

# EPA Gives Preliminary OK To Underground Waste Well

## Beeland Group Injection Well Permit Application

Emmet County, Michigan

December 2010

### Your opinion wanted

EPA will hold two public outreach gatherings **Jan. 10, 2011**, and a public comment period about the draft decision for Beeland Group's application to operate an underground waste injection well in Emmet County. The Agency has tentatively approved the well application pending review of public comments so your opinion is important.

The Jan. 10 event includes an informal presentation by EPA, Michigan and company officials followed by a formal public hearing. At the hearing you can make oral or written statements for the record:

**When:** Monday, Jan. 10, 2011

**Public Meeting** – 5:30 to 6:30 p.m.

**Public Hearing** – 7 to 8 p.m.

**Where:** Petoskey Middle School, 801 Northmen Drive., Petoskey

Written comments can be submitted until **Jan. 31, 2011**:

- At the Jan. 10 public meeting.
- Mail the enclosed comment sheet to William Bates.
- E-mail William at [bates.william@epa.gov](mailto:bates.william@epa.gov) or fax to 312-692-2580.
- Via the Internet at [www.epa.gov/r5water/uic/uicpub.htm](http://www.epa.gov/r5water/uic/uicpub.htm).

EPA will answer all comments and make the final decision available to the public.

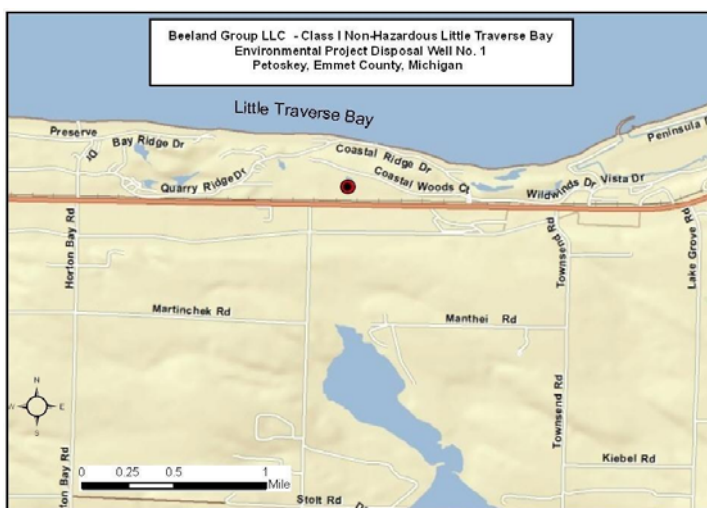
*(See P. 2 for more contact information and the case number for this well permit application)*

U.S. Environmental Protection Agency determined a proposed waste injection well is safe and has issued a draft permit but will hold a public hearing before making a final decision. Beeland Group LLC of Jackson, Mich., a subsidiary of CMS Land Company, applied for a permit to construct and operate a Class I injection well at CMS Land's remediation facility. CMS is the party responsible for cleaning up liquid waste called leachate that is coming from cement kiln dust buried under Bay Harbor resort development. The injection well is intended as a permanent disposal method for the leachate that currently is trucked off-site.

This draft action covers the construction and operation of a well in Emmet County and does not regulate the proposed injection well in Alba, Mich., which is currently tied up in legal action.

EPA scientists and engineers decided Beeland's proposal to inject the waste deep underground can be done safely without harming drinking water sources. EPA also determined the well will be properly constructed and will not leak if the allowable injection pressure is not exceeded. The proposed \$2 million well will be environmentally safe, EPA believes, but the company will not know until the well is built whether the deep rock formation can absorb the necessary volume of leachate.

Before making a final decision on its draft determination, EPA will accept public comments until Jan. 31, 2011, and host an official hearing to gather public input (*see left-hand box for ways you can participate in the decision-making process*).<sup>1</sup>



*This map shows the location of the proposed well in Emmet County.*

<sup>1</sup>EPA issues well permits under the Safe Drinking Water Act as amended (42 U.S.C. 300f *et seq.*, commonly known as the SDWA) and attendant regulations incorporated in Title 40 of the Code of Federal Regulations (CFR) Parts 124, 144, 146, and 147. To read the laws and regulations see [www.epa.gov/lawsregs/index.html](http://www.epa.gov/lawsregs/index.html).

