Supplemental Phase II Comprehensive Site Assessment Report

Yankee Nuclear Power Station
49 Yankee Road
Rowe, Massachusetts

RTN 1-13411
21 September 2006

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Yankee Atomic Electric Company

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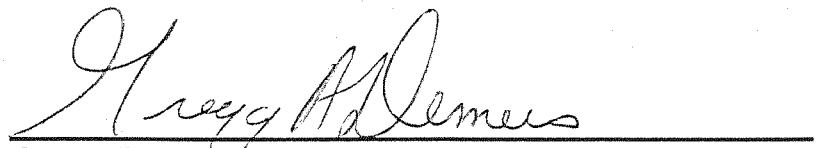
ERM Reference 43964.2

For John W. McTigue, P.G., LSP
Principal-in-Charge



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BUD	Beneficial Use Determination
CMR	Code of Massachusetts Regulations
DCE	1,1-dichloroethene
DCGL	Derived Concentration Guideline Level
DEHP	bis(2-ethylhexyl)phthalate
DRO	Diesel Range Organics
EPA	Environmental Protection Agency
EPH	Extractable Petroleum Hydrocarbon
ERM	Environmental Resources Management
FSS	Final Status Survey
GERG	Geochemical & Environmental Research Group
GMP-MCP	Groundwater Monitoring Plan to Support Closure under the Massachusetts Contingency Plan
HSA	Historical Site Assessment
HSSR	Hydrogeochemical and Stream Sediment Reconnaissance Program
IAEA	International Atomic Energy Agency
ISFSI	Independent Spent Fuel Storage Installation
IX	Ion Exchange
LTP	License Termination Plan
MADEP	Massachusetts Department of Environmental Protection
MCL	Maximum Contaminant Level
MCP	Massachusetts Contingency Plan
MDL	Method Detection Level
MW	Monitoring Well
NRC	Nuclear Regulatory Commission
NURE	National Uranium Resource Evaluation
OHM	Oil and Hazardous Materials
PAHs	Polycyclic Aromatic Hydrocarbons
PCBs	Polychlorinated Biphenyls
PCE	Tetrachloroethene
pCi/L	picocuries per liter
pCi/g	picocuries per gram
PP13	Priority Pollutant 13 Metals
QAPP	Quality Assurance Project Plan
QA/QC	Quality Assurance/Quality Control
RAO	Response Action Outcome Statement
ROS	Remedy Operation Status
RCs	Reportable Concentrations
REMP	Radiological Environmental Monitoring Program
RSCS	Radiation Safety Control Services

SCM	Site Conceptual Model
SFP	Spent Fuel Pool
SRL	Savannah River Laboratory
SVOC	Semi-Volatile Organic Compound
TCA	1,1,1-trichloroethane
TSCA	Toxic Substance Control Act
UIC	Underground Injection Control
VOC	Volatile Organic Compounds
VPH	Volatile Petroleum Hydrocarbon
YAEC	Yankee Atomic Electric Company
YNPS	Yankee Nuclear Power Station

EXECUTIVE SUMMARY

Introduction

Yankee Atomic Electric Company (YAEC) retained Environmental Resources Management (ERM) to prepare a Supplemental Phase II Comprehensive Site Assessment Report for the Yankee Nuclear Power Station, which is located in Rowe, Massachusetts. YAEC ceased commercial power generation activities at the site in 1992 and is in the final stages of site decommissioning.

A Phase II Comprehensive Site Assessment for the YNPS site was submitted to the Massachusetts Department of Environmental Protection (MADEP) in January 2005. On 7 October 2005, the MADEP provided YAEC with a review of the Phase II Report (Phase II Approval Letter) and stated that the Phase II Report was acceptable, subject to certain conditions. This Supplemental Phase II was prepared to address the conditions in the Phase II Approval Letter.

