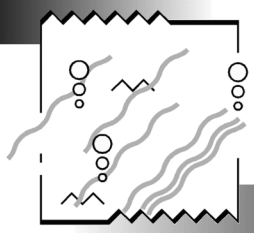
1999



The National Pollutant Release Inventory

Are you required to report?

Cette publication est disponible en français sous le titre de «l'Inventaire national des rejets de polluants: 1999 Devez-vous produire une déclaration?»

What is the National Pollutant Release Inventory?

The NPRI is a federal government initiative, designed to collect annual, comprehensive, national data on releases to air, water, and land, and transfers for disposal or recycling of 246 specified substances. The NPRI data support a wide range of environmental initiatives, including toxic substance assessment, pollution prevention and abatement. NPRI data are accessible by the public and provide information on all sectors -- industrial, government, commercial and others. This information, including on-line reporting guides, is available on the world wide web at **http://www.ec.gc.ca/pdb/npri/**.

Who is required to report to the NPRI?

Any facility that meets the reporting criteria **must** submit a report. Facilities that currently report to the NPRI include, but are not limited to, those which operate in the following sectors:

Chemicals and chemical products, clothing and leather products, communication, construction, electronics, fishing, food and beverages, forestry, furniture and other wood products, government (all levels), heavy machinery, metal fabrication and welding, mining and mineral production, motor vehicles and parts, paper products, petroleum and natural gas, pharmaceuticals, plastics and plastic products, primary metals and metal products, primary textiles and textile products, printing, rubber products, shipbuilding, storage and warehousing, transportation equipment, utilities, waste management and recycling, and other manufacturing and service industries.

Facilities should re-evaluate annually whether they are required to report, since chemical usage may vary from year to year and changes may be made to the list of NPRI substances, or to the reporting criteria.

Is reporting to the NPRI a legal requirement?

YES.

A common misconception about the NPRI is that it is a voluntary program. This is **NOT** the case. The legal authority for the NPRI is subsection 16(1) of the *Canadian Environmental Protection Act (CEPA).* Under the authority of this section, the Minister of Environment publishes an annual notice in the *Canada Gazette, Part I*, describing the reporting criteria and requirements of the NPRI. The Notice for the 1999 NPRI was published on Feb 13, 1999.

The *Canada Gazette* is the official information bulletin of the federal government, including the registry of federal statutes and regulations in Canada. A copy of the *Canada Gazette* notice respecting the NPRI can be obtained from the NPRI office listed on the back page of this document.

The deadline for the 1999 reporting year is **June 1, 2000.**

Owners or operators of facilities who fail to submit a report, or file a false, misleading, or late report may be subject to penalties under sections 112 and 114 of *CEPA*. Enforcement of the NPRI notice is consistent with Environment Canada's *Compliance and Enforcement Policy.*

What are the reporting criteria?

In general, any person who owns or operates a facility is required to file a report if the facility meets **ALL** three of the following criteria for **ANY** listed NPRI substance:

- all employees worked a total of **20,000 hours** or more during the 1999 calendar year, (including paid vacation and leave benefits), **and**
- the facility manufactured, processed or otherwise used **10 tonnes** (10,000 kg) or more of an NPRI substance in 1999, **and**
- the NPRI substance was manufactured, processed or otherwise used at a concentration greater than or equal to **1%** by weight, or the substance was produced as a **by-product** (as defined on page 2). The total weight of by-products, regardless of their concentration, must be included in the calculation of the 10-tonne threshold for each NPRI substance.

A common misconception about the NPRI is that facilities are not required to report if they do not release 10 tonnes of a NPRI substance. This is **NOT** the case. A facility which meets the reporting criteria for the manufacture, process, or other use of NPRI substances, must submit a report even if the total release or transfer is zero.

More information on how to calculate the reporting threshold is included in the NPRI reporting guide.

What is meant by …

Facility? A *"facility"* includes all buildings, equipment, structures, or other stationary items that are located on a single site or on contiguous or adjacent sites and that are owned or operated by the same person and function as a single integrated site.

Manufacture? The term *"manufacture*" means to produce, prepare or compound an NPRI substance. The production of chlorine dioxide by a chemical plant is an example of manufacturing.

