FIRST REPORT OF THE NATIONAL POLLUTANT RELEASE INVENTORY MULTI-STAKEHOLDER WORK GROUP ON SUBSTANCES (2003)

DRAFT FOR STAKEHOLDER REVIEW AND COMMENT

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This draft of the Work Group's first report summarizes the WG's current thinking on proposals and other issues relevant to the 2004 reporting year and beyond. WG members are now looking for input from other stakeholders to help inform their final positions, to be presented to EC in the form of a finalized report in October 2003. At its next meeting on September 15/16 in Halifax, the WG will review the feedback received on the current draft. To facilitate preparation for this meeting, please ensure that your comments are submitted to EC no later than Friday, **August 29, 2003**. Please send comments to:

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Table of Contents

1. INTRODUCTION 1

1.1 Background 1
1.2 Work Group Process 1
1.3 This Report 2

2. SUBSTANCE-SPECIFIC CHANGES 3

2.1 Thallium 3
2.2 Polychlorinated Biphenyls 4
2.3 Dioxins, Furans, and Hexachlorobenzene 6
2.4 *N*-Nitrosodimethylamine 7

3. ISSUES REFERRED TO SUBGROUPS 9

3.1 Introduction 9
3.2 Particulate Matter Speciation 9
3.3 Mining Exemption Review 10
3.4 Harmonization 10

4. OTHER ISSUES ARISING 13

4.1 Other Issues to be Considered by the WG 13
4.2 Other Information Items 14

Annex A: List of Current WG Members and Alternates (2003)

List of Acronyms

ATH	Alternate Threshold
CACs	Criteria Air Contaminants
CAS	Chemical Abstract Service
CEPA	*Canadian Environmental Protection Act*
CO	Carbon monoxide
CWS	Canada Wide Standards
EC	Environment Canada
ENGO	Environmental Non-Governmental Organization
EPWG	Emissions and Projections Working Group
GHGs	Greenhouse gases
HCB	Hexachlorobenzene
LoQ	Level of quantification
MPO	Manufactured, processed or otherwise used
MOE	Ontario Ministry of Environment
NDMA	N-nitrosodimethylamine
NGO	Non-governmental organization
NH_4	Ammonia
NO_3	Nitrate nitrogen
NPRI	National Pollutant Release Inventory
PCB	Polychlorinated Biphenyls
PM	Particulate matter
PRTR	Pollutant Release and Transfer Register
PSL	Priority Substances List
SG	Sub Group
SO_2	Sulphur dioxide
SO_4	Sulphates
TEQ	Toxic Equivalency (and I-TEQ is International Toxic Equivalency)
ToRs	Terms of Reference
TRI	Toxics Release Inventory (U.S.)
UNECE	United Nations Economic Commission for Europe
UNEP	United Nations Environment Programme
VOCs	Volatile organic compounds
WG	2003 NPRI Work Group on Substances
WHMIS	Workplace Hazardous Materials Information System
WHO	World Health Organization

1. INTRODUCTION

1.1 BACKGROUND

A permanent process for modifying the National Pollutant Release Inventory (NPRI) was adopted by Environment Canada (EC) in 2000.[1] This process is based on recommendations developed by members of the multi-stakeholder NPRI Ad Hoc Work Group on Substances (1998 to 2000), with input from other Canadian stakeholders.

Consultation with stakeholders on proposed changes to the NPRI is fundamental to the process. On an annual basis, EC is to notify the public of proposed changes (drawing from nominations that can be submitted by any party), and establish an appropriate consultation process for input on those proposed changes.

EC summarized the changes proposed for the 2003 reporting year in an April 2003 document titled *Multi-Stakeholder Consultations on Proposed Modifications to the National Pollutant Release Inventory*. Because of the scope and complexity of these proposed changes, a new NPRI Work Group on Substances (the WG), with a one-year mandate, was established. A list of current members of the WG is included as Annex A.

The current draft First Report from the WG to stakeholders presents the WG's views and recommendations on these proposed changes. Taking into account feedback from stakeholders, the WG will finalize this First Report and submit it to EC by October 31, 2003.

