CANADIAN ENVIRONMENTAL LAW ASSOCIATION
L'ASSOCIATION CANADIENNE DU DROIT DE L'ENVIRONNEMENT

ecojustice.ca
formerly Sierra Legal Defence Fund

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April 20, 2012

National Pollutant Release Inventory
Environment Canada
10th Floor, Fontaine Building
200 Sacré-Coeur Blvd.
Gatineau, QC
K1A 0H3

Attention: Co-ordinator of Proposals for Modifications (NPRI) Consultations and Outreach

RE: Addition of substances and their CAS RN to the NPRI

The Canadian Environmental Law Association (CELA) and Ecojustice are submitting this letter to request changes to the National Pollutant Release Inventory (NPRI). Our organizations recommend the addition of 10 substances to National Pollutant Release Inventory (NPRI) on the basis that these substances have been added to the United States Toxics Release Inventory recently and are classified as "reasonably anticipated to be a human carcinogen" by the United States National Toxicology Program (NTP) in their Report on Carcinogens (RoC).

Name, address and co-ordinates of the individuals who will act as contact for future correspondence on the proposal:

Fe de Leon
Canadian Environmental Law Association
130 Spadina Ave., Ste. 301
Toronto, ON
M5V 2L4
Tel: 416 960 2284 ext 223
Email: deleonf@cela.ca

Elaine MacDonald
Ecojustice
550 Bayview Ave., Suite 401
Toronto, ON
M4W 3X8
Tel: 416 368 7533 ext 527
Email: emacdonald@ecojustice.ca

The NPRI is a registry of pollutant releases and transfers reported by facilities in Canada and published by Environment Canada under the authority of Sections 46 – 50 of the *Canadian Environmental Protection Act, 1999* (CEPA 1999).

We request the addition of the following substances and their CAS RN to the NPRI as follows:

To Part 1 of the NPRI:

- 2,2-bis(Bromomethyl)-1,3-propanediol (CAS RN: 003296-90-0)
- Glycidol (CAS RN: 00556-52-5)
- Methyleugenol (CAS RN: 00093-15-2)
- Nitromethane (CAS RN: 00075-52-5)
- Phenolphthalien (CAS RN: 00077-09-8)
- Tetrafluoroethylene (CAS RN: 00116-14-3)

To Part 2 of the NPRI select Nitroarenes, which are nitro substituted derivatives of PAHs:

- 1,6-Dinitropyrene (CAS RN: 42397-64 -8)
- 1,8-Dinitropyrene (CAS RN: 2397-65-9)
- 6-Nitrochrysene (CAS RN: 07496-02-8)
- 4-Nitropyrene (CAS RN: 57835-92-4)

As note, the above substances have been classified by the United States National Toxicology Program (NTP) in their Report on Carcinogens (RoC) as "reasonably anticipated to be a human carcinogen."

The US Environmental Protection Agency (EPA) believes that these substances added to Toxic Release Inventory (TRI) meet the statutory listing criteria because they can reasonably be anticipated to cause cancer in humans. EPA also expects that these substances will meet or exceed the TRI reporting thresholds resulting in reports being filed.[1] Effective date for reporting on above substances under the TRI is January 1, 2011.[2] To ensure the NPRI is an effective pollution release and transfer registry program for Canada, it should remain relevant and respond to new information on pollution sources and be harmonized to a greater extent with the US TRI.

A comprehensive NPRI can be better utilized in decisions regarding the management of chemicals. The NPRI lags far behind the US TRI program in the number of substances required for reporting.[3] Recent efforts to add substances on the basis of potential human health and environmental impacts has been slow,[4] yet the addition to the NPRI of hazardous substances released or present in the Canadian environment is viewed as relevant for improving the program.

