



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

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JAMES R. THOMPSON CENTER, 100 WEST RANDOLPH, SUITE 11-300, CHICAGO, IL 60601 - (312) 814-6026

ROD R. BLAGOJEVICH, GOVERNOR DOUGLAS P. SCOTT, DIRECTOR

October 11, 2007

Ms. Wanda Alderson
(b)(6)

Re: Will County
Exelon Generation Braidwood Station
General Correspondence

Dear Ms. Alderson:

Thank you for your August 20, 2007 letter to the Illinois Environmental Protection Agency (Illinois EPA) regarding your concerns about the radioactive waste releases and groundwater remediation at Exelon Nuclear's Braidwood Generation Station (Station). Your letter expressed concern with the tritium releases and how the releases are being remediated, and requested a meeting with Illinois EPA to discuss your concerns. The Agency is willing to meet with you to discuss your concerns.

Listed below are the issues you raised in your letter followed with a response by the Illinois EPA. Some of the issues you have raised will need to be addressed by the Nuclear Regulatory Commission (NRC) and have been so noted.

1. There is an assertion that the spills contained more hazardous radionuclides than tritium (Cobalt 60 was discussed at one point). What other constituents were in the spills?

Response: The radionuclide waste treatment system operated by Exelon effectively removes the other radionuclides in the waste stream. What the treatment system cannot remove is tritium. In the Early stages of the groundwater investigations at the Station groundwater samples were analyzed for the several other radionuclides. Attachment 1 contains a list of the radionuclides which were analyzed. The analyses were completed by Midwest Laboratory. The results indicated that the concentrations were below detection. Additional information on what the Station is licensed to discharge to the Kankakee River would need to be provided by the NRC.

2. Exelon discharged nuclear waste without a permit.

Response: The Nuclear Regulatory Commission licenses Exelon to discharge radioactive waste to the Kankakee River and has procedures for dealing with unplanned releases. The National Pollutant Discharge Elimination System (NPDES) permit, granted to Exelon by the State of Illinois, allows Exelon to discharge the non-radioactive portion of the waste in the blow down line to the Kankakee River. The discharge of any wastewater, including wastewater containing radionuclides, at places other than the permitted discharge point - the Kankakee River - violated that permit.

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Information in this report was deleted in accordance with the Freedom of Information Act. Exemptions 6, 7, 2010-0209

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Further explanation on the details of where and at what concentrations the Station is licensed to discharge nuclear waste will need to be addressed by the NRC.

3. Radionuclide contamination extended to private property.

Response: This is correct. Because the previous tritium spills affected groundwater and off-site properties, Illinois EPA worked with the Illinois Attorney General's Office and the Will County State's Attorney to develop an Interim Order on Consent to compel Exelon to do the necessary work to remediate the tritiated water.

4. Is there any recourse for a private citizen whose property has been damaged?

Response: A private citizen may take legal action against Exelon separate from the remedy being sought by the State of Illinois.

5. Nuclear Regulatory Commission's punishment to Exelon (causing the licensee to file a report next time a spill occurs) seems inadequate for the damage done.

Response: This issue will need to be addressed by the NRC.

6. Property Values - Exelon has promised to make citizens "whole" for any losses of property damage. Mrs. Alderson believes that her property has been devalued as a result of the spills containing tritium and, potentially, other radionuclides.

Response: The Environmental Protection Act does not address issues such as diminished property value or property restoration costs that might be related to violations of the Act that affect the private interests of individuals. Those types of losses and injuries can be addressed through a private attorney. Nothing that the Illinois EPA or the NRC is doing pursuant fines or other action for the release of radionuclides to the environment would preclude a private citizen from taking legal action on their own behalf.

7. Fines - Why hasn't any regulatory agency issued fines to Exelon for the releases?

Response: The Illinois Environmental Protection Act ("Act") does allow for the State to seek monetary penalties from those persons violating provisions of the Act. The State generally does seek penalties from violators of the Act, along with action(s) to address the noncompliance issues involved in the particular case, as an acceptable resolution of such violations. The development of a resolution of this matter acceptable to the State is still ongoing.

8. The remediation plan is not working – tritium concentrations went up on the Alderson property after the remedy began.

Further sampling of the monitoring well on your property is needed to determine the overall trend of the tritium concentrations in your well. The concentrations should decline over time as the remediation progresses. Illinois EPA requests that Exelon and /or the Illinois Emergency Management Agency's Bureau of Nuclear Facility Safety be allowed to sample the monitoring well on your property.

