**SNAP Presentation to the City of Regina *Public Works Committee* regarding the Pesticide Use in Parks and Open Space report, March 7, 2013**

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**I would like to thank the Public Works committee and the City of Regina for the opportunity to speak at this meeting.**

1. **We are not talking about the pesticide bylaw**

I would like to thank the authors for a succinct and generally well done report, even though appendices B to E are quite irrelevant to the issue at hand as we are not discussing a pesticide bylaw, but best management practices for city turf.

In addition, it came to our awareness that the pesticide industry had a letter writing campaign to the mayor and council. The letter is a rant against a bylaw and in favour of the right to use poisons if one wants to. SNAP can’t see how the city adopting best management practices for turf “*would impose restrictions on my right to use products’…*and *‘prevent me from hiring professionals to apply pest control products’…*

As the recommendations of the Public Works committee were clear that there was no question of a bylaw, either the industry can’t read or this is nothing but disinformation.

Therefore, SNAP is asking this committee to disregard these letters as they are totally irrelevant to the issue at hand. We are NOT discussing a pesticide bylaw and what the city does in parks in no way affects the rights of any citizen.

In addition, this letter goes against recommendations of Health, SK Agriculture and even the PMRA who all state their support for pesticide reduction.

1. ***Widespread support for reducing pesticide use among all the agencies consulted for this report.***

The position of our health ministry/region has not been properly presented as to the issues of this report. The report is not dealing with a pesticide bylaw, but presenting a viable best management practice to reduce use of chemical herbicides in city parks.

In fact, the SK Ministry of Health’s *“supports best management practices to reduce usage of chemicals in the environment,”* (appendix D),

As well asthe Regina Qu’Appelle Health Region *(*APPENDIX E):

 *“The Region is supportive of efforts to reduce pesticide exposures in all forms where practical and reasonable to do so. Use of non –pesticide solutions to pest problems is encouraged and supported where this is available and practicable.”*

My conclusion is that both departments would strongly support option 2 (Plant Health Care) of the report as a non-pesticide solution which is “available and practicable”.

In addition, the PMRA (p B5) participates in *Integrated pest management partnership projects* and SK Agriculture (pC2)*. “The Ministry participates in …actions that will assist urban and agricultural users to reduce their reliance on pesticides, and the Ministry supports research into alternative methods of pest control.*”

From their statements, it appears that both the PMRA and SK Agriculture would strongly support option 2 (Plant Health Care) as it fits with best management practices to reduce pesticide use.

1. **Definitions:** IPM: (apparently taken from SK Environment)

**The definition of Integrated Pest Management (IPM)** – “An ecological approach to suppressing pest populations (e.g. weeds, insects, diseases, etc) in which all techniques are consolidated in a unified program, so that pests are kept at acceptable levels while minimizing all potential economic, health and environmental risks.” is still wobbly and fits the current Canadian and SK definitions.

What is essential to a proper definition of IPM and missing here is a goal of pesticide reduction, and always starting with the least toxic approach first. However, the proper definition of IPM seems to be used by the city as illustrated on the description of your program on p. 6 and option 2.

1. **Other parties Consulted**

SNAP applauds the Regina Separate and public School Board. They should certainly be instructed in the Plant Health Care approach to improve their turf while reducing weeds for the benefit of children and all.

P 5 Saskatoon.

This report does not adequately address the relation between the City of Saskatoon and the Saskatchewan Environmental Society (SES). I was under the impression that what was wanted were costs (if any) of this educational relationship and examples of the educational approach and materials to see what would be possible in Regina.

Update:

In 2012, after 6 years of collaboration on community marketing, SES and the City of Saskatoon collaborated in a social media info campaign with weekly posts on Facebook and twitter. These posts took the form of videos or informative blog with links to SES resources for more details. I am sure they would be willing to expand it to Regina. I have not been able to get the city financial input at this time.

 If we don’t go with option 2 (PHC), Saskatoon is definitely ahead of Regina by choosing to set up a reserve of $250,000 to *fund enhanced cultural practices for turfgrass*.