1.2 WORK GROUP PROCESS

Since the beginning of 2003, the WG as a whole has held one face-to-face meeting (of two-days duration) and one teleconference call (both in June). An additional meeting will be held in September to review and address the stakeholder feedback, followed by a last teleconference call in October to finalize this report.

To facilitate progress on the most significant of the proposed changes to the NPRI that it was mandated to address, the WG established three subgroups (SGs) in June 2003. The SGs were tasked with identifying key issues and developing preliminary recommendations for consideration by the main WG. These SGs have only begun their work, and as such, there are no preliminary options for the issues presented in this report (updates on this information can be expected in the final version of this report in October of this year, with subsequent final recommendations in WG reports for next year).

[1] The permanent process is fully described in a document available through the NPRI Office, or through the NPRI web site at http://www.ec.gc.ca/pdb/npri/npri_consult_e.cfm.

1.3 THIS REPORT

This report addresses the following topics:

- *Substance-specific changes*

  EC proposed some additions or listing changes, for the following substances: thallium, *N*-nitrosodimethylamine (NDMA), polychlorinated biphenyls (PCBs), and dioxins, furans and hexachlorobenzene. WG views and recommendations on these changes are addressed in Section 2.

- *Deferred Issues / Status of Sub-group work*

  Due to the complexities involved for some issues, work has been deferred from the main WG to sub-groups (SG) for the year, and the main WG will not be expected to formulate recommendations on these issues by October of this year (rather, it is expected that they will be carried forward for consideration by the next WG in 2004). It is likely that these issues will not affect the *Canada Gazette* notice for the 2004 NPRI reporting year, but SG work will progress intensely on these issues. The status / progress of SG work on PM Speciation, Review of the Mining Exemption, and Harmonization Issues will be presented in Section 3 of this report for stakeholder review and comment, although future WG reports will contain more detail on these issues.

- *Other issues arising*

  Section 4 of this report contains a status update on a number of issues that have been under consideration by the WG, but will likely not affect the *Canada Gazette* notice for the 2004 NPRI reporting year. It also contains some information items regarding upcoming changes to the NPRI reporting software, as well as items raised for future consideration.

2. SUBSTANCE-SPECIFIC CHANGES

2.1 THALLIUM

2.1.1 Background

Thallium is a metal that is easily and rapidly absorbed by ingestion, inhalation or through the skin. Large doses over short period can affect the nervous system, lung, heart, kidney and liver. Acute exposure can have a number of significant health effects, and can result in death. Chronic exposure is also associated with numerous potentially significant health effects in humans and animals.

Thallium is naturally present in the environment, but research has indicated that concentrations in the environment around some types of activities are elevated because of anthropogenic releases. Thallium is on the U.S. Toxics Release Inventory (TRI) and has met the U.S. EPA toxicity screening criteria. Based on information on releases reported to the U.S. TRI and EC, thallium is likely released to the Canadian environment primarily as a by-product from mining-smelting complexes, and coal-fired power plants, as well as from brick-works and cement plants that use thallium-enriched pyrite. Thallium is also used in manufacturing electronic devices, and has limited application in other industrial activities. While occupational exposure is a key concern, impacts on the health of nearby residents are also possible. EC presented an example of data from one Canadian mining facility, which showed that the airborne emission rate of thallium from one stack was 120 kg per year.

Data from the U.S. TRI indicate releases of thallium to air, land, and surface water. The Water Quality Guidelines of the Canadian Council of Ministers of the Environment (CCME) recommends a limit of 0.8µg/l for thallium (compared to other NPRI listed substances, such as lead at 1–7µg/l, and arsenic at 5.0µg/l).

2.1.2 The EC Proposal

EC is proposing to list thallium on the NPRI for the 2004 reporting year in order to: allow for monitoring releases of point sources; encourage voluntary action to reduce releases; allow tracking of progress in reducing releases and take action if necessary if releases increase. The EC proposal is to add thallium and its compounds at an alternate threshold (ATH) of 50 kg manufactured, processed or otherwise used (MPO) with a concentration limit of 1% (except for by-products), consistent with the WHMIS disclosure requirements for this substance. The expected number of reporters with the EC proposal is 23 coal fired power plants, 17 metal smelters and 16 cement manufacturers.

2.1.3 WG Views

Most WG members are concerned that the ATH Framework document is not yet complete, and that this is creates problems for the addition of substances at ATH, especially those that have not been assessed.

