

## **The Proposed Toxics Reduction Act Planned Consultations And Next Steps**

April 7, 2009

Bill 167, the proposed Toxic Reduction Act, 2009, was introduced to the Ontario Legislature on April 7, 2009. The Bill, if enacted, would provide regulation-making authority to the Lieutenant-Governor in Council (LGIC) in a number of areas.

In developing the Toxics Reduction Strategy, the Ontario government consulted with stakeholders and the public during the Fall of 2008, through the [Discussion Paper](#) that was posted on the Environmental Registry and through a series of regional forums and meetings.

The Ministry of the Environment will work to ensure these past consultations concerning specific substances, facilities to be regulated, and implementation timelines are taken into consideration during the development of regulations. Draft regulations under the Bill would be subject to further consultation with stakeholders and the public and would be posted on the Environmental Registry for comment. The description provided below provides some detail regarding what the draft regulations might include, should the Bill be passed, and is intended to provide the context needed to facilitate review and comment on the proposed Bill.

### **Defining Sectors and Thresholds: Who would be regulated under the Bill?**

If section 3 of the Bill is enacted, a facility would be subject to the toxics reduction planning requirements of the legislation if they meet the following criteria (1) the facility belongs to a class of facility (sector) prescribed by the regulations, (2) the number of persons prescribed at the facility meets the number of persons prescribed by the regulations, (3) a toxic substance is used or created at the facility and the amounts of the substance used or created meet the criteria specified by the regulations, and (4) any other criteria prescribed by the regulations.

### **Below is a description of the proposed content of such regulations:**

#### Class of facilities (Sectors):

Draft regulations would prescribe classes of facilities that fall within the manufacturing sector, as well as those in the mining sector engaged in mineral processing activities. These two sectors combined account for the bulk of the total releases of the toxic substances reportable to the Federal National Pollutant Release Inventory (NPRI). These sectors are proposed to be prescribed in regulations.

### Thresholds for a substance:

Draft regulations would define toxic substances thresholds to be the same as thresholds in effect for the federal NPRI (i.e., 10,000 kg, or an alternate threshold under NPRI if applicable). This approach would reduce duplication of efforts by facilities currently reporting under NPRI.

### Thresholds for number of employees:

Draft regulations are also anticipated to follow the NPRI threshold (and its exceptions), for the minimum number of employees at subject facilities. NPRI requirements apply to facilities that have a minimum of 10 full time equivalents or more. This would maintain consistency with NPRI and provide clarity for the regulated community.

### Timing:

It is anticipated that regulations would prescribe that the list of toxic substances subject to the requirements of the Bill would come into effect in two phases (see below, "Prescribing toxic substances and substances of concern"). If the Bill is passed and regulations are made, facilities subject to the toxics reduction planning requirements in the proposed legislation would be required to undertake toxics substance accounting for Phase I substances in accordance with section 9 for the period of January 1, 2010 to December 31, 2010; to provide their first report under section 10 on June 1, 2011 and to provide a summary of their first toxics reduction plan under section 8 by December 31, 2011.

This timing would maintain consistency with NPRI reporting timelines, thereby reducing administrative burden on the regulated community. The timing of the application of the requirements to the second phase of implementation would be determined during consultations on draft regulations. The Ministry is considering suggesting that the second phase would start two years after the first phase.

It is anticipated that draft regulations would propose that facilities be required to prepare reports on an annual basis (frequency of reporting to be reviewed after one full cycle of data has been collected) and review their toxics reduction plans every five years.

### **Prescribing toxic substances and substances of concern:**

A list of toxic substances and a list of substances of concern have been proposed by scientific experts from the government, in consultation with the Minister of the Environment's Toxics Reduction Scientific Expert Panel. It is anticipated that draft regulations would prescribe these lists for the purposes of the Bill, if it is passed. These proposed lists are attached. The proposed List of Toxics is the same as that posted in the Discussion Paper for consultation; the lists described in that document as Schedules 1 and 2 are now referred to as the List of Toxics Phase I and Phase II, respectively. The ministry used a science-based approach that evaluated relative-risk and hazard to identify 31 priority toxics; as well, 14 known and probable priority carcinogens were supported by Cancer Care Ontario, for Phase I of the strategy. In Phase II, the remainder of the NPRI substances and acetone (adopted from *O. Reg 127*) would become subject to the requirements of the legislation, if it is passed.

