastewater treatment sludge from the production of toxaphene.
K042	NA9367	Heavy ends or distillation residues from the distillation of tetrachlorobenzene in the production of 2,4,5T.
K043	NA9368	2, 6Dichlorophenol waste from the production of 2,4D.
K097	NA9358	Vacuum stripper discharge from the chlordane chlorinator in the production of chlordane.
K098	NA9366	Untreated process wastewater from the production of toxaphene.
K099	NA9369	Untreated wastewater from the production of 2, 4D.
K123		Process wastewater (including supernates, filtrates, and washwaters) from the production of ethylenebisdithiocarbamic acid and its salt.
K124		Reactor vent scrubber water from the production of ethylenebisdithiocarbamic acid and its salts.
K125		Filtration, evaporation, and centrifugation solids from the production of ethylenebisdithiocarbamic acid and its salts.
K126		Baghouse dust and floor sweepings in milling and packaging operations from the production or formulation of ethylenebisdithiocarbamic acid and its salts.
K131		Wastewater from the reactor and spent sulfuric acid from the acid dryer from the production of methyl bromide.
K132		Spent absorbent and wastewater separator solids from the production of methyl bromide.
Explosives:		
K044	NA9370	Wastewater treatment sludges from the manufacturing and processing of explosives.
K045	NA9371	Spent carbon from the treatment of wastewater containing explosives.
K046	NA9372	Wastewater treatment sludges from the manufacturing formulation and loading of leadbased initiating compounds.
K047	NA9373	Pink/red water from TNT operations.

USEPA HAZARDOUS WASTE NO.	INDUSTRY AND NO.	WASTE
Petroleum refining:		
K048	NA9374	Dissolved air flotation (DAF) float from the petroleum refining industry.
K049	NA9375	Slop oil emulsion solids from the petroleum refining industry.
K050	NA9376	Heat exchanger bundle cleaning sludge from the petroleum refining industry.
K051	NA9377	API separator sludge from the petroleum refining industry.
K052	NA9378	Tank bottoms (leaded) from the petroleum refining industry.
K169		Crude oil storage tank sediment from petroleum refining operations.
K170		Clarified slurry oil tank sediment and/or in-line filter/separation solids from petroleum refining operations.
K171		Spent Hydrotreating catalyst from petroleum refining operations, including guard beds used to desulfurize feeds to other catalytic reactors (this listing does not include inert support media).
K172		Spent Hydrorefining catalyst from petroleum refining operations, including guard beds used to desulfurize feeds to other catalytic reactors (this listing does not include inert support media).
Iron and steel:		
K061	NA9380	Emission control dust/sludge from the primary production of steel in electric furnaces.
K062	NA9381	Spent pickle liquor generated by steel finishing operations within the iron and steel industry at steel works, blast furnaces (including coke ovens), rolling mills, iron and steel foundries, gray and ductile iron foundries, malleable iron foundries, steel investment foundries or other miscellaneous steel foundries or at facilities in the electrometallurgical products (except steel) industry, steel wiredrawing and steel nails and spikes industry, coldrolled steel sheet, strip and bars industry, or steel pipe and tubes industry.
Primary copper:		
K064	NA9383	Acid plant blowdown slurry/sludge resulting from the thickening of blowdown slurry from primary copper production.
Primary lead:		
K065	NA9384	Surface impoundment solids contained in and dredged from surface impoundments at primary lead smelting facilities.
Primary zinc:		
K066	NA9385	Sludge from treatment of process wastewater and/or acid plant blowdown from primary zinc production.

USEPA HAZARDOUS WASTE NO.	INDUSTRY AND NO.	WASTE
Primary aluminum:		
K088		Spent potliners from primary aluminum reduction
Ferroalloys:		
K090		Emission control dust or sludge from ferrochromiumsilicon production
K091		Emission control dust or sludge from ferrochromium production
Secondary lead:		
K069	NA9388	Emission control dust/sludge from secondary lead smelting. (NOTE: This listing is stayed administratively for sludge generated from secondary acid scrubber systems. The stay will remain in effect until further administrative action is taken. If EPA takes further action effecting this stay, EPA will publish a notice of the action in the Federal Register.
K100	NA9389	Waste leaching solution from acid leaching of emission control dust/sludge from secondary lead smelting.
Veterinary pharmaceuticals:		
K084	NA9394	Wastewater treatment sludges generated during the production of veterinary pharmaceuticals from arsenic or organoarsenic compounds.
K101	NA9395	Distillation tar residues from the distillation of anilinebased compounds in the production of veterinary pharmaceuticals from arsenic or organoarsenic compounds.
K102	NA9396	Residue from the use of activated carbon for decolourization in the production of veterinary pharmaceuticals from arsenic or organoarsenic compounds.
Ink formulation:		
K086	NA9393	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.
Coking:		
K060	NA9379	Ammonia still lime sludge from coking operations.
K087	NA9397	Decanter tank tar sludge from coking operations.
K141		Process residues from the recovery of coal tar, including, but not limited to, collecting sump residues from the production of coke from coal or the recovery of coke by-products produced from coal. This listing does not include K087 (decanter tank tar sludges from coking operations).

USEPA HAZARDOUS WASTE NO.	INDUSTRY AND NO.	WASTE
K142		Tar storage tank residues from the production of coke from coal or from the recovery of coke by-products produced from coal.
K143		Process residues from the recovery of light oil, including, but not limited to, those generated in stills, decanters, and wash oil recovery units from the recovery of coke by-products produced from coal.
K144		Wastewater sump residues from light oil refining, including, but not limited to, intercepting or contamination sump sludges from the recovery of coke by-products produced from coal.
K145		Residues from naphthalene collection and recovery operations from the recovery of coke by-products produced from coal.
K147		Tar storage tank residues from coal tar refining.
K148		Residues from coal tar distillation, including but not limited to, still bottoms

<sup>1</sup> Resource Conservation and Recovery Act (RCRA), United States Congress, 42 U.S.C. s/s 6901 et seq. (1976)  
Subtitle C

Code of Federal Regulations, 40CFR, Chapter I – Environmental Protection Agency, Subchapter I – Solid Wastes, Part 261 – Identification and Listing of Hazardous Waste

## SCHEDULE 1.1

### EXEMPT HAZARDOUS INDUSTRIAL WASTES

INDUSTRY AND SITE	WASTE
ICI Canada Inc, Cornwall	Brine purification muds (known either as K071 or NO. NA9390, saturator and clarifier sludges only, without mixing with other wastes or materials) generated from mercury cells at the chloralkali chlorine plant.
Iron and steel industry, any site	Sludge generated by lime stabilization of spent pickle liquor (known either as K062 or NO. NA9381) generated by steel finishing operations within the iron and steel industry at steel works, blast furnaces (including coke ovens), rolling mills, iron and steel foundries, gray and ductile iron foundries, malleable iron foundries, steel investment foundries or other miscellaneous steel foundries or at facilities in the electrometallurgical products (except steel) industry, steel wiredrawing and steel nails and spikes industry, coldrolled steel sheet, strip and bars industry, or steel pipe and tubes industry.
Iron and steel industry, any site	Nonwastewater residues, such as slag, resulting from high temperature metals recovery (HTMR) processing of K061 (known also as NO. NA9380) or K062 (known also as NO. NA9381) waste, in units identified as rotary kilns, flame reactors, electric furnaces, plasma arc furnaces, slag reactors, rotary hearth furnace/electric furnace combinations or industrial furnaces.
Electroplating industry, any site	Nonwastewater residues, such as slag, resulting from high temperature metals recovery (HTMR) processing of F006 (known also as NO. NA9306) waste, in units identified as rotary kilns, flame reactors, electric furnaces, plasma arc furnaces, slag reactors, rotary hearth furnace/electric furnace combinations or industrial furnaces.
Organic chemical industry, and site	Biological treatment sludge from the treatment of organic waste (K156) and wastewaters (K157) from the production of carbamates and carbamoyl oximes.
Petroleum refining industry, any site	Catalyst inert support media separated from spent hydrotreating catalyst (K171) or spent hydrorefining catalyst (K172).

**APPENDIX 5**

Schedule 2(A)

Acute Hazardous Waste Chemicals

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Excerpt from the Regulation prepared for purposes of convenience only,  
and for accurate reference recourse should be had to the official volumes.