In light of the incomplete ATH framework, most industry members feel that adequate science-based justification for an ATH has not been provided, and that there is an absence of sufficient scientific evidence to conclude that thallium is as toxic as the other metals currently listed on the NPRI at an ATH. Industry members also question the plausible routes of exposure for this substance, which they believe are not clear in the submittal form.

In spite of the incomplete ATH framework, the environmental non-government organization (ENGO) members of the WG feel that the health issues associated with thallium releases provide a strong case for adding it at the proposed ATH.

There is consensus among all WG members about the need to add thallium to the NPRI. Industry members support adding thallium at the standard 10 tonne threshold. ENGOs support the proposed 50 kg ATH.

All WG members urge EC to move forward with the ATH framework. EC is also asked to provide additional information on the number of facilities and proportion of releases that would be captured under different thresholds.

2.2 POLYCHLORINATED BIPHENYLS

2.2.1 Background

Polychlorinated Biphenyls (PCBs) are a group of 209 halogenated aromatic hydrocarbons commercially used and sold in North America as mixtures of isomers (although they have never been manufactured in Canada). They are mainly used in electrical equipment in Canada, and current estimates include 40% in service, 15% destroyed, and 15% in storage, with 30% unaccounted for. Although there are current regulations at federal and provincial levels to manage transfer, storage, and treatment of PCBs, there is a concern regarding the amount that is incidentally released through processes such as emissions from waste incineration, releases from landfills or waste processing sites, leaks or releases from the operation, decommissioning, storage or transportation of equipment containing PCBs and also concerning the general releases of PCBs to the environment. In addition to both national and international commitments requiring the collection of PCB information, current federal regulations addressing the release of PCBs due to use, storage, and handling of equipment containing PCBs under CEPA include:

- Chlorobiphenyls Regulations
- Federal Mobile PCB Treatment and Destruction Regulations
- PCB Waste Export Regulations
- Storage of PCB Material Regulations

International reporting initiatives include: the Stockholm convention on Persistent Organic Pollutants; Protocols to the Convention on Long-Range Transboundary Air Pollutants; and the North American Regional Action Plan on PCB Management).

Although various provincial regulations also exist covering this group of substances, EC has indicated that at the federal level, current regulations do not cover incidental generation and release of PCBs from facilities managing/recycling PCBs and/or PCB wastes, creating a regulatory gap that EC would like filled by listing PCB on the NPRI. PCBs released from these activities are of concern since they are Track 1 substances[2].

2.2.2 The EC Proposal

EC is proposing to add PCBs to the NPRI for the 2004 reporting year. The EC proposal is to list PCBs (CAS # 1336-36-3) at a 5 kg MPO ATH, which includes:

- TCB (Tetrachlorobiphenyl)
- PeCB (Pentachlorobiphenyl)
- HxCB (Hexachlorobiphenyl)
- HpCB (Heptachlorobiphenyl)

Any facility managing (recycling/disposing) 5 kg of PCB wastes (based on a de-minimus level above 50ppm) would report any on-site releases or off-site transfers to the NPRI. This listing would be expected to capture amounts released incidentally into the environment, and would be consistent with the U.S. TRI. Sealed articles (i.e. transformers) would remain exempt from NPRI reporting, unless the article was unsealed, or disassembled). This is consistent with current reporting to the NPRI.

The NPRI is different from provincial hazardous waste regulations that deal with the proper disposal of hazardous wastes. The regulations are not an inventory of releases and transfers and they serve different purposes and cannot be used to generate the same information as the NPRI.

2.2.3 WG Views

Some industry WG members are concerned that such a low ATH would be a disincentive for companies to clean up sites contaminated with PCB material, since they would report high releases. In addition, some WG members note that a de-minimus ppm concentration threshold for by-products is not consistent with other NPRI listings, and request that EC provide more information on whether this threshold should remain (or should there be a different reporting threshold).

The ENGO members of the WG support the EC proposal. Industry WG members are concerned about the partial overlap and inconsistencies between the NPRI proposal and PCB regulations (current and proposed). EC is asked to provide additional information.

