July 27, 2015

The Honourable Leona Aglukkaq Minister of the Environment Environment Canada Les Terrasses de la Chaudière 10 Wellington Street, 28th Floor Gatineau, Quebec K1A 0H3 The Honourable Rona Ambrose Minister of Health Health Canada Brooke Claxton Building, Tunney's Pasture Postal Locator: 0906C Ottawa, Ontario K1A 0K9

Transmission by e-mail: <u>Minister@ec.gc.ca</u> <u>leona.aglukkaq@parl.gc.ca</u> <u>rona.ambrose@parl.gc.ca</u> minister.ministre@hc-sc.gc.ca

Dear Ministers Aglukkaq and Ambrose:

Joint NGO Letter Urging Government Action on Triclosan (CAS RN: 3380-34-5)

We – the following groups listed below - are urgently writing to inquire about the status of Triclosan (CAS RN: 3380-34-5) under the *Canadian Environmental Protection Act, 1999* (CEPA 1999). We are deeply concerned that the assessment on triclosan has not been finalized and released to the public. The NGO community urges the government of Canada to finalize its decision on Triclosan and find the chemical toxic under the CEPA 1999.

According to the posting on Canada's Chemicals Management Plan website, the draft risk assessment on Triclosan was completed in 2012. It's been almost 3.5 years since that draft assessment was released. Since its release there have been very limited updates to the public on the assessment. The conclusion of the draft assessment advises the government to declare Triclosan (CAS RN: 3380-34-5) to be toxic and add this chemical to the Toxics Substances List (Schedule 1) under the CEPA 1999.

On November 27, 2014, over 50 Canadian based environmental and health non-profit organizations submitted a statement urging the government to finalize the conclusion of toxicity and take necessary measures to ensure a phase out of this chemical in all

products (see attachment).¹ Leading scientists and health professionals have called for urgent action on Triclosan due to rising antibiotic resistance and the ongoing toxic effects in the environment – particularly in Canadian lakes and rivers.²

We want to reiterate our support for the Canadian government to proceed with this designation of toxicity and prohibit Triclosan in all products. The NGO community also seeks that a mandatory alternatives assessment be conducted to ensure informed substitution if chemical biocides can be shown to be necessary in specific applications. The use of alternative assessment seeks to avoid regrettable substitutions for Triclosan, including Triclocarban (CAS RN: 101-20-2).

Further delays to the final assessment of Triclosan are unacceptable given the toxicity impacts associated with Triclosan. The government has sufficient evidence to conclude that Triclosan is toxic. The lack of progress on this file will mean the continued release of Triclosan into important aquatic ecosystems such as the Great Lakes – St. Lawrence River Basin and other water bodies across the country.

We urge you to take the necessary steps to finalize the assessment immediately and proceed with regulatory measures prohibiting the use of Triclosan.

The NGO Triclosan Statement of November 27, 2014 included a series of recommendations:

- 1. Officially declare Triclosan (CAS RN: 3380-34-5) to be toxic and add Triclosan to the Toxic Substances List (Schedule 1) under CEPA, 1999;
- 2. Implement a phase-out of Triclosan in all consumer and institutional products, with priority given to cleaning and personal care products, and require mandatory product labelling during the phase-out period;
- 3. Adopt a framework of Informed Substitution and ensure that Triclocarban is prohibited so that industry does not adopt a regrettable substitution; and,

¹ Environment and Health Groups' Statement on Triclosan: Call on Canadian Government to Prohibit Triclosan in All Products dated November 27, 2015. Over 50 Environmental and Health non-governmental organizations signed this document.

² See, for example, the joint statement of the Canadian Partnership for Children's Health and Environment (CPCHE) and Drs. Bruce Lanphear and Robin Walker: http://www.healthyenvironmentforkids.ca/news-info/cpche-urges-federal-government-take-action-antibacterial-chemical-triclosan.

4. Require transparent alternatives assessments for safer substitutes if chemical biocides are shown to be necessary in specific cases.

Thank you for your consideration of our request and we look forward to your response.