Some changes to the proposed List of Substances of Concern, also anticipated to be prescribed for Phase I (and previously referred to as Schedule 3 in the Discussion Paper) were made to reflect comments received during consultation.

## **Facilities using or creating substances of concern:**

While the proposed List of Toxic Substances contains substances tracked through the NPRI, substances on the proposed List of Substances of Concern are not tracked by NPRI. This means that their releases in Ontario are less well known and it is more difficult to understand the potential risks associated with them. The purpose of the list of Substances of Concern is to determine who uses these substances and how they are used in Ontario. Draft regulations are expected to propose that facilities in Ontario using or creating these substances be subject to new, one-time, reporting requirements.

### Class of facilities:

Draft regulations are expected to propose that the application of requirements for facilities using Substances of Concern apply to all sectors, but that the application of the first list of Substances of Concern be limited to facilities in the manufacturing sector and those undertaking mineral processing activities within the mining sector. Starting with the manufacturing and mineral processing sectors is consistent with the application of other requirements under the Bill. The potential to expand the application of requirements to other sectors reflects the fact that these sectors may not be the major users of the substances of concern.

### Amount of a substance:

It is anticipated that regulations would propose that lower thresholds be applied to substances of concern than for toxic substances because there is so little existing data on the use and creation of these substances in Ontario. It is anticipated that draft regulations would initially propose a reporting threshold of 100 kilograms. This would match the federal reporting requirements under Section 71 of the Canadian Environmental Protection Act, 1999.

### Number of employees:

Again, because there is so little existing data on the Substances of Concern, it is anticipated that regulations would propose no minimum threshold on the number of employees that a facility must have to be subject to the requirements of the Bill related to Substances of Concern.

In addition to the areas described above, consultations in the following areas, among others, would likely be undertaken soon:

- The timing, preparation, review, and contents of toxic substance reduction plans, plan summaries, reports on plans and reports, where appropriate
- Toxics substances accounting
- The qualifications that a person must have to certify a toxics reduction plan
- The timing, preparation and contents of reports regarding substances of concerns
- Administrative penalties, and
- The creation, maintenance, retention, and availability of records.

The Ministry will continue to engage stakeholders on issues that would inform the development of the draft regulations.

## PROPOSED LIST OF TOXIC SUBSTANCES

This list is intended to facilitate meaningful consultation on the proposed Toxics Reduction Act, 2009. The list of substances would be finalized in consultation with stakeholders and the public, and prescribed in a regulation pending enactment of the Bill.

### PHASE 1

Substance	CAS Number <sup>1</sup>
<b>PRIORITY TOXICS</b>	
Aluminum (fume dust)	7429-90-5
Arsenic and compounds	**
Biphenyl	92-52-4
Cadmium and compounds	**
Chlorine	7782-50-5
Chromium and compounds	**
Hexavalent Chromium and compounds	**
Cobalt and compounds	**
Copper and compounds	**
Cyanides	57-12-5
Dichloroethane-1,2	107-06-2
Ethylbenzene	100-41-4
Formaldehyde	50-00-0
Hexachlorobenzene	118-74-1
Hydrochloric acid	7647-01-0
Lead and compounds	**
Manganese and compounds	**
Mercury and compounds	**
Methanol	**
Nickel and compounds	**
Phenol	108-95-2
Selenium and compounds	**
Silver and compounds	**
Tetrachloroethylene	127-18-4
Toluene	108-88-3
Total PAHs <sup>2</sup>	***
Triethylamine	121-44-8
Vanadium and its compounds (except when in its alloy)	7440-62-2
Vinyl Chloride	75-01-4
Xylene	1330-20-7
Zinc and compounds	**
<b>PRIORITY CARCINOGENS</b>	
4,4'-methylenebis(2-chloroaniline)	101-14-4
Acrylamide	79-06-1
Asbestos	1332-21-4
Benzene	71-43-2
Butadiene 1,3 -	106-99-0
Chlorinated toluenes (Benzoyl chloride and Benzyl chloride)	100-44-7, 98-88-4
Creosote	8001-58-9
Dioxins and Furans <sup>3</sup>	*
Epichlorohydrin	106-89-8
Ethylene Oxide	75-21-8
Styrene Oxide	96-09-3
Sulfuric Acid	7664-93-9
Thorium Dioxide	1314-20-1
Trichloroethylene	79-01-6

<sup>1</sup> Chemical Abstract Service (CAS) number defined by the National Pollutant Release Inventory (NPRI), 2006. Reporting requirement: the pure metal of any substance, metal or alloy as the equivalent weight of the metal itself. Lead and compounds does not include tetraethyl lead or when contained in stainless steel, brass or bronze alloys.