Supplemental Activities

This Supplemental Phase II report provides a summary of the following activities:

- Supplemental soil sampling to further characterize site conditions and to evaluate the effectiveness of closure activities in over 25 areas at the site;
- Implementation of a soil gas survey in the vicinity of the former solvent usage area;
- Installation of 19 additional groundwater monitoring wells and three replacement wells;
- Multiple groundwater sampling rounds and analysis of samples for radiological, as well as oil and hazardous material (OHM) parameters;
- Collection of 23 surface water and 50 sediment samples for analysis of radiological, as well as OHM parameters; and
- Collection of fish for analysis of radiological parameters.

Conclusions

The conclusions of the Supplemental Phase II Comprehensive Site Assessment for YNPS are presented below:

- The sources, nature and extent of impacts to the environment at YNPS have been defined. Additional investigation activities have addressed the conditions of approval stipulated by MADEP in the Phase II Approval Letter. No new or additional impacts were identified.

- Impacted soil and sediment have been adequately remediated. A limited program of confirmatory sampling and remediation is on-going to complete the decommissioning program.

- Areas of groundwater impact that exceed applicable or suitably analogous drinking water standards will continue to be monitored until impacts naturally attenuate (via dilution, dispersion, bio-transformation, radioactive decay) below drinking water standards.

- Portions of the site where residual concentrations of OHM in subsurface soil could pose a potential future risk of harm to human health, safety or public welfare will be subject to land use restrictions (e.g., Activity & Use Limitation or similar deed restriction) that will prohibit activities and uses that could result in adverse exposure and require the maintenance of controls (e.g., soil cover, 24-hour security) to prevent adverse exposure.

- Cumulative human health and environmental risk characterizations will be prepared to confirm and document that residual impacts remaining at the site will not pose a significant risk based on the planned land use restrictions. The risk assessment will be submitted to the Department under separate cover.

1.0 INTRODUCTION

1.1 BACKGROUND

The Yankee Nuclear Power Station (YNPS) is located on an approximately 1,800-acre property at 49 Yankee Road in Rowe, Massachusetts (Figure 1). Yankee Atomic Electric Company (YAEC), owner and operator of YNPS, ceased commercial power generation activities in 1992 and is in the final stages of decommissioning the plant.

On behalf of Yankee Atomic Electric Company (YAEC), Environmental Resources Management (ERM), in coordination with Gradient Corporation (Gradient), Radiation Safety Control Services (RSCS) and C.N. Associates, prepared a Phase II Comprehensive Site Assessment (Phase II) Report for the YNPS site, dated 28 January 2005. The report, which was prepared at the request of the Massachusetts Department of Environmental Protection (MADEP/Department), presented data generated through December 2004 and included a summary of:

- Likely and known sources of release of radioactivity, oil, and/or hazardous materials (OHM) to the environment;
- YAEC's rationale for selection of radioactive/OHM constituents/contaminants of concern and areas/media targeted for investigation;
- Results of investigation and testing to identify the nature and extent of contamination in potentially affected media (soil, groundwater, surface water, sediment, air, fish and food stocks such as syrup and milk); and
- Ongoing/scheduled investigations and/or remedial actions.

On 7 October 2005, the Department provided YAEC with a review of the Phase II Report (Phase II Approval Letter) and stated that the Phase II Report was acceptable, subject to certain conditions (see Appendix A). The conditions included requirements to conduct additional sampling of soil, groundwater, sediment, surface water and fish, along with requests for other information related to the nature and extent of impacts at YNPS. The Department's letter established a deadline of 15 July 2006 for the submittal of the requested information. Following discussions between Mr. Joseph Lynch (YAEC) and Mr. David Howland (MADEP), the

deadline for submittal of the report was extended to allow for the compilation and review of data collected in Spring and Summer 2006.

1.2 PURPOSE & SCOPE

The purpose of the Supplemental Phase II Report is to address the conditions outlined in the Phase II Approval Letter and to further document the source, nature, and extent of impacts associated with the construction, operation, and decommissioning of YNPS. A summary of the conditions outlined in the Phase II Approval Letter, along with YAEC's response to the conditions, is provided in Table 1.