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## SCHEDULE 2

### PART A ACUTE HAZARDOUS WASTE CHEMICALS

<b>Hazardous waste No.</b>	<b>Chemical abstracts No.</b>	<b>Substance</b>	<b>Reference Number</b>
P026	5344821	1(oChlorophenyl)thiourea	ON1037
P081	55630	1,2,3Propanetriol, trinitrate	ON1089
P042	51434	1,2Benzenediol,4[1hydroxy2(methylamino)ethyl]	ON1025
P067	75558	1,2Propylenimine	ON1082
P185	26419738	1,3Dithiolane2carboxaldehyde, 2,4–dimethyl, O [(methylamino)carbonyl]oxime	
P004	309002	1,4,5,8Dimethanonaphthalene,1,2,3,4,10,10hexachloro1,4,4a,5,8,8a,hexahydro,(1alpha,4alpha,4abeta,5alpha,8alpha,8abeta)	ON1010
P060	465736	1,4,5,8Dimethanonaphthalene,1,2,3,4,10,10hexachloro1,4,4a,5,8,8ahexahydro,(1alpha,4alpha,4abeta,5beta,8beta,8abeta)-	ON1070
P002	591082	1Acetyl2thiourea	ON1002
P048	51285	2,4Dinitrophenol	ON1055
P051	**72208	2,7:3,6Dimethanonaphth [2,3b]oxirene, 3,4,5,6,9,9hexachloro1a,2,2a,3,6,6a,7,7aoctahydro,(1aalpha,2beta,2abeta,3alpha,6alpha,6 abeta,7beta, 7aalpha), & metabolites	ON1062
P037	60571	2,7:3,6Dimethanonaphth[2,3b]oxirene,3,4,5,6,9,9hexachloro1a,2,2a,3,6,6a,7,7aoctahydro,(1aalpha,2beta,2aalpha,3beta,6beta,6alpha,7beta, 7aalpha)[b]oxirene, 3,4,5,6,9,9hexachloro	ON1043
P045	39196184	2Butanone,3,3dimethyl1methylthio),O[methylamino)carbonyl] oxime	ON1049
P034	131895	2Cyclohexyl4,6dinitrophenol	ON1054
P001	**81812	2H1Benzopyran2one, 4hydroxy3(3oxo1phenylbutyl), & salts, when present at concentrations greater than 0.3%	ON1006
P069	75865	2Methylactonitrile	ON1005
P017	598312	2Propanone, 1bromo	ON1029
P005	107186	2Propen1ol	ON1011
P003	107028	2Propenal	ON1007
P102	107197	2Propyn1ol	ON1097

Hazardous waste No.	Chemical abstracts No.	Substance	Reference Number
P007	2763964	3(2H)Isoxazolone, 5(aminomethyl)	ON1008
P027	542767	3Chloropropionitrile	ON1038
P202	64006	3Isopropylphenyl N-methylcarbamate	
P047	**534521	4,6-Dinitroresol, & salts	ON1053
P059	76448	4,7-Methano-1,4,5,6,7,8,8-heptachloro-3a,4,7,7-tetrahydro	ON1069
P008	504245	4-Aminopyridine	ON1013
P008	504245	4-Pyridinamine	ON1013
P007	2763964	5(Aminomethyl)isoxazolol	ON1008
P050	115297	6,9-Methano-2,4,3-benzodioxathiepin-6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-3-oxide	ON1060
P127	1563662	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl, methylcarbamate	
P088	145733	7-Oxabicyclo[2.2.1]heptane-2,3-dicarboxylic acid	ON1061
P023	107200	Acetaldehyde, chloro	ON1001
P057	640197	Acetamide, 2-fluoro	ON1003
P002	591082	Acetamide, N(aminothiomethyl)	ON1002
P058	62748	Acetic acid, fluoro, sodium salt	ON1067
P003	107028	Acrolein	ON1007
P070	116063	Aldicarb	ON1009
P203	1646884	Aldicarb sulfone	
P004	309002	Aldrin	ON1010
P005	107186	Allyl alcohol	ON1011
P046	122098	alpha,alpha-Dimethylphenethylamine	ON1052
P072	86884	alpha-Naphthylthiourea	ON1083
P006	20859738	Aluminum phosphide	ON1012
P009	131748	Ammonium picrate	ON1015

Hazardous waste No.	Chemical abstracts No.	Substance	Reference Number
P119	7803556	Ammonium vanadate	ON1014
P099	506616	Argentate(1), bis(cyanoC), potassium	ON1096
P010	7778394	Arsenic acid H <sub>3</sub> AsO <sub>4</sub>	ON1016
P012	1327533	Arsenic oxide As <sub>2</sub> O <sub>3</sub>	ON1017
P011	1303282	Arsenic oxide As <sub>2</sub> O <sub>5</sub>	ON1018
P011	1303282	Arsenic pentoxide	ON1018
P012	1327533	Arsenic trioxide	ON1017
P038	692422	Arsine, diethyl	ON1019
P036	696286	Arsonous dichloride, phenyl	ON1042
P054	151564	Aziridine	ON1020
P067	75558	Aziridine, 2methyl	ON1082
P013	542621	Barium cyanide	ON1021
P024	106478	Benzenamine, 4chloro	ON1022
P077	100016	Benzenamine, 4nitro	ON1023
P028	100447	Benzene, (chloromethyl)	ON1024
P046	122098	Benzeneethanamine, alpha,alphadimethyl	ON1052
P014	108985	Benzenethiol	ON1026
P188	57647	Benzoic acid, 2hydroxy, compd. With (3aScis)1,2,3,3a,8,8ahexahydro1,3a,8trimethylpyrrolo[2,3b]indol-5yl methylcarbamate ester (1:1)	
P028	100447	Benzyl chloride	ON1024
P015	7440417	Beryllium powder	ON1027
P017	598312	Bromoacetone	ON1029
P018	357573	Brucine	ON1030
P021	592018	Calcium cyanide	ON1031
P021	592018	Calcium cyanide Ca(CN) <sub>2</sub>	ON1031

Hazardous waste No.	Chemical abstracts No.	Substance	Reference Number
P189	55285148	Carbamic acid, [(dibutylamino)thio]methyl, 2,3-dihydro-2,2-dimethyl-7-benzofuranyl ester	
P191	644644	Carbamic acid, dimethyl, 1-[(dimethylamino)carbonyl]-5-methyl-1H-pyrazol-3-yl ester	
P190	1129415	Carbamic acid, methyl, 3-methylphenyl ester	
P192	119-38-0	Carbamic acid, dimethyl-, 3-methyl-1-(1-methylethyl)-1H-pyrazol-5-yl ester	
P127	1563662	Carbofuran	
P022	75150	Carbon disulfide	ON1034
P095	75445	Carbonic dichloride	ON1035
P189	55285148	Carbosulfan	
P023	107200	Chloroacetaldehyde	ON1001
P029	544923	Copper cyanide	ON1039
P029	544923	Copper cyanide Cu(CN)	ON1039
P030	N/A	Cyanides (soluble cyanide salts), not otherwise specified	ON1040
P031	460195	Cyanogen	ON1041
P033	506774	Cyanogen chloride	ON1036
P033	506774	Cyanogen chloride (CN)Cl	ON1036
P016	542881	Dichloromethyl ether	ON1028
P036	696286	Dichlorophenylarsine	ON1042
P037	60571	Dieldrin	ON1043
P038	692422	Diethylarsine	ON1019
P041	311455	Diethylp-nitrophenyl phosphate	ON1045
P043	55914	Diisopropylfluorophosphate (DFP)	ON1047
P044	60515	Dimethoate	ON1048
P191	644644	Dimetilan.	
P020	88857	Dinoseb	ON1056

Hazardous waste No.	Chemical abstracts No.	Substance	Reference Number
P085	152169	Diphosphoramidate, octamethyl	ON1057
P111	107493	Diphosphoric acid, tetraethyl ester	ON1098
P039	298044	Disulfoton	ON1044
P049	541537	Dithiobiuret	ON1058
P050	115297	Endosulfan	ON1060
P088	145733	Endothall	ON1061
P051	72208	Endrin	ON1062
P051	72208	Endrin, & metabolites	ON1062
P042	51434	Epinephrine	ON1025
P031	460195	Ethanedinitrile	ON1041
P194	23135220	Ethanimidothioic acid, 2(dimethylamino)N[[[(methylamino)carbonyl]oxy]2oxo, methyl ester	
P066	16752775	Ethanimidothioic acid, N[[[(methylamino)carbonyl]oxy],methyl ester	ON1004
P101	107120	Ethyl cyanide	ON1064
P054	151564	Ethyleneimine	ON1020
P097	52857	Famphur	ON1065
P056	7782414	Fluorine	ON1066
P057	640197	Fluoroacetamide	ON1003
P058	62748	Fluoroacetic acid, sodium salt	ON1067
P198	23422539	Formetanate hydrochloride	
P197	17702577	Formparanate	
P065	628864	Fulminic acid, mercury(2+) salt	ON1068
P059	76448	Heptachlor	ON1069
P062	757584	Hexaethyl tetraphosphate	ON1072