Process? The term *"process"* means the preparation of an NPRI substance, after its manufacture. Processing includes preparation of a NPRI substance with or without changes in physical state or chemical form. The term also applies to the processing of a mixture or formulation that contains an NPRI substance as one component. The use of chlorine to manufacture hypochloric acid is an example of processing of chlorine. The use of toluene and xylenes to blend paint solvent mixtures is an example of processing without changes in chemical form.

Otherwise Use? The term *"otherwise use"* encompasses any use of an NPRI substance that does not fall under the definitions of *manufacture* or *process*. This includes the use of the substance as a chemical processing aid, manufacturing aid or some other use. An example is the use of trichloroethylene in the maintenance of equipment used for manufacturing or processing.

By-product? A *"by-product"* is an NPRI substance that is **incidentally** manufactured, processed, or otherwise used at a facility. By-products must be included in the calculation of the 10 tonne threshold **regardless** of the concentration.

Disposal? *"Disposal"* refers to the transfer off site of material containing a NPRI substance(s) to a facility for treatment (i.e. stabilization) or waste management purposes (i.e. landfill site).

Recycling? *"Recycling"* refers to activities that involve the re-use or recovery of material containing a NPRI substance(s).

Further explanation and examples of these definitions are found in the NPRI reporting guide, or may be obtained by contacting the NPRI office listed on the back page.

What facilities are exempt from reporting?

Certain facilities are currently exempt from reporting to the NPRI. These are identified as facilities, or any part thereof, that are used **exclusively** for:

- educating or training students
- research or testing
- the maintenance and repair of transportation vehicles, such as automobiles, trucks, locomotives, ships or aircraft
- the distribution, storage or retail sale of fuels
- the wholesale or retail sale of articles or products which contain NPRI substances.
- growing or managing renewable natural resources, such as fisheries, forestry and other agricultural activities up to and including the primary harvesting of that resource.
- mining activities up to and including primary crushing of ore.
- drilling or operating oil or gas wells up to and including primary extraction of raw material.

What are the NPRI substances?

NPRI substances are chosen through a consultation process by a multi-stakeholder committee. The committee is comprised of industrial, public and government organizations. **Seventy-three** new substances have been added to the 1999 substance list. Many substances on the list are categorized as toxins, carcinogens and ozone depleting substances.

The NPRI substances are listed below. Included is their Chemical Abstracts Service (CAS) registry numbers (where applicable). Material Safety Data Sheets (MSDS) include CAS numbers, and are an important source of information on the composition of purchased products.

Alphabetical Listing of the 1999 NPRI Substances

Name	CAS Nr.
Acetaldehyde	75-07-0
Acetone	67-64-1
Acetonitrile	75-05-8
▶ Acetophenone	98-86-2
Acrylamide	79-06-1
Acrylic acid [b]	79-10-7
Acrylonitrile	107-13-1
▶ Alkanes, C_{6-18}, chloro	68920-70-7
▶ Alkanes, C_{10-13}, chloro	85535-84-8
Allyl alcohol	107-18-6
Allyl chloride	107-05-1
Aluminum [c]	7429-90-5
Aluminum oxide [d]	1344-28-1
Ammonia (total) [e]	*
Aniline [b]	62-53-3
Anthracene	120-12-7
Antimony [f]	*
Arsenic [f]	*
Asbestos [g]	1332-21-4
Benzene	71-43-2
Benzoyl chloride	98-88-4
Benzoyl peroxide	94-36-0
Benzyl chloride	100-44-7
Biphenyl	92-52-4
bis(2-Ethylhexyl) adipate	103-23-1
bis(2-Ethylhexyl) phthalate	117-81-7
▶ Boron trifluoride	7637-07-2
▶ Bromine	7726-95-6
▶ 1-Bromo-2-chloroethane	107-04-0
Bromomethane	74-83-9
1,3-Butadiene	106-99-0
▶ 2-Butoxyethanol	111-76-2
Butyl acrylate	141-32-2
i-Butyl alcohol	78-83-1
n-Butyl alcohol	71-36-3
sec-Butyl alcohol	78-92-2
tert-Butyl alcohol	75-65-0
Butyl benzyl phthalate	85-68-7
1,2-Butylene oxide	106-88-7
Butyraldehyde	123-72-8
C.I. Acid Green 3	4680-78-8
C.I. Basic Green 4	569-64-2
C.I. Basic Red 1	989-38-8
▶ C.I. Direct Blue 218	28407-37-6
C.I. Disperse Yellow 3	2832-40-8
C.I. Food Red 15	81-88-9
C.I. Solvent Orange 7	3118-97-6
C.I. Solvent Yellow 14	842-07-9
Cadmium [f]	*
Calcium cyanamide	156-62-7
▶ Calcium fluoride	7789-75-5
Carbon disulphide	75-15-0
Carbon tetrachloride	56-23-5
Catechol	120-80-9
▶ CFC-11	75-69-4
▶ CFC-12	75-71-8
▶ CFC-13	75-72-9
▶ CFC-114	76-14-2
▶ CFC-115	76-15-3
▶ Chlorendic acid	115-28-6
Chlorine	7782-50-5
Chlorine dioxide	10049-04-4
Chloroacetic acid [b]	79-11-8
Chlorobenzene	108-90-7
Chloroethane	75-00-3
Chloroform	67-66-3