<sup>2</sup> Includes seventeen (17) congeners as defined by the NPRI, 2006

<sup>3</sup> Total PAHs (polyaromatic hydrocarbons) reported under the NPRI, 2006

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### PHASE 2

Substance	CAS Number <sup>1</sup>
1,1,1,2-Tetrachloroethane	630-20-6
1,1,2,2-Tetrachloroethane	79-34-5
1,1,2-Trichloroethane	79-00-5
1,1-Methylenebis(4-isocyanatocyclohexane)	5124-30-1
1,2,4-Trichlorobenzene	120-82-1
1,2,4-Trimethylbenzene	95-63-6
1,2-Butylene oxide	106-88-7
1,2-Dichloropropane	78-87-5
1,4-Dioxane	123-91-1
1-Bromo-2-chloroethane	107-04-0
2,2,4-Trimethylhexamethylene diisocyanate	16938-22-0
2,4,4-Trimethylhexamethylene diisocyanate	15646-96-5
2,4-Diaminotoluene	95-80-7
2,4-Dichlorophenol	120-83-2
2,4-Dinitrotoluene	121-14-2
2,6-Dinitrotoluene	606-20-2
2,6-Di- <i>t</i> -butyl-4-methylphenol	128-37-0
2-Butoxyethanol	111-76-2
2-Ethoxyethanol	110-80-5
2-Ethoxyethyl acetate	111-15-9
2-Mercaptobenzothiazole	149-30-4
2-Methoxyethanol	109-86-4
2-Methoxyethyl acetate	110-49-6
2-Methyl-3-hexanone	
2-Methylpyridine	109-06-8
2-Nitropropane	79-46-9
3,3'-Dichlorobenzidine dihydrochloride	612-83-9
3-Chloro-2-methyl-1-propene	563-47-3
3-Chloropropionitrile	542-76-7
4,6-Dinitro- <i>o</i> -cresol	534-52-1
Acetaldehyde	75-07-0
Acetone	67-64-1
Acetonitrile	75-05-8
Acetophenone	98-86-2
Acetylene	74-86-2
Acrolein	107-02-8

<sup>1</sup> Chemical Abstract Service (CAS) number defined by the National Pollutant Release Inventory (NPRI), 2006. Reporting requirement: the pure metal of any substance, metal or alloy as the equivalent weight of the metal itself. Lead and compounds does not include tetraethyl lead or when contained in stainless steel, brass or bronze alloys.

Acrylic acid	79-10-7
Acrylonitrile	107-13-1
Adipic acid	124-04-9
Alkanes, C <sub>10-13</sub> , chloro	85535-84-8
Alkanes, C <sub>6-18</sub> , chloro	68920-70-7
Allyl alcohol	107-18-6
Allyl chloride	107-05-1
Alpha-Pinene	80-56-8
Aluminum oxide	1344-28-1
Ammonia (total)	
Aniline	62-53-3
Aniline	65-53-3
Anthraquinone	
Antimony	
Benzoyl peroxide	94-36-0
Beta-Phellandrene	555-10-2
Beta-Pinene	127-91-3
<i>Bis</i> (2-ethylhexyl) adipate	103-23-1
<i>Bis</i> (2-ethylhexyl) phthalate	117-81-7
Boron trifluoride	
Bromine	7726-95-6
Bromomethane	74-83-9
Butane	
Butene	25167-67-3
Butyl acrylate	141-32-2
Butyl benzyl phthalate	85-68-7
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
Calcium cyanamide	156-62-7
Calcium fluoride	7789-75-5
Carbon disulphide	75-15-0
Carbon monoxide	630-08-0
Carbon tetrachloride	56-23-5
Carbonyl sulphide	463-58-1
Catechol	120-80-9
CFC-11	75-69-4
CFC-114	76-14-2
CFC-115	76-15-3
CFC-12	75-71-8
CFC-13	75-72-9

