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June 3, 2005

**BY ELECTRONIC MAIL**

Jay Rasku  
Toxics Action Center  
233 North Pleasant Street, Suite 32  
Amherst, MA 01002

RE: In the Matter of Department of Conservation and Recreation  
Docket No. DEP-04-919  
DEP FILE #233-547  
Natick

Dear Jay:

I am writing to update you on the present status of the above matter.

Last month, on behalf of the citizen appellants, we filed voluminous written testimony and exhibits challenging the public health and environmental bases for the state's proposal to apply herbicides in Lake Cochituate. Rather than respond to such evidence, the state moved to stay the pending administrative proceeding for the purpose of filing a new weed control proposal with the Natick Conservation Commission. Ultimately, the state proposes to re-set the clock in a way that will postpone a full and public adversarial hearing regarding its approach to weed control, which was scheduled to occur at the end of June. We have opposed this tactic, but it is uncertain what the hearing officer will decide to do.

I will summarize much of the testimony that we filed in this matter. However, I am including a full copy of the Testimony of Howard Horowitz, Ph.D. This testimony presents the "big picture" critique of the state's approach in this matter, and a discussion of the non-chemical alternatives to aquatic weed control. Although the testimony is lengthy, I believe you will find it of considerable interest.

As is the case with Dr. Horowitz, the witnesses who provided the following summarized testimony in support of the appeal all did so on a *pro bono publico* basis. If you wish to have copies of their full written testimony, please let me know.

1. Threat to drinking water and surface water quality. Richard Yuretich, Ph.D., and

a professor of Geosciences at the University of Massachusetts, testified that the diquat would likely migrate to the Natick Springvale wellfield. He explained that the studies relied upon by the DCR, indicating low risk of diquat migration to groundwater, were inapplicable to Lake Cochituate. This is because those studies considered the migration of diquat in clay soils, and the shore and lake bottom of the Lake are not clay, but sand and gravel. Dr. Yuretich also testified that the application of herbicides would result in an extensive area of dead and decaying vegetation along the Lake shoreline, consuming oxygen from the Lake surface water and degrading surface water quality; and that harvesting of the decayed vegetation would be required to prevent such conditions. Finally, he testified that although the proposed application of endothall did not pose a high risk to the Springvale wells (due to the smaller area of application and distance from the State Beach to the wells), it poses a risk of contamination to any nearby groundwater wells.

2. Threat to human health. Harlee Strauss, Ph.D., and private consultant in the areas of human health risk assessment and toxicology, agreed with Dr. Yuretich's opinion that the proposed herbicide application poses a risk of contamination to the Town wells. She further testified that recent research regarding the toxicity of diquat, including the potential for low dose reproductive and developmental effects and possible adverse effects on internal organs, call into question present EPA estimates of diquat's toxicity. She concluded, "The uncertainties associated with the human toxicity of diquat, even at the low concentrations that would occur in Lake Cochituate after application and its potential intrusion into the Natick public drinking water supply, render it imprudent to use this herbicide in the South Pond...."

3. Threat to aquatic life. Emily Monosson, Ph.D., and private consultant in the area of environmental toxicology, testified that the application of diquat, proposed precisely at the time of year when the fish in the Lake spawn, would likely kill fish eggs and young larvae. She further testified that the application poses an "acute High Risk" to early life stages ("ELS") of fish, and strongly recommended that pre-application studies be performed regarding the toxic effects of diquat on ELS of the Lake's fish. Dr. Monosson testified that studies of diquat's effect on fish focus on lethal effects (i.e., death), and that there is some research indicating that fairly low concentrations of diquat can have sublethal (e.g., behavioral, reproductive, or neurological) effects on adult fish. Dr. Monosson also testified that diquat is toxic to aquatic invertebrates, and that research suggests its use will likely kill any endangered Boreal turreted snails that reside in the area of the herbicide application. (See more regarding this topic below.)

4. Threat to wildlife. Rodney Poling, D.V.M., a veterinarian, testified that diquat causes chromosome damage to mallard ducks; produces a chemical reaction "that alters the chemical makeup of fats that are vital building blocks of all body cells;" and reduces antioxidant activity that "protects the integrity of body cells and strengthens them against damage from any insult." Dr. Poling also testified that water currents and other environmental effects can produce variations in and increase the concentration of diquat in the water beyond the intended rate of application. He testified that the early life stages of Lake Cochituate wildlife are likely to be present along the shoreline and shallows of the Lake at the time of the planned application, and

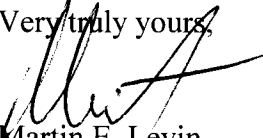
that such stages “are generally the most sensitive to substances producing the adverse health effects” caused by diquat.

5. The basis of citizen concerns. Deborah Ridings, whose home abuts South Pond, is one of the group of appellants. She testified to the many values she and others derive from the Lake, including the water she uses in her home; a multitude of recreational uses such as swimming, boating, and fishing; and her enjoyment of viewing the wildlife that live on and around the Lake. She testified to her observations of the growth of the Eurasian milfoil, and the volunteer efforts that she and others have made to prevent its spread through public education and monitoring and pulling weeds. She testified that her challenge of the state’s proposal to use herbicides stems from her concern about the possibility that they will contaminate the public wells; that people using the Lake may be directly exposed to them; and that wildlife living in, on and around the Lake will likewise be exposed. Ms. Ridings testified that such concerns have prompted difficult and expensive efforts to assess and remedy the impacts of pollutants from other sources on the Lake, and that it “does not make sense...to intentionally introduce yet more hazardous chemicals for the purpose of controlling weeds in this lake that is part of the Natick drinking water supply.” Ms. Ridings suggested use of non-chemical alternatives that would not pose such risks.

6. Threat to endangered species. The state has identified Lake Cochituate as habitat to the Boreal turreted snail, a state-listed endangered species. As a result, the state was required to submit its 2003 NOI to the Natural Heritage and Endangered Species Program (“NHESP”), the state agency responsible for assessing the potential impact of proposed wetland projects on such species. NHESP provided the Natick ConCom with a brief letter confirming that the Project would occur near actual habitat of this species, but stating that there would not be any adverse impact. Our investigation revealed that the NHESP in fact performed no evaluation whatsoever of the Project’s potential impact on the snail. The reason was the NHESP’s opinion that it did not have jurisdiction to do so, because of the passage of time since the last confirmed sighting of the snail. We believe this was an erroneous conclusion based on a misreading of the applicable regulations, and we filed pleadings challenging both the NHESP’s legal interpretation, and its failure to conduct any evaluation whatsoever. The state’s effort to re-set the clock by proposing a new NOI may permit the state to argue that enough time has now passed that the law no longer requires NHESP review. In other words, through a procedural sleight of hand, the state may seek to avoid an important environmental issue that we believe it was destined to lose.

The evidence filed in support of the appeal included testimony of highly reputable experts with no financial interest in this matter. On the other hand, from the very inception of its proposal, the state has substantially relied on the expertise of individuals in the employ of the very companies that manufacture and apply herbicides—Syngenta and Aquatic Control Technology, Inc. We do not know the specifics of the state’s new proposal, but have reason to believe that it will propose use of a new herbicide, either in addition to or instead of the originally proposed herbicides. The matter will initially be back in the hands of local Natick officials. It will be up to the appellants and their neighbors to press for a thorough, critical, and

independent evaluation of the new proposal.

Very truly yours,  
  
Martin E. Levin

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