

**John Hickman - Trying to reach John B Hickman**

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**From:** "Jon Block" <jonb@sover.net>  
**To:** <jbh@nrc.gov>  
**Date:** 11/20/2003 4:15:35 PM  
**Subject:** Trying to reach John B Hickman

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Please let me know if this address reached John B Hickman, Project Manager, Yankee Rowe, NRC NMSS.

The attached report should be forwarded to him.

It is by an independent hydrogeologist assessing the current status of Yankee Rowe's hydrogeological assays and methodology under the new LTP.

Thank you.

Sincerely,

Jonathan M. Block

**Mail Envelope Properties** (3FBD2EE8.734 : 11 : 55092)

**Subject:** Trying to reach John B Hickman  
**Creation Date** Thu, Nov 20, 2003 4:04 PM  
**From:** "Jon Block" <[jonb@sover.net](mailto:jonb@sover.net)>

**Created By:** [jonb@sover.net](mailto:jonb@sover.net)

**Recipients**

nrc.gov  
twf4\_po.TWFN\_DO  
JBH (John Hickman)

**Post Office**

twf4\_po.TWFN\_DO

**Route**

nrc.gov

<b>Files</b>	<b>Size</b>	<b>Date &amp; Time</b>
MESSAGE	341	Thursday, November 20, 2003 4:04 PM
Part.001	1297	
REAYankee.pdf	136918	
Mime.822	191057	

**Options**

**Expiration Date:** None  
**Priority:** Standard  
**ReplyRequested:** No  
**Return Notification:** None

**Concealed Subject:** No  
**Security:** Standard

ROSS ENVIRONMENTAL ASSOCIATES, INC.

Hydrogeology, Water Quality, GIS Planning,  
Contaminant Fate & Transport, Remediation,  
& Regulatory Compliance and Permitting



12 November 2003

Mr. Jon Block  
Attorney at Law  
PO Box 566  
Putney, VT 05346-0566

RE: *Yankee Row*

Dear Mr. Block:

I have reviewed the following documents regarding the Yankee Nuclear Power Station in Rowe, Massachusetts:

- Site Groundwater Data Collection for YNPS Decommissioning (DESD-YR-02-001) Rev. 1
- Yankee Atomic Energy Commission (YAEC) - Decommissioning and Fuel Storage Update - 5/01/03 - 7/16/03.
- Yankee Atomic Energy Commission- Decommissioning and Fuel Storage Update - 7/16/03 - 9/30/03

Based on my review of these documents, I believe the methodology used by YAEC to evaluate the hydrogeologic and subsurface soil contaminant conditions at the site were inadequate to assure the protection of public health and safety. A summary of significant deficiencies are included below:

1. Available information indicates that inconsistent sampling methodologies were used during groundwater sampling completed at the facility to date. Comparison of ground water quality data from sampling events where different sampling procedures are used is highly suspect. A consistent sampling methodology should be employed and a more frequent sampling schedule should be implemented to evaluate possible seasonal fluctuations in ground water quality.
2. The evaluation of ground water quality data should be correlated with ground water elevation data for corresponding sampling events to assess the possible relationship between contaminant trends and fluctuating ground water elevations. In many instances, contaminant concentrations vary seasonally due to fluctuating ground water elevations.
3. The horizontal and vertical extent of subsurface contamination has not been adequately characterized. Additional work should be completed to characterized possible impacts within and downgradient of the suspected release areas.
4. The hydrogeologic assessment of the Yankee Rowe facility does not include an evaluation of the vertical hydraulic flow regime. The report identifies three potential water-bearing units (fill outwash, glacial till and bedrock units); however, the current site characterization does not adequately assess the potential hydraulic connection between these units.

5. The hydrogeologic assessment of the Yankee Rowe facility does it adequately assess possible contaminant distribution in deeper portions of the underlying ground water formation. There is limited data regarding possible impacts to the underlying glacial till and bedrock units; a majority of the data collected to date is related to the shallow overburden formation (fill outwash and upper till units).
6. The vertical extent of subsurface soil contamination beneath facility structures does not appear to have been completely characterized.

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If you have any questions or concerns regarding the above comments, please call.

Sincerely,

*Ross Environmental Associates, Inc.*

Robert J. Ross, CGWP, LPG  
Principal Hydrogeologist

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