Yours truly,

Action cancer du sein du Québec/ Breast Cancer Action Québec (QUÉBEC, CANADA) Jennifer Beeman, Directrice générale; tel.: 514-483-1846; email: jennifer.beeman@acsqc.ca

Alaska Community Action on Toxics (ALASKA, USA) Pamela Miller, Executive Director; tel.: 907-222-7714; e-mail: pamela@akaction.org

Alliance for the Great Lakes (ILLINOIS, USA) Molly M. Flanagan, Vice President, Policy; tel.: 312-445-9741; email:mflanagan@greatlakes.org

Benedictine Sisters of Erie PA (PENNSYLVANIA, USA) Pat Lupo, OSB; tel.: 814-490-3108; e-mail: plupo@neighborhoodarthouse.org

Breast Cancer Action Manitoba (MANITOBA, CANADA) Louise Schoenherr; tel.: 204-257-2649; e-mail: kschoenh@mymts.net

Canadian Association of Physicians for the Environment (ONTARIO, CANADA) Kapil Khatter, Board Member; tel.: 613-864-9591; e-mail: khatter7@gmail.com

Canadian Coalition for Green Health Care (ONTARIO, CANADA) Kent Waddington, Communications Director; tel.: 613-756-0435; e-mail: Kent@greenhealthcare.ca

Canadian Environmental Law Association (ONTARIO, CANADA) Fe de Leon, Researcher; tel.: 416-960-2284; e-mail: deleonf@cela.ca

Canadians for A Safe Learning Environment (CASLE) (NOVA SCOTIA, CANADA) Karen Robinson; tel.: 902-457-3002; e-mail: info@casle.ca

Chemical Sensitivities Manitoba (MANITOBA, CANADA)

Sandra Madray; tel.: 204-256-9390; e-mail: madray@mymts.net

Citizens Environment Alliance of southwestern Ontario (ONTARIO, CANADA)

Derek Coronado, Coordinator; tel. 519-973-1116; e-mail: dcoronado@cogeco.net

Citizens for a Safe Environment (CSE) of Toronto Foundation Inc. (ONTARIO, CANADA)

Karen Buck, President; tel.: 416-690-7593; e-mail: karenbuck@rogers.com

Citizens' Network on Waste Management (ONTARIO, CANADA) John Jackson; tel.: 519-744-7503; e-mail: jjackson@web.ca

Clean Water Action Minnesota (MINNESOTA, USA) Deanna White; tel.: 612-627-1512; e-mail: dwhite@cleanwater.org,

Clean Production Action (NORTH AMERICA) Beverley Thorpe, Consulting Co-Director; tel.: 647-341-6688; e-mail: bev@cleanproduction.org

Concerned Walkerton Citizens (ONTARIO, CANADA) Bruce Davidson, Chair; tel.: 519-881-0884; e-mail: cwc@bmts.com

Conservation Council of New Brunswick (NEW BRUNSWICK, CANADA) Lois Corbett, Executive Director; tel.: 506-458-8747; email: lois.corbett@conservationcouncil.ca

Crooked Creek Conservancy Society of Athabasca (ALBERTA, CANADA) Rosemary Neaves, Chair; tel.: 780-675-9197; e-mail: reneaves@telus.net

Ecology Center (MICHIGAN, USA)

Rebecca Meuninck, Environmental Health Campaign Director; tel.: 734-369-9278; e-mail: rebecca@ecocenter.org

EcoSuperior Environmental Programs (ONTARIO, CANADA) Ellen Mortfield, Executive Director; tel: 807-624-2145; e-mail: ellen@ecosuperior.org

Environmental Defence (CANADA) Maggie MacDonald, Program Manager; tel.: 416-323-9521; e-mail: mmacdonald@environmentaldefence.ca

Environmental Health Association of Nova Scotia (EHANS) (NOVA SCOTIA, CANADA) Alison Petten; tel.: 902-454-0989

Federation of Ontario Cottagers' Associations (FOCA) (ONTARIO, CANADA)

Terry Rees, Executive Director; tel.: 705-749-3622; e-mail: trees@foca.on.ca

Freshwater Future (ONTARIO, CANADA) April Weppler; tel.: 647-215-7992; e-mail: april@freshwaterfuture.org

Friends of Cathedral Grove (BRITISH COLUMBIA, CANADA)

David F. Boehm, B. Sc.; e-mail: dfboehm@shaw.ca

Georgian Bay Association (ONTARIO, CANADA)

Anne Stewart; tel.: 705-366-2148; e-mail: astewart.anne@gmail.com

Georgia Strait Alliance (BRITISH COLUMBIA, CANADA) Christianne Wilhelmson, Executive Director; tel.: 250-753 3459; e-mail: gsa@georgiastrait.org