continued…

1999 NPRI Substance List (continued)

	Name	CAS Nr.
	Chloromethane	74-87-3
▶	3-Chloro-2-methyl-1-propene	563-47-3
▶	3-Chloropropionitrile	542-76-7
	Chromium [f]	*
	Cobalt [f]	*
	Copper [f]	*
	Cresol [b,h]	1319-77-3
	m-Cresol [b]	108-39-4
	o-Cresol [b]	95-48-7
	p-Cresol [b]	106-44-5
▶	Crotonaldehyde	4170-30-3
	Cumene	98-82-8
	Cumene hydroperoxide	80-15-9
	Cyanides [i]	*
	Cyclohexane	110-82-7
▶	Cyclohexanol	108-93-0
	Decabromodiphenyl oxide	1163-19-5
	2,4-Diaminotoluene [b]	95-80-7
▶	2,6-Di-t-butyl-4-methylphenol	128-37-0
	Dibutyl phthalate	84-74-2
	o-Dichlorobenzene	95-50-1
	p-Dichlorobenzene	106-46-7
▶	3,3'-Dichlorobenzidine dihydrochloride	612-83-9
	1,2-Dichloroethane	107-06-2
	Dichloromethane	75-09-2
	2,4-Dichlorophenol [b]	120-83-2
	1,2-Dichloropropane	78-87-5
▶	Dicyclopentadiene	77-73-6
	Diethanolamine [b]	111-42-2
	Diethyl phthalate	84-66-2
	Diethyl sulphate	64-67-5
▶	Dimethylamine	124-40-3
	N,N-Dimethylaniline [b]	121-69-7
▶	Dimethyl phenol	1300-71-6
	Dimethyl phthalate	131-11-3
	Dimethyl sulphate	77-78-1
	4,6-Dinitro-o-cresol [b]	534-52-1
	2,4-Dinitrotoluene	121-14-2
	2,6-Dinitrotoluene	606-20-2
	Dinitrotoluene [h]	25321-14-6
	Di-n-octyl phthalate	117-84-0
	1,4-Dioxane	123-91-1
▶	Diphenylamine	122-39-4
	Epichlorohydrin	106-89-8
	2-Ethoxyethanol	110-80-5
	2-Ethoxyethyl acetate	111-15-9
▶	Ethoxynonyl benzene	28679-13-2
	Ethyl acrylate	140-88-5
	Ethylbenzene	100-41-4
	Ethyl chloroformate	541-41-3
	Ethylene	74-85-1
	Ethylene glycol	107-21-1
	Ethylene oxide	75-21-8
	Ethylene thiourea	96-45-7
▶	Fluorine	7782-41-4
	Formaldehyde	50-00-0
▶	Formic acid	64-18-6
▶	Halon 1211	353-59-3
▶	Halon 1301	75-63-8
▶	HCFC-22	75-45-6
▶	HCFC-122 and all isomers [j]	41834-16-6
▶	HCFC-123 and all isomers [k]	34077-87-7
▶	HCFC 124 and all isomers [l]	63938-10-3
▶	HCFC-141b	1717-00-6
▶	HCFC-142b	75-68-3
	Hexachlorocyclopentadiene	77-47-4
	Hexachloroethane	67-72-1
▶	Hexachlorophene	70-30-4
▶	Hexane	110-54-3
	Hydrazine [b]	302-01-2
	Hydrochloric acid	7647-01-0
	Hydrogen cyanide	74-90-8
	Hydrogen fluoride	7664-39-3
▶	Hydrogen sulphide	7783-06-4
	Hydroquinone [b]	123-31-9
▶	Iron pentacarbonyl	13463-40-6
	Isobutyraldehyde	78-84-2
▶	Isophorone diisocyanate	4098-71-9
▶	Isoprene	78-79-5
	Isopropyl alcohol	67-63-0
	p,p'-Isopropylidenediphenol	80-05-7
	Isosafrole	120-58-1
	Lead [f]	*
▶	Lithium carbonate	554-13-2
	Maleic anhydride	108-31-6
	Manganese [f]	*
▶	2-Mercaptobenzothiazole	149-30-4
	Mercury [f]	*
	Methanol	67-56-1
	2-Methoxyethanol	109-86-4
	2-Methoxyethyl acetate	110-49-6
	Methyl acrylate	96-33-3
	Methyl *tert*-butyl ether	1634-04-4
	p,p'-Methylene*bis*(2-chloroaniline)	101-14-4