Hazardous waste No.	Chemical abstracts No.	Substance	Reference Number
P068	60344	Hydrazine, methyl	ON1074
P116	79196	Hydrazinecarbothioamide	ON1073
P063	74908	Hydrocyanic acid	ON1075
P063	74908	Hydrogen cyanide	ON1075
P096	7803512	Hydrogen phosphide	ON1077
P060	465736	Isodrin	ON1070
P192	119380	Isolan	
P196	15339363	Manganese dimethyl dithiocarbamate	
P196	15339363	Manganese,bis(dimethylcarbomodithioatoS,S')	
P202	64006	MCumenyl methylcarbamate	
P065	628864	Mercury fulminate	ON1068
P092	62384	Mercury, (acetatoO)phenyl	ON1079
P082	62759	Methanamine, NmethylNnitroso	ON1051
P064	624839	Methane, isocyanato	ON1078
P016	542881	Methane, oxybis[chloro	ON1028
P112	509148	Methane, tetranitro	ON1080
P118	75707	Methanethiol, trichloro	ON1081
P197	17702577	Methanimidamide,N,NdimethylN'[2methyl4[(methylamino)carbonyl]oxy]phenyl]	
P198	23422539	Methanimidamide,N,NdimethylN'[3[(methylamino)carbonyl]oxy]phenyl],monohydrochloride	
P199	2032657	Methiocarb	
P066	16752775	Methomyl	ON1004
P068	60344	Methyl hydrazine	ON1074
P064	624839	Methyl isocyanate	ON1078
P071	298000	Methyl parathion	ON1050

Hazardous waste No.	Chemical abstracts No.	Substance	Reference Number
P190	1129415	Metolcarb	
P128	31584	Mexacarbate	
P073	13463393	Nickel carbonyl	ON1084
P073	13463393	Nickel carbonyl Ni(CO) <sub>4</sub> ,(T4)	ON1084
P074	557197	Nickel cyanide	ON1085
P074	557197	Nickel cyanide Ni(CN) <sub>2</sub>	ON1085
P075	**54115	Nicotine, & salts	ON1086
P076	10102439	Nitric oxide	ON1087
P078	10102440	Nitrogen dioxide	ON1088
P076	10102439	Nitrogen oxide NO	ON1087
P078	10102440	Nitrogen oxide NO <sub>2</sub>	ON1088
P081	55630	Nitroglycerine	ON1089
P082	62759	NNitrosodimethylamine	ON1051
P084	4549400	NNitrosomethylvinylamine	ON1063
P040	297972	O,ODiethyl Opyrazinyl phosphorothioate	ON1046
P085	152169	Octamethylpyrophosphoramide	ON1057
P087	20816120	Osmium oxide OsO <sub>4</sub> ,(T4)	ON1090
P087	20816120	Osmium tetroxide	ON1090
P194	23135220	Oxamyl	
P089	56382	Parathion	ON1091
P024	106478	pChloroaniline	ON1022
P020	88857	Phenol, 2(1methylpropyl)4,6dinitro	ON1056
P009	131748	Phenol, 2,4,6trinitro, ammonium salt	ON1015
P048	51285	Phenol, 2,4dinitro	ON1055

Hazardous waste No.	Chemical abstracts No.	Substance	Reference Number
P034	131895	Phenol, 2cyclohexyl4,6dinitro	ON1054
P047	**534521	Phenol, 2methyl4,6dinitro, & salts	ON1053
P202	64006	Phenol, 3(1methylethyl), methyl carbamate	
P201	2631370	Phenol, 3methyl5(1methylethyl),methyl carbamate	
P199	2032657	Phenol,(3,5dimethyl4(methylthio),methylcarbamate	
P128	315184	Phenol,4(dimethylamino)3,5dimethyl, methylcarbamate (ester)	
P092	62384	Phenylmercury acetate	ON1079
P093	103855	Phenylthiourea	ON1092
P094	298022	Phorate	ON1093
P095	75445	Phosgene	ON1035
P096	7803512	Phosphine	ON1077
P041	311455	Phosphoric acid, diethyl 4nitrophenyl ester	ON1045
P094	298022	Phosphorodithioic acid, O,Odiethyl S[(ethylthio)methyl] ester	ON1093
P039	298044	Phosphorodithioic acid, O,Odiethyl S[2(ethylthio)ethyl] ester	ON1044
P044	60515	Phosphorodithioic acid,O,OdimethylS[2(methylamino)2oxoethyl] ester	ON1048
P043	55914	Phosphorofluoridic acid, bis(1methylethyl) ester	ON1047
P071	298000	Phosphorothioic acid, O,O,dimethyl O(4nitrophenyl) ester	ON1050
P089	56382	Phosphorothioic acid, O,Odiethyl O(4nitrophenyl) ester	ON1091
P040	297972	Phosphorothioic acid, O,Odiethyl Opyrazinyl ester	ON1046
P097	52857	Phosphorothioic acid, O[4[(dimethylamino)sulfonyl]phenyl] O,Or dimethyl ester	ON1065
P188	57647	Physostigmine salicylate.	
P204	57476	Physostigmine.	
P110	78002	Plumbane, tetraethyl	ON1094
P077	100016	pNitroaniline	ON1023

Hazardous waste No.	Chemical abstracts No.	Substance	Reference Number
P098	151508	Potassium cyanide	ON1095
P098	151508	Potassium cyanide K(CN)	ON1095
P099	506616	Potassium silver cyanide	ON1096
P201	2631370	Promecarb	
P203	1646884	Propanal,2methyl2(methylsulfonyl),O[(methylamino)carbonyl] oxime	
P070	116063	Propanal,2methyl2(methylthio),O[(methylamino)carbonyl]oxime	ON1009
P101	107120	Propanenitrile	ON1064
P069	75865	Propanenitrile, 2hydroxy2methyl	ON1005
P027	542767	Propanenitrile, 3chloro	ON1038
P102	107197	Propargyl alcohol	ON1097
P075	**54115	Pyridine, 3(1methyl2pyrrolidinyl), (S), & salts	ON1086
P204	57476	Pyrrolo[2,3b]indol5ol,1,2,3,3a,8,8a,8ahexahydro1,3a,8 trimethyl,methylcarbamate (ester), (3aScis)	
P114	12039520	Selenious acid, dithallium(1+) salt	ON1106
P103	630104	Selenourea	ON1033
P104	506649	Silver cyanide	ON1099
P104	506649	Silver cyanide Ag(CN)	ON1099
P105	26628228	Sodium azide	ON1100
P106	143339	Sodium cyanide	ON1101
P106	143339	Sodium cyanide Na(CN)	ON1101
P108	**57249	Strychnidin10one, & salts	ON1103
P018	357573	Strychnidin10one, 2,3dimethoxy	ON1030
P108	**57249	Strychnine, & salts	ON1103
P115	7446186	Sulfuric acid, dithallium(1+) salt	ON1105
P110	78002	Tetraethyl lead	ON1094

Hazardous waste No.	Chemical abstracts No.	Substance	Reference Number
P111	107493	Tetraethyl pyrophosphate	ON1098
P109	3689245	Tetraethyldithiopyrophosphate	ON1059
P112	509148	Tetranitromethane	ON1080
P062	757584	Tetraphosphoric acid, hexaethyl ester	ON1072
P113	1314325	Thallic oxide	ON1104
P113	1314325	Thallium oxide $Tl_2O_3$	ON1104
P114	12039520	Thallium(I) selenite	ON1106
P115	7446186	Thallium(I) sulfate	ON1105
P109	3689245	Thiodiphosphoric acid, tetraethyl ester	ON1059
P045	39196184	Thiofanox	ON1049
P049	541537	Thioimidodicarbonic diamide $[(H_2N)C(S)]_2NH$	ON1058
P014	108985	Thiophenol	ON1026
P116	79196	Thiosemicarbazide	ON1073
P026	5344821	Thiourea, (2chlorophenyl)	ON1037
P072	86884	Thiourea, 1naphthalenyl	ON1083
P093	103855	Thiourea, phenyl	ON1092
P185	26419738	Tirpate	
P123	8001352	Toxaphene	ON1032
P118	75707	Trichloromethanethiol	ON1081
P119	7803556	Vanadic acid, ammonium salt	ON1014
P120	1314621	Vanadium oxide $V_2O_5$	ON1107
P120	1314621	Vanadium pentoxide	ON1107
P084	4549400	Vinylamine, NmethylNnitroso	ON1063
P001	**81812	Warfarin, & salts, when present at concentrations greater than 0.3%	ON1006

Hazardous waste No.	Chemical abstracts No.	Substance	Reference Number
P121	557211	Zinc cyanide	ON1108
P121	557211	Zinc cyanide Zn(CN) <sub>2</sub>	ON1108
P122	1314847	Zinc phosphide Zn <sub>3</sub> P <sub>2</sub> , when present at concentrations greater than 10%	ON1109
P205	137304	Zinc, bis(dimethylcarbamoathioatoS,S'),	
P205	137304	Ziram	

\*\* CAS number given for parent compound only

**APPENDIX 6**

Schedule 2(B)

Hazardous Waste Chemicals

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Excerpt from the Regulation prepared for purposes of convenience only,  
and for accurate reference recourse should be had to the official volumes.

