

Towns Ready To Issue Contract For Long Pond Alum Treatment

by William F. Galvin

HARWICH --- Phosphorus inactivation treatment designed to improve the health of Long Pond is anticipated to begin in late spring. The Long Pond Study Group has been examining treatment proposals and is poised to issue a contract to ENSR International, Inc., an environmental consulting group from Westford.

The study committee will meet with ENSR later this week to discuss its \$417,848 bid for alum treatment to the pond to make sure there are no hidden costs involved. The group met last week to examine two responses to a request from proposals issued by the town of Brewster.

The study group, which is made up of representatives from Harwich and Brewster, examined two proposals from ENSR and Lycott Environmental, Inc. of Southbridge. The Lycott bid was for \$440,600. The group also received a letter from SolarBee of Delaware, which recommended aeration, rather than use of alum in the pond.

SolarBee said it could not meet the performance of the RFP because it does not supply alum. Conservation Administrator John Chatham said the RFP allowed for alternative proposals. He said the SolarBee concept was to place 23 solar powered reservoir circulators to aerate the pond.

He said they would be placed on no-weight floats and could be a problem for boating activity in the pond. The conservation agent said aeration is a better system for shallow ponds, and Long Pond has three pockets greater than 30 feet deep.

“Basically they’re saying you can’t boat on the pond while the work is being done,” Chatham said of the aeration systems.

The pond, which is divided by municipal boundaries placing jurisdiction under both communities, has long suffered from an excess of phosphorus, primarily from septic systems and lawn fertilizers. The phosphorus settles into the bottom layer of the pond causing an anoxic condition and depriving the ecological system of much-needed oxygen in the lower stratum. Those conditions are responsible for periodic algae blooms and fish kills during summer months.

Both the ENSR and Lycott proposals called for the use of alum. Alum treatment binds phosphorus and allows oxygen to circulate more freely

throughout the water.

ENSR previously did a study of the conditions in the pond and recommended alum treatment or aeration, but alum treatment – the use of aluminum sulfate and sodium aluminate – was the preferred application.

Because the proposal best suited the request, Chatham said the group chose ENSR before they opened the financial package. When they opened the financial package ENSR was also the low bidder. From review of the proposals it was unclear whether Lycott had a clear understanding of the scope of work, Chatham said.

Chatham said there is \$420,000 available for the project. Brewster Town Administrator Charles Sumner said \$350,000 is available from the state, each of the towns has contributed \$30,000, and the Cape Cod Commission provided \$10,000.

ENSR said the cost of aluminum treatment had risen appreciable since the initial study was done in 2000, and a large portion of the cost is related to the actual aluminum chemicals. The ENSR proposal calls for 73,265 gallons of aluminum sulfate and 36,632 of sodium aluminate at a cost of \$178,398. The chemicals will be placed in three basins in the pond over 370 of the 600 acres.

“We have assumed that multiple precautions will be required through the permitting system to avoid undue water quality and biological impacts during the project. These precautions include buffer balance, dose management, subsurface injection, non-sequential treatment of adjacent areas and extensive monitoring during treatment,” the proposal states.

ENSR will work with Aquatic Control Technology, an independent corporation that will serve as the vendor applying the chemical, Sumner said. Both the Harwich and Brewster conservation commissions will have to approve the means for treatment application. Treatment protocols are anticipated to increase labor costs above levels estimated in the original report, the document states.

Sumner said there will be filings with the conservation commissions after the first of the year. He anticipated permitting would proceed through the winter and the treatment applied to the pond in late spring. The Brewster town administrator said a joint presentation will be made to the conservation commissions by ENSR to save time and money. The commissions, however, will deliberate on an individual basis.

The alum treatment is anticipated to address the anoxic condition in the pond for 20 to 30 years, Sumner said, citing experiences with other ponds on the Cape. But as part of the contract, ENSR is charged with evaluating extensive land use alternatives designed to decrease the amount of phosphorus entering the pond.