

# **Advisory Committee on Mercury Pollution**

Meeting #102: December 13, 2010

Time: 9:30 am to noon

Location: Laundry Building Conference Room, Waterbury State Office Complex  
Waterbury, Vermont

## **MINUTES**

### **Members Present:**

Michael Bender, Mercury Policy Project

Bill Bress, Vermont Department of Health

Gary Gulka, Vermont Agency of Natural Resources, Environmental Assistance Office

Jennifer Holliday, Chittenden Solid Waste District (via telephone)

Neil Kamman, Vermont Agency of Natural Resources, Water Quality Division

Senator Richard McCormack

### **Guests Present:**

Anthony Otis, Otis & Brooks, representing Northeast Delta Dental

Allison DeMag, representing National Electrical Manufacturers Association

Dr. Ned Groth

The Committee members and interested parties gathered at the Laundry Building conference room at the Waterbury State Office Complex. Neil Kamman called the meeting to order.

### **Agenda Item 1**

Accept minutes from November 15 meeting

A typographical error was noted and the draft minutes of November 15th were approved.

### **Agenda Item 2**

Public comment/committee member concerns

Neil Kamman asked Bill Bress about progress to develop web site content on dental amalgam and environmental concerns. Mr. Bress said that discussions on this will not occur until after the first of the year.

Michael Bender informed the Committee of the newly adopted European Union Restriction on Hazardous Substances (RoHS) Directive that sets mercury content standards for lamps. He provided the Committee with a fact sheet that showed the new mercury content limits for various lamp types. The fact sheet was prepared by Alicia Culver of Responsible Purchasing Network. Some older lamp technologies (such as halophosphate linear T10 and T12 fluorescent lamps) will no longer be allowed to be sold in the future.

Mr. Bender said that he recommends that the Committee endorse in concept the new EU standard for mercury lamps. This can be accomplished by requiring Vermont to adopt mercury content standards equivalent to the states of California or Maine, whichever is more stringent and which is based on the EU standards.

### **Agenda Item 3**

Tuna served in school lunch programs – risk communication issues

Michael Bender referenced two documents that were provided to Committee members: (1) a January 2011 Consumer Reports article entitled *Mercury in Canned Tuna Still a Concern* and (2) a June 25, 2010 letter to FDA and EPA from numerous scientists and health professionals urging the agencies to update and expand the 2004 fish advisory and to improve risk communication efforts. The Consumer Reports article recommended that pregnant women not eat any tuna, which differs from Vermont's advisory. Additional epidemiological studies since 2004 have raised concerns about the joint FDA/EPA advisory.

Mr. Bender expressed his concern with mercury exposure through school lunch programs, largely through the consumption of tuna. He said that most schools serve mainly light tuna which is much lower in mercury than white; however, it appears that some schools serve white tuna on occasion.

Mr. Bender introduced Dr. Ned Groth, who joined the meeting via teleconference to update the Committee on recent research and concerns with the FDA/EPA advisory. Dr. Groth is an environmental health scientist, now retired, who worked for Consumer's Union for 25 years as environmental health and risk communication expert. He was the principal author of the June 25 letter to FDA and EPA.

Dr. Groth said that in a paper he authored earlier this year and published in *Environmental Research*, he analyzed the relative contribution of mercury to the food supply of 51 varieties of fish and shellfish based on market share. Tuna, as a whole, overshadows all other fish and shellfish; 37% of mercury in the food supply is from canned tuna, with 32% coming from light tuna. In children, an even higher percentage of the mercury body burden is contributed by tuna. This suggests that tuna consumption by children needs to be better addressed in risk communication.

Recent studies have shown adverse impacts on cognitive development in children when prenatal exposure to mercury was near or below the Reference Dose for dietary methylmercury intake.

Dr. Groth indicated that there needs to be much better public education on which fish to choose or avoid to reduce mercury intake. Dr. Groth also pointed out deficiencies in the EPA/FDA joint advisory including the following: (1) it urges women of childbearing age to limit consumption of fish to no more than 12 ounces per week, thus limiting potential nutritional benefits; (2) it assumes no one eats more than 12 ounces of seafood per week, offering no advice for high-end consumers; (3) it lists only five high mercury fish varieties as choices for women to avoid or limit intake of, and names just five lower mercury choices, while offering no advice about the rest of the seafood market; and (4) it recommends canned light tuna as a lower mercury choice,

although canned light tuna has an above average methylmercury level and is the largest single source of mercury exposure in the U.S. diet. Dr. Groth noted that FDA has acknowledged that it included canned light tuna in the lower mercury category to avoid harming the tuna industry.