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## SCHEDULE 2

### PART B HAZARDOUS WASTE CHEMICALS

<b>Hazardous waste No.</b>	<b>Chemical abstracts No.</b>	<b>Substance</b>	<b>Reference Number</b>
U021	92875	[1,1'Biphenyl]4,4'diamine	ON2064
U073	91941	[1,1'Biphenyl]4,4'diamine, 3,3'dichloro	ON2071
U091	119904	[1,1'Biphenyl]4,4'diamine, 3,3'dimethoxy	ON2072
U095	119937	[1,1'Biphenyl]4,4'diamine, 3,3'dimethyl	ON2073
U208	630206	1,1,1,2Tetrachloroethane	ON2158
U209	79345	1,1,2,2Tetrachloroethane	ON2159
U227	79005	1,1,2Trichloroethane	ON2162
U078	75354	1,1Dichloroethylene	ON2128
U098	57147	1,1Dimethylhydrazine	ON2144
U207	95943	1,2,4,5Tetrachlorobenzene	ON2061
U085	1464535	1,2:3,4Diepoxybutane	ON2070
U069	84742	1,2Benzenedicarboxylic acid, dibutyl ester	ON2037
U088	84662	1,2Benzenedicarboxylic acid, diethyl ester	ON2038
U102	131113	1,2Benzenedicarboxylic acid, dimethyl ester	ON2039
U107	117840	1,2Benzenedicarboxylic acid, dioctyl ester	ON2040
U028	117817	1,2Benzenedicarboxylic acid,bis(2ethylhexyl) ester	ON2036
U202	**81072	1,2Benzisothiazol3(2H)one, 1,1dioxide, & salts	ON2065
U066	96128	1,2Dibromo3chloropropane	ON2124
U079	156605	1,2Dichloroethylene	ON2129
U099	540738	1,2Dimethylhydrazine	ON2145
U109	122667	1,2Diphenylhydrazine	ON2148
U155	91805	1,2Ethanediamine,N,NdimethylN'2pyridinylN'(2thienylmethyl)	ON2202

Hazardous waste No.	Chemical abstracts No.	Substance	Reference Number
U193	1120714	1,2Oxathiolane, 2,2dioxide	ON2216
U142	143500	1,3,4Metheno2Hcyclobuta[cd]pentalen2one, 1,1a,3,3a,4,5,5,5a,5b,6decachlorooctahydro	ON2118
U234	99354	1,3,5Trinitrobenzene	ON2063
U182	123637	1,3,5Trioxane, 2,4,6trimethyl	ON2217
U201	108463	1,3Benzenediol	ON2046
U364	22961826	1,3Benzodioxol4ol, 2,2dimethyl,	
U278	22781233	1,3Benzodioxol4ol, 2,2dimethyl,methyl carbamate	
U141	120581	1,3Benzodioxole, 5(1propenyl)	ON2054
U203	94597	1,3Benzodioxole, 5(2propenyl)	ON2053
U090	94586	1,3Benzodioxole, 5propyl	ON2055
U128	87683	1,3Butadiene, 1,1,2,3,4,4hexachloro	ON2079
U130	77474	1,3Cyclopentadiene, 1,2,3,4,5,5hexachloro	ON2112
U084	542756	1,3Dichloropropene	ON2135
U190	85449	1,3Isobenzofurandione	ON2035
U186	504609	1,3Pentadiene	ON2203
U193	1120714	1,3Propane sultone	ON2216
U074	764410	1,4Dichloro2butene	ON2086
U108	123911	1,4Diethyleneoxide	ON2136
U108	123911	1,4Dioxane	ON2136
U166	130154	1,4Naphthalenedione	ON2208
U166	130154	1,4Naphthoquinone	ON2208
U172	924163	1Butanamine, NbutylNnitroso	ON2080
U031	71363	1Butanol	ON2082
U011	61825	1H1,2,4Triazol3amine	ON2016
U186	504609	1Methylbutadiene	ON2203

Hazardous waste No.	Chemical abstracts No.	Substance	Reference Number
U167	134327	1Naphthalenamine	ON2210
U279	63252	1Naphthalenol, methylcarbamate.	
U194	107108	1Propanamine	ON2224
U111	621647	1Propanamine, NnitrosoNpropyl	ON2150
U110	142847	1Propanamine, Npropyl	ON2149
U235	126727	1Propanol, 2,3dibromo, phosphate (3:1)	ON2225
U140	78831	1Propanol, 2methyl	ON2189
U243	1888717	1Propene, 1,1,2,3,3,3hexachloro	ON2184
U084	542756	1Propene, 1,3dichloro	ON2135
U085	1464535	2,2Bioxirane	ON2070
F027	58902	2,3,4,6Tetrachlorophenol	ON2219
U237	66751	2,4(1H,3H)Pyrimidinedione, 5[bis(2chloroethyl)amino]	ON2237
F027	93765	2,4,5T	ON2233
F027	95954	2,4,5Trichlorophenol	ON2220
U408	118796	2,4,6Tribromophenol	
F027	88062	2,4,6Trichlorophenol	ON2221
U240	**94757	2,4D, salts & esters	ON2114
U081	120832	2,4Dichlorophenol	ON2132
U101	105679	2,4Dimethylphenol	ON2146
U105	121142	2,4Dinitrotoluene	ON2051
U197	106514	2,5Cyclohexadiene1,4dione	ON2068
U147	108316	2,5Furandione	ON2177
U082	87650	2,6Dichlorophenol	ON2133
U106	606202	2,6Dinitrotoluene	ON2052

Hazardous waste No.	Chemical abstracts No.	Substance	Reference Number
U236	72571	2,7Naphthalenedisulfonic acid, 3,3'[(3,3'dimethyl[1,1'biphenyl]4,4'diyl)bis(azo)bis[5amino 4hydroxy],tetrasodium salt	ON2209
U005	53963	2Acetylaminofluorene	ON2004
U159	78933	2Butanone	ON2083
U160	1338234	2Butanone, peroxide	ON2084
U053	4170303	2Butenal	ON2085
U074	764410	2Butene, 1,4dichloro	ON2086
U143	303344	2Butenoic acid, 2methyl, 7[[2,3dihydroxy2(1methoxyethyl)3methyl1oxobutoxy]methyl]2,3,5,7atetrahydro1Hpyrroliziny ester,[1S[1alpha(Z),7(2S*,3R*),7aalpha]]	ON2190
U042	110758	2Chloroethyl vinyl ether	ON2103
U125	98011	2Furancarboxaldehyde	ON2176
U058	50180	2H1,3,2Oxazaphosphorin2amine,N,Nbis(2chloroethyl)tetra hydro, 2oxide	ON2113
U248	**81812	2H1Benzopyran2one,4hydroxy3(3oxo1phenylbutyl), & salts, when present at concentrations of 0.3% or less	ON2009
U116	96457	2Imidazolidinethione	ON2169
U168	91598	2Naphthalenamine	ON2211
U171	79469	2Nitropropane	ON2213
U191	109068	2Picoline	ON2223
U002	67641	2Propanone	ON2226
U007	79061	2Propenamide	ON2012
U009	107131	2Propenenitrile	ON2014
U152	126987	2Propenenitrile, 2methyl	ON2195
U008	79107	2Propenoic acid	ON2013
U118	97632	2Propenoic acid, 2methyl, ethyl ester	ON2170
U162	80626	2Propenoic acid, 2methyl, methyl ester	ON2205
U113	140885	2Propenoic acid, ethyl ester	ON2167