1. **that the city develop a list of alternative products based on the PMRA information (P. 8)**

SNAP feels this would be a waste of time and money as promoting option 2 (Plant Health Care) and actively looking for the establishment of companies promoting this approach for the residential sector would be sufficient to reduce regular use of herbicides.

Furthermore, SNAP already has a list of alternative products freely available on <http://www.snapinfo.ca> under information. Alternatives, program/*Organic Gardening Class* and *Organic Land Care* and information of Plant Health Care under *Organic Land Care* and *Training for Municipal Officials or Transitioning Landscaper.* SNAP would consider an agreement with the City of Reginafor using any information available on SNAP site for any educational campaign.

1. **Exceptions to on-site signage and Pesticide Advisory Line Notification (p. 9)**

“Areas treated with pesticides in parks and open space are identified by the use of temporary “lawn” signs (e.g. mosquito, gopher and weed control). An exception to this approach is identified in The Weed Policy (2005) which states:

*“Passive Open Space areas include areas such as tree wells, shrub beds, light standards, fence posts, center medians, side boulevards, traffic islands and walkways. These areas are exempt from on-site signage and Pesticide Advisory Line notification, provided that the area selectively treated does not exceed 5,000 sq. ft. and treatment is not within 100 feet of Active Open Space Areas.””*

SNAP disagrees with the exceptions listed to posting temporary pesticide signs listed on p. 9. I can feel if pesticides have been used even when driving by in a closed car with the ventilation off and blocked or on recycling. Many chemically sensitive people as well as many others extensively rely on the *Pesticide Advisory Line* to plan our travels around the city during spraying season. All these exceptions make the information given to the public inaccurate and unreliable. Medians and boulevards are adjacent to roads, side boulevards and tree wells are adjacent to/in sidewalks, and walkways are to walk on. Not notifying of a pesticide application in these areas is unconscionable.

Pesticides penetrate porous surfaces such as leather shoes and sandals. They don’t wash off and therefore keep exposing the person over and over again when the shoes are worn again. The only protection is to avoid sprayed areas, which means we have to know where they are.

**SNAP Recommendation:** It is not acceptable that these areas remain unmarked and the city provides no notification of spraying on the *Pesticide Advisory Line.* SNAP asks for the exceptions the *in The Weed Policy (2005)* to be removed.

1. **SNAP supports the city recommendation 1** *That the annual weed density measurements be used as the basis for the annual designation of parks with “herbicide-free” turfgrass* as it results in a decrease in herbicide use.

And *Option 2 (Plant Health Care)* as this is a proven method that has resulted in weed reduction and is how organic lawns are maintained on public and private lands across Canada and the US.

1. **SNAP does NOT support** “*That the three existing “pesticide free” parks be designated “herbicide free ”because* of the faulty rationale.If the locations were chosen because there was no other spray need, this will not have changed. Why not leave them as pesticide-free?
2. **Comments on Appendices**

As most of the pesticide industry and government departments blindly accept that the PMRA is close to God in expertise and effectiveness, it is appropriate to discuss The PMRA .

**PMRA**

Last summer, Mr Taylor presented that*The Auditor General's Report is damning illustrating that shows PMRA does not have reliable up to date information, lacks significant information on the use and exposure to pesticides, has very limited information on health impacts, uses incomplete, out of date information to evaluate pesticides and cannot manage the health and environmental risks associated with pesticides.*

**from Al’s presentation July 2012**

*“There is another quote from the Cancer Panel worth noting because it also applies equally to Canada's Pest Management Regulatory Agency (PMRA). "Only a few hundred [chemicals] have actually been tested for safety: the high body- burden of toxins in newborns (more than 300 hundred different chemicals); and the Environmental Protection Agency (EPA's) "innocent until proven guilty" approach to toxic chemical regulation. In other words we have to prove the pesticide is dangerous rather than the chemical company having to prove the pesticide is safe.”*