[2] http://www.ec.gc.ca/toxics/en/index.cfm

2.3 DIOXINS, FURANS, AND HEXACHLOROBENZENE

2.3.1 Background

Dioxins, furans were added to the NPRI in 2000 at an ATH. Current reporting for these substances and Hexachlorobenzene (HCB) is based on the activity at the facility, rather than the quantity MPO, which limits reporting to releases from listed activities only. Based on TRI data, gaps in NPRI data were identified for the activities relating to catalyst regeneration, petroleum refineries, asphalt mixing plants, secondary smelting of copper, tire combustion, biogas combustion, carbon re-activation furnaces, pyrolysis of brominated flame retardants, and crematoriums.

A variety of domestic and international agreements include reporting obligations for dioxins, furans and HCB:

1. Canada Wide Standards (CWS)
2. North American Regional Action Plan
3. United Nations Environment Programme (UNEP)
4. United Nations European Economic Commission (UNECE) Persistent Organic Pollutants (POPs) Protocol
5. Great Lakes Agreements
6. Stockholm Convention

2.3.2 The EC Proposal

To assist EC in meeting Canada's domestic and international obligations for reporting dioxins, furans and HCB, and to increase harmonization efforts with the Ontario Ministry of Environment (MOE)'s Airborne Contaminant and Discharge Regulation 127 (O.Reg.127) as well as the U.S. TRI, EC is proposing that reporting be required from facilities with a 20,000 hour/year employee threshold, and MPO more than 0.1 g total of the 17 currently listed dioxin and furan congeners as well as 12 co-planer PCBs. As is currently the case, the minimum employee-hour requirement would not apply to certain kinds of facilities (e.g. incinerators). The proposed threshold for HCB is 5 kg MPO. EC indicated that the EC proposal would result in fewer facilities captured unnecessarily, with a more comprehensive picture of total quantity of releases for many facilities (rather than just numbers for specific activities within facilities).

A key difference in this proposal from current reporting requirements is that reporting would be in total grams, not International Toxic Equivalency (ITEQ), and the NPRI reporting software would convert grams to the applicable toxic equivalency unit (either ITEQ or the World Health Organization TEQ). For facilities that are dependent on emission factors for calculating their releases, guidance on emission factors is available on the US EPA and United Nations Environment Program (UNEP) websites, and congener-based emission factors are available for 12 sectors. EC will provide guidance on an ongoing basis.

In addition, EC is proposing to ask reporting facilities whether or not they are above or below the LoQ, to remove uncertainty surrounding reports of zero. *EC will provide a*

resolution in the fall on whether facilities would be required to specify if they are above or below LoQ.

EC expects to capture emissions from new sectors identified above, as well as incinerators with capacities lower than 26 tonnes per year. EC analysis on the comparison of capture rate at the 0.1 g total threshold vs the equivalent in TEQ showed that the difference would be somewhere between 1 and 2 orders of magnitude (10 – 100 times smaller).

2.3.3 WG Views

There is general agreement on moving to an MPO based threshold, however EC is asked to provide additional information on the effects of different thresholds and to ensure that plans are compatible with that of the U.S. TRI.

2.4 *N*-NITROSODIMETHYLAMINE

2.4.1 Background

N-Nitrosodimethylamine (NDMA) is a Priority Substance List (PSL)2 substance that has been declared CEPA (Canadian Environmental Protection Act) -toxic in June 2003. It is a Track 2 substance. The PSL report indicated that although there are no industrial or commercial uses of NDMA in Canada, NDMA is released to the Canadian environment as a by-product and contaminant from various industries and from municipal wastewater treatment plants. Sources of releases of NDMA may occur across Canada, but releases have been quantified in Ontario under the Accelerated Reduction and Elimination of Toxics (ARET) program. NDMA may be produced as a result of biological, chemical or photochemical processes. It may form in water, air and soil from ubiquitous, naturally occurring precursors found in these media, classified as nitrosatable substrates (secondary amines) and nitrosating agents (nitrites). Through similar reactions it is also produced inadvertently as a by-product and contaminant in a range of industrial situations. Industrial sectors/sources identified in the PSL Assessment Report or that have reported to ARET or the U.S. TRI include: rubber manufacturers, tire manufactures, organic chemical producers (as an intermediate, catalyst, antioxidant, additive for lubricants and softener of copolymers), pesticide manufacturing and pesticides contaminated with NDMA, drinking water and wastewater treatment plants, land application of sewage sludge, food processing and food processing waste, leather tanning manufacturers, foundries and dye manufacturing, waste disposal (used oil recycling or refining and incineration). It is also formed in the manufacture of fire retardants.

