



Fact Sheet #2

Exelon Braidwood Nuclear Facility

Update on Tritium Releases and Groundwater Impacts

Background – The Illinois Environmental Protection Agency (Illinois EPA) has been working since late November 2005 to fully discover the extent of groundwater contamination at the Exelon Braidwood Generating Facility. Two violations notices have been issued to Exelon, and the Agency has referred a case to the Illinois Attorney General's Office for enforcement. Illinois EPA requested significant testing of groundwater near the plant in areas of previous leaks of water that contained tritium. Exelon has installed numerous sampling wells and has tested many private wells in the area. A complete investigation report is due soon from Exelon, and this will be available to the public through a Freedom of Information Act (FOIA) request (see Page Three for details).

On March 16, 2006, the Illinois Attorney General and the Will County State's Attorney filed a complaint against Exelon. Currently, these two offices are working with the Illinois EPA and Illinois Emergency Management Agency (IEMA) to develop the steps that Exelon will need to take to fully investigate, mitigate and clean up contamination resulting from releases of tritium water.

Illinois EPA has also worked with representatives in the Illinois State Legislature to develop House Bill 1620, which calls for reporting within 24 hours of any unpermitted release of a radionuclide to Illinois EPA and IEMA as well as quarterly inspection authority for both agencies at nuclear generating plants in Illinois.

Has the investigation fully defined the groundwater contaminated at the plant?

While further work is being performed, Illinois EPA believes that the plumes have been well defined. The larger plumes are situated on the northeast side of the plant. One of these plumes has migrated off-site to the north of Smiley Road.

Two other smaller plumes are located on the Will County Forest Preserve's Braidwood Dunes (near vacuum breaker #4) and Sand Ridge Savanna Nature Preserve (near VB #7).

An investigation report is due in April and will be made available at a public repository at the Godley Park District.

Does a health hazard exist for residents in the area who are using private wells?

No data collected to date from private wells near the plant show tritium contamination levels greater than the maximum level that is established by U.S. EPA for safe drinking water. That comparison level is 20,000 Pico curies of radiation per liter of water (pCi/L). Well tests near the Braidwood plant have shown (except one well that is not being used for drinking water) results below or near the **detection level** for tritium, which is 200 (pCi/L). According to the interpretation by IDPH, results to date do not represent a health hazard to area residents.



However, under Illinois' Groundwater and Environmental Protection Acts, Illinois EPA is acting to protect the future safe use of groundwater by enforcing the provision against causing a threat to groundwater. For example, under these Acts, a "threat" exists if a contamination plume in groundwater is at a concentration level greater than what would be naturally-occurring and is moving toward a drinking water well.

Should I be concerned about the safety of the pond on my property? My children swim and fish in the pond. Does it need to be tested?

Unless your pond is located directly north of the plant between S. Center Street and Cemetery Road/Comet Drive, Illinois EPA does not believe that it is necessary for you to have your pond tested for tritium. However, if you would feel more comfortable having it tested, that is an individual decision.

Residents have expressed concern about eating fish from Exelon's cooling lake. Has that lake been impacted by the tritium releases?

No, the cooling lake for the generating plant has not been affected by tritium releases. The cooling lake was recently tested for tritium, and the result was below the detection limit. Other than the 25-acre pond just north of the plant (the direction of the larger groundwater plume), Illinois EPA is not aware of contamination affecting any lakes or ponds in the area.

Residents are concerned about the ditch that runs along the west side of the plant. Various spills in the past followed the ditch, which is close to some residences in Godley. Is that ditch being monitored?

Yes, it is being routinely monitored for tritium in the groundwater via a shallow well next to the ditch near the plant entrance (on the northwest). Results of testing have shown no tritium in the groundwater near the ditch. Exelon is currently preventing surface water from entering the ditch.

Illinois EPA has sampled four private drinking water wells immediately adjacent to the ditch in June 2005 and has now compelled Exelon to sample all of the private wells in Godley.

What is the status of the enforcement case that the state of Illinois began with Exelon?

