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Mr. David Jentoft, DEQ Field Office 2100 West M-32 Gaylord, MI, 49735

Feb. 14, 2008

Re: TLA Recommendation on Bay Harbor Leachate Injection at Alba, Michigan

Mr. Jentoft,

Three Lakes Association has monitored the plan by Consumers Energy (CMS) to inject leachate derived from Bay Harbor cement plant kiln dust into rock formations beneath Alba in Star Township. We have noted criticism by many groups that this is unfair and unwise. The fairness issue can be summarized by the statement: "Why should the poor folks of Alba have to expose themselves to the toxic leachate from rich folks who live in Bay Harbor?" The injection would be unwise if the leachate contaminated groundwater near Alba. In either case the plan appears to be flawed. However, our discussion will concentrate on the issue of community health. This is not the least because the Bay Harbor community has already been affected significantly by leachate seepage into their own ground and lake water. This leachate has levels of lead, arsenic, and other materials that are above the safety levels established by he EPA and M-DEQ for human health and for the survival of some wildlife. CMS has concentrated their remediation efforts on the Bay Harbor area and has already installed pumping and treatment facilities there to minimize the immediate hazard. However, CMS wants to use deep well injection to minimize their own costs of disposing of this leachate. The primary question for us is this: Can it be done safely?

Recently, Antrim County has had a bad experience with a carcinogen, trichloroethylene (TCE), contaminating residential wells as much as 15 miles away from its point of origin. No one wants to repeat this situation. CMS claims that the injection of leachate into deep rock formations will not migrate to residential wells or into the groundwater. However, the shallowest rock layers are known to be crisscrossed with cracks and fissures that allow the penetration of groundwater. Deeper layers, the ones into which CMS is planning to inject, have a reputation of having fewer cracks. The critical issue for Alba residents is that the leachate contribute no contamination to any wells. Anything less risks putting a time bomb beneath the village of Alba and letting actual deterioration in health determine its safety. This appears to us to be imprudent.

The level of toxicity of the leachate and the location of its disposal are the main issues here. Cement leachate is dangerous both because it is caustic and because it contains toxic materials. However, the leachate contains only material from which it was originally made, Ellsworth shale. No one is alleging that it contains exotic, made-made carcinogens like TCE. The main hazardous materials, lead and mercury, were not added by the cement company during manufacturing. They are present naturally in the shale to begin with, but in the leachate they are not trapped in rock formations. It is possible that many of these leachate materials will be

reincorporated into the rock from which they are derived and diluted by distance. But only testing will determine if this process will occur fast enough or stay local enough to protect community health, and only monitoring will insure that community wells stay safe.

Three Lakes Association respectfully recommends to the EPA and M-DEQ that before significant quantities of leachate are injected into any deep wells testing be done to determine where and how fast leachate materials will travel from the well location and whether there are sufficient chemical changes or dilutions taking place in the injected material to keep hazards well below safety limits for residential or agricultural wells. Furthermore, following the practice of testing the TCE plume near Mancelona, we recommend that sentinel wells be placed near the injection well to continuously monitor the safety of groundwater. Finally, we recommend that these tests be evaluated by the EPA and M-DEQ and that the test information be available to the public for inspection.

Sincerely,

Norton Bretz Executive Director Three Lakes Association PO Box 689

Bellaire, MI 49615

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cc: Friends of the Jordan River
Star Township Supervisor
Antrim County Board of Commissioners Chairman
Antrim County Soil and Erosion Office
Antrim County Prosecuting Attorney
Kevin Elsenheimer
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Tip of the Mitt Watershed Council
Grand Traverse Bay Watershed Center
Antrim County News
Antrim Review
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