▶	1,1-Methylene*bis*(4-isocyanatocyclohexane)	5124-30-1
	Methylene*bis*(phenylisocyanate)	101-68-8
	p,p'-Methylenedianiline	101-77-9
	Methyl ethyl ketone	78-93-3
	Methyl iodide	74-88-4
	Methyl isobutyl ketone	108-10-1
	Methyl methacrylate	80-62-6
▶	N-Methylolacrylamide	924-42-5
▶	2-Methylpyridine	109-06-8
▶	N-Methyl-2-pyrrolidone	872-50-4
	Michler's ketone [b]	90-94-8
	Molybdenum trioxide	1313-27-5
	Naphthalene	91-20-3
	Nickel [f]	*
	Nitrate ion [m]	*
	Nitric acid	7697-37-2
	Nitrilotriacetic acid [b]	139-13-9
▶	*p*-Nitroaniline	100-01-6
	Nitrobenzene	98-95-3
	Nitroglycerin	55-63-0
	p-Nitrophenol [b]	100-02-7
	2-Nitropropane	79-46-9
	N-Nitrosodiphenylamine	86-30-6
▶	Nonylphenol	104-40-5
▶	Nonylphenol hepta(oxyethylene) ethanol	27177-05-5
▶	Nonylphenol, industrial	84852-15-3
▶	Nonylphenol nona(oxyethylene) ethanol	27177-08-8
▶	*n*-Nonylphenol [h]	25154-52-3
▶	Nonylphenol polyethylene glycol ether	9016-45-9
▶	*p*-Nonylphenol polyethylene glycol ether	26027-38-3
▶	Nonylphenoxy ethanol	27986-36-3
▶	2-(*p*-Nonylphenoxy) ethanol	104-35-8
▶	2-(2-(*p*-Nonylphenoxy)ethoxy) ethanol	20427-84-3
▶	2-(2-(2-(2-(*p*-Nonylphenoxy) - ethoxy)ethoxy)ethoxy) ethanol	7311-27-5
▶	Paraldehyde	123-63-7
▶	Pentachloroethane	76-01-7
	Peracetic acid [b]	79-21-0
	Phenol [b]	108-95-2
	p-Phenylenediamine [b]	106-50-3
	o-Phenylphenol [b]	90-43-7
	Phosgene	75-44-5
	Phosphoric acid	7664-38-2
	Phosphorus [n]	7723-14-0
	Phthalic anhydride	85-44-9
▶	Potassium bromate	7758-01-2
▶	Propargyl alcohol	107-19-7
	Propionaldehyde	123-38-6
	Propylene	115-07-1
	Propylene oxide	75-56-9
	Pyridine [b]	110-86-1
	Quinoline [b]	91-22-5
	p-Quinone	106-51-4
	Safrole	94-59-7
	Selenium [f]	*
	Silver [f]	*
▶	Sodium fluoride	7681-49-4
▶	Sodium nitrite	7632-00-0
	Styrene	100-42-5
	Styrene oxide	96-09-3
▶	Sulphur hexafluoride	2551-62-4
	Sulphuric acid	7664-93-9
▶	1,1,1,2-Tetrachloroethane	630-20-6
	1,1,2,2-Tetrachloroethane	79-34-5
	Tetrachloroethylene	127-18-4
▶	Tetracycline hydrochloride	64-75-5
▶	Tetraethyl lead	78-00-2
	Thiourea	62-56-6
	Thorium dioxide	1314-20-1
	Titanium tetrachloride	7550-45-0
	Toluene	108-88-3
	Toluene-2,4-diisocyanate	584-84-9
	Toluene-2,6-diisocyanate	91-08-7
	Toluenediisocyanate [h]	26471-62-5
	1,2,4-Trichlorobenzene	120-82-1
	1,1,2-Trichloroethane	79-00-5
	Trichloroethylene	79-01-6
▶	Triethylamine	121-44-8
	1,2,4-Trimethylbenzene	95-63-6
▶	2,2,4-Trimethylhexamethylene diisocyanate	16938-22-0
▶	2,4,4-Trimethylhexamethylene diisocyanate	15646-96-5
	Vanadium [c]	7440-62-2
	Vinyl acetate	108-05-4
	Vinyl chloride	75-01-4
	Vinylidene chloride	75-35-4
	Xylene [h]	1330-20-7
	Zinc [f]	*

