

VERMONT'S REVISED WATER CLEAN-UP LAW

By Jon Anderson

The Vermont Legislature recently enacted Act 64, “An act relating to improving the quality of state waters.” On August 14, 2015, the United States Environmental Protection Agency (“EPA”) proposed a draft phosphorus total maximum daily load (“TMDL”) limit for Lake Champlain, which will be finalized later this year. Together, the two documents establish a framework for improving the quality of Vermont’s waters, including the prevention of blue-green algae blooms in Lake Champlain.

By way of background, the Federal Clean Water Act requires each state to establish, subject to EPA review and approval, “Water Quality Standards” identifying a state’s waterways’ designated uses and the criteria needed to support those uses. These standards must be sufficient to ensure, wherever attainable, a water quality level that provides for the protection and propagation of fish and wildlife as well as recreation in and on the water. The Federal Clean Water Act then requires each state to assess whether its waterways meet the applicable state Water Quality Standards. A waterway, such as Lake Champlain, which fails to meet the standards is designated as “impaired.”

Phosphorus, an element commonly released in agriculture and silvicultural activities, dissolves easily in water. Rivers and lakes naturally assimilate a certain amount of phosphorus, but an abundance of the element may cause blue-green algae growths and other undesirable effects on the affected waterway. Given blue-green algae’s deleterious aesthetic and health effects and its presence in Lake Champlain, the Lake does not meet the State’s Water Quality Standards and is classified as an “impaired waterway” under the Federal Clean Water Act. This classification requires the determination of a so-called TMDL as part of the Lake’s restoration plan. Once a TMDL is determined, allowed discharges are then reduced until the waterway is no longer impaired.

The EPA’s draft TMDL makes at least two noteworthy observations. First, despite its name, the proposed Total Maximum Daily Load for phosphorus is not a daily load; rather, it is an annual load. Phosphorus discharges to Lake Champlain vary daily depending on the weather, the season and other factors. However, the extent of the blue-green algae blooms affecting the Lake depend on the concentration of phosphorus, which, given the Lake’s size and the “residence time” of the element once released into the Lake, turns on the total phosphorus loading over longer periods.

Second, the EPA’s TMDL proposal notes that elevated phosphorus levels could continue in parts of Lake Champlain well into the future despite any reductions in phosphorus releases. In at least two locations, the St. Albans and Missisquoi Bays, previously-released phosphorus, currently in the sediment at the bottom of those Bays, is expected to mix with the water column. This mixing of excess residual phosphorus could cause blue-green algae blooms even after the annual discharge of phosphorus into the Lake is reduced to the EPA’s target. While St. Albans Bay could be treated with alum to stabilize the phosphorus (essentially capturing the phosphorus

and causing it to settle to the bottom), Missisquoi Bay is too large, and a lot of Missisquoi Bay is located in Canada or is a wildlife preserve, making alum treatment impractical.

The TMDL proposes to reduce annual phosphorus deposits to Lake Champlain by thirty-four percent, from 631 metric tons to 418 metric tons. (A metric ton is 1,000 kilograms or about 2,200 pounds.) Proposed reductions vary by use in consideration of what can be most easily achieved. Farmers are expected to reduce phosphorus loading by fifty-three percent, from 262 metric tons to 123 metric tons per year. Foresters are expected to reduce phosphorus loading by about twenty-four percent, from 101 metric tons to 77 metric tons per year. Proposed reductions also vary by location. To achieve the targets, the greatest reductions must be achieved for the waters feeding into the St. Albans and Missisquoi Bays, which have the highest phosphorus concentrations.

The State of Vermont expects to achieve these reductions following what may be described as three steps – enhanced registration of potential pollution control participants and then restricting allowed discharges in two rounds: one that is applicable throughout Vermont and a second round for impaired waterways, including Lake Champlain.