Hazardous waste No.	Chemical abstracts No.	Substance	Reference Number
U073	91941	3,3'Dichlorobenzidine	ON2071
U091	119904	3,3'Dimethoxybenzidine	ON2072
U095	119937	3,3'Dimethylbenzidine	ON2073
U148	123331	3,6Pyridazinedione, 1,2dihydro	ON2141
U157	56495	3Methylcholanthrene	ON2021
U164	56042	4(1H)Pyrimidinone, 2,3dihydro6methyl2thioxo	ON2206
U158	101144	4,4'Methylenebis(2chloroaniline)	ON2028
U036	57749	4,7Methano1Hindene, 1,2,4,5,6,7,8,8octachloro2,3,3a,4,7,7ahexahydro	ON2099
U030	101553	4Bromophenyl phenyl ether	ON2033
U049	3165933	4Chlorootoluidine, hydrochloride	ON2026
U161	108101	4Methyl2pentanone	ON2204
U059	20830813	5,12Naphthacenedione,8acetyl10[(3amino2,3,6trideoxy)alphaLlyxohexopyranosyl]oxy]7,8,9,10tetrahydro6,8,11trihydroxylmethoxy, (8Scis)	ON2115
U181	99558	5Nitroootoluidine	ON2030
U094	57976	7,12Dimethylbenz[a]anthracene	ON2025
U367	1563388	7Benzofuranol, 2,3dihydro2,2dimethyl	
U394	30558431	A2213	
U001	75070	Acetaldehyde	ON2001
U034	75876	Acetaldehyde, trichloro	ON2002
U187	62442	Acetamide, N(4ethoxyphenyl)	ON2003
U005	53963	Acetamide, N9Hfluoren2yl	ON2004
U112	141786	Acetic acid ethyl ester	ON2005
See F027	93765	Acetic acid, (2,4,5trichlorophenoxy)	ON2233
U240	**94757	Acetic acid, (2,4dichlorophenoxy),salts & esters	ON2114
U144	301042	Acetic acid, lead(2+) salt	ON2006

Hazardous waste No.	Chemical abstracts No.	Substance	Reference Number
U214	563688	Acetic acid, thallium(1+) salt	ON2007
U002	67641	Acetone	ON2226
U003	75058	Acetonitrile	ON2008
U004	98862	Acetophenone	ON2010
U006	75365	Acetyl chloride	ON2011
U007	79061	Acrylamide	ON2012
U008	79107	Acrylic acid	ON2013
U009	107131	Acrylonitrile	ON2014
U096	80159	alpha,alphaDimethylbenzylhydroperoxide	ON2143
U167	134327	alphaNaphthylamine	ON2210
U011	61825	Amitrole	ON2016
U012	62533	Aniline	ON2017
U136	75605	Arsinic acid, dimethyl	ON2087
U014	492808	Auramine	ON2018
U015	115026	Azaserine	ON2019
U010	50077	Azirino[2,3_3,4]pyrrolo[1,2a]indole4,7dione,6amino8[[aminocarbonyloxy)methyl]1,1a,2,8,8a,8bbhexahydro8amethoxy5methyl, [1aS(1aalpha,8beta,8aalpha,8balpha)]	ON2020
U280	101279	Barban.	
U364	22961826	Bendiocarb phenol	
U278	22781233	Bendiocarb.	
U271	17804352	Benomyl.	
U018	56553	Benz[a]anthracene	ON2024
U094	57976	Benz[a]anthracene, 7,12dimethyl	ON2025
U016	225514	Benz[c]acridine	ON2022
U157	56495	Benz[j]aceanthrylene, 1,2dihydro3methyl	ON2021

Hazardous waste No.	Chemical abstracts No.	Substance	Reference Number
U017	98873	Benzal chloride	ON2023
U192	23950585	Benzamide,3,5dichloroN(1,1dimethyl2propynyl)	ON2127
U012	62533	Benzenamine	ON2017
U328	95534	Benzenamine, 2methyl	
U222	636215	Benzenamine, 2methyl, hydrochloride	ON2029
U181	99558	Benzenamine, 2methyl5nitro	ON2030
U014	492808	Benzenamine, 4,4carbonimidoylbis[N,Ndimethyl	ON2018
U158	101144	Benzenamine, 4,4methylenebis[2chloro	ON2028
U049	3165933	Benzenamine, 4chloro2methyl,hydrochloride	ON2026
U353	106490	Benzenamine, 4methyl	
U093	60117	Benzenamine, N,Ndimethyl4(phenylazo)	ON2027
U019	71432	Benzene	ON2031
U055	98828	Benzene, (1methylethyl)	ON2056
U017	98873	Benzene, (dichloromethyl)	ON2023
U023	98077	Benzene, (trichloromethyl)	ON2062
U247	72435	Benzene, 1,1(2,2,2trichloroethylidene)bis[4 methoxy	ON2163
U207	95943	Benzene, 1,2,4,5tetrachloro	ON2061
U070	95501	Benzene, 1,2dichloro	ON2041
U234	99354	Benzene, 1,3,5trinitro	ON2063
U071	541731	Benzene, 1,3dichloro	ON2042
U223	26471625	Benzene, 1,3diisocyanatomethyl	ON2044
U072	106467	Benzene, 1,4dichloro	ON2043
U030	101553	Benzene, 1bromo4phenoxy	ON2033
U105	121142	Benzene, 1methyl2,4dinitro	ON2051
U106	606202	Benzene, 2methyl1,3dinitro	ON2052

Hazardous waste No.	Chemical abstracts No.	Substance	Reference Number
U037	108907	Benzene, chloro	ON2034
U239	1330207	Benzene, dimethyl	ON2045
U127	118741	Benzene, hexachloro	ON2047
U056	110827	Benzene, hexahydro	ON2048
U220	108883	Benzene, methyl	ON2050
U169	98953	Benzene, nitro	ON2057
U183	608935	Benzene, pentachloro	ON2058
U185	82688	Benzene, pentachloronitro	ON2059
U061	50293	Benzene, 1,1(2,2,2trichloroethylidene)bis[4chloro	ON2117
U060	72548	Benzene, 1,1(2,2dichloroethylidene)bis[4chloro	ON2116
U038	510156	Benzeneacetic acid, 4chloroalpha (4chlorophenyl)alphahydroxy, ethyl ester	ON2032
U035	305033	Benzenebutanoic acid, 4[bis(2chloroethyl)amino]	ON2081
U221	25376458	Benzenediamine, armethyl	ON2121
U020	98099	Benzenesulfonic acid chloride	ON2060
U020	98099	Benzenesulfonyl chloride	ON2060
U021	92875	Benzidine	ON2064
U022	50328	Benzo[a]pyrene	ON2067
U064	189559	Benzo[rst]pentaphene	ON2123
U023	98077	Benzotrichloride	ON2062
U047	91587	betaChloronaphthalene	ON2106
U168	91598	betaNaphthylamine	ON2211
U225	75252	Bromoform	ON2078
U136	75605	Cacodylic acid	ON2087
U032	13765190	Calcium chromate	ON2088
U280	101279	Carbamic acid, (3chlorophenyl), 4chloro2butynyl ester	

Hazardous waste No.	Chemical abstracts No.	Substance	Reference Number
U409	23564058	Carbamic acid, [1,2phenylenebis (iminocarbonothioyl)]bis, dimethyl ester	
U271	17804352	Carbamic acid, [1[(butylamino)carbonyl]1Hbenzimidazol2yl], methyl ester	
U372	10605217	Carbamic acid, 1Hbenzimidazol2yl,methyl ester	
U238	51796	Carbamic acid, ethyl ester	ON2089
U178	615532	Carbamic acid, methylnitroso, ethyl ester	ON2090
U373	122429	Carbamic acid, phenyl, 1methylethyl ester	
U097	79447	Carbamic chloride, dimethyl	ON2094
U114	**111546	Carbamodithioic acid, 1,2ethanedylbis,salts & esters	ON2155
U389	2303175	Carbamothioic acid, bis(1methylethyl), S(2,3,3trichloro2propenyl)ester	
U062	2303164	Carbamothioic acid, bis(1methylethyl)S(2,3dichloro2propenyl) ester	ON2119
U387	52888809	Carbamothioic acid, dipropyl, S(phenylmethyl) ester	
U279	63252	Carbaryl.	
U372	10605217	Carbendazim	
U367	1563388	Carbofuran phenol	
U033	353504	Carbon oxyfluoride	ON2097
U211	56235	Carbon tetrachloride	ON2098
U215	6533739	Carbonic acid, dithallium(1+) salt	ON2095
U033	353504	Carbonic difluoride	ON2097
U156	79221	Carbonochloridic acid, methyl ester	ON2096
U034	75876	Chloral	ON2002
U035	305033	Chlorambucil	ON2081
U036	57749	Chlordane, alpha & gamma isomers	ON2099
U026	494031	Chlornaphazin	ON2100
U037	108907	Chlorobenzene	ON2034

