

Nielsen, Adam

**From:** Bonser, Brian 122  
**Sent:** Friday, June 18, 2010 11:13 AM 122  
**To:** Dykes, Carmen; Nielsen, Adam  
**Cc:** Kuzo, George  
**Subject:** FW: Historical List of Reactor Sites with Groundwater Tritium greater than 20,000 pCi/l

Fyi

**From:** Conatser, Richard  
**Sent:** Wednesday, June 16, 2010 8:56 AM  
**To:** Martin, Robert  
**Cc:** Bonser, Brian; Shoop, Undine  
**Subject:** Historical List of Reactor Sites with Groundwater Tritium greater than 20,000 pCi/l

Bob,

Below (in RED) is the suggested response to Southern Company regarding the NRC including Hatch and Vogtle on "The List" of spills and leaks at power plants. Read this and see if you think it is OK. Feel free to edit it. If you want me to send it, just let me know. If you would like to send it to the licensee, feel free to do that as well, but please include the following individuals on the response:

- (b)(6)
- Richard Conatser (NRC)
  - Brian Bonser (NRC, Health Physics Branch Chief)
  - Bob Trojanoski (NRC State Liaison Officer, Region II)
  - Roger Hannah (NRC, Region II OPA)

(b)(6)

NRR Health Physicists compiled a list of reactor sites with leaks or spills involving tritium (from abnormal radioactive releases) in concentrations greater than 20,000 pCi/l in either soil, soil moisture, groundwater, or the leak/spill source. Both Hatch and Vogtle appear on this list based on records supplied by the licensee to the NRC. The list has been posted on the NRC Public Web Page at <http://www.nrc.gov/reactors/operating/ops-experience/tritium/sites-grndwtr-contam.html> (via hyperlink in center of web page).

The licensee questioned whether Hatch and Vogtle should be included in the list, and whether the date associated with the Hatch event should be revised. NRR Health Physicists evaluated the situation for both Vogtle and Hatch, and have come to the following conclusions:

- Hatch should appear on the list based on a spill from the Spent Fuel Pool in 2003.
- The date for the Hatch event was verified as 2003, and the list was revised to reflect this information.
- Vogtle should appear on the list based on a multiple spills or leaks from the RWST in the 1990s.
- In both cases, the data indicates an abnormal release from the sites involving tritium greater than 20,000 pCi/l contacting the soil, which is the criteria for inclusion in the list.

The Historical List of Reactor Sites with Groundwater Tritium greater than 20,000 pCi/l was revised and reissued as Revision 5 with the change indicated above (i.e., the date for the Hatch event was changed from 1986 to 2003).

If you have questions, please contact me.

C/4

Best Regards,

*Richard L. Conatser*

Health Physicist

Nuclear Regulatory Commission

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