Green Science Policy Institute (CALIFORNIA, USA) Arlene Blum, PhD, Executive Director; tel.: 510-898-1704 or 510-898-1739; e-mail: arlene@arleneblum.com

Grey Bruce Sustainability Network (ONTARIO, CANADA) Bruce Davidson, Chair; tel.: 519-881-0884; e-mail: cwc@wightman.ca

Healthy Community Partners - Partenaires pour une communauté saine (PRINCE EDWARD ISLAND, CANADA) David Daughton; tel.: 902-626-7399; e-mail: ddaughton@gmail.com

Healthy Legacy Coalition (MINNESOTA, USA)

Kathleen Schuler; tel.: 612-767-2444; e-mail: kathleen@conservationminnesota.org

KANCED (KAN Centre for Environment and Development) (ONTARIO, CANADA) Olga Speranskaya; tel.: 647-868-9526; e-mail: info@kanced.org

Learning Disabilities Association of Canada (LDAC)/ Association Canadienne des troubles d'apprendissage (ACTA) (OTTAWA, CANADA) Barbara McElgunn, Health Policy Advisor; tel.: 613-238-5721; email: mcelgunnb@rogers.com

Lake Ontario Waterkeeper (ONTARIO, CANADA) Mark Mattson; tel.: 416-861-1237; e-mail: admin@waterkeeper.ca

National Network on Environments and Women's Health, York University (ONTARIO, CANADA)

Anne Rochon Ford; tel.: 416-736-2100, ext 20713; e-mail: annerf@yorku.ca

North Saskatchewan Riverkeeper (ALBERTA, CANADA) Brigitte Dreger; tel.: 647-678-0746; e-mail: glenn@saskriverkeeper.ca

Nova Scotia Environmental Network (NOVA SCOTIA, CANADA) Sheila Cole; tel.: 902-444-4291; e-mail:sheilacole108@yahoo.ca

Ontario Rivers Alliance (ONTARIO, CANADA) Linda Heron, Chair; tel.: 705-866-1677; e-mail: LindaH@OntarioRiversAlliance.ca

Ottawa Riverkeeper/Sentinelle Outaouais (ONTARIO, CANADA) Meredith Brown, Riverkeeper and Executive Director/ Sentinelle et Directrice générale; tel.: 613-321-1120; e-mail: keeper@ottawariverkeeper.ca

The Oxford Coalition for Social Justice (ONTARIO, CANADA) Bryan Smith, Chair; tel.: 519-456-5270; e-mail: bryasmit@oxford.net

Pesticide Action Network North America (CALIFORNIA, USA) Paul Towers; tel.: 916-588-3100; e-mail: ptowers@panna.org

Prevent Cancer Now (ONTARIO, CANADA) Meg Sears PhD, Co-chair; tel.: 613 297-6042; e-mail: meg@preventcancernow.ca

Quill plains Chapter, Council of Canadians (SASKATCHEWAN, CANADA) Margaret Lewis, Acting Contact/Acting Chair; tel.: 306-647-2132; e-mail: readymade@sasktel.net

Reach for Unbleached Foundation (BRITISH COLUMBIA, CANADA) Michael Cooke, chair; e-mail: michael@sunwindsolar.com

Saskatchewan Network for Alternatives to Pesticides (SNAP) (SASKATCHEWAN, CANADA) Paule Hjertaas; tel.: 306-584-2835; e-mail: dp.hjertaas@sasktel.net

Save The River / Upper St. Lawrence Riverkeeper (NEW YORK, USA) Lee Willbanks, Executive Director: tel.: 315-686-2010; e-mail: lee@savetheriver.org

Synergie Santé Environnement (QUÉBEC, CANADA) Jerome Ribesse; tel.: 514-885-6178; e-mail: jribesse@ssequebec.org

Toronto Environmental Alliance (ONTARIO, CANADA) Heather Marshall, Toxics Campaigner; tel.: 416-596-0660; e-mail: heather@torontoenvironment.org

Wallaceburg Advisory Team for a Cleaner Habitat (WATCH) (ONTARIO, CANADA) Kris Lee, Chair; tel.: 519-892-3813; e-mail: lee(at)kent.net