Chlorendic acid	115-28-6
Chlorine dioxide	10049-04-4
Chloroacetic acid	79-11-8
Chlorobenzene	108-90-7
Chloroethane	75-00-3
Chloroform	67-66-3
Chloromethane	74-87-3
Cresol	1319-77-3
Crotonaldehyde	4170-30-3
Cumene	98-82-8
Cumene hydroperoxide	80-15-9
Cycloheptane	
Cyclohexane	110-82-7
Cyclohexanol	108-93-0
Cyclohexene	
Cyclooctane	
Decabromodiphenyl oxide	1163-19-5
Decane	
Dibutyl phthalate	84-74-2
Dichloromethane	75-09-2
Dicyclopentadiene	77-73-6
Diethanolamine	111-42-2
Diethyl phthalate	84-66-2
Diethyl sulphate	64-67-5
Diethylene glycol butyl ether	112-34-5
Diethylene glycol ethyl ether acetate	112-15-2
Dihydronaphthalene	
Dimethyl phenol	1300-71-6
Dimethyl phthalate	131-11-3
Dimethyl sulphate	77-78-1
Dimethylamine	124-40-3
Dimethylether	115-10-6
Dinitrotoluene	25321-14-6
Di- <i>n</i> -octyl phthalate	117-84-0
Diphenylamine	122-39-4
D-Limonene	5989-27-5
Dodecane	
Ethyl acetate	141-78-6
Ethyl acrylate	140-88-5
Ethyl alcohol	64-17-5
Ethyl chloroformate	541-41-3
Ethylene	74-85-1
Ethylene glycol	107-21-1
Ethylene glycol butyl ether acetate	112-07-2
Ethylene glycol hexyl ether	112-25-4
Ethylene thiourea	96-45-7
Fluorine	7782-41-4

Formic acid	64-18-6
Furfuryl alcohol	98-00-0
Halon 1211	353-59-3
Halon 1301	75-63-8
HCFC 124 and all isomers	63938-10-3
HCFC-122 and all isomers	41834-16-6
HCFC-123 and all isomers	34077-87-7
HCFC-141b	1717-00-6
HCFC-142b	75-68-3
HCFC-22	75-45-6
Heavy alkylate naptha	64741-65-7
Heavy aromatic solvent naphtha	64742-94-5
Heptane	
Hexachlorocyclopentadiene	77-47-4
Hexachloroethane	67-72-1
Hexachlorophene	70-30-4
Hexane	
Hexene	25264-93-1
Hydrazine	302-01-2
Hydrogen cyanide	74-90-8
Hydrogen fluoride	7664-39-3
Hydrogen sulphide	
Hydroquinone	123-31-9
Hydrotreated heavy naptha	64742-48-9
Hydrotreated light distillate	64742-47-8
<i>i</i> -Butyl alcohol	78-83-1
Iron pentacarbonyl	13463-40-6
Isobutyraldehyde	78-84-2
Isophorone diisocyanate	4098-71-9
Isoprene	78-79-5
Isopropyl alcohol	67-63-0
Isosafrole	120-58-1
Light aromatic solvent naphtha	64742-95-6
Lithium carbonate	554-13-2
Maleic anhydride	108-31-6
Methyl acrylate	96-33-3
Methyl ethyl ketone	78-93-3
Methyl iodide	74-88-4
Methyl isobutyl ketone	108-10-1
Methyl methacrylate	80-62-6
Methyl <i>tert</i> -butyl ether	1634-04-4
Methylene <i>bis</i> (phenylisocyanate)	101-68-8
Methylindan	27133-93-3
Michler's ketone	90-94-8
Mineral spirits	64475-85-0
Molybdenum trioxide	1313-27-5
Myrcene	123-35-3