▶ New substance added in 1999

* No single CAS number applies to this NPRI listing.

a CAS Registry Number denotes the Chemical Abstracts Service Registry Number, as appropriate.

b "and its salts" – The CAS number corresponds to the weak acid or base. However, the NPRI listing includes the salts of these weak acids and bases. When calculating the weight of these substances and their salts, use the molecular weight of the acid or base, not the total weight of the salt.

c "fume or dust"

d "fibrous forms"

e "Ammonia (total)" means the total of both of ammonia (NH_3 – CAS number 7664-41-7) and the ammonium ion (NH_4^+) in solution.

f "and its compounds"

g "friable form"

h "mixed isomers"

i "ionic"

j The isomers include, but are not necessarily limited to, HCFC-122 (CAS Number 354-21-2).

k The isomers include, but are not necessarily limited to, HCFC-123 (CAS Number 306-83-2) and HCFC 123a (CAS Number 90454-18-5).

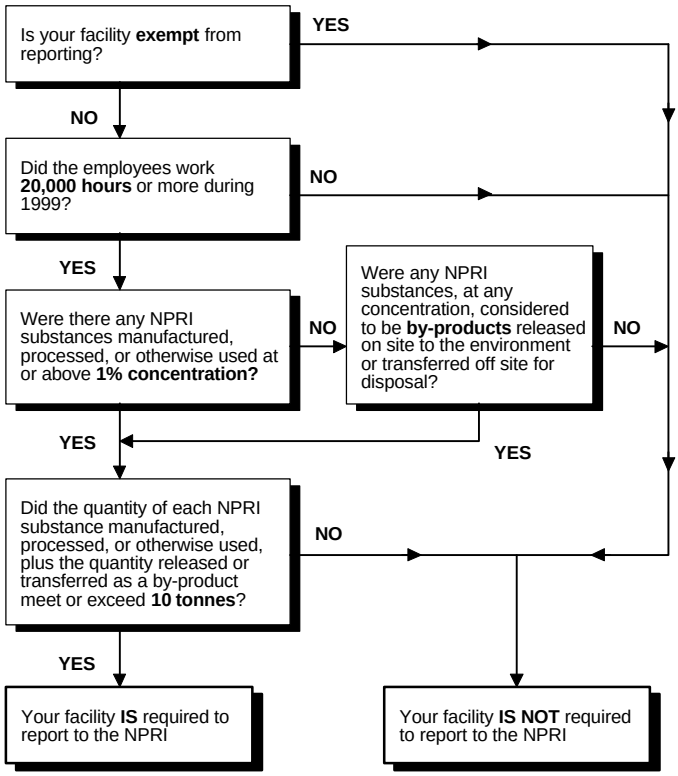
l The isomers include, but are not necessarily limited to, HCFC 124 (CAS Number 2837-89-0), and HCFC 124a (CAS Number 354-25-6).