9. Involuntary Health Risk – Since Exelon allowed the spilled tritiated water to seep onto some of the neighboring properties (and, later, it moved underneath neighboring properties), any additional health risk posed from this additional amount of radiation in the groundwater on the Alderson property is not voluntary. Concern is expressed that the Aldersons may suffer health effects in the future from past exposures, and Ms. Alderson is requesting medical monitoring.

Response: This issue will need to be addressed by the NRC.

10. Dresden Nuclear Generating Station – Why haven't enforcement agencies made Exelon do anything about the large plume of tritiated water (with greater than 10 million picocuries per liter concentration) underneath this facility? Are private wells at risk?

Response: The plume does not threaten private wells at this time. On-site groundwater contamination will be addressed when the plant is decommissioned.

11. There is a predominantly sandy geological formation in the area – Has this become saturated with tritiated water? Will it be radioactive for a very long time?

Response: Tritium contaminated groundwater remains in the subsurface at Dresden and will remain radioactive for a significant period of time.

12. Trivialization of Risk – Information conveyed by ~~Mr. Eli Port~~ the health physicist who is speaking for Exelon, seemed to trivialize residents' concerns. The tritium concentration in the groundwater and in the monitor well on the Alderson property is "not naturally-occurring."

Response: You are correct that the tritium levels in the well on the Alderson property are not naturally-occurring. Health risks from these levels of tritium will need to be addressed by the NRC.

I trust the responses helps to further your understanding of the issues you have identified. The Illinois EPA is willing to meet with you to further discuss these issues. Some of your concerns will need to be addressed by the NRC, and I have forwarded a copy of your letter to Steven Orth at the NRC to make him aware of your questions and concerns. Mr. Orth may be reached at 630-829-9827. Please contact me at 217- 524-7922 if I can be of further assistance, or if you would like to schedule a meeting.

Sincerely,



William E. Buscher, P.G.
Supervisor, Hydrogeology and Compliance Unit
Groundwater Section
Division of Public Water Supplies
Bureau of Water

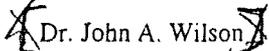
Carol Fuller
Steve Orth

Attachment 1

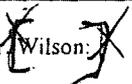
Environmental, Inc.

Midwest Laboratory

An Allegheny Technologies Company
700 Landwehr Road • Northbrook, IL 60062-2310
Phone (847) 564-0700 • Fax (847) 564-4517

 Dr. John A. Wilson
Health Physics Support
Exelon Nuclear
4300 Winfield Road
Warrenville, IL 60555

LABORATORY REPORT NO.: 8004-100-1866
DATE: 12-03-05
SAMPLES RECEIVED: 12-02-05
TYPE OF REPORT: COMPLETE

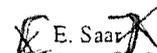
Dear Dr.  Wilson:

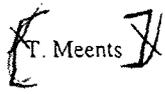
Below are the results of the gamma isotopic analyses performed on 2 water samples collected at Braidwood Station.

If you have any questions or comments, please call me at (847) 564-0700.

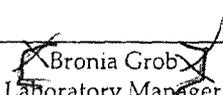
Sample Description	BL-18	BL-17	LLD
Collection Date	12-01-05	12-01-05	(From Exelon ODCM)
Lab Code	BDWW-6702	BDWW-6703	
Units	pCi/L	pCi/L	pCi/L
Mn-54	2.3±5.3;5.3	3.6±5.1;5.1	15
Fe-59	1.2±9.9;9.9	5.2±8.8;8.8	30
Co-58	-2.5±4.8;4.8	-0.4±4.9;4.9	15
Co-60	-3.2±6.3;6.3	-0.6±5.2;5.2	15
Zn-65	0.5±12.4;12.4	-24.5±13.7;13.7	30
Nb/Zr-95	0.3±5.1;5.1	-8.3±5.9;5.9	15
Cs-134	-2.6±4.9;4.9	-9.3±5.4;5.4	15
Cs-137	7.8±4.9;4.9	1.8±5.7;5.7	18
Ba/La-140	0.5±6.4;6.4	-0.3±6.1;6.1	15

Sincerely,

 E. Saar
Program Coordinator

 cc:  T. Meents

APPROVED BY _____

 Bronia Grob
Laboratory Manager

SAMPLES RETAINED THIRTY DAYS AFTER ANALYSIS