As with the Phase II Report, the Supplemental Phase II is intended to be a summary document and thereby relies on more detailed supporting characterization documentation. The Phase II is applicable to the entire "YNPS site" defined, for the purposes of this report, as that location in the environment where plant-related radioactivity and/or OHM have come to be located in the environment (i.e., at levels exceeding those naturally occurring, or background, including anthropogenic influences).

This Supplemental Phase II is submitted in partial fulfillment of the requirements of the Massachusetts Contingency Plan (MCP), Code of Massachusetts Regulations (310 CMR 40.0000) for a Phase II Report pursuant to 310 CMR 40.0883. A risk characterization will be prepared following completion of remedial actions to document that residual radioactivity and/or OHM remaining at the site meet applicable risk management criteria for protection of human health, safety, public welfare and the environment.

1.3 STATUS OF DECOMMISSIONING ACTIVITIES

Decommissioning activities have been substantially completed as of September 2006. All structures at the site, except for the guardhouse and Independent Spent Fuel Storage Installation (ISFSI) have been demolished (see Figure 2). Remedial activities, consisting of soil and sediment excavation and on-site thermal treatment or off-site disposal, have been completed in a variety of areas to support site closure. In addition, polychlorinated biphenyls (PCB) impacted soil in the former Southeast Construction Fill Area has been substantially removed. Closure samples were taken during the course of all remedial activities to determine the adequacy of the cleanup and to document post-remedial conditions. The site is in the process of being re-graded and the crest of Sherman Dam is

being extended onto the site to replace former flood control structures that were part of YNPS. The Final Status Survey (FSS), which is necessary to satisfy the requirements of the License Termination Plan (LTP) for radiological issues, is substantially complete with data analysis and report generation currently underway.

YAEC anticipates that site decommissioning will be completed in 2006 and that groundwater sampling and monitoring of site conditions will be performed in 2007 and beyond. YAEC anticipates that the final risk characterization being conducted as part of this Phase II and in support of site closure will be completed in early 2007 and that a Response Action Outcome Statement (RAO) or Remedy Operation Status (ROS) will be filed by the end of 2007.

The ISFSI will continue to be guarded and monitored continually until the fuel is permanently removed.

2.0 SUMMARY OF SUPPLEMENTAL PHASE II ACTIVITIES

2.1 SOIL

2.1.1 Radiological Sampling

Soil samples along with other survey data are being collected during the FSS in accordance with the FSS Quality Assurance Project Plan (QAPP) and approved procedures. The results from these samples will comprise the final record of radioactivity in soils at the site and will be used to demonstrate compliance with applicable Derived-Concentration Guideline Levels (DCGLs) for Nuclear Regulatory Commission (NRC) license termination and risk assessment. Both surface (top 6 inches of soil) and subsurface (top 3 meters of soil in limited areas) samples are being collected in support of FSS, in addition to scans of open land areas (see Figure 3).

2.1.2 OHM Sampling

Supplemental soil sampling was performed between January 2005 and August 2006 to address the Department's comments in the Phase II Approval Letter, to further characterize site conditions, and to evaluate the effectiveness of closure activities the site. Based on discussions with the MADEP, ERM, on behalf of YAEC, submitted a letter to the MADEP , dated 31 March 2006 (see Appendix B), that outlined YAEC's proposed approach for evaluating exceedances of Reportable Concentrations (RCs), which varied from the approach described in the Department's Phase II Approval Letter. The adopted approach was designed to ensure adequate characterization of soil in areas where data indicated OHM at levels in excess of RCs and to eliminate collection of repetitive or unnecessarily duplicative data.

The soil sampling locations are shown in Figures 4A and 4B. Soil samples were collected for one or more of the following non-radiological parameters:

- Extractable Petroleum Hydrocarbons (EPH) – Standard/Volatile Petroleum Hydrocarbons (VPH) – Standard by MADEP Methods MADEP-EPH-98-1 and MADEP-VPH-98-1 (standard analysis excludes target analytes).