Hazardous waste No.	Chemical abstracts No.	Substance	Reference Number
U038	510156	Chlorobenzilate	ON2032
U044	67663	Chloroform	ON2104
U046	107302	Chloromethyl methyl ether	ON2105
U032	13765190	Chromic acid H <sub>2</sub> CrO <sub>4</sub> , calcium salt	ON2088
U050	218019	Chrysene	ON2069
U051	N/A	Creosote	ON2108
U052	1319773	Cresol (Cresylic acid)	ON2109
U053	4170303	Crotonaldehyde	ON2085
U055	98828	Cumene	ON2056
U246	506683	Cyanogen bromide (CN)Br	ON2077
U056	110827	Cyclohexane	ON2048
U129	58899	Cyclohexane, 1,2,3,4,5,6hexachloro,(1alpha,2alpha,3beta,4alpha,5alpha,6beta)	ON2182
U057	108941	Cyclohexanone	ON2111
U058	50180	Cyclophosphamide	ON2113
U059	20830813	Daunomycin	ON2115
U060	72548	DDD	ON2116
U061	50293	DDT	ON2117
U206	18883664	DGlucose,2deoxy2[[methylnitrosoamino]carbonyl]amino]	ON2179
U062	2303164	Diallate	ON2119
U063	53703	Dibenz[a,h]anthracene	ON2122
U064	189559	Dibenzo[a,i]pyrene	ON2123
U069	84742	Dibutyl phthalate	ON2037
U075	75718	Dichlorodifluoromethane	ON2126
U025	111444	Dichloroethyl ether	ON2130

Hazardous waste No.	Chemical abstracts No.	Substance	Reference Number
U027	108601	Dichloroisopropyl ether	ON2075
U024	111911	Dichloromethoxy ethane	ON2074
U088	84662	Diethyl phthalate	ON2038
U395	5952261	Diethylene glycol, dicarbamate	
U028	117817	Diethylhexyl phthalate	ON2036
U089	56531	Diethylstilbesterol	ON2140
U090	94586	Dihydrosafrole	ON2055
U102	131113	Dimethyl phthalate	ON2039
U103	77781	Dimethyl sulfate	ON2147
U092	124403	Dimethylamine	ON2142
U097	79447	Dimethylcarbamoyl chloride	ON2094
U107	117840	Dinooctyl phthalate	ON2040
U111	621647	Dinpropylnitrosamine	ON2150
U110	142847	Dipropylamine	ON2149
U041	106898	Epichlorohydrin	ON2102
U001	75070	Ethanal	ON2001
U404	121448	Ethanamine, N,Ndiethyl	
U174	55185	Ethanamine, NethylNnitroso	ON2151
U208	630206	Ethane, 1,1,1,2tetrachloro	ON2158
U226	71556	Ethane, 1,1,1trichloro	ON2161
U209	79345	Ethane, 1,1,2,2tetrachloro	ON2159
U227	79005	Ethane, 1,1,2trichloro	ON2162
U024	111911	Ethane, 1,1'[methylenebis(oxy)]bis[2chloro	ON2074
U076	75343	Ethane, 1,1dichloro	ON2153
U117	60297	Ethane, 1,1'oxybis	ON2137

Hazardous waste No.	Chemical abstracts No.	Substance	Reference Number
U025	111444	Ethane, 1,1'oxybis[2chloro	ON2130
U067	106934	Ethane, 1,2dibromo	ON2152
U077	107062	Ethane, 1,2dichloro	ON2154
U131	67721	Ethane, hexachloro	ON2156
U184	76017	Ethane, pentachloro	ON2157
U218	62555	Ethanethioamide	ON2160
U394	30558431	Ethanimidothioic acid, 2(dimethylamino)Nhydroxy2oxo,methyl ester	
U410	59669260	Ethanimidothioic acid, N,N'[thiobis[(methylimino)carbonyloxy]]bis, dimethyl ester	
U173	1116547	Ethanol, 2,2'(nitrosoimino)bis	ON2164
U395	5952261	Ethanol, 2,2'oxybis, dicarbamate	
U359	110805	Ethanol, 2ethoxy	ON2239
U004	98862	Ethanone, 1phenyl	ON2010
U042	110758	Ethene, (2chloroethoxy)	ON2103
U078	75354	Ethene, 1,1dichloro	ON2128
U079	156605	Ethene, 1,2dichloro, (E)	ON2129
U043	75014	Ethene, chloro	ON2165
U210	127184	Ethene, tetrachloro	ON2166
U228	79016	Ethene, trichloro	ON2236
U112	141786	Ethyl acetate	ON2005
U113	140885	Ethyl acrylate	ON2167
U238	51796	Ethyl carbamate (urethane)	ON2089
U117	60297	Ethyl ether	ON2137
U118	97632	Ethyl methacrylate	ON2170
U119	62500	Ethyl methanesulfonate	ON2171

Hazardous waste No.	Chemical abstracts No.	Substance	Reference Number
U067	106934	Ethylene dibromide	ON2152
U077	107062	Ethylene dichloride	ON2154
U359	110805	Ethylene glycol monoethyl ether	ON2239
U115	75218	Ethylene oxide	ON2168
U114	**111546	Ethylenebisdithiocarbamic acid, salts & esters	ON2155
U116	96457	Ethylenethiourea	ON2169
U076	75343	Ethylidene dichloride	ON2153
U120	206440	Fluoranthene	ON2066
U122	50000	Formaldehyde	ON2173
U123	64186	Formic acid	ON2174
U124	110009	Furan	ON2175
U213	109999	Furan, tetrahydro	ON2178
U125	98011	Furfural	ON2176
U124	110009	Furfuran	ON2175
U206	18883664	Glucopyranose,2deoxy2(3methyl3nitrosoureido), D	ON2179
U126	765344	Glycidylaldehyde	ON2180
U163	70257	Guanidine, NmethylN'nitroNnitroso	ON2181
U127	118741	Hexachlorobenzene	ON2047
U128	87683	Hexachlorobutadiene	ON2079
U130	77474	Hexachlorocyclopentadiene	ON2112
U131	67721	Hexachloroethane	ON2156
U132	70304	Hexachlorophene	ON2183
U243	1888717	Hexachloropropene	ON2184
U133	302012	Hydrazine	ON2120
U098	57147	Hydrazine, 1,1dimethyl	ON2144

Hazardous waste No.	Chemical abstracts No.	Substance	Reference Number
U086	1615801	Hydrazine, 1,2diethyl	ON2138
U099	540738	Hydrazine, 1,2dimethyl	ON2145
U109	122667	Hydrazine, 1,2diphenyl	ON2148
U134	7664393	Hydrofluoric acid	ON2185
U134	7664393	Hydrogen fluoride	ON2185
U135	7783064	Hydrogen sulfide	ON2187
U135	7783064	Hydrogen sulfide H <sub>2</sub> S	ON2187
U096	80159	Hydroperoxide, 1methyl1phenylethyl-	ON2143
U137	193395	Indeno[1,2,3cd]pyrene	ON2188
U140	78831	Isobutyl alcohol	ON2189
U141	120581	Isosafrole	ON2054
U142	143500	Kepone	ON2118
U143	303344	Lasiocarpine	ON2190
U144	301042	Lead acetate	ON2006
U145	7446277	Lead phosphate	ON2191
U146	1335326	Lead subacetate	ON2192
U146	1335326	Lead, bis(acetatoO)tetrahydroxytri	ON2192
U129	58899	Lindane	ON2182
U150	148823	LPhenylalanine, 4[bis(2chloroethyl)amino]	ON2015
U015	115026	LSerine, diazoacetate (ester)	ON2019
U147	108316	Maleic anhydride	ON2177
U148	123331	Maleic hydrazide	ON2141
U149	109773	Malononitrile	ON2193
U071	541731	mDichlorobenzene	ON2042
U150	148823	Melphalan	ON2015

Hazardous waste No.	Chemical abstracts No.	Substance	Reference Number
U151	7439976	Mercury	ON2194
U152	126987	Methacrylonitrile	ON2195
U092	124403	Methanamine, Nmethyl	ON2142
U029	74839	Methane, bromo	ON2196
U045	74873	Methane, chloro	ON2197
U046	107302	Methane, chloromethoxy	ON2105
U068	74953	Methane, dibromo	ON2125
U080	75092	Methane, dichloro	ON2131
U075	75718	Methane, dichlorodifluoro	ON2126
U138	74884	Methane, iodo	ON2198
U211	56235	Methane, tetrachloro	ON2098
U225	75252	Methane, tribromo	ON2078
U044	67663	Methane, trichloro	ON2104
U121	75694	Methane, trichlorofluoro	ON2200
U119	62500	Methanesulfonic acid, ethyl ester	ON2171
U153	74931	Methanethiol	ON2199
U154	67561	Methanol	ON2201
U155	91805	Methapyrilene	ON2202
U247	72435	Methoxychlor	ON2163
U154	67561	Methyl alcohol	ON2201
U029	74839	Methyl bromide	ON2196
U045	74873	Methyl chloride	ON2197
U156	79221	Methyl chlorocarbonate	ON2096
U226	71556	Methyl chloroform	ON2161
U159	78933	Methyl ethyl ketone (MEK)	ON2083