Michigan Department of Natural Resources and Environment must also issue a permit for the well that includes aboveground operations. Well construction could start following final approval of the federal and state permits.

### Keeping the community safe

The Bay Harbor resort was built on top of a former cement processing plant. Before the problem was discovered, snowmelt and rain were picking up contaminants from buried cement kiln dust (CKD) as they soaked through the ground and then traveling to Little Traverse Bay on Lake Michigan. The CKD leachate is caustic and unsafe to touch. CMS agreed to take several cleanup actions including building interception trenches that stop most of the leachate from reaching the lake.

The liquid waste is currently trucked to an off-site disposal facility, which creates traffic, poses accident risks and costs a lot of money. Disposing of the leachate at the local well would be cheaper and help the community by protecting Little Traverse Bay from pollution and reducing truck traffic and the risk of an accidental spill.

#### More contact information

##### William Bates

Underground Injection Control Branch  
EPA Region 5 (WU-16J)  
77 W. Jackson Blvd.  
Chicago, IL 60604-3590  
312-886-6110

In correspondence, please refer to EPA Draft Permit # MI-047-11-0001. If you would like a written response, please be sure to include a return mail or e-mail address.

Remember, the public comment period closes Jan. 31, 2011.

#### Read the documents

EPA's draft permit and other documents about the proposed Beeland injection well are on file at the **Petoskey District Library**, 500 E. Mitchell, Petoskey; and **EPA Region 5 Offices**, 77 W. Jackson Blvd., Chicago. If you visit Region 5, call William Bates for an appointment, 800-621-8431, Ext. 66110, weekdays, 10 a.m. – 5 p.m.

#### On the Web

[www.epa.gov/region5/water/uic/uicpub.htm](http://www.epa.gov/region5/water/uic/uicpub.htm)

### Protecting drinking water

The proposed Beeland Class I well permit would only allow for the disposal of nonhazardous leachate and stormwater runoff from the cleanup site at Bay Harbor.

The waste will be injected into an area below the deepest underground source of drinking water (USDW). The well will be cased and cemented to prevent fluid from moving into an USDW. In this location the base of the USDW is unknown but believed to be less than 800 feet below the surface. During well construction the USDW base will be pinpointed.

### Site geology

EPA scientists carefully study the rock formations at a proposed well site to determine whether they will isolate the waste.

The injection zone where the waste will be placed lies in the Franconia and Eau Claire formations and Galesville and Mount Simon sandstone. At the proposed well site, the injection zone is located between 6,000 and 7,000 feet below the surface. Directly above the injection zone is the confining zone, which isolates the waste from nearby underground water supplies. The confining zone is Utica and Collingwood shale, Trenton, Black River, Trempealeau and Glenwood formations, Saint Peter Sandstone and Prairie du Chien Group, which are composed of limestone, sandstone and shale.

### Technical guidelines

Here are some of the criteria EPA examines before acting on a permit application:

**Area of Review:** The AOR is a two-mile radius from the proposed injection well. EPA found no producing, plugged or abandoned wells within the AOR.

**Maximum Injection Pressure:** The proposed maximum injection pressure in the Beeland permit application is 258 pounds per square inch. Well operations must stick to that limit or risk penalties including permit revocation.

**Financial Assurance:** Beeland Group LLC has demonstrated adequate financial resources to close, plug or abandon this underground injection operation using a state bond for \$60,000.

### Appeal rights

To preserve your right to appeal any final permit decision, you must either send EPA written comments or participate in the public hearing. The first appeal must be made to the Environmental Appeals Board. You may not seek legal action until all agency review procedures have been exhausted.



**Beeland Group Injection Well Permit Application  
Comment Sheet**

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Place  
First  
Class  
Postage  
Here

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