1. It is still illegal to say or imply that pesticides are safe.

DIR96-02: [Environment Label Claims and Advertising of Pest Control Products](http://www.hc-sc.gc.ca/cps-spc/pubs/pest/_pol-guide/dir96-02/index-eng.php) has not been replaced at this time and is therefore still current. It forbids the use of the terms "safe" or "safer" on pest control product labels. Section 21 of the **Pest Control Products Regulations (2006)(**<http://gazette.gc.ca/archives/p2/2006/2006-06-28/html/sor-dors124-eng.html> **)** forbids implying that the government is promoting, endorsing or recommending the use of a pest control product on any package or advertising.

1. In Appendix B , the PMRA clearly states that it is still operating under the now disproved belief that “*the dose makes the poison*.” as they still believe that there are *“levels at which humans can be exposed to the products without any harm.” (*p. B3Toxicological evaluation section) (1)

The US EPA recognizes that *the presence of such effects (endocrine low dose effects) would* ***challenge the validity of our current approaches*** *to hazard identification and risk assessment for endocrine disruptors (1)*

Even the *American Chemical Society* [of which everyone working in chemicals is aware and a likely a member of] is recognizing that “*a large and growing body of environmental health literature shows that* ***endocrine disrupting substances have complicated dose-response curves that do not fit the central tenet of regulatory toxicology, namely, that the ‘dose makes the poison.****’* And that ‘***This makes it impossible to predict the effects of low-dose exposures based upon high-dose experiments****.’* They call for very low dose experiments most relevant to human body burdens and environmental concentrations and updating of test protocols, including those of regulatory agencies with laboratory experiments conducted at biologically realistic levels.(29)

They have recently been joined by NIESH (US National Institute of Health) (2) and WHO ( World Helath Organization) (3) The scientific consensus now tells us that endocrine disrupting low dose effects exist. You can no longer sweep them under the table.

The conclusion is that the current dose-response model does not answer or represent many of the health effects of pesticides including cancer, obesity, depression, feminization of males, earlier puberty, reduced sperm counts and many others.

1. No required testing for endocrine disruption despite the fact that the US EPA has ordered some.
2. *The PMRA is “committed to providing an open, transparent and participatory process for the regulation of pesticides” (*p. B6 Consultation/Communications)

Open, transparent and participatory? Then why so many secrets?

And yet only 51 formulants including 4 known toxins and a few allergens out of a total of 3173 listed formulants have to be listed on labels. Those that do not include all kinds of petrochemical products such as xylene, benzene, diesel fuel, various naphtas and petroleum distillates and several endocrine disrupting phthalates.

From SNAP web site: Of  these 3173 formulants, only 25 have to be listed on labels with the 9 allergens subdivided in 35 formulants for a total of 51 (1.6%) formulants that have to be listed on labels The 593 list 2 (potentially toxic) formulants remain secret, as do known toxins in other categories.

I still have not received a direct answer to my 3 year old enquiry on whether the PMRA is now considering endocrine disruption in the regulatory testing. They have not answered because they know that the tests (DACO tables) required have not been updated in 29 years, since 1984.

The first ever Canadian pesticide sales data have been released for 2007-8 in the summer 2012. The whole sale issue is gummed up by only 70% of vendors reporting, adding disinfectants to the totals, and not presenting provincial sales data. Further inquiry revealed that provincial sales data are secret.

1. how many PMRA inspectors work in SK? (pB5 Compliance and Regional Operations )

F.When will the PMRA sue or fine the province of Saskatchewan for not yet having any licensing or training of domestic vendors?

*pesticide retailers and applicators are required to be trained and licensed.* (Vendor/ dispenser Licensing p. B7)

 *G.. pest control products that were registered before January 1, 1995, are currently being re-evaluated ( p.B1)*

These are products registered over 18 years ago. How close is the PMRA to being done?

