

# YANKEE ATOMIC ELECTRIC COMPANY

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49 Yankee Road, Rowe, Massachusetts 01367

November 22, 2005  
BYR-2005-102

Ms. Kimberly N. Tisa  
PCB Coordinator  
United States Environmental Protection Agency  
1 Congress Street, Suite 1100 - CPT  
Boston, MA 02114-2023

- References:
- 1) J. Lynch (YAEC) to K. Tisa (EPA), "TSCA Waste Management Area Verification Field Sampling Plan – Yankee Nuclear Power Station", dated October 20, 2005, BYR 2005-089
  - 2) R. Varney (EPA) to J. Rollins (YAEC), "Approval for Cleanup and Disposal of PCB Remediation Waste under 40 CFR §§ 761.61 (a) and (c)", dated June 23, 2005
  - 3) J. Rollins (YAEC) to K. Tisa (EPA), Notification and Certification of Self-Implementing Cleanup & Disposal of PCB Remediation Waste, Yankee Nuclear Power Station", dated May 6, 2005 BYR 205-045

**Subject: Revised Work Plan - Sampling, Analysis & Response Actions  
PCB Remediation Waste Management Areas  
Yankee Nuclear Power Station  
49 Yankee Road  
Rowe, Massachusetts 01367**

Dear Ms. Tisa:

Yankee Atomic Electric Company (YAEC) is pleased to submit this revised Work Plan for Sampling, Analysis & Response Actions (Work Plan) in PCB remediation waste management areas utilized at the Yankee Nuclear Power Station (YNPS) site. In response to your request for the Work Plan to reflect only amendments to sampling procedures and locations not specifically approved by the US Environmental Protection Agency (EPA or Agency) as outlined in prior YAEC submittals or Agency approvals, this Work Plan replaces that previously submitted to the Agency (Reference 1). This Work Plan is submitted in fulfillment of Condition 13 of the Agency's June 23, 2005 Approval for Cleanup and Disposal of PCB Remediation Waste (Reference 1). Collectively the YAEC submittal and Agency approval will be identified as the TSCA Plan.

## **Purpose & Scope**

Condition 13 of the Agency's approval indicates "...YAEC shall submit for EPA's review and approval, a Work Plan for sampling and analysis of PCB remediation waste management areas, including the waste staging areas and indirect thermal disposal system (IDS) area. The work plan shall include a review, cleanup, and disposal component in the event that PCBs at > 1 ppm are found in these areas." This Work Plan responds to the requirement of Condition 13.

## **Proposed Work Plan**

Any work conducted to satisfy Condition 13 of the Agency's June 23, 2005 Approval will be conducted in accordance with prior Agency Approval and/or supporting Applications. Additional work necessary to satisfy Condition 13 not previously outlined in prior YAEC Applications or Agency Approvals that is completed to support the characterization of soil quality in PCB remediation waste management areas will be conducted in accordance with this Work Plan.

Verification soil samples will be collected from PCB remediation waste management areas of the site where TSCA remedial work is not planned and where PCB impacted materials (soil, sediment, or debris) were staged or treated. Therefore, if material was temporarily staged in an area that was planned for remediation, and that area was subsequently remediated under the TSCA Plan, verification sampling will not be required. Stockpiles on protective barriers other than in planned remediation areas will require sampling.

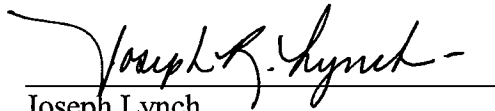
As provided in Yankee's previous submittal of May 6, 2005 (Reference 2) samples of PCBs for either soil or asphalt will be collected in accordance with YNPS procedures. Stockpiles on concrete will be visually inspected to ensure that no residual soil remains in place of sampling. Sample frequency for all samples will be as specified within this Work Plan or within this submittal.

Following the removal of a PCB impacted stockpile, a maximum grid spacing of 20-foot by 20-foot will be marked in the field. Figure 1 presents an example of a waste management area (sediment staging area) with a 20-foot by 20-foot grid and sample locations. A verification grab sample will be collected from the center of each complete and partial grid cell. A similar process will be used for marking sampling grids in all remediation waste staging areas, as well as for the indirect thermal disposal system (IDS) area. For smaller areas, a 10-foot by 10-foot area will be sampled with a maximum of a 9-point composite. The sampling grid will completely cover the footprint of the stockpile/ staging/IDS area. Table 1 identifies the areas to be sampled, as well as the prescribed sample grid spacing for each area. Additional locations may be added as necessitated by ongoing site closure/decommissioning needs. Any additional areas and results will be identified in the final report to EPA compiled in accordance with Condition 19 of the Agency's approval.

