

## Comments to Act 154 working group 11/1/16.

Please accept these comments on the policy proposals put forth by the committee.

1) VAAFM homeowner pesticide usage proposal.

- a. Lack of information on what pesticide products are being bought and used by homeowners is a large gap in our knowledge of what pesticides are getting into the Vermont environment. The current VAAFM program is inadequate because it collects information only on **commercial** pesticide sales/use and location is only collected at the county level. I suggest that small pesticide retailers be required to report sales annually, while large retailers such as: Aubuchon, True Value, Walmart, and Home Depot report sales by zip code of the purchaser. This will more accurately estimate where pesticides are actually being used. With zip code level of detail it will be possible to more accurately estimate what watershed the use is occurring in. Urban pesticide use is of continuing concern at the national level because pesticides in stormwater runoff have been shown to be toxic to aquatic life in urban streams. Knowing where pesticides are being used is critical in predicting areas of large use, developing environmental monitoring programs and educational outreach activities.
- b. Similar to the above pesticide tracking, a mechanism for tracking prescription pharmaceutical sales by zip code would make it possible to optimize wastewater treatment facilities (WWTFs) for their removal. Emerging Contaminants, and pharmaceuticals in particular, in our WWTF effluent are a serious concern in Vermont and worldwide. In areas where surface water is the source of drinking water, such as Burlington, emerging contaminants from WWTF effluent are potentially ending up in our drinking water. So not only is this an environmental issue, but also a potential human health concern. Knowing the amounts of pharmaceuticals in use within areas of specific WWTFs would make possible cost effective monitoring of effluent as well as being able to optimize treatment to remove contaminants of most concern. In order to make the creation of these pesticide and pharmaceutical databases cost effective, it is suggested that they be maintained by one agency, perhaps VDOH. Combining both the pesticide and pharmaceutical databases into one database within the VDOH would ensure privacy concerns are addressed and house them within an agency with in-house statistical expertise for data analysis.

2) VDOH testing of private water supplies for manmade chemicals.

Developing the capability in-state for testing of private drinking water supplies for unregulated contaminants of concern is an excellent idea. As part of developing this testing capability, I would suggest that this proposal be expanded to include all public water supplies. Currently, the USEPA has a program to collect information on the presence of contaminants of emerging concern in U.S. drinking water supplies, The Unregulated Contaminant Monitoring Rule (UCMR). The most recent list of contaminants which were required to be tested for under UCMR3 included perfluorinated compounds and estrogenic hormones. Unfortunately, most public water supplies in Vermont are small enough that they are exempt from UCMR testing requirements. Of the 20 or so public drinking water supplies in Vermont getting water from Lake Champlain, only the City of Burlington was required to test for perfluorinated compounds, and none needed to test for the hormones.

As a first step in understanding emerging contaminants in our drinking water, I suggest that **all** public drinking water supplies be required to routinely (at least annually) test for all UCMR compounds, as well as any other compounds deemed appropriate by the legislature, VTDEC, or VDOH.

Sincerely,

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**From:** Annette Smith [<mailto:vce@vce.org>]

**Sent:** Tuesday, November 08, 2016 10:39 AM

**To:** Duggan, Jen <[Jen.Duggan@vermont.gov](mailto:Jen.Duggan@vermont.gov)>; Martin, Trey <[Trey.Martin@vermont.gov](mailto:Trey.Martin@vermont.gov)>

**Subject:** Comments to Act 154 Chemical Use Working Group

Dear Act 154 Chemical Use Working Group,

I reviewed the Nov. 1 draft recommendations and would like to offer comments from Vermonters for a Clean Environment. I did not find a contact person dedicated to receiving comments on the web page for the grup, so am sending them to the people who appear to be facilitating the discussion.

VCE has been asked by Vermonters to work on chemical and toxics issues during the last 17 years. We support many of the recommendations being suggested by the working group members in the draft recommendations. However, there are areas that seem to be missing from the discussion, perhaps by design of the group's mission. We think it is important to identify those areas.