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[1] Environmental Protection Agency, Toxics Release Inventory (TRI) Program, Addition of National Toxicology Program Carcinogens Final Rule. Accessed at < http://www.epa.gov/tri/lawsandregs/ntp_chemicals/final.html>

[2] Environmental Protection Agency,40 CFR Part 372. [EPA–HQ–TRI–2010–0006; FRL–9231–5]. Available at <http://www.gpo.gov/fdsys/pkg/FR-2010-11-26/pdf/2010-29627.pdf>

[3] The CEC overview of PRTR reporting requirements reports that the NPRI requires reporting on over 300 substances while the TRI requires reporting on over 600 substances. Available at <http://www.cec.org/Page.asp?PageID=924&ContentID=2756>

[4] For example, Environmental Defence's request to add Naphthenic Acids from November 2010. Available at<http://www.ec.gc.ca/inrp-npri/default.asp?lang=en&n=AC708134-1>

Also of concern is the comparability of the NPRI to other registries like the TRI. To that the Commission for Environmental Cooperation, a tri-national environmental organization created under NAFTA, has an "*Action Plan to Enhance Comparability of Pollutant Releases and Transfer Registers*" that has proposed an approach to "[e]ncourage all three countries to add chemicals that appear on the lists in the other countries, as appropriate, taking into account national circumstances...".[5] In addition, section 2(1)l of the CEPA 1999 requires the Minister to "endeavour to act with regard to the intent of intergovernmental agreements and arrangements entered into for the purpose of achieving the highest level of environmental quality throughout Canada".

A guide published under CEPA 1999 titled, "*Modifying the National Pollutant Release Inventory: A Guide to the Procedure to Follow When Submitting Proposals and A Description of the Stakeholder Consultation Process*" (from herein 'the guide'), provides the criteria and decision factors that determine if a substance should be added to the NPRI.

Below each decision factor in the guide is addressed to the best of the ability of the requesters with respect to the substances we nominate for addition to the NPRI.

1. Does the substance meet the NPRI criteria, that is:

- ***the substance is manufactured, processed or otherwise used in Canada***

According to the guide, this is an 'absolute' requirement for the listing of a substance under the NPRI.

The six non PAH substances: 2,2-bis(Bromomethyl)-1,3-propanediol CAS RN: 003296-90-0, Glycidol CAS RN: 00556-52-5, Methyleugenol CAS RN: 00093-15-2, Nitromethane CAS RN: 00075-52-5, Phenolphthalien CAS RN: 00077-09-8 and Tetrafluoroethylene CAS RN: 00116-14-3, are relevant for Canada because they are listed under the *CEPA 1999* Domestic Substances List (DSL).

If a substance is listed on the DSL, as described in section 66 of the Act, the substance is either:

(*a*) manufactured in or imported into Canada by any person in a quantity of not less than 100 kg in any one calendar year; or

(b) in Canadian commerce or used for commercial manufacturing purposes in Canada.

The four PAHs Nitroarenes: 1,6-Dinitropyrene CAS RN 42397-64 -8, 1,8-Dinitropyrene CAS RN 2397-65-9, 6-Nitrochrysene CAS RN 07496-02-8 and 4-Nitropyrene CAS RN57835-92-4

[5] Commission for Environmental Cooperation. *Action Plan to Enhance Comparability of Pollutant Releases and Transfer Registers*. September 2005.Available at< http://www.cec.org/Storage/127/15188_PRTR-ActionPlan-2005_en.pdf> p. 13

are not on the DSL. However, in our review of the PAHs that have been added to the NPRI in recent years, we noted that there are several PAHs that are not listed on the DSL [6]

For example, seven of nine PAHs substances added in Part 2 for 2007, are not listed on the DSL.[7] They are:

- Dibenzo(a,h)acridine (CAS RN 226-36-8);
- Dibenzo(a,e)fluoranthene (CAS RN 5385-75-1)
- Dibenzo(a,e)pyrene (CAS RN 192-65-4)
- Dibenzo(a,h)pyrene (CAS RN 189-64-0)
- Dibenzo(a,l)pyrene (CAS RN 191-30-0)
- 5-Methylchrysene (CAS RN 3697-24-3)

1-Nitropyrene (CAS RN 5522-43-0) is listed on the NDSL, which is "an inventory of substances that are not on the DSL but are accepted as being in use internationally. Substances that are not on the DSL but are listed on the non-Domestic Substances List (NDSL) are subject to the *New Substances Notifications Regulations (Chemicals and Polymers)* of the *Canadian Environmental Protection Act, 1999*. However, they are subject to fewer information requirements."[8]

In addition, of the three PAHs added for reporting to NPRI in 2006, Acenaphthylene (CAS RN 208-96-8) is listed on the NDSL.[9]

According to the US National Toxicological Report, these Nitroarenes have been detected in particulates derived from coal burning and in precipitation.[10] Nitroarenes are also found in the indoor environment in the particulate emissions from kerosene heaters and gas burners used for home heating and cooking.