 H. How many PMRA staff are being cut and where?

**App G 2012 Total Parks Weed Survey Final - July 31, 2012**

I have not had the chance to study this appendix (the part that is readable) as much as I would have liked but the tables showing that, often, there is no or little decrease in weed in some sprayed parks between 2011 and 2012. This is not really a surprise. If herbicides would get rid of weeds permanently, there would have been no need to spray for many decades.

However, large scale users of Option 2 (Plant Health Care) report that aeration is fundamental to good quality grass and that severe weed problems have been turned around in a few years by looking after the grass appropriately. (see <http://www.snapinfo.ca/programs>*/ Organic Land Care Training for Municipal Officials or Transitioning Landscapers* for links to information and training.)

Thank you,

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***References***

1. Dose–response as the template for regulatory science.

 Exerpted from **Comments to the city of Regina Public works committee following the July 17, 2012 public meeting on a discussion of a pesticide bylaw available at** <http://www.snapinfo.ca/info/presentations-and-publications>

Ms Anderson’s talk was all about the dose-response and determining acceptable levels of exposure. She illustrated very well the basis of *regulatory science*. This approach however, implies that there is a dose at which there are no effects. The last 22 years at least have seen a mushrooming of evidence of endocrine and other effects of substances at low doses, that are not seen or are even opposite at high doses. Independent research has also found many negative health effects actually occurring at concentrations currently found in the environment. In a response to a *BC Environmental Health Association* in Dec 2011 (12), the *PMRA* through a convoluted answer indicates that there were no new mandatory tests required for endocrine disruption in particular. This is confirmed by the fact that they have not yet answered my question of 2-3 years on whether Canada will follow the *US EPA* and require endocrine disruption testing.

The fact is that diluting a pesticide by using extrapolation (sometimes called “safety”) factors may likely result in totally different effects, not currently measured or taken into account. How many pesticides and formulants are endocrine disruptors is still up in the air as conclusive research has been done on so few products. By the way, several phthalates (known endocrine disruptors) used to be and still are used as formulants in pet and weed control products.(9)

The regulatory system of extrapolating low dose effects from high doses actually precludes any rational company reporting testing of low dose effects. If effects are seen at environmentally relevant doses, it would preclude registration of the product.

As mentioned by the *US EPA* in *3 E* above,*“The issue (of low dose) is an important one because the presence of such effects would* ***challenge the validity of our current approaches*** *to hazard identification and risk assessment for endocrine disruptors…****EPA’s entire chemical regulation framework is based on the presumption that as dose increases****, so does the prevalence and severity of adverse effects****.”***(10)

Even the *American Chemical Society* [of which everyone working in chemicals is aware and a likely a member of] is recognizing that “*a large and growing body of environmental health literature shows that* ***endocrine disrupting substances have complicated dose-response curves that do not fit the central tenet of regulatory toxicology, namely, that the ‘dose makes the poison.****’* And that ‘***This makes it impossible to predict the effects of low-dose exposures based upon high-dose experiments****.’* They call for very low dose experiments most relevant to human body burdens and environmental concentrations and updating of test protocols, including those of regulatory agencies with laboratory experiments conducted at biologically realistic levels.(29)

The conclusion is that the current dose-response model does not answer or represent many of the health effects of pesticides including cancer, obesity, depression, feminization of males, earlier puberty, reduced sperm counts and many others.

# Environmental Chemicals: Evaluating Low-Dose Effects. [Linda S. Birnbaum](http://www.ncbi.nlm.nih.gov/pubmed/?term=Birnbaum%20LS%5Bauth%5D) (Director, NIEHS and NTP, National Institutes of Health, Department of Health and Human Services, Research Triangle Park, North Carolina, E-mail: birnbaumls@niehs.nih.gov.) <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3339483/>

1. **State of the science of endocrine disrupting chemicals - 2012An assessment of the state of the science of endocrine disruptors** prepared by a group of experts for the United Nations Environment Programme (UNEP) and WHO. WHO. <http://www.who.int/ceh/publications/endocrine/en/index.html>