



March 12, 2014

Senate Committee on Economic Development,
Housing and General

Re: Omya Testimony on S.239 Regulation of Toxic Substances

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Dear Senators:

The bill as written will have unintended consequences on Vermont businesses due to its lack of clarity and predictability. Of particular concern, under the current proposed language, consumer products containing unintentional contaminants would be subject to the law without consideration to the source or type of exposures to humans which can cause harm. My testimony speaks to the impacts specific to Omya and its Vermont operations.

1. Omya is a leading global producer of industrial minerals, mainly calcium carbonate fillers and pigments derived from marble. In Vermont, Omya's Middlebury and Florence quarries supply the marble ore feed stone to our processing facility located just north of Rutland. The calcium carbonate products made at our Florence facility are used as raw materials in the manufacturing of paper, plastics, paints, adhesives, flooring, and countless other household consumer products.
2. Omya's marble deposits are very pure, meaning they have a high calcium carbonate content. Even so, as with virtually all such geologic deposits, they contain naturally-occurring mineral impurities, one of which is quartz. Quartz is naturally present at very low levels in marble like that which Omya processes, typically less than 1%. Besides marble, the same is true for other minerals of economic significance to Vermont, including granite, slate, limestone, sand, and gravel.
3. Quartz is by far the most abundant form of what is also known as crystalline silica. Most of us know quartz and crystalline silica by its most common name -- ordinary sand. Quartz comprises 12% of the earth's crust, and it is spread on Vermont's roads by the millions of pounds each winter. It also is a component of the pavement we drive on, and the unpaved roads which Vermont has more miles of than paved roads. It is part of the soil that gardeners and farmers till.
4. What many people don't realize is that respirable size crystalline silica is present at measureable concentrations in the air we breathe every day. Air monitoring studies conducted by the U.S. Environmental Protection Agency have documented this fact. But that is not surprising considering the ubiquity of silica, and the widespread human activities that contribute to airborne silica levels.
5. It is a well-known axiom that "everything is made with raw materials that are either grown or mined". Therefore it should be no surprise that many consumer products made from mineral raw materials, including minerals sourced from within Vermont, contain crystalline silica. And the amount of silica in many consumer products will greatly exceed the 100 part per million exemption allowance for unintended, naturally-occurring contaminants.
6. A key consideration that S.239 fails to make is that most consumer products do not, and never will be able to, expose end users to measureable amounts of airborne respirable silica if present as a mineral contaminant. Silica typically is bound up in the consumer product and not available via the inhalation exposure route. And unlike some organic chemicals or heavy metals that may also be in consumer products, silica will not break down and/or leach out over time even after the consumer product is disposed as waste.

Testimony on S.239, "An Act Relating to the Regulation of Toxic Substances" (continued)

7. Such recognition of the lack of exposure potential is what the U.S. Occupational Health & Safety Administration (OSHA) refers to as an "Article", which means a manufactured item which contains a potentially hazardous substance but for which there is no potential for exposure because it is effectively bound up. Articles are exempt from OSHA's hazard communication standard and thus are not subject to warning via labels or Material Safety Data Sheets.
8. This same approach is used by California's Proposition 65 law that aims to protect against exposure to carcinogens from consumer products without proper warning. While Prop 65's carcinogen list includes crystalline silica, the listing bears the specific parenthetical qualifier ("airborne particles of respirable size"). Furthermore, Prop 65's regulations are triggered only when an exposure actually occurs by way of reasonably foreseeable consumer product use -- not simply the presence of the carcinogen in the consumer product.
9. It would be inconsistent of the State of Vermont to regulate via this legislation consumer products containing crystalline silica as a bound-up contaminant from the likes of Omya's calcium carbonate, while at the same contributing to the public's routine exposure to crystalline silica via the State-supported application of millions of pounds of sand to Vermont's roads each year.
10. In closing I will leave you with a good example of a consumer product that would undoubtedly be subject to this law as currently drafted. The average piece of copy paper, like the one these remarks are printed on, contains 20% calcium carbonate as a filler. At the usual 0.2% silica impurity level in Omya's Vermont-made calcium carbonate, which is quite low by industry standards, this piece of paper would contain 500 parts per million of silica and thus would be subject to this law.

I thank you for the opportunity to speak to the Committee and if there are any questions, please do not hesitate to contact me.

Sincerely,



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