Similar to other individual PAH substances listed under Part 2 of the NPRI, Nitroarenes may not be manufactured or imported to Canada for commercial use but are 'incidentally manufactured' as a result of combustion of fossil fuels like coal and diesel.

- ***is of health and/or environmental concern***

It is also an 'absolute' requirement that the substance be of health or environmental concern for it to be listed under the NPRI.

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[6] Environment Canada. National Pollutant Release Inventory. Available at <http://www.ec.gc.ca/inrp-npri/default.asp?lang=en&n=C1645A61-1#report>

[7] Government of Canada. New Substances. The Substances List: Search Engine for Chemicals and Polymers. Access at <http://www.ec.gc.ca/substances/nsb/search/eng/cp_search_e.cfm>

[8] Ibid.

[9] Ibid.

[10] National Toxicology Program, Department of Health and Human Services. Report on Carcinogens, Twelfth Edition (2011) Nitroarenes (Selected). Available at <http://ntp.niehs.nih.gov/ntp/roc/twelfth/profiles/Nitroarenes.pdf>

These substances were recently added to the US TRI because each substance was classified by the US NTP as "reasonably anticipated to be a human carcinogen."[11]

In addition, 2,2-bis(Bromomethyl)-1,3-propanediol (CAS RN: 003296-90-0) met the categorization criteria under CEPA 1999 and identified as a high human health priority. This substance has been subject of *the Notice with respect to certain inanimate substances (chemicals) on the Domestic Substances List* for the year 2008.[12] Responses to this notice have not been released.

Glycidol (CAS RN: 00556-52-5) was identified as a high human health priority but does not meet categorization criteria. However a similar substance, Oxirane, (butoxymethyl)- (*n*-Butyl glycidyl ether) (CAS RN: 2426-08-6), was assessed in Batch 7 of the industry challenge and has considered glycidol in the health exposure assessment for oxirane. The screening assessment reviews the scientific studies documenting evidence of carcinogenicity of Glycidol in mice and rats[13] and evidence of genotoxicity. According to the European Commission, glycidol is considered carcinogenic (Cat 2), mutagenic (Cat. 3) and reproductive toxicity (Cat. 2).[14] The final assessment for Oxirane "concluded that n-butyl glycidyl ether is a substance for which there may be a probability of harm at any level of exposure."[15] The only risk management measure proposed for Oxirane is for requirement for notification to the federal government regarding any potential changes in the use pattern for n-butyl glycidyl ether. The proposed measure does not promote the reduction levels of Oxirane.[16] In addition, according to the TEDX List of Potential Endocrine Disruptors, Glycidol is an endocrine disruptor.[17] This substance has been subject of the *Notice with respect to certain inanimate substances (chemicals) on the Domestic Substances List* for the year 2008.[18] Responses to this notice have not been released.

Methyl eugenol (CAS RN: 00093-15-2) was assessed in Batch 9 of the challenge to industry. The screening assessment concluded that, "on the basis of the carcinogenicity of

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[11] United States Environmental Protection Agency, 40 CFR Part 372 [EPA–HQ–TRI–2010–0006; FRL–9231–5] RIN 2025–AA28, Addition of National Toxicology Program Carcinogens; Community Right-to-Know Toxic Chemical Release Reporting, Final rule. Access at < http://www.gpo.gov/fdsys/pkg/FR-2010-11-26/pdf/2010-29627.pdf>

[12] Government of Canada. Canada Gazette. Part I: Notices and Proposed Regulations. Vol. 143, No. 40 — October 3, 2009. Notice with respect to certain inanimate substances (chemicals) on the Domestic Substances List. Available at <http://www.gazette.gc.ca/rp-pr/p1/2009/2009-10-03/html/notice-avis-eng.html#d101>