Registration

Participants will be registered according to the following schedule:

1. Farms. “Large” and “Medium” farms (as defined by the State) are already subject to registration and reporting. Beginning on July 1, 2017, some small farms must certify their compliance with phosphorus reduction practices while other small farms must simply comply with required agricultural practices. The Agency of Agriculture, Food and Markets (“AAFM”) will adopt rules by July 1, 2016 specifying which small farms are in which category. Small farms include parcels of land on which as few as ten acres are used for farming, that have a certain number of mature animals or that are used for the preparation, tilling, fertilization, planting, protection, irrigation and harvesting of crops for sale.
2. Custom Applicators. By July 1, 2016, the AAFM must adopt a rule requiring persons applying manure or fertilizer for pay to register with AAFM.
3. Municipal Roads. By December 31, 2017, the Agency of Natural Resources (“ANR”) must adopt a rule establishing a date by which all municipalities shall apply for coverage under a so-called “municipal roads general permit.” All municipalities must apply for coverage under this permit by July 1, 2021.
4. Stormwater Discharges. Parcels of land with a certain amount of impervious surface (which includes rooftops and paved and unpaved parking and travel areas) developed after certain dates already hold stormwater operations permits. The size of the impervious area triggering jurisdiction has decreased over the years. Currently, permits are required for the development or significant expansion of more than an acre of impervious surfaces. Act 64 establishes a process to study

reducing this threshold to one-half acre. A number of sites were constructed when the jurisdictional threshold was higher than one acre. By July 1, 2018, ANR must adopt a rule establishing a date by which all previously unpermitted discharges from three or more acres of impervious surfaces must obtain coverage under a general permit by October 1, 2023 if such discharges are located in the Lake Champlain watershed, and by October 1, 2028 for other discharges in Vermont.

Discharge Restrictions

Discharges will first be restricted according to the following schedule:

1. By July 1, 2016, the AAFM will adopt, by rule, revised stormwater management and fertilization practices, which shall be known as Required Agricultural Practices (“RAPs”). This rule will be revised by January 15, 2018 to also include requirements for reducing contributions from subsurface tile drainage, which is used to drain water from fields so crops grow better. “Medium” farms must annually certify compliance with RAPs or submit a plan for achieving compliance. “Large” farms will be inspected for compliance at least once a year. Other farms will be inspected according to a priority system established by AAFM. When a farm inspection reveals that a farmer complying with the RAPs could further reduce discharge levels, AAFM may require such further discharge reductions using practices that will be called Best Management Practices (“BMPs”). AAFM will also inform the farmer about resources available to pay for the implementation of such BMPs. As basin planning proceeds (see below), “any person with an interest in the agricultural component of the basin planning process” may petition the AAFM to require the implementation of BMPs.
2. By July 1, 2016, the AAFM will specify training required for all farmers and, by July 1, 2017, the AAFM shall adopt a schedule by which all farmers shall complete this training. (Custom applicators must also comply with training requirements.)
3. By July 1, 2016, AAFM and ANR must develop a Memorandum of Understanding describing how they will share grants and comply with other legal requirements applying to farm operations.
4. By December 31, 2017, ANR will also revise stormwater management rules and issue a general permit for discharges from municipal roads and previously unpermitted sites with three or more acres of impervious surface. New permits will require that any new discharges, including any expansion of existing discharges, maintain the same load to any waterway impaired for such load until a TMDL for such waterway is established. The redevelopment or renewal of any permit for existing discharges must

satisfy on-site the water quality recharge and channel protection in criteria specified by the ANR to the extent such criteria are technically feasible, and the discharge load to the receiving water may not be increased.

Additional Restrictions for Impaired Waterways

Within three months after EPA issues the TMDL for Lake Champlain, ANR must update the State's TMDL implementation plan, including phosphorous reduction strategies, as well as schedules for issuing both revised wastewater treatment plans and stormwater discharge permits. New or expanded discharges may be allowed only to the extent ANR determines that there are sufficient pollutant load allocations for the discharge. In the same time frame, ANR will also have to review and update the State's other TMDL-implementation strategies.

By December 31, 2017, ANR will adopt rules establishing criteria for a basin planning process to implement the TMDL requirements. As TMDL allocations are established in each basin, the ANR may require loading reduction as necessary to achieve any TMDL.

Enforcement

Non-agricultural rules will continue to be enforced via ANR enforcement actions, with disputes being resolved by the Environmental Division of the Superior Court. Act 64 creates a new mechanism for enforcing compliance with the rules governing agricultural activities. Act 64 allows the AAFM to initiate enforcement actions through a process similar to that used by ANR, with disputes being resolved by Civil Division of the Superior Court. In addition to all other penalties, including fines and orders to cease and desist, farms found to be in violation of any rules may be removed from the use value appraisal program during the pendency of any violation.

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