Dr. Groth referenced a prototype fish advisory chart that was included in the June 25 letter as an example of a more detailed guide to mercury levels in a greater variety of fish. Dr. Groth also pointed out that the average level of mercury in canned light tuna was 30-40% above the average level in the 51 types of seafood tested, with 20-25 seafood types having lower mercury levels. The data also showed that 6% of canned light tuna has mercury levels comparable to white tuna. There is a concern by some researchers that a high spike in mercury during prenatal development could have adverse impacts. He urged that more caution is needed than ever and better public education.

Neil Kamman asked why the prototype chart did not include walleye. Dr. Groth said that the data source was from FDA and it did not include walleye.

Michael Bender was asked what he was recommending for Committee involvement in this issue. Mr. Bender said that he would like to see the Committee address methylmercury exposure particularly in Vermont elementary schools – taking another look at Vermont’s advisory for pregnant women and the advisory related to canned light tuna.

Bill Bress said that going by EPA’s Reference Dose, VDH recommends one can of tuna per week and does not differentiate between pregnant women and young children. He said that he does not consider this a proper Reference Dose for children, since it has never been calculated. When EPA set the Reference Dose, it assumed fetal blood concentrations of mercury to be equal to maternal concentrations. But research has shown a maternal to fetal blood ratio of 1 to 1.7, thus fetal blood has a higher concentration of methylmercury.

Dr. Groth said that treating pregnant women and young children the same in advisories is a good approach. Adverse effects are seen at or below the Reference Dose.

Neil Kamman said he felt that consistent messaging to schools on mercury in tuna is needed. He said that last year’s Committee report had no exposure reduction recommendations.

Michael Bender said that he hoped that the Committee would support a recommendation in this year’s report to raise awareness in schools about the concerns with canned tuna.

Bill Bress was asked and agreed to draft some language that could be passed on to schools through various groups such as the Dept. of Education and through the Nutrition and Fitness Guidelines developed by the Dept. of Education, Agency of Agriculture and Dept. of Health. Bill Bress will bring a draft language back to the Committee.

#### **Agenda Item 4**

Committee recommendations for annual report to the Legislature

The Committee agreed to a recommendation on lamps similar to the recommendations in the 2010 report, including mercury content restrictions, sustainable funding for mercury lamp recycling that includes shared responsibility and a mechanism for phasing out mercury lamps when technically and economically feasible mercury-free alternatives are available. The discussion section of the recommendations will be updated to reflect the European Union's recent finalization of mercury content standards, as well as stakeholder meetings sponsored by DEC to review proposals for funding spent lamp recycling.

The Committee agreed on a recommendation to support efforts by VDH to incorporate environmental concerns of dental amalgam on its fact sheets and web site.

The Committee agreed to carry forward the 2010 recommendation on a fish mercury monitoring program. Neil Kamman said that true cost per year of a monitoring program is closer to \$60,000.

The Committee agreed on a recommendation that VDH work in collaboration with the Vermont Dept. of Education on communicating the risk to children of consuming tuna through school lunch programs.

The Committee agreed to a recommendation that the Advisory Committee on Mercury Pollution be sunsetted in 2011.

The Committee agreed that it would recommend to the Legislature that state government be actively engaged in the evaluation to toxic chemicals. The report will mention three options for engagement in toxics, including: an advisory committee, a state toxics evaluation program similar to Washington and Maine, and an interagency working group (consisting of ANR, VDH, and Agriculture) to advise the administration and Legislature. The Committee will not take a position on the three options. Under any of these options, mercury issues can still be addressed, should and Advisory Committee on Mercury Pollution no longer exist.

#### **Agenda Item 5**

Set next meeting date and agenda

The next meeting date was tentatively scheduled for January 10 as a conference call.

The agenda for the meeting will be to finalize the report to the Legislature.

### Summary of Motions and Actions

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