[13] Environment Canada and Health Canada Screening Assessment for the Challenge. Oxirane, (butoxymethyl)- (*n*-Butyl glycidyl ether) Chemical Abstracts Service Registry Number 2426-08-6. March 2010. Available at <http://www.ec.gc.ca/substances/ese/eng/challenge/batch7/batch7_2426-08-6.cfm>

[14] European Chemical Substances Information System [database on the Internet]. 2012. Database developed by the European Chemicals Bureau. [cited 2012]. Available from: <http://esis.jrc.ec.europa.eu/ >

[15] Ibid. Appendix 4.

[16] Environment Canada and Health Canada. March 2010. Proposed Risk Management Approach for Oxirane, (butoxymethyl)-(n-butyl glycidyl ether) Chemical Abstracts Service Registry Number (CAS RN): 2426-08-6. Available at <http://www.ec.gc.ca/ese-ees/default.asp?lang=En&n=71D6DE25-1#i9>

[17] The TEDX List of Potential Endocrine Disruptors is a database of chemicals with the potential to affect the endocrine system. Available at <http://www.endocrinedisruption.com/files/TEDXListforWeb20111010.xls>

[18] Government of Canada. Canada Gazette. Part I: Notices and Proposed Regulations. Vol. 143, No. 40 — October 3, 2009. Notice with respect to certain inanimate substances (chemicals) on the Domestic Substances List. Available at <http://www.gazette.gc.ca/rp-pr/p1/2009/2009-10-03/html/notice-avis-eng.html#d101>

methyl eugenol, for which there may be a probability of harm at any level of exposure, it is concluded that methyl eugenol is a substance that may be entering the environment in a quantity or concentration or under conditions that constitute or may constitute a danger in Canada to human life or health." The management measures under considerations for this substance include *Significant New Activity* provisions and to phase out personal insect repellents containing citronella oil, which contains this substance. Based on the survey conducted by the government under section 71 of CEPA 1999, no company reported the manufacture, import or use of methyl eugenol in 2006 above the reporting thresholds established at 100 kg. This substance can be found in citronella oil and other essential oils as well as various fragrances.

A screening assessment of Nitromethane (CAS RN: 00075-52-5) was conduced as part of Batch 8 of the challenge to industry. The assessment reviews the carcinogenicity of nitromethane but finds it does not meet the requirements for designation as toxic under CEPA 1999 because of limited human exposure.[19] According to the screening assessment report for nitromethane, total use of nitromethane in Canada for 2006 was between 100-1000 kg. Between 1984-86, the quantity reported to be manufactured in, imported into, or in commerce in Canada during the 1986 calendar year was between 100 000 and 1 000 000 kg. The report did not provide an explanation for the significant decline in the numbers reported. [20]

Phenolphthalein (CAS RN: 00077-09-8) was identified as a substances of high human health priority but was not found to meet the categorization criteria. The European Commission considers this substance carcinogenic (Cat. 2); Mutagenic (Cat. 3) and a reproductive toxicant (Cat. 3).[21]

Tetrafluoroethylene (CAS RN: 00116-14-3) was identified as a substance of high human health priority that meets the CEPA 1999 categorization criteria. This substance was included in the *Notice with respect to certain inanimate substances (chemicals) on the Domestic Substances List* released October 3, 2009 for reporting for 2008.[22] The data from this notice has not been released.

- ***is released into the Canadian environment***
- ***is present in the Canadian environment***

According to the guide there should be a reasonable expectation that a substance is being or may be released to the Canadian environment.