Watershed Sentinel Educational Society (BRITISH COLUMBIA, CANADA) Delores Broten; e-mail: editor@watershedsentinel.ca

Women's Healthy Environments Network (ONTARIO, CANADA)

Jenise Lee, Chair; tel.: 416-928-0880; e-mail: office@womenshealthyenvironments.ca

Individuals:

Dr. Gail Krantzberg, Professor and Director, Engineering and Public Policy Program, Booth School of Engineering Practice, McMaster University (ONTARIO, CANADA); tel.: 905-525-9140 ext. 22153; e-mail: krantz@mcmaster.ca

attachment

Environment and Health Groups' Statement on Triclosan: Call on Canadian Government to Prohibit Triclosan in All Products

We, the undersigned public interest and not-for-profit groups, urge the Government of Canada to take urgent action to officially declare Triclosan (CAS#3380-34-5) to be toxic and add this chemical to the Toxics Substances List (Schedule 1) under the *Canadian Environmental Protection Act, 1999* (CEPA, 1999). Measures must be taken to ensure a phase out of this chemical in all products. As well, mandatory alternatives assessment must occur to ensure informed substitution if chemical biocides can be shown to be necessary in specific applications. Applying alternatives assessment is particularly important to ensure that related antibacterial chemicals such as Triclocarban (CAS#101-20-2) do not become regrettable substitutes for triclosan.

Canadians are exposed to triclosan through a variety of routes including consumer and institutional products, treated textiles and food contact materials, drinking water contaminated with triclosan, breast milk and contaminated household dust.¹ The recent report on human biomonitoring in Canada² shows triclosan to be a wide ranging contaminant in the Canadian population. Triclosan is also an endocrine disruptor, with particular impacts on the thyroid. A new study released in August 2014 is the first to report on real-world exposures during pregnancy to triclosan and triclocarban.³ It found that 50% of babies' cord blood contained triclosan. The presence of these substances pose a direct risk to the delicate balance of thyroid hormone in pregnant women and their infants that is necessary for healthy brain development.

The human and environmental health hazards of triclosan are highlighted in a July 2014 GreenScreen® assessment of triclosan. That report clearly demonstrates that triclosan is a chemical of high concern.⁴ Triclosan is highly toxic in the aquatic environment, persistent and bioaccumulative, and is present in wastewater treatment plant effluents as well as in sewage sludge.

Triclosan and triclocarban, a similar antibacterial chemical incorporated into bars of soap and other consumer products, are ranked in the list of top contaminants of concern worldwide. US streams have a 60 - 100% likelihood of containing detectable quantities of both these chemicals. The presence of triclosan and triclocarban is so pervasive globally that they are now detectable in house dust worldwide, in ocean water and locations as remote as the water loop of spacecraft.⁵

In March 2012, two departments of the Canadian Government released their Preliminary Assessment Report for Triclosan. This assessment revealed varying levels of triclosan in wastewater effluent across Quebec, Ontario and British Columbia with data for triclosan concentrations in wastewater sludge across more provinces. Environment Canada concluded that triclosan meets the criterion of 'CEPA toxic' and could be added to the CEPA 1999 List of Toxic Substances for a range of possible risk management measures,⁶ though to date, no action has been taken. In contrast, Health Canada stated that triclosan does not constitute a danger in Canada to human life or health. The disparity between the draft conclusions of Health Canada and Environment Canada for triclosan does not provide the necessary regulatory signal to the marketplace that this chemical should be eliminated from commerce.

The two departments failed to take a life cycle perspective to the assessment of triclosan and to take into account that 95% of the human use of this chemical goes down a drain where it further degrades into highly hazardous substances in the receiving waters. Triclosan is not only a direct hazard but undergoes transformation into hazardous methyl-triclosan during wastewater treatment, as well as being photo-transformed into various forms of dioxins including 2,8-DCDD, which the government considers to be of low toxicological concern. However, recent research notes that three other dioxin congeners, which are known photo-transformation products of chlorinated derivatives of triclosan, were also detected.⁷ These transformation products are potentially of greater concern than 2,8-DCDD formed directly from triclosan and could be an important, yet unrecognized, source for polychlorinated dioxins in the environment. More dioxin generation will occur when triclosan-containing municipal sludge is incinerated.⁸ These transformation products are also of concern in the Great Lakes basin where triclosan has been detected in over 89% of surface water samples.⁹ Levels of triclosan and triclocarban in shallow sediments are known to make the survival and activity of many different animal species impossible.¹⁰