- Volatile Organic Compounds (VOCs) by GC/MS, SW-846 Method 8260B;
- Semi-Volatile Organic Compounds (SVOCs) by GC/MS, SW-846 Method 8270C;
- Dioxin;
- Herbicides by SW-846 Method 8151;
- Polychlorinated Biphenyls (PCBs) by GC, SW-846 Method 8082; and
- Priority Pollutant 13 Metals (PP13) Metals by SW-846 6010B.

In addition to the soil sampling activities described above, YAEC collected over 600 excavation closure samples to satisfy Environmental Protection Agency (EPA) requirements of the Toxic Substance Control Act (TSCA) associated with remediation of PCBs in soil in both the central portion of the site and at the former Southeast Construction Fill Area. The closure samples were collected following the excavation of soils impacted by the historic release of PCB-containing paint chips. A final TSCA Soil Report and a Phase IV Final Inspection Report, which will describe the remedial activities and closure sampling, will be provided under separate cover.

2.2 SOIL GAS

From April to June 2005, a passive soil gas sampling event was conducted in the footprint of the former Service Building and Turbine Building (see Figure 4B). Sampling was conducted to investigate the former usage of solvents in the machine shop of the Service Building and the oil room in the Turbine Building. Samples were analyzed for VOCs by GC/MS, SW-846 Method 8260B.

2.3 GROUNDWATER

2.3.1 Monitoring Well Network

Groundwater investigations began at YNPS in 1977 with the installation of the first monitoring well. Since 1977, a total of 80 monitoring wells have been installed, along with three replacement wells. Although 25 of these wells were abandoned during site decommissioning, the remaining 55 wells support ongoing monitoring of site groundwater quality (see Table 2 and Figure 5). A brief summary of primary well installation/ abandonment events is provided below:

- Prior to 2003, 34 monitoring wells were installed at various times to investigate the shallow outwash aquifer.

- In 2003 and 2004, a comprehensive subsurface investigation program was initiated to evaluate groundwater quality deeper in the overburden beneath the shallow outwash deposits and into the underlying bedrock aquifer. This program included collection of continuous soil and rock cores and installation of 27 wells as a single, couplet or triplet monitoring point, including:

    - Four wells in the shallow outwash aquifer;

    - 13 wells in sand lenses interlayered within a lodgment till underlying the bedrock; and

    - 10 wells into the bedrock.

- In 2006, an additional 22 wells were installed to further define the extent of groundwater impacts detected in previous events. The wells were installed by D.L. Maher Company in accordance with the Department's *Standard References for Monitoring Wells* (WSC-310-91). This investigation focused on further characterization of groundwater quality in and around the Ion Exchange (IX) Pit and the Spent Fuel Pool (SFP) as the suspected source of tritium in groundwater as well as the down-gradient extent of impact, including:

    - Nine wells in three wells clusters to investigate the IX Pit, the SFP, and the Septic System Leach Field;

    - Five shallow wells to bound the highest shallow tritium groundwater concentration;

    - Three wells to investigate the highest deep tritium groundwater concentration;

    - Three shallow wells to replace wells that were destroyed during decommissioning;

    - One shallow well to investigate non-radiological impacts down-gradient of the former Service Building; and

    - One additional well at the MW-104 cluster to characterize an intermediate sand lens.

Plant decommissioning activities necessitated the closure/abandonment of a total of 26 monitoring wells. These were generally older, shallow wells that were either damaged with questionable integrity, duplicative of the current monitoring well network or not worth maintaining during site re-grading, including:

- In July 2004, the following six wells were closed: B-1, CB-10, CB-11A, CW-11, CW-8, and MW-1;
- In November 2004, the following 16 wells were closed: CB-1, CB-12, CB-5, CB-7, CB-9, CFW-2, CFW-3, CFW-4, CFW-7, CW-3, CW-4, CW-5, MW-2, MW-5, MW-6, and OSR-1;
- In August 2005, the following three wells were closed: CB-2, CW-6, and CW-7; and
- In August 2006, CB-3 was closed.