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[19]Environment Canada and Health Canada. Screening Assessment for the Challenge Methane, nitro-(Nitromethane) Chemical Abstracts Service Registry Number 75-52-5. July 2010. Available at <http://www.ec.gc.ca/ese-ees/default.asp?lang=En&n=111EA8E9-1#a12>

[20] Environment Canada and Health Canada. July 2010. Methane, nitro-(Nitromethane) Chemical Abstracts Service Registry Number 75-52-5.Available at < http://www.ec.gc.ca/ese-ees/default.asp?lang=En&n=111EA8E9-1#a5>

[21] European Chemical Substances Information System [database on the Internet]. 2012. Database developed by the European Chemicals Bureau. [cited 2012]. Available at <http://esis.jrc.ec.europa.eu/>

[22] Government of Canada. Canada Gazette. Part I: Notices and Proposed Regulations. Vol. 143, No. 40 — October 3, 2009. Notice with respect to certain inanimate substances (chemicals) on the Domestic Substances List. Available at <http://www.gazette.gc.ca/rp-pr/p1/2009/2009-10-03/html/notice-avis-eng.html#d101>

It is not within the purview of the requesters to prove if a substance is being released into or present in the Canadian environment. An update to the complete DSL regarding level of use, manufacture and import of substances has not been undertaken. However, Environment Canada's effort under the Chemicals Management Plan to gather recent data on selected DSL substances may be a source of information. Since screening level risk assessment reports on some of these substances have already been completed in draft or final form, these reports may also provide evidence of use and presence in Canada.

To the extent we can provide useful information on these criteria through publically available sources, we have below, but we request that the Minister use the power allotted to him under the CEPA, in particular under section 44, to assess these criteria more thoroughly.

2,2-bis(Bromomethyl)-1,3-propanediol (CAS RN: 003296-90-0) is a flame retardant used in unsaturated polyester resins, for molded products, and in the production of rigid polyurethane foam. It is also used as a chemical intermediate in the production of pentaerythritol ethers and other derivatives used as flame retardants.[23] It is expected to enter the environment as dust or through wastewater. The commercial flame retardant version is available from at least one supplier and is called FR-522 (DBNPG).[24] A quick internet search shows there are numerous manufacturers of polyurethane and polyester resins in Canada that may be using this substance.

Glycidol (CAS RN: 00556-52-5) has many uses including industrial synthesis of pharmaceutical products and other biologically active substances, production of flavouring and sweetening agents and insecticides and stabilizer in the manufacture of vinyl polymers and natural oils and as an intermediate in the synthesis of glycerol, glycidyl ethers, and amines.[25]

Methyeugenol (CAS RN: 00093-15-2) was assessed in Batch 9 of the challenge to industry. The screening assessment reports that ,"[t]here are no known industrial sources of release of methyl eugenol to the Canadian environment; however, it is expected that as in the United States, this substance is ubiquitous in air and water at low part per trillion levels."[26]

Nitromethane (CAS RN: 00075-52-5) was assessed as part of Batch 8 in the challenge to industry and according to the screening assessment the importation activities were reported to be in the range of 100–1000 kg in 2006. The screening assessment report that it is "currently used in Canada as a stabilizer in halogenated solvents used for vapour degreasing of workpieces, as a laboratory and industrial solvent, as a solvent for removal or debonding of a-cyanoacrylate

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[23] National Toxicology Program, Department of Health and Human Services
Report on Carcinogens, Twelfth Edition (2011) 2,2-Bis(bromomethyl)-1,3-propanediol (Technical Grade) CAS No. 3296-90-0 Available at < http://ntp.niehs.nih.gov/ntp/roc/twelfth/profiles/Bis(bromomethyl)propanediol.pdf>

[24] Dead Sea Bromine Group. Available at <http://www.dsbg.com/Brome/Brome.nsf/WebProducts/96A19308DF9F21B742256BB9003E50FF?OpenDocument&URL=Product211~40>

[25] National Toxicology Program, Department of Health and Human Services Report on Carcinogens, Twelfth Edition (2011). Glycidol CAS No. 556-52-5. Available at <http://ntp.niehs.nih.gov/ntp/roc/twelfth/profiles/Glycidol.pdf>