m "in solution at a pH of 6.0 or greater"

n "yellow or white"

How do we file a report?

Review the reporting criteria:



If you have indicated on the reply form that you may be required to report, you will receive a reporting kit which includes: a CD-ROM or diskette containing the electronic reporting form; and a reporting guide. The guide includes: explanations of the criteria and reporting requirements in more detail; guidance on how to calculate the reporting threshold; and instructions for completing the electronic reporting form.

Requesting a reporting kit does not legally bind you to submit a report. If, upon further examination of the information in the guide, you determine that you are not required to report, you should advise Environment Canada of this fact. However, if your facility **does** meet the reporting criteria, you **must** submit a report.

NOTES

Please complete the enclosed reply form and send it to your nearest Environment Canada office. If you have any questions, or require further information, please contact the regional NPRI office at the following address:

National Pollutant Release Inventory
Environment Canada
4th Floor
105 McGill Street
Montreal, Quebec
H2Y 2E7

Tel: (514) 283-0193
Fax: (514) 496-6982
eMail: Chantal.menard@ec.gc.ca

Information about the NPRI is available on the Internet, including an on-line version of the reporting guide, downloadable data, and proposals for modifying the NPRI. Please consult the World Wide Web site at:

www.ec.gc.ca/pdb/npri

NPRI REPLY FORM

Please complete this reply form and return it to your nearest Environment Canada office:

National Pollutant Release Inventory
Environment Canada
105 McGill Street, 4th Floor
Montreal, Quebec
H2Y 2E7

Tel: (514) 283-0193
Fax: (514) 496-6982
eMail: Anne-Marie.Carter@ec.gc.ca

Company Name: _____

Facility Name: _____

Address: _____

City/Town: _____ Province: _____ Postal Code: _____

Contact Name: _____ Position: _____

Telephone / Fax: _____ / _____ e-mail: _____

Nature of Business: _____

❑ **YES,** we may be required to report for 1999. Please send a reporting kit to the above address.

Preferred media:

- ❑ CD-ROM (MS DOS & Windows 95/98/NT)
- ❑ 3½" Diskette (MS-DOS) ❑ 3½" Diskette (Windows 95/98/NT)

❑ **NO,** our facility is not required to report (check ☑ all that apply) :

Our facility is exempt from reporting, because we are **exclusively** involved in (check ☑ one) :

- ❑ educating or training students.
- ❑ research or testing.
- ❑ the maintenance and repair of transportation vehicles.
- ❑ the wholesale or retail sale of articles or products which contain NPRI substances, or the retail sale of NPRI substances themselves. These substances are **not** released to the environment during normal use at our facility.
- ❑ growing, harvesting or managing renewable natural resources.
- ❑ mining, and we do **not** engage in further processing of mined materials.
- ❑ drilling or operating wells to obtain oil and gas products, and we do **not** engage in further processing of these products.
- ❑ the distribution, storage or retail sale of fuels.

We do **not** meet the reporting criteria (check ☑ ALL that apply) :

- ❑ Our employees have **not** worked a total of **20 000 hours** or more during the 1999 calendar year.
- ❑ We had NPRI substances on site in 1999, but we did **not** manufacture, process or otherwise use **10 tonnes** or more of any of these substances, **including by-products** at any concentration.
- ❑ We did not have NPRI substances on site in 1999
- ❑ NPRI substances were **not** manufactured, processed or otherwise used at a concentration greater than or equal to **1%** by weight, **nor** were **by-products** manufactured, processed or otherwise used at any concentration in 1999.

Thank you for your reply. Environment Canada may contact you to confirm this information