NDMA was determined to be toxic as a consequence of its risk to human health, since it is a potent carcinogen. Short-term studies have shown that NDMA is moderately toxic to wildlife as well as laboratory and domestic animals. NPRI Substances that may contain NDMA as a contaminant during MPO include dimethylamine (DMA) products (e.g. chemical production of DMA based solvents such as dimethylformamide, dimethylacetamide).

The four companies participating in the voluntary ARET program demonstrated almost 100% reductions in emissions of NDMA since 1993, and the Canadian Chemical Producer's Association has repeated zero emissions in their Emissions Inventory Reports since 1998. However, the concern is with companies and sectors that did not participate in the ARET program.

2.4.2 The EC Proposal

There is a risk management strategy currently under development and addition of NDMA to the NPRI is a part of that strategy. Addition of NDMA to the NPRI supports many of the objectives above, particularly to support regulatory initiatives and to identify priorities for action.

EC is recommending listing NDMA at an ATH of 10 grams, release based, since the companies that participated in EC's ARET program reported their releases in grams, and a release based threshold was chosen since the substance is incidentally manufactured. Ten grams was chosen as releases reported to the ARET program are in the order of grams. Releases reported to the TRI are in the order of 1-10 pounds. A release-based threshold was chosen as the substance is incidentally manufactured.

2.4.3 WG Views

WG members have not yet discussed this proposal.

3. ISSUES REFERRED TO SUBGROUPS

3.1 INTRODUCTION

Due to the complexities involved for some issues, some work has been referred to sub-groups (SG), and the main WG will not be expected to formulate recommendations on these issues by October 2003 (rather, it is expected that they will be carried forward for consideration by the next WG in 2004). The preliminary status or progress of SG work is presented below, for stakeholder review and comment, although future WG reports will contain more detail on these issues.

3.2 PARTICULATE MATTER SPECIATION

3.2.1 Background

Following the addition of Criteria Air Contaminants (CAC's) to the NPRI in 2001, substantial work was conducted by the WG in 2002 on speciating Volatile Organic Compounds (VOCs) (October 2002 WG Report), and that WG agreed that particulate matter (PM) speciation would be the next step for further speciation work. PM mass emissions consist mostly of the following: elemental carbon, sulphates (SO_4), ammonia (NH_4), crustal material, organic carbon, and nitrate nitrogen (NO_3). PM sources include combustion and process-related activities, and fugitive emissions. Major industrial sources of PM include the forest product sector, electric power generation, non-ferrous mining and smelting, iron ore mining, iron and steel processing, coal mining, aluminium processing, cement and concrete manufacturing, rock quarrying, grain processing, mine tailings processing, and asphalt paving.

3.2.2 Sub-Group Status

A SG on this topic was initiated in the fall 2002 following the completion of the October 2002 WG report. SG members developed a mandate outlined below:

- Develop options for speciating primary PM considering
  - Requirements of regional air quality modelling
  - Filterable versus condensable fractions
  - Issue of double counting in reporting out
  - Current and new testing methodologies
  - Level of speciation considered for all options developed
- Develop options that balance costs against improvements in the accuracy and consistency of speciation
- Develop a guide for facilities on options for reporting PM species (long-term)
- Explore options for EC to report out on PM to Canadians.

At the June meeting of the WG, there was consensus that:

- *The SG will focus on filterable PM since emission factors are established and the U.S. is still developing test methods for condensable PM (SG to review U.S. work).*

3.3 MINING EXEMPTION REVIEW

3.3.1 Background

Mining activities (but not processing of mined materials) are currently exempted from NPRI reporting, although some mining activities are reported under other federal regulations (such as the metal mining effluent regulations). The recent addition of CACs to the NPRI stimulated the interest in more comprehensive coverage of emissions from other sectors such as mining. As a step in this direction, the WG has been tasked with reviewing the mining exemption. In the fall of 2002, a small SG was established to begin work on this topic in preparation for the NPRI 2003 consultations. At the first meeting of the WG in 2003, preliminary issues were identified by this small SG, and the need for a broad stakeholder SG to work through these issues was identified and agreed by the WG.