And it is not just our rivers, lakes and oceans that are at risk. Triclosan and triclocarban are contaminating our terrestrial environment, particularly through the application of sewage sludge to land where these chemicals are entering into animal feed and crops destined for human consumption. Researchers also warn that 'accumulation of antimicrobials in worms and plant material and subsequent uptake by higher organisms is a known pathway for ecological risks from exposure of vertebrates, including songbirds.¹¹

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Since the draft assessment was released almost two years ago, evidence continues to mount about triclosan's human health impacts – notably a recent study released November 17, 2014 from the US National Academy of Sciences demonstrating that triclosan is a liver tumour promoter.¹²

Triclosan's link to antibiotic resistance is of further high concern. Indeed, the Canadian Medical Association has called upon the federal government to ban the sale of household antibacterial products due to the risk of bacterial resistance.¹³ More fundamentally, both the Public Health Agency of Canada and the US Food and Drug Administration have indicated that soaps with added antibacterial ingredients, such as triclosan, are no more effective than the mechanical action of washing with plain soap and water.¹⁴ A GreenScreen assessment of triclocarban¹⁵ reveals this chemical to be an endocrine disruptor, persistent in the environment and highly hazardous in water - underlying the need to prevent the use of triclocarban as a possible substitute for triclosan.

We the undersigned therefore call on the Government of Canada to:

- 1. Officially declare triclosan (CAS RN: 3380-34-5) to be toxic and add triclosan to the Toxic Substances List (Schedule 1) under CEPA, 1999;
- 2. Implement a phase-out of triclosan in all consumer and institutional products, with priority given to cleaning and personal care products, and require mandatory product labelling during the phase-out period;
- 3. Adopt a framework of Informed Substitution and ensure that triclocarban is prohibited so that industry does not adopt a regrettable substitution.
- 4. Require transparent alternatives assessments for safer substitutes if chemical biocides are shown to be necessary in specific cases.

Furthermore, because the Great Lakes Basin is a binational responsibility, we urge the Government of Canada to liaise with the Government of the United States of America, all provincial and state governments in the Great Lakes Basin, and with the International Joint Commission to prohibit triclosan and ensure transparent alternatives assessments for safer substitutes if chemical biocides are shown to be necessary in specific cases.

SIGNATORIES

updated December 10, 2014

Action cancer du sein du Québec/Breast Cancer Action Québec (formerly Breast Cancer Action Montreal) (QC, CANADA) - Jennifer Beeman (Jennifer.Beeman@acsqc.ca; (514) 483-1846)

Alaska Community Action on Toxics (AK, USA) - Pamela Miller (pamela@akaction.org; (907) 222-7714)

BCEN, British Columbia Environmental Network (BC, CANADA) - Rod Marining (rmariner@aol.com; (604) 984-7030)

Benedictine Sisters of Erie Pennsylvania (PA, USA) - Pat Lupo, OSB (plupo@neighborhoodarthouse.org; (814) 490-3108)

Breast Cancer Action Manitoba (MB, CANADA) - Louise Schoenherr (kschoenh@mts.net; (204) 257-2649)

Canadian Association of Physicians for the Environment (ON, CANADA) - Gideon Forman (Gideon@cape.ca; (416) 306-2273)

The Canadian Coalition for Green Health Care (ON, CANADA) - Kent Waddington (kent@greenhealthcare.ca; (613) 756-0435)

Canadian Environmental Law Association (ON, CANADA) – Fe de Leon (deleonf@cela.ca; (416) 960-2284)

Canadian Nurses for Health and the Environment (QC, CANADA) - June Kaminski (june@cnhe-iise.ca)

CHOKED About our Health (BC, CANADA) - Dave Stevens (geek@uniserve.com)

Clean Production Action (ON, CANADA) – Beverley Thorpe (bev@cleanproduction.org; (647) 341-6688)

Chemical Sensitivities Manitoba (MB, CANADA) – Sandra Madray (madray@mymts.net; (204) 256-9390)

Citizens Environment Alliance of southwestern Ontario (ON, CANADA) - Derek Coronado (dcoronado@cogeco.net; (519) 973-1116)

Citizens' Network on Waste Management (ON, CANADA) – John Jackson (jjackson@web.ca; (519) 744-7503)

