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Via email neil.kamman@vermont.gov

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Watershed Management Division

Vermont Department of Environmental Conservation

Public Comment on the 2016 Vermont Water Quality Standards Revisions

The Environmental and Natural Resources Law Clinic at Vermont Law School submits this comment on behalf of Toxics Action Center and concerned residents in the Brandon-Leicester-Salisbury-Goshen (BLSG) mosquito control district. We appreciate the opportunity to provide this comment, and thank you for your consideration.

We urge the Vermont Department of Environmental Conservation (DEC) to include criteria for Permethrin and Anvil (Sumithrin), and any other pesticide or pesticidal ingredient that has been or is likely to be used in the state, in the 2016 Water Quality Standards revisions.

Both the State of Vermont and Vermont's insect control districts spray synthetic pyrethroid insecticides, such as Permethrin and Anvil (Sumithrin), as part of adulticide programs to control flying adult mosquitos.¹ These pesticides are being sprayed into the environment and pose a risk to the quality of Vermont's waters. However, there are no criteria listed for pyrethroid insecticides in Vermont's Water Quality Standards.² Without criteria for these pesticides, there is no mechanism for ensuring that the existing and designated uses of Vermont's waters are being maintained and protected, especially given the harmful effects that these pesticides have on human and ecological health. For instance, Permethrin is highly toxic to fish and other aquatic species, and to bees and other beneficial insects.³ In addition, pyrethroids have known human health risks.⁴

Some resources that may be helpful to the agency in developing criteria for pyrethroids, including the following:

¹ See Agency of Human Services, Vermont Department of Health, About Anvil (Sumithrin) & Health, <http://goo.gl/xc7HyP>; see also BLSG Insect Control District, Public Notice, <http://goo.gl/KbMpFf>.

² See 2016 Water Quality Standards Revisions, Proposed Rule with markup, Appendix C, <http://goo.gl/1k0T75>.

³ See, e.g., National Pesticide Information Center, Permethrin General Fact Sheet, <http://goo.gl/uWGiBO>; see also Fyfanon ULV Mosquito Insecticide Label; see also Permanone Ready-To-Use Insecticide Label.

⁴ See, e.g., Ctr. for Disease Control, Public Health Statement for Pyrethrins and Pyrethroids, <http://goo.gl/mOE6pX>.

- Tessa L. Fojut, PhD, et al., *Water Quality Criteria Report for Permethrin* (Sept. 2011), <http://goo.gl/hsL2pq>.
- Michelle L. Hladik et al., *Methods of Analysis—Determination of Pyrethroid Insecticides in Water and Sediment Using Gas Chromatography/Mass Spectrometry* (2009) <http://goo.gl/Rvvy90>.
- Lisa Nowell, *Types and Sources of Water-Quality Benchmarks for Pesticides*, Pesticide National Synthesis Project, US. Geological Survey, <http://goo.gl/63qcuw>.
- Patrick W. Moran et al., *Contaminants in Stream Sediments from Seven U.S. Metropolitan Areas: Data Summary of a National Pilot Study*, U.S. Geological Survey (Mar. 2012), <http://goo.gl/BklQB5>.
- Pesticide Action Network Pesticides Database, Water Pollution Potential and Criteria for Permethrin, <http://goo.gl/g9YDSZ>.

We urge DEC to include criteria for Permethrin and Anvil (Sumithrin), and any other pesticide or pesticidal ingredient that has been or is likely to be used in the state, in the 2016 Water Quality Standards revisions.

Thank you for the opportunity to comment.

Sincerely,

/s/ Laura Murphy

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