3.3.2 Sub-Group Status

The WG agreed that the substantive issues to be discussed in the SG should include:

- Mining sector specific issues only (including diffuse sources such as dust from stock piles), while generic issues (such as mobile sources and decommissioned sites) should be deferred to the WG.
- Sectoral coverage – identify which sub-sectors should be included (note that all mining sectors are included in O.Reg.127).
- Type of exemption (modified exemption, full exemption, or no exemption) for each category of substance.
- How to treat the natural composition of rock in terms of a release.
- Reporting status / treatment of substances contained in waste rock and tailings.

The WG agreed that the process for the mining SG would be as follows:

- Determine membership via a broad workshop of stakeholders (this fall)
- Establish Terms of Reference and Workplan (timelines would reflect a Jan 2005 Gazette Notice)
- Address substantive issues outlined and produce recommendations for main WG
- Determine how to consult with broader stakeholders
- Address other objectives (MOE mining requirements); definitions regarding rock content; data analysis for emissions capture; and release estimates.

3.4 HARMONIZATION

3.4.1 Background

On May 1, 2000, the Ontario Ministry of Environment (MOE) introduced the Airborne Contaminant Discharge Monitoring and Reporting Regulation, which was subsequently expanded in 2001 to include all NPRI substances and many industrial sectors (O.Reg.127/01). In recognition of the overall similarities of the NPRI and O.Reg.127/01, a joint federal-provincial Working Group was established to address issues. A pilot

project was initiated to coordinate the implementation of the respective inventories, and harmonize reporting requirements. This pilot project has successfully implemented a joint help desk, integrated reporting software, harmonized reporting deadline, training sessions with reporting facilities, and is continuing efforts toward harmonizing the two systems.

In the fall of 2002, a consultant conducted a comprehensive review of the two programs with the goals of identifying the specific differences between the two systems; categorizing the differences in terms of commonality and their interdependence; and prioritizing the differences in terms of the time and effort required to resolve them. The consultant's report was released in April 2003, outlining 38 specific differences, grouped into 5 categories. A joint MOE and EC response statement was produced after preliminary analysis of this report[2].

In summary, the grouped substances include the following:

Group 1: Six differences which EC and MOE can address in a short time frame or are currently on the table for consideration by the MOE OnAir working group and the NPRI WG

Group 2: Twenty-one differences that could be addressed within two years, further bundled into the following sub-groups:

- Definitions
- Thresholds
- Speciation issues

Group 3: Eleven differences to be addressed at a later date, requiring a broader community and/or department involvement (i.e. legal services and other policy divisions).

3.4.2 Sub-Group Status

At the June 2003 meeting, the WG decided that the best means of progressing on this issue would be through a joint SG of the WG and the MOE OnAir working group. Preliminary objectives and a proposed process were developed, and EC will present this to the MOE OnAir working group.

There was unanimous WG consensus regarding the core of the mandate for the SG: the NPRI should provide a core national reporting system and that generally, provincial systems should be required to harmonize with the NPRI (reporting should not be duplicated, and substances that both governments want should be reported to NPRI and then shared with provinces, while regionally important substances should just be reported to the province).

The WG agreed that preliminary objectives for a SG on harmonization should include:

- Establishing terms of reference and boundaries (clear tasks, timelines, and a commitment by both governments to follow through with recommendations); SG recommendations are to be brought back to main groups
- Representation: 12 stakeholders (likely 2 ENGOs, 1 from Assembly of First Nations, and 9 industry) –members not necessarily from either NPRI or MOE working group
- Vision / Objectives of harmonization:
  - To engage other provinces (teleconferences, email)
  - Identify broader issues for harmonization in general
  - Have a goal of one release / one number reported
  - Simplicity of thresholds / definitions / consistency in reporting –
  - Use the framework of the national system providing core Canadian requirements and provincial systems serving regional needs
- Preliminary Plan/Tasks:
  - Confirm terms of reference/ground rules, vision, objectives, representation
  - Develop workplan and timeline –suggest addressing priorities for 2003 Gazette and Ontario equivalent (approach for group 1); review classification scheme and assigned classification as well as priorities; review specific plans / approach for each category.

