



National Pollutant Release Inventory

Changes for 2003

Disclaimer: This handout was developed to assist existing reporters understand the changes made for the 2003 reporting year. For the complete reporting requirements, refer to the **Notice with Respect to Substances in the National Pollutant Release Inventory for 2003**, published on January 4, 2003 and subsequent amendment.

Summary of changes for the 2003 reporting year

1. New Substances

- Carbonyl sulphide has been added as a Part 1 substance with 10 tonne and 1% concentration reporting threshold.
- Phosphorus (total) has been added as a Part 1 substance with 10 tonne and 1% concentration reporting threshold. This does not include "phosphorus (yellow or white)" which is listed separately.
- 13 individually listed nonylphenols and ethoxylates have been replaced by "Nonylphenol and its ethoxylates" (this grouping includes additional nonylphenols, ethoxylates and derivatives in addition to the 13 listed in 2002).
- 4-*tert*-octylphenol has been replaced with "Octylphenol and its ethoxylates" (this grouping includes additional octylphenols and ethoxylates not listed in 2002).
- 60 selected Volatile Organic Compound (VOC) species with additional reporting criteria have been added under Part 5 with a 1 tonne reporting threshold.

2. Exemption Change for Oil and Gas Sector

- The exemption from reporting for the Upstream Oil and Gas sector has changed. Only exploration and drilling activity remains exempt. More detailed information is available in the document titled "2003 NPRI Reporting Requirements for the Oil & Gas Sector". Copies can be obtained from your regional NPRI Office.

3. Basis of Estimate

- "Monitoring or Direct Measurement" has been replaced by Continuous Emission Monitoring (CEM), Predictive Emission Monitoring (PEM), and Source Testing.
- "Emission Factors" has been replaced by Site Specific Emission Factor and Published Emission Factor.

4. Facility Information

- The Business Number is now required. Business Numbers (9 digit registration number) can be found on all forms issued to a business by Canada Customs and Revenue Agency.
- Definition of facility now includes "offshore installations" as well as pipeline installations and contiguous facilities.

5. Guidance Material

- For the 2003 Reporting Year, the Guidance Material has been organized into the following documents:
 - Guide for Reporting to the NPRI 2003: This guide outlines the 2003 reporting requirements including Criteria Air Contaminants (CACs) and speciation of Volatile Organic Compounds (VOCs).
 - The NPRI Toolbox: This on-line resource will contain examples, case studies, flowcharts, spreadsheets and other tools that will assist reporters with their calculations.
 - A flowchart depicting the reporting of VOC (Part 4 substance) and Speciated VOCs (Part 5 substances) will be available in the Guide for Reporting to the NPRI 2003 and in the NPRI Toolbox.
 - The NPRI Software Guide.
 - NPRI Guidance Manual for the Wastewater Sector.
 - Wood Preservation Guide

Addition of 60 individual Volatile Organic Compounds (VOCs)

Volatile Organic Compounds (VOCs) are an aggregate grouping of almost 1000 organic substances that readily volatilize. VOC species of interest to the NPRI are those that contribute to the formation of ground-level ozone and secondary particulate matter. Environment Canada has identified a list of 60 individual VOCs that will require reporting to the NPRI starting with the 2003 reporting year. These VOCs have been grouped as Part 5 substances and are listed below.

Part 5 VOC reporting requirement

Part 5 VOC reporting only needs to be considered by facilities that meet the 10-tonne air-release threshold for VOCs (Part 4 substance). If a facility meets the 10-tonne VOC release threshold, it must report for all the VOCs listed below that are released to air in a quantity greater than or equal to 1 tonne. Reporting of Part 5 substances are broken down into releases from stacks and other sources.

For more information on the NPRI visit our website at: www.ec.gc.ca/npri or call your regional NPRI office. For information on substances, visit the Canada Gazette notice in the NPRI website at: www.ec.gc.ca/pdb/npri/npri_cgaz_e.cfm

The deadline for submitting a 2003 NPRI report is June 1, 2004

**NPRI Part 5 Substances
Speciated VOC Substance List**

Name	CAS No. ¹		
Acetylene	74-86-2	D-Limonene	5989-27-5
Adipic Acid	124-04-9	Methanol	67-56-1
Aniline ²	62-53-3	Methyl ethyl ketone	78-93-3
Benzene	71-43-2	2-Methyl-3-hexanone	7379-12-6
1,3-Butadiene	106-99-0	Methyl isobutyl ketone	108-10-1
2-Butoxyethanol	111-76-2	Myrcene	123-35-3
n-Butyl acetate	123-86-4	Beta-Phellandrene	555-10-2
Chlorobenzene	108-90-7	Phenyl isocyanate	103-71-9
p-Dichlorobenzene	106-46-7	Alpha-Pinene	80-56-8
1,2-Dichloroethane	107-06-2	Beta-Pinene	127-91-3
Dimethylether	115-10-6	Propane	74-98-6
Ethyl alcohol	64-17-5	Propylene	115-07-1
Ethyl acetate	141-78-6	Styrene	100-42-5
Ethylene	74-85-1	1,2,4-Trimethylbenzene	95-63-6
Formaldehyde	50-00-0	Trimethylfluorosilane	420-56-4
n-Hexane	110-54-3	Toluene	108-88-3
Isopropyl alcohol	67-63-0	Vinyl acetate	108-05-4

Isomer Groups

Name	CAS No. ¹		
Anthraquinone ³	*	Nonane ³	*
Butane ³	*	Octane ³	*
Butene ³	25167-67-3	Pentane ³	*
Cycloheptane ³	*	Pentene ³	*
Cyclohexene ³	*	Terpene ³	68956-56-9
Cyclooctane ³	*	Trimethylbenzene ⁵	25551-13-7
Decane ³	*	Xylene ³	1330-30-7
Dihydronaphthalene ³	*		
Dodecane ³	*		
Heptane ³	*		
Hexane ⁴	*		
Hexene ³	25264-93-1		
Methylindan ³	27133-93-3		

Other Groups and Mixtures

Name	CAS No. ¹
Creosote	8001-58-9
Heavy aromatic solvent naphtha	64742-94-5
Light aromatic solvent naphtha	64742-95-6
Mineral spirits	64475-85-0
Naphtha	8030-30-6
Stoddard solvent	8052-41-3

* No single CAS number applies to this NPRI listing.

1 CAS Registry Number denotes the Chemical Abstracts service Registry Number, as appropriate.

2 "and its salts" – The CAS number corresponds to the weak acid or base. However, the substance 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.

3 "all isomers"

4 "all isomers", excluding n-hexane (CAS No. 110-54-3)

5 "all isomers", excluding 1,2,4-trimethylbenzene (CAS No. 95-63-64)