

## FOJ's objections to the Alba waste well

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Some people have asked why the Friends of the Jordan (FOJ) is so opposed to the injection well in Alba when there are already 110 natural gas producing and brine injection wells within a two-mile radius? The following is in part my reply as president of the FOJ and my personal involvement in this critically important issue.

FOJ and the people of Antrim County inherited the unspoiled Jordan Valley from our prudent predecessors and we have the solemn obligation to be good stewards of this priceless gift and pass this legacy on to future generations. The Alba waste disposal well represents a real and present danger to the "Crown Jewel" of Michigan's riverine ecosystems, the Jordan River Watershed.

Nearly every river, lake, city, farm and household in Northern Michigan depends on clean, fresh groundwater. Those who don't (City of Charlevoix and Mancelona) have had to find other sources of drinking water at great expense because the ground water has been contaminated with industrial wastes. Of the 19 states that do allow deep waste well disposal, most have groundwater contamination problems as a result of these wells. EPA reports a nine percent failure rate for deep injection wells. Others I fear are waiting to fail or have leaks discovered.

There are major differences between brine disposal wells and the Alba waste disposal well. The CKD leachate destined for Alba is toxic and corrosive. It contains hazardous heavy metals, petrochemicals and high levels of dissolved solids. An estimated 135,000 gallons of this toxic brew must be trucked over county roads every day, 10 – 15 times both ways, 365 days a year for 10 – 20 years. What then? Will the CKD piles at Bay Harbor quit leaching when the permits expire? How many more disposal wells will be needed if CMS is able to collect more than 10 percent of the total leachate? If one well is OK, why not 20? What other industrial wastes will be targeted for Antrim County? A dangerous precedent is being set.

Unlike the gas wells, the people of Alba don't want this waste disposal well. They derive no benefit or royalty check every month and only stand to lose should anything go wrong. Moreover, Beeland Group (CMS) doesn't even own the mineral rights to the property. What about neighboring property owners? What will happen to the value of their real-estate when this well is operational? Who wants to live and raise a family next to a toxic disposal well? Who will pay for the wear and tear of the county roads and emergency response personnel? Who will pay for a cleanup if a toxic plume emerges like in Mancelona? How would you like to have 15 of these massive tanker trucks drive by your house or child's bus stop twice a day, every day? These issues and many more were not considered by EPA or MDEQ because they fell outside the permit "rules."

The brine from a gas well is returned to the Earth from where it came, albeit in a deeper formation. The CKD leachate is a toxic industrial waste, hauled into a distant watershed against the people's wishes. Disposal wells do fail and there is no way to suck this material back up the hole once it's injected. The classification of CKD leachate as non-hazardous is by semantic definition only. It kills fish, insects and vegetation on contact and causes chemical burns.

The scientific evidence cited by CMS to reassure us is strongly disputed by knowledgeable people who have no financial incentive to fabricate the truth. Dr. Harrison (PhD. Geologist, Western MI Univ.) has identified two major fault lines in the deep limestone formations in SE. Antrim Co. Recent earth quakes in Ohio were caused by increased pressures and lubrication from a deep disposal well, releasing toxic wastes from the "confinement zone" and contaminating groundwater. Dr. McClurg (PhD. Geologist, Univ. of Wyoming) cites evidence that the "capping shale layers" are actually fractured and porous, not the impervious layer as CMS contends. Dr. Patterson (PhD. Geophysist, Exxon) has exposed numerous flaws in Beeland's permit regarding pressure gradients, limestone porosity and many critical calculations.

The regulatory agencies, EPA and MDEQ, have not thoroughly reviewed all aspects of this waste disposal well. Mr. Bates of EPA states it simply, "EPA's role is to evaluate permit applications and to regulate the construction and operation of the injection well to ensure compliance with the Safe Drinking Water Act." Even Dr. Vugrinovich, a senior geologist with MDEQ states, "The number of wells disposing of oil and gas field brine into the Dundee Limestone in Antrim Co. suggests that the Dundee Limestone will serve as a suitable disposal zone." Suggests? That's hardly reassuring. He must use the word, suggest, because solid scientific proof does not exist.

Let's not forget that in 2005, EPA ordered CMS to "remove, isolate or contain" the CKD at Bay Harbor, not transport its toxic leachate to Alba. Let's also not forget that nearly 20 years ago, a much stronger MDNR ordered Penn Dixie's owner, Holnam, to clean up the CKD according to rigid accepted standards. Sadly, and after careful and exhaustive study, FOJ finds the cleanup process at Bay Harbor today to be dysfunctional, inept, lacking proper oversight and cloaked in secrecy.

Perhaps the biggest obstacle is also the simplest. In the midst of all the techno-babble, we lose sight of the simple truths. The goals are to cleanup Bay Harbor and halt the release of toxic CKD leachate. Every time we discuss the problems with Bay Harbor and the Alba disposal well we get bogged down in, the technical details, miss-leading public statements to score PR points and the lack of credible, unbiased facts. The simple facts are that the waste disposal well in Alba doesn't solve the problems at Bay Harbor and only makes matters worse. There are still 2.5 million cubic yards of improperly buried CKD under the Resort that continue to leach millions of gallons of a toxic substance. The collection system installed by CMS is prone to failure and only captures a fraction of the total leachate. Most leachate still flows into Little Traverse Bay untreated. The Alba waste disposal well allows CMS to inexpensively dispose a toxic industrial waste into a distant, rural, less affluent community with no zoning to prevent it. It also will divert a large volume of water that should be flowing into Lake Michigan. Why risk contaminating a pristine groundwater aquifer that feeds the Jordan and Boyne Rivers and ultimately Lake Charlevoix with a poor and partial remedy? Would the people of Bay Harbor be willing to accept Alba's industrial waste if the roles were reversed?

FOJ has met with MDEQ, EPA, CMS and Tip of the Mitt to help find a better solution to the myriad of problems at Bay Harbor. There are prudent and feasible alternatives. We have been largely ignored. We have tried to educate the public through the media but also feel we have been shunned and cut off. I am shocked and dismayed that the people of Petoskey, Harbor Springs and Bay Harbor are not outraged and demanding better answers. This has been going on for 20 years! These issues demand more attention by the public, our elected officials and the press.

Tragically, FOJ has no option but to appeal these miss-guided permits, raise money for a protracted legal battle and appeal to the good people of Northern Michigan to take action. Support FOJ, write to your elected representatives and get involved. The contamination problems and the flawed cleanup process at Bay Harbor has the potential to, one day, be in all our backyards, not just Alba's.

Sincerely,

Dr. John W. Richter

President, Friends of the Jordan River Watershed Inc.