During the extensive work we did with Omya in what was called the "Section 5" study, we were educated by very fine toxicologists and hydrogeologists. One aspect of this topic that we learned about is that there must be a route of exposure. In the review of the draft recommendations, some of the items being called out — such as dental floss — have an obvious route of exposure. Others that are not mentioned that seem to be very important are the permitted, outdoor use of chemicals for weed control along roadways, power lines, and railroad tracks. These open air uses of chemicals have clear routes of exposure to the people who live and recreate near or on these areas, and may be exposed through air or water contamination.

One of the most interesting things that came out of the Omya Section 5 study was the company's lack of understanding of the chemicals it was using. The flotation reagent used by Omya in unlined settling cells, contained a toxic chemical that was not identified and unknown to Omya. The working group's recommendations seem to touch on this problem, but it seems worthwhile to note that it has been identified as a challenge for industry to know the compounds in the chemicals they are using. While the Omya Section 5 study did address that issue, VCE remains concerned about the very large quantities of biocides used at that facility that may result in the build-up of resistant bacteria.

Notably absent from the working group's list of recommendations is the use of chemicals in agriculture. Again, these are permitted uses. VCE's work on chemicals includes pesticide drift from orchards, and that area of interest led us to learn about the Pesticide Advisory Council, which was created in the 1980s and its apparent goal was to work on steadily reducing the use of chemicals in Vermont. However over the years, the PAC has apparently chosen not to address agricultural chemicals in terms of reduction and instead has become the permitting entity for agricultural, railroad, power line, and roadway chemicals. VCE recommends bringing the PAC and its role into the discussion, evaluating the success of the PAC, perhaps returning it to its purse which is the reduction in chemical usage.

Some of the most difficult subjects VCE has worked on include the permitted addition of toxic chemicals to drinking water and also dental practices. Ammonia and hydrofluorosilic acid are added to some municipal drinking water supplies, and are eventually discharged back into the environment. These toxic substances have environmental and health impacts aside from their perceived benefits. The chemicals used in municipal drinking water are a sleeper of an issue, but that does not mean they are not important. Erin Brockovich has spoken, especially in the last year on several TV shows (Stephen Colbert, Bill Maher) about the use of chloramine and how detrimental it is to public water supplies, public health, and the environment. The use of mercury in dental amalgam is another topic that has seen improvement, but should not be dropped off any list of efforts to reduce public exposure. These types of direct exposures to chemicals can and should be a part of the Act 154 Chemical Use working group's topics to address. They provide a direct route of exposure by way of ingestion directly into the body, and discharge to the environment.

A final observation is one that structurally, environmental health issues have no home. There are no legislative committees focused on environmental health — on the Senate side there is “Natural Resources and Energy” and Health and Welfare”, and on the House side there is “Natural Resources and Energy” and “Fish, Wildlife and Water Resources” and two Health committees — so it has been challenging to identify a place to take these issues to. Similarly on the state agency level, there is an Agency of Natural Resources and a Department of Health, and Agency of Agriculture, all of which share responsibilities but create no direct place to address these issues. VDH is heavily funded by the CDC and focused on carrying out their mission, so VCE has experienced less cooperation and more opposition from VDH over the years, as they defend things like the use of mercury in dental amalgam, the use of ammonia and fluoride in drinking water supplies. Similarly the Ag Agency is more of a defender of agricultural and industrial chemicals, such as when Atrazine was sprayed around school children at a Rutland County school.

It would be helpful if the Act 154 Chemical Use working group would address and recommend to the legislature a governmental structure that would enable a more focused approach to this topic. Dr. Ian Balcomb's recommendation for an Office of Chemical Hazards Assessment is a good first step, which could be expanded to identify legislative committees that track with the new Office's work. Too often, citizens dealing with permitted chemical exposure find themselves fighting state government's support of industry rather than finding a receptive audience for their health concerns. VCE has been discussing this problem with numerous people in recent years, with the idea of some new division in state government and committee in the legislature to provide a home for public environmental health issues.

Thank you for the opportunity to provide input to the Act 154 Chemical Use Working Group.

Annette

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