2.3.2 Water Supply Wells

Two fresh water supply wells served the YNPS site: the Furlon House Water Supply Well (DW002) and the Plant Water Supply Well (DW001). The Furlon House Water Supply Well is in the process of being abandoned, as its associated structure has been demolished. No additional sampling will occur from this well location.

2.3.3 Sherman Spring

Sherman Spring is located approximately 0.2 miles northwest of the former footprint of the operating plant. It continues to be routinely sampled as a part of the groundwater monitoring program and was sampled in conjunction with the surface water sampling program conducted as part of the Supplemental Phase II activities.

2.3.4 Radiological Sampling Program

Monitoring Wells

As discussed in Section 2.3.1, additional monitoring wells have been installed at YNPS, and those wells have been incorporated into the site groundwater sampling program. Table 3 provides a matrix of the wells sampled, in the Winter 2005, Spring 2006, Summer 2006, and Fall 2006 quarterly sampling campaigns. Table 3 also provides the analytical suites for each monitoring period.

In the fourth quarter of 2005, increases in the tritium concentrations were observed in three of the shallow-aquifer wells (MW-106A, CB-6, CB-4) and the groundwater seep at Sherman Spring (SP-1). These wells previously had low or non-detectable concentrations of tritium. The increase in concentrations was attributed to flushing of groundwater through the source area following the removal of slabs and foundations in that portion of the site. As a result, supplemental tritium sampling of these wells was performed in January/February, May/June, and August of 2006.

Two of the wells and the surface water seep (MW-106A, CB-6 and SP-1) are down-gradient of the former foot-print of the operating plant. The increased concentrations of tritium detected down-gradient of the former plant are consistent with the migration of tritium via advective flow of groundwater in the shallow outwash deposits from defined areas of tritium impact to groundwater at the former plant. These locations will continue to be sampled as part of the LTP groundwater monitoring program.

Water Supply Wells

The on-site potable water supply wells have been historically included in the site groundwater sampling plans. Table 3 summarizes the analyses performed (or to be performed) for the Furlon House and Site Water Supply Wells for the Winter 2005, Spring 2006, Summer 2006, and Fall 2006. As the Furlon House Water Supply Well is being abandoned, it is no longer available for sampling.

Sherman Spring

Sherman Spring continues to be included in the groundwater monitoring program. Tritium has been the only plant-related radionuclide identified in sampling and analysis. Table 3 provides a matrix of the analyses performed during the Winter 2005, Spring 2006, Summer 2006, and Fall 2006 quarterly sampling campaigns.

2.3.5 OHM Sampling Program

Monitoring Wells

As part of the site closure process, YAEC has been conducting groundwater sampling on a periodic basis. The following table summarizes groundwater sampling activities conducted since the submittal of the Phase II Report:

Date	Comment
November 2004	Phase II Report provided historical data, but had not yet been validated. The validated data are presented in this report.
March 2005	Sampled select wells that previously exceeded RCs.
November 2005	Sampled select wells that previously exceeded RCs.
April/May 2006	Comprehensive sampling round to address conditions of Phase II Approval Letter. Data have not yet been validated.
June/July 2006	Sampled select wells that exceeded RCs in April/May. Data have not yet been validated.
September 2006	Sampling has been conducted, but the results are not yet available.

Groundwater samples were collected using low-flow sampling techniques in accordance with YAEC's procedure *Ground Water Level Measurement and Sample Collection in Observation Wells* (DP-9734) and USEPA's *Low Stress (low flow) Purging and Sampling Procedure for the Collection of Groundwater Samples from Monitoring Wells*, dated 30 July 1996.

During these sampling events, monitoring wells were analyzed for one or more of the following non-radiological parameters:

- EPH/VPH by MADEP Methods MADEP-EPH-98-1 and MADEP-VPH-98-1;
- VOCs by GC/MS, SW-846 Method 8260B; (with Tentatively Identified Compounds in specified samples);
- SVOCs by GC/MS, SW-846 Method 8270C SVOCs, SIM analysis;
- Alcohols by FID Method ASTM D3695;
- Chlorinated Herbicides by GC, SW-846 Method 8151;
- PCBs - total and dissolved by GC, SW-846 Method 8082; and
- PP13 Metals plus boron and lithium by SW-846 Method 6010B.