Hazardous waste No.	Chemical abstracts No.	Substance	Reference Number
U160	1338234	Methyl ethyl ketone peroxide	ON2084
U138	74884	Methyl iodide	ON2198
U161	108101	Methyl isobutyl ketone	ON2204
U162	80626	Methyl methacrylate	ON2205
U068	74953	Methylene bromide	ON2125
U080	75092	Methylene chloride	ON2131
U164	56042	Methylthiouracil	ON2206
U010	50077	Mitomycin C	ON2020
U163	70257	MNNG	ON2181
U086	1615801	N,N'Diethylhydrazine	ON2138
U026	494031	Naphthalenamine, N,N'bis(2chloroethyl)	ON2100
U165	91203	Naphthalene	ON2207
U047	91587	Naphthalene, 2chloro	ON2106
U031	71363	nButyl alcohol	ON2082
U217	10102451	Nitric acid, thallium(1+) salt	ON2235
U169	98953	Nitrobenzene	ON2057
U173	1116547	NNitrosodiethanolamine	ON2164
U174	55185	NNitrosodiethylamine	ON2151
U172	924163	NNitrosodinbutylamine	ON2080
U176	759739	NNitrosoNethylurea	ON2091
U177	684935	NNitrosoNmethylurea	ON2092
U178	615532	NNitrosoNmethylurethane	ON2090
U179	100754	NNitrosopiperidine	ON2214
U180	930552	NNitrosopyrrolidine	ON2215
U194	107108	nPropylamine	ON2224

Hazardous waste No.	Chemical abstracts No.	Substance	Reference Number
U087	3288582	O,ODiethyl Smethyl dithiophosphate	ON2139
U048	95578	oChlorophenol	ON2107
U070	95501	oDichlorobenzene	ON2041
U328	95534	oToluidine	
U222	636215	oToluidine hydrochloride	ON2029
U115	75218	Oxirane	ON2168
U041	106898	Oxirane, (chloromethyl)	ON2102
U126	765344	Oxiranecarboxyaldehyde	ON2180
U182	123637	Paraldehyde	ON2217
U197	106514	pBenzoquinone	ON2068
U039	59507	pChloromcresol	ON2101
U072	106467	pDichlorobenzene	ON2043
U093	60117	pDimethylaminoazobenzene	ON2027
U183	608935	Pentachlorobenzene	ON2058
U184	76017	Pentachloroethane	ON2157
U185	82688	Pentachloronitrobenzene (PCNB)	ON2059
F027	87865	Pentachlorophenol	ON2218
U161	108101	Pentanol, 4methyl	ON2204
U187	62442	Phenacetin	ON2003
U188	108952	Phenol	ON2049
U411	114261	Phenol, 2(1methylethoxy),methylcarbamate	
F027	58902	Phenol, 2,3,4,6tetrachloro	ON2219
F027	95954	Phenol, 2,4,5trichloro	ON2220
F027	88062	Phenol, 2,4,6trichloro	ON2221
U081	120832	Phenol, 2,4dichloro	ON2132

Hazardous waste No.	Chemical abstracts No.	Substance	Reference Number
U101	105679	Phenol, 2,4dimethyl	ON2146
U082	87650	Phenol, 2,6dichloro	ON2133
U048	95578	Phenol, 2chloro	ON2107
U089	56531	Phenol, 4,4'(1,2diethyl1,2ethenediyl)bis, (E)	ON2140
U039	59507	Phenol, 4chloro3methyl	ON2101
U170	100027	Phenol, 4nitro	ON2212
U052	1319773	Phenol, methyl	ON2109
F027	87865	Phenol, pentachloro	ON2218
U132	70304	Phenol,2,2'methylenebis[3,4,6trichloro	ON2183
U145	7446277	Phosphoric acid, lead(2+) salt (2:3)	ON2191
U087	3288582	Phosphorodithioic acid, O,Odiethyl Smethyl ester	ON2139
U189	1314803	Phosphorus sulfide	ON2222
U190	85449	Phthalic anhydride	ON2035
U179	100754	Piperidine, 1nitroso	ON2214
U170	100027	pNitrophenol	ON2212
U192	23950585	Pronamide	ON2127
U066	96128	Propane, 1,2dibromo3chloro	ON2124
U083	78875	Propane, 1,2dichloro	ON2134
U027	108601	Propane, 2,2'oxybis[2chloro	ON2075
U171	79469	Propane, 2nitro	ON2213
U149	109773	Propanedinitrile	ON2193
F027	93721	Propanoic acid, 2(2,4,50 trichlorophenoxy)	ON2227
U373	122429	Propham	
U411	114261	Propoxur.	
U083	78875	Propylene dichloride	ON2134

Hazardous waste No.	Chemical abstracts No.	Substance	Reference Number
U387	52888809	Prosulfocarb	
U353	106490	pToluidine	
U196	110861	Pyridine	ON2228
U191	109068	Pyridine, 2methyl	ON2223
U180	930552	Pyrrolidine, 1nitroso	ON2215
U200	50555	Reserpine	ON2229
U201	108463	Resorcinol	ON2046
U202	**81072	Saccharin, & salts	ON2065
U203	94597	Safrole	ON2053
U204	7783008	Selenious acid	ON2230
U204	7783008	Selenium dioxide	ON2230
U205	7488564	Selenium sulfide	ON2232
U205	7488564	Selenium sulfide SeS <sub>2</sub>	ON2232
F027	93721	Silvex (2,4,5TP)	ON2227
U206	18883664	Streptozotocin	ON2179
U189	1314803	Sulfur phosphide	ON2222
U103	77781	Sulfuric acid, dimethyl ester	ON2147
U210	127184	Tetrachloroethylene	ON2166
U213	109999	Tetrahydrofuran	ON2178
U216	7791120	Thallium chloride TlCl	ON2234
U214	563688	Thallium(I) acetate	ON2007
U215	6533739	Thallium(I) carbonate	ON2095
U216	7791120	Thallium(I) chloride	ON2234
U217	10102451	Thallium(I) nitrate	ON2235
U218	62555	Thioacetamide	ON2160

Hazardous waste No.	Chemical abstracts No.	Substance	Reference Number
U410	59669260	Thiodicarb	
U153	74931	Thiomethanol	ON2199
U244	137268	Thioperoxydicarbonic diamide[(H <sub>2</sub> N)C(S)] <sub>2</sub> S <sub>2</sub> , tetramethyl	ON2076
U409	23564058	Thiophanatemethyl	
U219	62566	Thiourea	ON2093
U244	137268	Thiram	ON2076
U220	108883	Toluene	ON2050
U223	26471625	Toluene diisocyanate	ON2044
U221	25376458	Toluenediamine	ON2121
U389	2303175	Triallate	
U228	79016	Trichloroethylene	ON2236
U121	75694	Trichloromonofluoromethane	ON2200
U404	121448	Triethylamine	
U235	126727	Tris(2,3dibromopropyl) phosphate	ON2225
U236	72571	Trypan blue	ON2209
U237	66751	Uracil mustard	ON2237
U176	759739	Urea, NethylNnitroso	ON2091
U177	684935	Urea, NmethylNnitroso	ON2092
U043	75014	Vinyl chloride	ON2165
U248	** 81812	Warfarin, & salts, when present at concentrations of 0.3% or less	ON2009
U239	1330207	Xylene	ON2045
U200	50555	Yohimban16carboxylic acid,11,17dimethoxy 18[(3,4,5trimethoxybenzoyl)oxy], methyl ester,(3beta,16beta,17alpha, 18beta,20alpha)	ON2229
U249	1314847	Zinc phosphide Zn <sub>3</sub> P <sub>2</sub> , when present at concentrations of 10% or less	ON2238

\*\*CAS number given for parent compound only

**APPENDIX 7**

Schedule 3

Severely Toxic Contaminants

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Excerpt from the Regulation prepared for purposes of convenience only,  
and for accurate reference recourse should be had to the official volumes.

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### SCHEDULE 3

#### SEVERELY TOXIC CONTAMINANTS

<u>Reference Number</u>	<u>Contaminant</u>
ON3001	Aflatoxin
ON3002	2,3,7,8-Tetrachlorodibenzo-p-dioxin
ON3003	1,2,3,7,8-Pentachlorodibenzo-p-dioxin
ON3004	1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin
ON3005	1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin
ON3006	1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin
ON3007	2,3,7,8-Tetrachlorodibenzo furan

**APPENDIX 8**

Schedule 4

Leachate Toxic Criteria

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Excerpt from the Regulation prepared for purposes of convenience only,  
and for accurate reference recourse should be had to the official volumes.