[26] Environment Canada and Health Canada. Proposed Risk Management Approach for Benzene, 1,2-dimethoxy-4-(2-propenyl)- (Methyl eugenol) Chemical Abstracts Service Registry Number (CAS RN): 93-15-2. September 2010. Available at < http://www.ec.gc.ca/ese-ees/default.asp?lang=En&n=DD33228F-1#i4>

instant adhesives, as a carrier solvent for opaquing porcelain for dental applications, as a fuel mixture with methanol in drag racing cars and miniature internal combustion engines (model cars, boats, planes, etc.), as a formulant in flux remover, magnetic tape head cleaner and multi-purpose lubricant, and as a dry cleaning solvent stabilizer."[27]

In addition the screening assessment reports that environmental releases in response to a notice issued under section 71 of CEPA 1999 found no releases of nitromethane to environmental media were reported in the 2006 calendar year. Response to the survey also indicated that that transfers of under 100 kg of nitromethane to hazardous waste facilities occurred in the 2006 calendar year.[28]

However, it is worth noting that given its use as a fuel in race cars and other off road vehicles, releases are likely at the commercial level through refueling activities. In addition, there will be release of nitromethane VOCs during fueling and the release of combustion products from the burning of nitromethane.

Phenolphthalein (CAS RN: 00077-09-8) is used in pharmaceuticals and as a chemical indictor.[29]

Tetrafluoroethylene (CAS RN: 00116-14-3) is produced primarily by the pyrolysis of chlorodifluoromethane or trifluoromethane, according to the US NTP. US production plus imports of tetrafluoroethylene totaled 50 million and 100 million pounds from 1998 to 2006. The US NTP reports Tetrafluoroethylene may be released to the environment during its production and use in the production of fluoropolymers, nitroso rubbers, and low-molecular-mass compounds and intermediates.[30]

As already cited above, all four Nitroarenes were detected in particulates derived from coal burning and in precipitation according to the US NTP report.[31] Nitroarenes have been found in the indoor environment in particulate emissions from kerosene heaters and gas burners used for home heating and cooking.

2. Do facilities contribute significant releases of the substance?

It is not possible to know the significance of the releases of these substances by Canadian facilities given no reporting under NPRI is required at present. Once again, this goes beyond the purview of the requesters who have no means of gathering this information. As suggested above,

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[27] Environment Canada and Health Canada Screening Assessment for the Challenge Methane, nitro- (Nitromethane) Chemical Abstracts Service Registry Number 75-52-5.July 2010. Available at < http://www.ec.gc.ca/ese-ees/default.asp?lang=En&n=111EA8E9-1>

[28] Ibid.

[29] National Toxicology Program, Department of Health and Human Services Report on Carcinogens, Twelfth Edition (2011). Phenolphthalein CAS No. 77-09-8. Available at <http://ntp.niehs.nih.gov/ntp/roc/twelfth/profiles/Phenolphthalein.pdf>

[30] National Toxicology Program, Department of Health and Human Services. Report on Carcinogens, Twelfth Edition (2011). Tetrafluoroethylene CAS No. 116-14-3. Available at <http://ntp.niehs.nih.gov/ntp/roc/twelfth/profiles/Tetrafluoroethylene.pdf>

[31] *Id. at note 3*

we request that the Minister use the power allotted to him under CEPA, in particular section 44, to assess this question more thoroughly.

Given these substances are released by the type of industrial operations and activities found in Canada as documented above (ex. plastics manufacturing, rubber manufacturing, pharmaceuticals manufacturing, solvent use, racing fuel use, fossil fuel combustion) it would be expected that there are significant releases that should be reported under the NPRI. In addition, even if low levels of these substances are released they are largely associated with products and activities which allow for human exposure.

Given the high hazard associated with carcinogens, the significance of any release or exposure is great. For example, as detailed above, the following uses have potential consumer exposures and environmental releases:

- 2,2-bis(Bromomethyl)-1,3-propanediol is a flame retardant used in unsaturated polyester resins, for molded products, and in the production of rigid polyurethane foam.

- Glycidol has many uses including industrial synthesis of pharmaceutical products and other biologically active substances, production of flavouring and sweetening agents and insecticides.

- Methyl eugenol is naturally occurring plant essential oil and may be used as a flavour or fragrance ingredient.

- Nitromethane is currently used in Canada as a stabilizer in halogenated solvents used for vapour degreasing, as a solvent for removal or debonding of a-cyanoacrylate instant adhesives, as a solvent for opaquing porcelain for dental applications, as a fuel mixture with methanol in drag racing cars in addition to other uses.