Concerned Walkerton Citizen (ON, CANADA) - Bruce Davidson (cwc@bmts.com)

Crooked Creek Conservancy Society of Athabasca (AB, CANADA) - Rosemary Neaves (reneaves@telus.net; (780) 675-9197)

Dr. D. Coates Medicine Professional Corporation (ON, CANADA) – Dr. D. Coates (dr.d.coates@gmail.com)

Ecology Center (MI, USA) - Tracey Easthope (tracey@ecocenter.org; (734) 369-9268)

Empire State Consumer Project (NY, USA) - Judy Braiman (judybraiman@frontiernet.net)

Environmental Defence (ON, CANADA) – Maggie MacDonald (mmacdonald@environmentaldefence.ca; (416) 323-9521 ext 228, c/o Jen Mayville)

Environmental Health Association of Alberta (AB, CANADA) - Roberta Bradley (bobbie_bradley@shaw.ca; (780) 289-5719)

Environmental Health Association of Manitoba (MB, CANADA) - Marg Friesen (ehamanitoba@gmail.com; (204) 261-8591)

Federation of Ontario Cottagers' Associations (ON, CANADA) - Terry Rees (trees@foca.on.ca; (705) 749-3622)

Fraser Riverkeeper, (BC, CANADA) - Joe Daniels (joe@fraserriverkeeper.ca; (250) 600-6262)

Freshwater Future (ON, CANADA) - April Weppler (april@freshwaterfuture.org; (647) 215-7992)

The Friends of Cathedral Grove (BC, CANADA) - David f Boehm (dfboehm@shaw.ca; (250) 247-8698)

Georgian Bay Association (ON, CANADA) - Anne Stewart (astewart.anne@gmail.com)

Health & Environment Alliance (HEAL) (EU) - Génon K. Jensen (genon@env-health.org; +32 2 234 36 47)

Healthy Community Partners - Partenaires pour une communauté saine (PE, CANADA) – David Daughton (ddaughton@gmail.com; (902) 626-7399)

International Institute of Concern for Public Health (IICPH) (ON, CANADA) – Dr. Gordon Albright (Albright@yorku.ca)

IPEN (INTERNATIONAL) - Olga Speranskaya (olga@ipen.org; (647) 866-9224)

KANCED (KAN Centre for Environment and Development) (ON, CANADA) – Peter Podobed (info@kanced.org; (647) 868-9526)

Keepers of the Athabasca Watershed Society (AB, CANADA) - Mary Richardson (marygrichardson@gmail.com; (780) 466-3337)

Lake Ontario Waterkeeper (ON, CANADA) - Mark Mattson (admin@waterkeeper.ca; (416)861-1237)

Learning Disabilities Association of Canada (ON, CANADA) - Barbara McElgunn (mcelgunnb@rogers.com)

Learning Disabilities Association of New Brunswick/Troubles d'apprentissage- association du Nouveau-Brunswick (NB, CANADA) - Fabienne McKay (edmckay@nb.sympatico.ca)

New Brunswick Lung Association (NB, CANADA) - Barb MacKinnon (Barb.mackinnon@nb.lung.ca; (506)455-8961)

Minnesota Division Izaak Walton League of America (MN, USA) - Barry Drazkowski (ikes@minnesotaikes.org; (651) 221-0215)

North Saskatchewan Riverkeeper (SK, CANADA) - Glenn Isaac (glenn@saskriverkeeper.ca; (780) 438-5148)

Northwest BC Coalition for Alternatives to Pesticides (BC, CANADA) - Paul Glover (pglover@bulkley.net; (250) 847-5575)

Ohio Environmental Council (OH, USA) - Melanie Houston (mhouston@theOEC.org; (614) 487-7506)

Ontario Headwaters Institute (ON, CANADA) - Andrew McCammon (andrew@ohwi.ca; (416) 231-9484)

Ottawa Riverkeeper (ON, CANADA) - Meredith Brown (keeper@ottawariverkeeper.ca; (613) 864-7442)

The Oxford Coalition for Social Justice - Bryan Smith (bryasmit@oxford.net)

PLEWA, Pennsylvania Lake Erie Watershed Association (PA, USA) - Sarah Galloway (sgalloway@erie.pa.us; (814) 870-1255)