N,N-Dimethylaniline	121-69-7
N,N-Dimethylformamide	68-12-2
Naphtha	8030-30-6
<i>n</i> -Butyl alcohol	71-36-3
<i>n</i> -Hexane	110-54-3
Nitrate ion	
Nitric acid	7697-37-2
Nitrilotriacetic acid	139-13-9
Nitrobenzene	98-95-3
Nitroglycerin	55-63-0
N-Methyl-2-pyrrolidone	872-50-4
N-Methylolacrylamide	924-42-5
N-Nitrosodiphenylamine	86-30-6
Nonane	
Nonylphenol and its ethoxylates	
Octane	
Octylphenol and its ethoxylates	
<i>o</i> -Dichlorobenzene	95-50-1
<i>o</i> -Phenylphenol	90-43-7
Oxides of nitrogen (expressed as NO <sub>2</sub> )	11104-93-1
<i>p,p'</i> -Isopropylidenediphenol	80-05-7
<i>p,p'</i> -Methylenedianiline	101-77-9
Paraldehyde	123-63-7
<i>p</i> -Dichlorobenzene	106-46-7
Pentachloroethane	76-01-7
Pentane	
Pentene	
Peracetic acid	79-21-0
Phenyl isocyanate	103-71-9
Phosgene	75-44-5
Phosphorus	7723-14-0
Phosphorus (total)	
Phthalic anhydride	85-44-9
PM <sub>10</sub>	
PM <sub>2.5</sub>	
<i>p</i> -Nitroaniline	100-01-6
<i>p</i> -Nitrophenol	100-02-7
Polymeric diphenylmethane diisocyanate	9016-87-9
Potassium bromate	
<i>p</i> -Phenylenediamine	106-50-3
<i>p</i> -Quinone	106-51-4
Propane	74-98-6
Propargyl alcohol	107-19-7
Propionaldehyde	123-38-6
Propylene	115-07-1
Propylene glycol butyl ether	5131-66-8
Propylene glycol methyl ether acetate	108-65-6

Propylene oxide	75-56-9
Pyridine	110-86-1
Quinoline	91-22-5
Safrole	94-59-7
<i>sec</i> -Butyl alcohol	78-92-2
Sodium fluoride	7681-49-4
Sodium nitrite	7632-00-0
Solvent naptha light aliphatic	64742-89-8
Solvent naptha medium aliphatic	64742-88-7
Stoddard solvent	8052-41-3
Styrene	100-42-5
Sulphur dioxide	
Sulphur hexafluoride	2551-62-4
Terpene	68956-56-9
<i>tert</i> -Butyl alcohol	75-65-0
Tetracycline hydrochloride	64-75-5
Tetraethyl lead	78-00-2
Tetrahydrofuran	109-99-9
Thiourea	62-56-6
Titanium tetrachloride	7550-45-0
Toluene-2,4-diisocyanate	584-84-9
Toluene-2,6-diisocyanate	91-08-7
Toluenediisocyanate	26471-62-5
Total particulate matter	
Trimethylbenzene	25551-13-7
Trimethylfluorosilane	420-56-4
Vinyl acetate	108-05-4
Vinylidene chloride	75-35-4
VM & P naptha	8032-32-4
Volatile organic compounds	
White mineral oil	8042-47-5

## PROPOSED LIST OF SUBSTANCES OF CONCERN

This list is intended to facilitate meaningful consultation on the proposed Toxics Reduction Act, 2009. The list of substances would be finalized in consultation with stakeholders and the public, and prescribed in a regulation pending enactment of the Bill.

### PHASE I

Substance	CAS Number
1,2,3,4-Tetrachlorobenzene	634-66-2
2,6-di-tert-butylphenol	128-39-2
2-Bromopropane	75-26-3
3,3'-Dimethylbenzidine	119-93-7
3,3'-dimethoxybenzidine	119-90-4
4,4'-methylene bis(o-ethylaniline)	19900-65-3
Barium lithol red	1103-38-4
Benzene, C10-16-alkyl derivatives	68648-87-3
Benzotriazole	25973-55-1
C.I. Pigment Yellow 36	37300-23-5
Carbendazim	10605-21-7
D&C red no. 9	5160-02-1
Dichloroethane, 1,1-	75-34-3
Dicumylperoxide	80-43-3
Di-isodecyl phthalate (DIDP)	26761-40-0
Hexachloro-1,3-butadiene	87-68-3
Pentachlorothiophenol	133-49-3
Tricresyl phosphate	1330-78-5
Triethanolamine	102-71-6