- Phenolphthalein is used in pharmaceuticals.

- Tetrafluoroethylene may be released to the environment during its production and use in the production of fluoropolymers and nitroso rubbers and low-molecular-mass compounds and intermediates.

- Nitroarenes have been found in the indoor environment in particulate emissions from coal burning and kerosene heaters and gas burners used for home heating and cooking.

3. Does inclusion of the substance support one or more of the objective of the NPRI?

The objectives of the NPRI are to:

- **Identify priorities for action;**
- **Encourage voluntary action to reduce releases;**
- **Allow tracking of progress in reducing releases;**
- **Improve public understanding; an**

- **Support targeted regulatory initiatives.**

Including the above substances on the NPRI will support all of the objectives of the NPRI, as well as the tri -national objective to improve comparability of the NPRI to other registries like the TRI, as discussed above.

Without the requirement to report pollutant releases and transfers of these substances it will not be possible to identify sources for priority action to reduce releases and track progress towards reducing releases, nor will it be possible to determine Canadian's exposure to these carcinogenic substances.

Data gathered on these substances through the NPRI may also help determine if targeted initiatives are needed or should be strengthened to reduce releases. Public reporting of releases and transfers of these substances will also improve the public understanding of sources and thus their potential exposures to these substances.

The screening assessments of challenge substances under the CMP relied on the data collected under NPRI demonstrated the utility of the inventory in the evaluation and assessment of substances.

Additional efforts to expand the substance list and lower reporting thresholds are highly recommended.

4. Is the substance reported elsewhere? If it is, is there additional value in reporting to the NPRI?

To our knowledge there is no information available to the public on releases and transfers of these substances by facilities in Canada. However, the US EPA announcement to require reporting of these substances under its TRI should provide a good incentive for Canada to expand the scope of reporting on substances under its own NPRI inventory.

The inclusion of these substances to the NPRI will improve the utility of Canada's national inventory and facilitate comparison of pollutant levels between Canada and US on common substances at the binational level as well as at the regional level (i.e. Great Lakes).

5. Is the substances already in the NPRI in some form? If it is, is there additional value in including it in another form?

No, none of these substances are in the NPRI in any form.

Conclusion

Given the above information, we respectfully request that addition of the following substances and their CAS RN to the NPRI as follows:

To Part 1 of the NPRI:

- 2,2-bis(Bromomethyl)-1,3-propanediol (CAS RN: 003296-90-0)
- Glycidol (CAS RN: 00556-52-5)
- Methyleugenol (CAS RN: 00093-15-2)
- Nitromethane (CAS RN: 00075-52-5)
- Phenolphthalien (CAS RN: 00077-09-8)
- Tetrafluoroethylene (CAS RN: 00116-14-3)

To Part 2 of the NPRI select Nitroarenes, which are nitro substituted derivatives of PAHs:

- 1,6-Dinitropyrene (CAS RN: 42397-64 -8)
- 1,8-Dinitropyrene (CAS RN: 2397-65-9)
- 6-Nitrochrysene (CAS RN: 07496-02-8)
- 4-Nitropyrene (CAS RN:57835-92-4)

The above substances have been classified by the United States National Toxicology Program (NTP) in their Report on Carcinogens (RoC) as "reasonably anticipated to be a human carcinogen." Effective date for reporting on above substances under US TRI is January 1, 2011.[32] Canada is badly lagging behind comparable pollutant release and transfer programs like the US TRI. Given the hazard the release of substances poses to Canadian's we believe they should be added to the NPRI as soon as possible but no later than for the reporting year 2014.

Yours Truly,

Elaine Macdonald
Senior Scientist
Ecojustice

Fe de Leon
Researcher
Canadian Environmental Law Association

[32] Environmental Protection Agency,40 CFR Part 372. [EPA–HQ–TRI–2010–0006; FRL–9231–5]. Available at <http://www.gpo.gov/fdsys/pkg/FR-2010-11-26/pdf/2010-29627.pdf>