

Comments on Policy Proposal Recommendations Act 154 Chemical Use Working Group

Submitted by:

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I am writing to submit comments on the Act 154 Chemical use workgroup draft report and policy recommendations as released on 12-15-2016. As a chemist with 35+ years in the food and environmental chemistry field, I would like to voice my support for the efforts of the Workgroup to expand transparency and public availability of information on chemicals in manufacturing and consumer goods in Vermont. Lack of information on unregulated chemicals in use in commerce in Vermont is of great concern and will only become more of an issue as more new chemicals and products come on the market. My primary interest in making comments is in the area of chemicals of emerging concern in consumer goods and what happens to them in the environment. As such, I have attached a report I recently completed for the Lake Champlain Basin Program concerning emerging contaminants in the Champlain Basin.

I have several general comments and concerns relative to the overall Workgroup proceedings and report, followed by some comments on specific recommendations, and concluding with some recommendations of my own.

GENERAL COMMENTS:

- 1) As an unaffiliated member of the public with interest in these proceedings, I was disappointed that there was no mechanism for, or even interest in, soliciting input from the public. Policy recommendations were only considered if proposed by workgroup members. On a related note, there is an "Inter-Agency" standing committee which is proposed in the Workgroup report whose purpose is to evaluate chemicals annually and identify potential risks. This should be expanded to include outside experts from academia, industry, etc. A committee composed entirely of state program managers will not necessarily have the time or expertise to investigate what is known of chemicals of concern as they emerge. An example of a committee which works this way is the Vermont Pesticide Advisory Council, composed mostly of state employees, but with several citizen representatives. I suggest that the "Inter-Agency Committee" and the "Policy Advisory Panel" described in the Workgroup Recommendations be combined into one "Vermont Emerging Contaminants Advisory Committee"
- 2) The overall emphasis of the workgroup and report has been on reporting chemicals used in manufacturing which are already of concern in other jurisdictions, but not currently regulated in Vermont. What I think has been overlooked by this Workgroup are those chemicals in consumer products which are currently not regulated anywhere, so no information is being collected on their presence. Perfluorinated Compounds (PFCs) coated on microwave popcorn bags and pizza boxes to make them grease resistant is a recent example. But all one needs do is watch TV to see new products with other "special features". These products are not necessarily a problem, but examples are:
 - a. Rain-X™ windshield wipers which release a compound onto your windshield to make it water repellent.

- b. Hanes FreshIQ™ underwear with antimicrobial, anti-odor treatment. The chemicals in products such as these have unknown long-term effect on humans, to say nothing of the environment. Therefore, eventually, we must know what ingredients are in all products so it will be possible to retroactively trace the source of problem chemicals if they arise.
- 3) Insufficient emphasis is placed on where in Vermont chemicals or products are actually used. The proposed ANR Atlas data layer will pinpoint where chemicals are used in manufacturing, stored, or sold, but not where products are used. This will improve response if there is an accidental release, but will not inform us as to where a product might enter the environment after purchase by consumers. This is important if one needs to track the environmental consequences of consumer product use. An example of this is the Vermont Agency of Agriculture proposal to track consumer purchases of pesticides at "point of sale". Knowledge of the quantities of pesticides purchased by consumers is extremely important and is currently a HUGE hole in our knowledge of pesticide use in Vermont. Point of sale information though is not sufficient to even determine what portion of the state or what watershed the pesticide is actually used in. If a product is purchased at Tafts Corner in Williston, it might be actually used anywhere in northern or central Vermont.
 - 4) Act 188 requires reporting of a select list of chemicals of concern to children. The Workgroup proposes to expand the list and expand reporting to all consumer products. Act 100 requires reporting of large volume toxic chemical inventory by industry. The Workgroup proposes to expand the toxics list and decrease reporting thresholds. Neither Act 188 nor Act 100 requires detailed information on the quantity of chemicals actually being consumed or entering our environment. Not just inventory, but sales volume, is important to understand what is happening with chemicals in Vermont.

SPECIFIC COMMENTS:

- 1) It seems that a list of definitions is necessary. For instance the report recommends expanding reporting requirements to "inventories of all chemicals...on an annual basis". How is CHEMICAL defined in this context? Another example is the proposal to decrease reporting thresholds for "Persistent Bioaccumulative Toxics (PBTs)". How are PBTs defined? Endocrine disrupters should be included as well.
- 2) The Workgroups suggests strengthening the Vermont Agency of Agriculture (VAAF) database management team to enable adequate management of consumer pesticide use data. In the interest of efficiency and transparency, this database should be maintained with other chemical use information in a unified database. The Workgroup report specifically mentions that currently chemical information is hard for the public to find "because the information that is currently available is difficult to find and may be stored at multiple locations". Commercial Pesticide Use is currently maintained at the VAAF, but this data is not widely or easily available. Consumer pesticide sales would be orders of magnitude more information which would be better handled as part of the unified chemical database. Assigning this to a small Agency such as VAAF would be inefficient and duplicative of what will be needed for the unified chemicals database.
- 3) The Workgroup proposes to require testing of private water supplies when properties are transferred. It is not clear what testing is proposed to say nothing of who would pay for it.
- 4) I strongly support the proposal to expand Act 188 reporting to all consumer products and greatly expanding the list of chemicals covered by Act 188, as well as giving the Vermont Dept. of Health easier ability to restrict sales of Act 188 compounds. I

believe the ultimate goal should be a public database listing ingredients of all consumer products at a national level.

- 5) The Vermont Dept. of Health proposed expanding in-state capability for testing of private water supplies for emerging contaminants. This is excellent, but public water supplies should be included. A large portion of Vermonters get their drinking water from relatively small public drinking water systems, which are exempt from mandatory EPA testing for unregulated contaminants. All public drinking water systems should be tested for unregulated emerging contaminants on a routine basis, irrespective of size.

SPECIFIC PROPOSALS:

- 1) Require large retailers to ask consumers of pesticides and prescription drugs for their zip code at time of purchase. Both pesticides and pharmaceuticals are designed to be biologically active and are therefore of especial concern when they get into the environment. Having information on location and volume of use of these compounds would enable tracking of quantities of these potentially hazardous chemicals to the local area and watershed where actually used. When developing a cost effective targeted monitoring program for emerging contaminants in people or the environment it is critical to know what is being used in the area. Similar to checking birth date when purchasing alcohol or inputting zip code when buying gas at the pump, this would not be unduly burdensome for the retailer or consumer.
- 2) When expanding reporting for Act 188, require reporting of complete ingredient list for those products which meet criteria for Act 188 reporting. This, in combination with proposal one above, would be a first step in creating a database of what compounds are in commerce, BEFORE they become "chemicals of emerging concern". Any chemical by chemical reporting such as the Act 188 requirement, will inevitably be behind the curve of chemicals of concern and will not necessarily help prevent another PFOA like incident. Examples of ingredients which are present in consumer goods which are not currently reported are: nanoparticles, silver and other antimicrobial treatments, preservatives, colors, flavors, whiteners, and fragrances. As can be seen in the attached report, some of these have been demonstrated to enter our aquatic environment and have deleterious effects on the aquatic life our streams and lakes. Many more are entering the environment with unknown consequences.

In conclusion, I applaud the endeavors of the Workgroup to strengthen reporting requirements for chemicals of concern, increase testing for chemicals of concern in our water, and make information available to the public. I believe that even more should be done to put a spotlight on "chemicals of emerging concern" in consumer products, before they become "chemicals of high concern".