Pesticide Action Network North America (NORTH AMERICA) - Paul Towers (ptowers@panna.org; (916) 588-3100)

Prevent Cancer Now (ON, CANADA) – Meg Sears (meg@preventcancernow.ca; (613) 297-6042)

Reach for Unbleached (BC, CANADA) - Delores Broten (delores@rfu.org)

Results Planning Ltd. (NB, CANADA) - Bonnie Hamilton Bogart (bonniehb@nb.sympatico.ca; (506) 488-1888)

Saskatchewan Network for Alternatives to Pesticides (SNAP) (SK, CANADA) - Paule Hjertaas (phjertaas@gmail.com)

Saskatchewan Prevention Institute (SK, CANADA) - Megan Clark (mclark@skprevention.ca)

Sierra Club Canada Foundation - Atlantic Canada Chapter. (NS, CANADA) - Gretchen Fitzgerald (Gretchenf@sierraclub.ca; (902) 444-3113)

Synergie Santé Environnement (QC, CANADA) - Jerome Ribesse (jribesse@ssequebec.org; (514) 885-6178)

Tip of the Mitt Watershed Council (MI, USA) - Grenetta Thomassey (grenetta@watershedcouncil.org; (231) 347-1181 ext. 118)

Toronto Environmental Alliance (ON, CANADA) - Heather Marshall (heather@torontoenvironment.org; (416) 596-0660)

Wallaceburg Advisory Team for a Cleaner Habitat (ON, CANADA) - Kris Lee (ecowrappin@hotmail.com; (519) 892-3813)

Wastewater Education 501(c)3 (MI, USA) - Dendra J. Best (info@wastewatereducation.org; (231) 233-1806)

Watershed Sentinel Educational Society (WSES) (BC, CANADA) – Anna Tilman (annatilman@sympatico.ca; (905) 841-0095)

ENDNOTES

⁹ Gary Klecka, Carolyn Persoon, and Rebecca Currie. Chemicals of Emerging Concern in the Great Lakes Basin: An Analysis of Environmental Exposures. 2010. *Rev Environ Contam Toxicol.* 2010;207:1-93.

¹⁰ Rolf U. Halden. On the Need and Speed of Regulating Triclosan and Triclocarban in the United States. Op.cit. ¹¹ ibid

¹² Mei-Fei Yueh et al. The commonly used antimicrobial additive triclosan is a liver tumor promoter. Proceedings of the National Academy of Sciences of the United States of America. Available at:

http://www.pnas.org/content/early/2014/11/12/1419119111.abstract

¹³ Canadian Medical Association. Public Health Issue Briefing Antimicrobial/Antibacterial Products. March 2010.

¹⁴ Environment Canada/Health Canada. Risk Management Scope for Triclosan. March 2012.

¹⁵ Report and GreenScreen assessments available at: http://www.cela.ca/triclosan-and-triclocarban.

¹ Environment Canada/Health Canada. Risk Management Scope for Triclosan. March 2012.

² Health Canada. Second Report on Human Biomonitoring of Environmental Chemicals in Canada. 2013.

³ BF Pycke et al. Human fetal exposure to triclosan and triclocarban in an urban population from Brooklyn, New York. Environ Sci Technol. 2014 Aug 5;48(15):8831-8. doi: 10.1021/es501100w. Epub 2014 Jul 15.

⁴ Report and GreenScreen assessments available at: http://www.cela.ca/triclosan-and-triclocarban.

⁵ Rolf U. Halden. On the Need and Speed of Regulating Triclosan and Triclocarban in the United States. Environ. Sci.Technol. 2014, 48, 3603-3611. American Chemical Society.

⁶ Health Canada/Environment Canada. Preliminary Assessment Report for Triclosan. March 2012.

⁷ Jeffrey M Buth, et al. Dioxin Photoproducts of Triclosan and Its Chlorinated Derivatives in Sediment Cores. Environ. Sci. Technol, 2010, 44 (12), pp 4545–455.

⁸ K. D. Doudrick, D.B. Jones, T. Kalinowski, E. M. Hartmann, and R. U. Halden. Assessment of the Contribution of Triclosan to Dioxin Emissions from Sludge Incineration in the U.S. Using a Mathematical Model. In Contaminants of Emerging Concern in the Environment: Ecological and Human Health Consider- ations; Halden, R.; ACS Symposium Series; American Chemical Society: Washington, DC, 2010.