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**SCHEDULE 4****LEACHATE QUALITY CRITERIA**

CONTAMINANT	CONCENTRATION (mg/l)
Aldicarb	0.9
Aldrin + Dieldrin	0.07
Arsenic	2.5
Atrazine + N-dealkylated metabolites (Weedex)	0.5
Azinphos-methyl	2.0
Barium	100.0
Bendiocarb	4.0
Benzene	0.5
Benzo(a)pyrene	0.001
Boron	500.0
Bromoxynil	0.5
Cadmium	0.5
Carbaryl/Sevin/1-Naphthyl-N methyl carbamate	9.0
Carbofuran	9.0
Carbon tetrachloride (Tetrachloromethane)	0.5
Chlordane	0.7
Chlorobenzene (Monochlorobenzene)	8.0
Chloroform	10.0
Chlorpyrifos	9.0
Chromium	5.0
Cresol (Mixture - total of all isomers, when isomers cannot be differentiated)	200.0
m-Cresol	200.0
o-Cresol	200.0
p-Cresol	200.0
Cyanazine	1.0
Cyanide	20.0
2,4-D / (2,4-dichlorophenoxy)acetic acid	10.0
2,4-DCP (2,4-Dichlorophenol)	90.0
DDT (total isomers)	3.0
Diazinon/Phosphordithioic acid, o,o-diethyl o-(2-isopropyl 6-methyl-4-pyrimidinyl)ester	2.0
Dicamba	12.0
1,2-Dichlorobenzene (o-Dichlorobenzene)	20.0
1,4-Dichlorobenzene (p-Dichlorobenzene)	0.5
1,2-Dichloroethane (Ethylene dichloride)	0.5
1,1-Dichloroethylene (Vinylidene chloride)	1.4
Dichloromethane (also see - methylene chloride)	5.0
Diclofop-methyl	0.9
Dimethoate	2.0
2,4-Dinitrotoluene	0.13
Dinoseb	1.0
Dioxin & Furan	0.0000015*
Diquat	7.0

Diuron	15.0
Endrin	0.02
Fluoride	150.0
Glyphosate	28.0
Heptachlor + Heptachlor epoxide	0.3
Hexachlorobenzene	0.13
Hexachlorobutadiene	0.5
Hexachloroethane	3.0
Lead	5.0
Lindane	0.4
Malathion	19.0
Mercury	0.1
Methoxychlor/1,1,1-Trichloro-2,2-bis(p-methoxyphenyl) ethane	90.0
Methyl ethyl ketone / Ethyl methyl ketone	200.0
Methyl Parathion	0.7
Methylene chloride / Dichloromethane	5.0
Metolachlor	5.0
Metribuzin	8.0
NDMA	0.0009
Nitrate + Nitrite (as Nitrogen)	1,000.0
Nitrilotriacetic acid (NTA)	40.0
Nitrobenzene	2.0
Paraquat	1.0
Parathion	5.0
PCBs	0.3
Pentachlorophenol	6.0
Phorate	0.2
Picloram	19.0
Pyridine	5.0
Selenium	1.0
Silver	5
Simazine	1.0
2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)	28.0
2,4,5-TP/ Silvex/ 2-(2,4,5-Trichlorophenoxy)propionic acid	1.0
Temephos	28.0
Terbufos	0.1
Tetrachloroethylene	3.0
2,3,4,6-Tetrachlorophenol /(2,3,4,6-TeCP)	10.0
Toxaphene	0.5
Triallate	23.0
Trichloroethylene	5.0
2,4,5-Trichlorophenol (2,4,5-TCP)	400.0
2,4,6-Trichlorophenol (2,4,6-TCP)	0.5
Trifluralin	4.5
Uranium	10.0
Vinyl chloride	0.2

\* Toxic equivalent (TEQ)

**APPENDIX 9**

Ministry of the Environment

Regional and District Offices

## Ontario Ministry of the Environment

REGIONAL OFFICE	DISTRICT OFFICE	DISTRICT OFFICE	DISTRICT OFFICE	AREA OFFICE	AREA OFFICE
<u>SOUTHWESTERN</u> 659 Exeter Road London, ON. N6E 1L3  <b>(519) 873-5000</b>	<u>LONDON</u> 659 Exeter Road London, ON. N6E 1L3  <b>(519) 873-5000</b>	<u>BARRIE</u> 54 Cedar Pointe Dr. Unit 1203 Barrie, ON. L4N 5R7 <b>(705) 739-6441</b>	<u>SARNIA</u> 1094 London Road Sarnia ON. N7S 1P1  <b>(519) 336-4030</b>	<u>OWEN SOUND</u> 1580 20th St. E., P.O. Box 967 Owen Sound, ON. N4K 6H6 <b>(519) 371-2901</b>	<u>WINDSOR</u> 250 Windsor Ave. 6th Fl. Windsor, ON. N9A 6V9  <b>(519) 254-2546</b>
<u>WEST-CENTRAL</u> 119 King St. W. 12th Fl. Hamilton, ON. L8P 4Y7  <b>(905) 521-7640</b>	<u>HAMILTON</u> 119 King St. W. 9th Fl. Hamilton, ON. L8P 4Y7  <b>(905) 521-7650</b>	<u>GUELPH</u> 1 Stone Road W. 4 <sup>th</sup> Floor Guelph, ON. N1G 4Y2  <b>(519) 826-4255</b>	<u>NIAGARA</u> 301 St. Paul Street 9th Floor St. Catharines, ON. L2R 3M8 <b>(905) 704-3900</b>		
<u>CENTRAL</u> 5775 Yonge Street 8th Floor North York, ON. M2M 4J1 <b>(416) 326-6700</b>	<u>TORONTO</u> 5775 Yonge Street 9th Floor North York, ON. M2M 4J1 <b>(416) 326-6700</b>	<u>HALTON-PEEL</u> 1182 North Shore Blvd. E. 1 <sup>st</sup> Floor Burlington, ON. L7R 3Z9 <b>(905) 637-4150</b>	<u>YORK DURHAM</u> 230 Westney Road S., 5th Floor Ajax, ON. L1S 7J5 <b>(905) 427-5600</b>		
<u>EASTERN</u> 133 Dalton St. P.O. Box 820 Kingston, ON. K7L 4X6 <b>(613) 549-4000</b>	<u>KINGSTON</u> 133 Dalton St. P.O. Box 820 Kingston, ON. K7L 4X6 <b>(613) 549-4000 x2692</b>	<u>OTTAWA</u> 2435 Holly Lane Ottawa, ON. K1V 7P2  <b>(613) 521-3450</b>	<u>PETERBOROUGH</u> 300 Water St. 2 <sup>nd</sup> Floor Peterborough, ON. K9J 7M3  <b>(705) 755-4300</b>	<u>BELLEVILLE</u> Belleville Mall 470 Dundas Street East Belleville, ON. K8N 1G1 <b>(613) 962-9208</b>	<u>CORNWALL</u> 113 Amelia St., 2nd Floor Cornwall, ON. K6H 3P1  <b>(613) 933-7402</b>
<u>NORTHERN</u> 435 James St. S., 3rd Floor, Ste. 331 Thunder Bay, ON. P7E 6S7 <b>(807) 475-1205</b>	<u>THUNDER BAY</u> 435 James St. S. 3rd Floor, Ste. 331 Thunder Bay, ON. P7E 6S7 <b>(807) 475-1315</b>	<u>SUDBURY</u> 199 Larch St., Ste. 1101 Sudbury, ON. P3E 5P9  <b>(705) 564-3237</b>	<u>TIMMINS</u> Ontario Gov't. Complex Hwy. 101 East P.O. Bag 3080 South Porcupine, ON. <b>(705) 235-1500</b>	<u>KENORA</u> 808 Robertson St. P.O. Box 5150 Kenora, ON. P9N 1X9  <b>(807) 468-2718</b>	<u>NORTH BAY</u> 447 McKeown Ave., Ste. 103 North Bay, ON. P1B 9S9 (Includes Parry Sound area)  <b>(705) 497-6865</b>
					<u>SAULT STE. MARIE</u> 70 Foster Dr., Ste. 610 Sault Ste. Marie, ON. P6A 6V4 <b>(705) 949-4640</b>

For off-hour emergencies, please contact the Spills Action Centre at 1-800-268-6060.

October 1, 2000

**APPENDIX 10**

Examples

Completed Generator Registration Report