4. OTHER ISSUES ARISING

4.1 OTHER ISSUES TO BE CONSIDERED BY THE WG

4.1.1 Alternate Threshold Framework

Reporting for the majority of substances currently listed on the NPRI is triggered when the substance is MPO in quantities equal to or greater than 10 tonnes. However, there is a growing list of NPRI substances that have an alternate threshold (ATH); and many of the substances that are being or will be added in future may require an ATH. The ATH framework is a document being finalized by the WG to establish a consistent basis for determining the need for an ATH for a given substance, and for establishing appropriate thresholds. When complete, the ATH framework will be integrated as part of the process for modifying the NPRI.

A draft of the WG's proposed ATH framework was previously circulated to general stakeholders in 2001. Four decision factors were developed and recommended by the 1998-2000 WG, and these were adopted by EC. Since then, some additional work has taken place within a SG of the WG to finalize the framework, and EC has done some internal work on it. Remaining issues include: whether and how to use the limit of quantification (LoQ) as a threshold; how exposure is taken into consideration; and how alternate thresholds are identified for Category 2 substances. EC has been having internal discussions on these issues, and they have also had discussions with Health Canada.

WG deliberations of current proposals for ATH substance listings were difficult in light of the incomplete ATH framework.

WG members agreed to resurrect a SG to assist EC in finalizing this framework. This SG will have a conference call in late August or early September. In the meantime EC will undertake to advance the resolution of its discussions with Health Canada and internally within EC. Depending on SG and EC progress, there may be value in having the full WG examine this issue at the September meeting.

4.1.2 Substances Deferred

A number of substances that had been previously proposed for addition or listing changes for the 2003 reporting year remain in the deferred items list due to lack of time and/or adequate information/analysis. These include nickel, beryllium, and barium. One of these substances (nickel) is currently on the NPRI but requires an ATH. Some WG members are very concerned about delaying these items indefinitely. It was acknowledged, however, that the NPRI process requires that the larger stakeholder community have opportunity to comment on changes in the NPRI before they are made; and for this reason, the changes noted above cannot be made for the 2004 reporting year.

EC intends to publish additional information on this issue at the WG's September meeting.

4.1.3 Publication of Data

The addition of CACs and VOCs to the NPRI will result in the need to add context when publishing data to avoid double counting. Some WG members would like NPRI to provide additional context regarding CAC data, and the amount from industrial versus transportation or other non-point sources.

WG members would like to review any such contextual changes prior to their implementation on the website.

4.1.4 Data Quality

WG members were in agreement that in broad terms, the knowledge of how to report to the NPRI is not keeping pace with the changes being implemented, and that this could have data quality impacts. It is important for reporting facilities to understand estimating methodologies outlined by EC. In the past, all data reported to the NPRI has traditionally been viewed as good quality data, and some capacity building strategies are required in light of the numerous changes taking place.

EC will consider a program for increased capacity building among reporting facilities, either through the NPRI regional offices or through a separate WG.

4.1.5 Detection Limits and Level of Quantification (LoQ)

WG members pointed out the need for NPRI to clarify the scientific basis that should be used for reporting to the NPRI (NPRI guidance currently states that if a substance is below the detection limit, standard practice is to take half of the detection limit and report it for the sum of the year). WG members were uncertain of the merits of this practice since laboratories do not use consistent language. There are inconsistencies arising from laboratories that use LoQ instead of detection limit (since LoQ is higher). In addition, there is potential for confusing reports of "zero" discharge with "below-LoQ" (as discussed in section 2.3.2). This is a problem in instances of high volume, low concentration discharge (significant amounts could be under reported in large volumes).

WG members were in agreement with the need for a consistent protocol on this issue, and they will decide in September whether they have the resources to form a SG to examine this issue.

4.2 OTHER INFORMATION ITEMS

4.2.1 Canada Gazette 2003 Amendments

New requirements have been included in the reporting software to require facilities to include their official 9-digit business numbers (issued by Revenue Canada) to clarify company and parent company. The facility-based NPRI reference number will remain.