In the event that a PCB remediation waste management area is sampled and found to contain PCBs in excess of 1 ppm, the area will be evaluated in accordance with provisions of the approved TSCA Plan and the associated regulatory approval to determine remedial actions if any. Removal, management and re-sampling of impacted areas will be conducted in accordance with Agency approvals and conditions thereto. Re-sampling of this area will be performed in accordance with the field-sampling plan. Grid sample numbers will be consecutively numbered as previously described in the plan, with the exception that the letter "R" will be used at the end of each sample number to designate that the sample is a repeat sample following excavation (e.g., ST-13-001R).

We hope the proposed Work Plan will meet your expectations. Should you have questions or require additional information, please contact Mr. Kenneth W. Dow, Environmental Manager, at (413) 424-2245.

Sincerely,  
YANKEE ATOMIC ELECTRIC COMPANY

  
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Joseph Lynch  
Yankee Site Closure Director

Attachments: Table 1: PCB Remediation Waste Management Areas  
Figure 1: Proposed Sampling Grid

cc: Robert Varney, US EPA  
M. Rosenstein, US EPA (w/o enclosure)  
D. Howland, MA DEP Springfield  
L. Hanson, MA DEP Springfield  
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Public Repository at Greenfield Community College



**Table 1**  
**TSCA Waste Management Area**  
**Verification Sampling**

Pile Number	Pile Location	Origin of Materials	Description of Materials	Original Volume (yds <sup>3</sup> )	Footprint Area	TSCA Grid (1) Spacing
10	Perimeter of PCA 1	Perimeter of PCA 1	Soil	40	20 X 20	10 X 10
13	TSCA Area No. 2 Hillside, South of Switchyard	PCB Excavation Areas 1 & 3, Landfill Areas A, B, & C	Soil & Rock	950	90 X 90	10 X 10
25	NE of PCA 1 Pad	Truck Monitoring Area	Street Sweepings	10	10 X 10	Sample with Pile No. 26
26	SE Corner of Industrial Area	SFP Excavation	Soil & Rock	220	60 X 60	20 X 20
37	Off of North Road Across from Pile 34	Site Wide	Sand/Stone/Asphalt	10	16 X 24	20 X 20
47	Maxymillian In-feed Area	Site Wide (Industrial Area)	Soil/Rock	300 (var.)	50 X 125	10 X 10
	Maxymillian General Area	Processed Soils	Soil	N/A	50 X 150	20 X 20
51	South Access Road Upper Lot	Pile 47 (Untreated PCB Soils & Rock)	Oversized Material (Rock/Rubble)	1,000 (est.)	70 X 130	20 X 20
58	S of Former SIDG Bldg	Pile 47 (Untreated PCB Soils & Rock)	Rejected Oversized Materials	15	30 X 30	10 X 10
70	West of Pile 26	Site Wide	Street Sweepings	1	3 X 10	Sample with Pile No. 26
74	Lower Lot	Erosion Control Hay Bales (Used)	Hay Bales	15	20 X 20	10 X 10
75	S of Gate 7	Site Wide	Street Sweepings	1	3 X 10	Sample with Pile No. 26
102	East of Fire Water Tank	Area 1.8 Excavation	Soil & Rock	80	30 X 30	10 X 10
115	S of Former SIDG Bldg	Site Wide Street Sweepings	Soil	1	3 X 10	Sample with Pile No. 58
126	Former Office Bldg Area	Turbine Pad Surface	Used Filter Fabric	3	5 X 10	Sampled with Pile No. 144

**Table 1  
TSCA Waste Management Area  
Verification Sampling**

Pile Number	Pile Location	Origin of Materials	Description of Materials	Original Volume (yds <sup>3</sup> )	Footprint Area	TSCA Grid (1) Spacing
128	Former Office Bldg Area	Turbine Pad Demo	Concrete/Rebar	10	5 X 10	Sampled with Pile No. 144
133	East of Control Point	North Storm Water Detention Area	Sediment	5	10 X 10	10 X 10
140	Off West Rd. North of Mt. Herdon	Area 2 Hillside Excavations	Soil	0	30 X 30	20 X 20
144	NE Corner Office Bldg.	Turbine Building Pad	Soil & Concrete Rubble	200	30 X 50	10 X 10
145	North of Annex Bldg	Catch Basin #2 Excavation	Concrete Rubble	5	20 X 20	10 X 10
148	Safe Shutdown Building	Rad-Waste Building Complex	Soil & Concrete Rubble	320	20 X 50	20 X 20
151	West of SCFA	Rad-Waste Building Complex	Soils	1,180	40 X 60	20 X 20
	Drainage Locations A & B	Maxymillian and SCFA Locations	Soils	N/A	5 X 600	1 per 50 linear feet (behind erosion controls)
	Along Roadway North of West Storm Drainage Ditch	PCB Containing Sediment in Storage Sacks	Sediment	N/A	5 X 250	1 per 50 linear feet
	PCB Storage Area Access Roads	General Site	Soil	N/A	25 X 500	1 per 50 linear feet

(1) 10 X 10 (10-foot grid spacing with grid cell samples combined into a nin-point composited sample)  
20 X 20 (20-foot sample spacing with no composites)