The Illinois Attorney General has filed a complaint on behalf of the Illinois EPA against Exelon for spills/leaks of tritium into groundwater. The Illinois Attorney General and the Will County State's Attorney are working with the Illinois EPA and IEMA to develop steps that Exelon should take, including:

1. Discharge no radiation-waste water through the blowdown line (where leaks previously occurred), except under specific circumstances. To lower the 25-acre pond on the north side of the site, Exelon will be allowed to discharge water to the Kankakee River under very strict monitoring requirements;
2. Provide bottled water to all residences not on public water supply along the blowdown line and in Godley and where tritium has been detected in drinking water wells at a concentration greater than the detection level of 200 (pCi/L);
3. Conduct testing of private wells in Godley for tritium;

4. Establish a Groundwater Management Zone through a comprehensive investigation and development of corrective actions with Illinois EPA oversight;
5. Disclose any information about other releases of tritium;
6. Maintain and implement a Community Relations Plan with Illinois EPA oversight;
7. Develop a public repository of documents related to the tritium releases and corrective actions; and
8. Reimburse the State of Illinois and Will County for costs incurred to respond to these spills/leaks.

Which residents will be provided with bottled water?

Exelon mailed out information on March 20 to residents in the area explaining that bottled water will be provided to residents of Godley and to residents within 1500 feet of the blowdown line (which goes to the Kanakakee River west of the plant). These residents may receive up to 20 gallons of water per week at Berkots grocery store in Braidwood.

What is the status of tritium recently found in the ditches along Center Street north of the facility?

On March 24, 2006, Exelon received test results on surface water from the ditches along Center Street that revealed tritium contamination at levels up to 1000 pico curies per liter. Exelon reported this to the state agencies that evening and has begun efforts to capture this water from the ditch with vacuum trucks. The tritiated water will be stored in tanks on the Braidwood Generating Plant property until plans are approved for disposing of the stored water.

For more information:

General questions about the site, Illinois EPA, Office of Community Relations:

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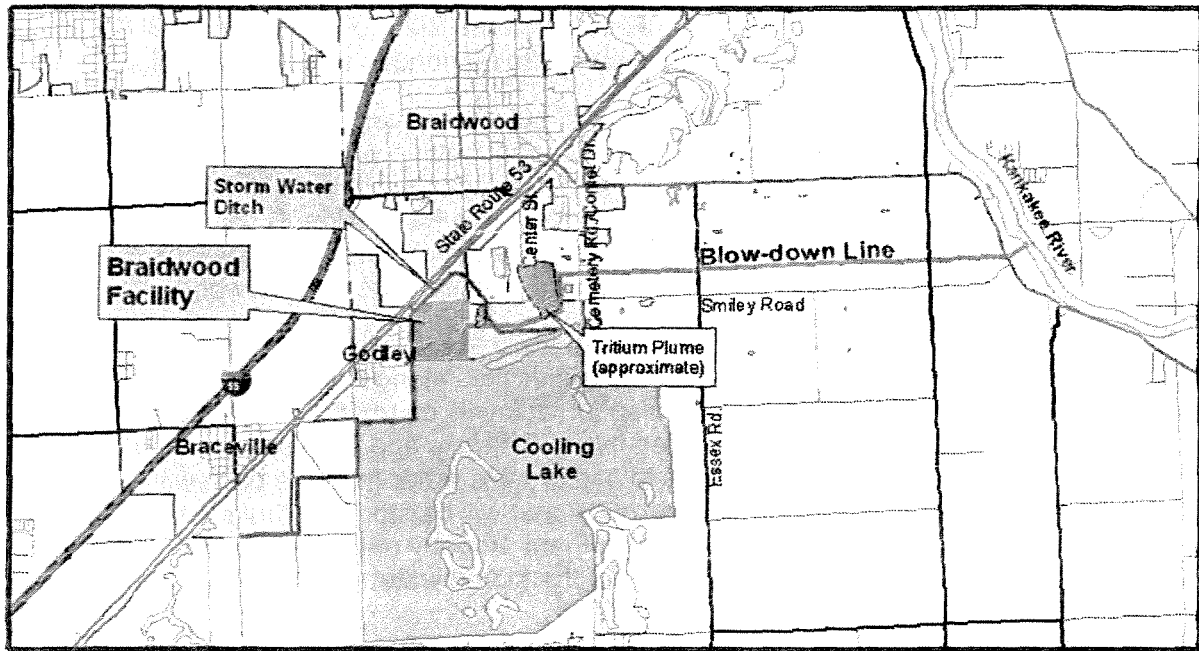
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Illinois EPA now has a website regarding Radiation and Groundwater at www.epa.state.il.us/community-relations/radiation-and-groundwater

Exelon - Braidwood Generation Station



Legend

- | | |
|--------------------|-----------------------------|
| Water | Storm Water Ditch |
| State Highway | Blow-down Line |
| Major Road | Tritium Plume (approximate) |
| Local Road | Cooling Lake |
| Interstate | Braidwood Facility |
| Municipal Boundary | |



Illinois EPA
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