4.2.2 New Reporting Software

An entirely new reporting system is under development, which will integrate reporting to various EC and federal programs, and other programs (it is a multi-partner initiative that anticipates the involvement of provinces, industry, and government departments).

EC is currently accepting suggestions regarding this new software, and it will be pilot-tested by industry volunteers.

4.2.3 Reporting of Greenhouse Gases

There will be a separate stakeholder consultation on this topic in the fall. Options are being considered by an inter-departmental group formulating Canada's Climate Change Plan, in response to WG recommendations in its October 2002 report. The WG will be apprised of details concerning the fall consultations on this topic.

4.2.4 Wastewater Requirements

Efforts are underway to merge new NPRI requirements for this sector with Canada Wide Standards (CWS) and CEPA Pollution Prevention Plan requirements. A key issue to be addressed is the challenge of reporting by-products in the influent – which have no lower threshold of concentration by weight and carry the risk of *Fisheries Act* violations.

An update will be provided to the WG on progress in September.

4.2.5 Issues Raised for Future Consideration

Other issues that arose during the course of WG discussions which should be added to the NPRI master list of possible changes to the NPRI for future consideration include:

- Mobile sources: Some WG members have suggested that facility-based mobile source emissions should be captured in reporting.
- Decommissioned Sites: WG members note that this issue should be explored.

ANNEX A
LIST OF CURRENT (June 2003) WG MEMBERS AND ALTERNATES

	Organization	Member
Associations Representing Reporting Facilities		
1	Canadian Association of Petroleum Producers (CAPP)	Member - John Squarek Alternate - Fiona Boulet / Gail Buchanan
2	Canadian Chemical Producer's Association (CCPA)	Member - Bruce Caswell Alternate – Dave Shortt
3	Canadian Electricity Association (CEA)	Member – Vicky Christie
4	Canadian Energy Pipeline Association (CEPA)/ Canadian Natural Gas Association (CNGA)	Member - not yet assigned Alternate - Sandra Barnett
5	Canadian Manufacturers and Exporters (CME)	Member - Wally Vrooman Alternate - Nancy Coulas
6	Canadian Petroleum Products Institute (CPPI)	Member - Peter Baltais Alternate - Adolfo Silva
7	Canadian Steel Producer's Association (CSPA)	Member - Ross Kent Alternate - Lynne Ree
8	Canadian Vehicle Manufacturers' Association (CVMA)	Member - Deanna MacLean Alternate - Sarah Palmer
9	Forest Products Association of Canada (FPAC)	Member - Catherine Cobden Alternate - Patrice Tardif (Composite Panel Association)
10	Mining Association of Canada (MAC)	Member - Walter Sencza Alternate - Justyna Laurie-Lean / Gail Buchanan
11	Ontario Energy Association (OEA) / Canadian Energy Partnership for Environmental Innovation (CEPEI)	Member - Jasmine Urisk
Non-Government Organizations		
1	Assembly of First Nations	Member - Maggie Julian Alternate – Will David
2	Canadian Institute for Environmental Law and Policy	Member - Anne Mitchell Alternate - Jolanda Rasteniene
3	Canadian Labour Congress	Member - vacant
4	Canadian Public Health Association	Member - vacant
5	CLEANfld	Member – Linda Whalen
6	Environmental Defense Canada	Member - Sarah Winterton Alternate - BoAnne Tran
7	Inuit Tapiriit Kanatami	Member - Eric Loring Alternate – Soha Kneen
8	Ontario Toxic Waste Research Coalition	Member - John Jackson
9	Pembina Institute	Member - Matthew Bramley Alternate – Mark Winfield
10	Save the Oak Ridges Moraine	Member - Anna Tilman
	Extra Alternate for environmental NGOs	Alternate - Keith Stewart (Toronto Environmental Alliance)
Federal/Provincial Departments		
1	Environment Canada - NPRI	Member - François Lavallée
2	Environment Canada - NPRI Regional Seat	Member - Regional Office representative
3	Environment Canada - Existing Substances Branch	Member - Lesley Lander Alternate - Don Gutzman
4	Health Canada	Member - Gordon Cockell Alternate – Mark Korchinski
5	Industry Canada, Advanced Materials/Chemicals	Member - Gary McGee
6	Ontario Ministry of Energy and the Environment	Member - PK Misra Alternate – Peter Wong