As with the soil sampling program, ERM submitted a letter to the Department on 31 March 2006 that outlined YAEC's proposed approach for evaluating exceedances of RCs in groundwater. Appendix B provides a summary of the approach that was adopted at the site.

On 1 September 2006, YAEC submitted to the Department a *Groundwater Monitoring Plan to Support Closure under the Massachusetts Contingency Plan*

(GMP-MCP) that outlined long-term monitoring proposed to support site closure under the MCP. The *Groundwater Compliance Plan for License Termination for the Yankee Nuclear Power Station,* which outlines groundwater monitoring being conducted to satisfy the License Termination Plan for review and approval by the NRC, was included as an appendix to the GMP-MCP.

Water Supply Wells

Since January 2005, the Facility Supply Well (DW001) has been sampled twice for non-radiological parameters and the Furlon House (Visitor's Center) Water Supply Well (DW002) has been sampled once for non-radiological parameters.

Sherman Spring

Since January 2005, Sherman Spring has been sampled once for non-radiological parameters. Sampling of surface water from Sherman Spring is addressed in Section 2.4 below.

2.4 SEDIMENT & SURFACE WATER

2.4.1 Sampling Program

Sediment and surface water sampling was conducted between May and August 2006 to address the Department's comments in the Phase II Approval Letter. As requested by the Department, sediment and/or surface water samples were collected at the following locations:

- Background/Deerfield River: Three surface water and six sediment samples were collected from locations in the Deerfield River, upstream of the Harriman Station outfall (SW-407 to 409, SD-407 to 412).

- Sherman Reservoir: Three surface water and 13 sediment samples were collected in the vicinity of the Intake Structure, Discharge Structure, and East Storm Drain Outfall. The following samples were collected to further evaluate locations where inorganic elements were detected at concentrations more than five times background levels (SD-008R, 009R, 011R, 012R, 041R). The remaining samples in Sherman Reservoir were collected to further assess potential impacts to sediment (SD-050 to 057) and surface water (SW-008, -009 and -011).

- Wheeler Brook: Six surface water samples were collected from Wheeler Brook (SW-101 through SW-106), consistent with sampling locations used for annual monitoring of the former Southeast Construction Fill Area.

- West Storm Drain Ditch: One surface water and one sediment sample were collected in the West Storm Drain Ditch. The sediment sample was collected to further evaluate locations where inorganic elements were detected at concentrations more than five times background levels (SD-304R). The surface water sample was co-located with the sediment sample (SW-304).

- Surface Springs: One surface water and one sediment sample were collected at each of the following locations: along the true seep line of Sherman Spring (SD-220, SW-220), at the historic "Sherman Spring" sampling location (SD-221, SW-221); and at the seep area of the "second spring" south of Sherman Spring (SD-222, SW-222).

- Deerfield River below Sherman Dam: Ten surface water samples and 30 sediment samples were collected from the Deerfield River downstream of Sherman Dam. The sampling locations are described below:
  - At the outfall location of Sherman Spring (SW-223; SD-223 to -225)
  - At the outfall location of the "second spring" (SW-226; SD-226 to -228)
  - In the river between Sherman Dam and the West Storm Drain Ditch (SW-229; SD-229 to -231)
  - In two areas near the West Storm Drain Ditch outfall to the river (SW-232; SD-232 to -234) and (SW-235; SD-235 to -237)
  - Three areas between the West Storm Drain Ditch and the Monroe Bridge Dam, upstream of the former, capped Monroe Sludge Landfill (SW-238; SD-238 to -240), (SW-241; SD-241 to -243) and (SW-244; SD-244 to -246)
  - Behind the Bear Swamp (Fife Brook) dam (SW-247; SD-247 to -249)
  - Behind the No. 4 dam in Charlemont (SW-250; SD-250 to -252)

Sediment grab samples were collected either manually using a core tube or by boat using a Ponar or torpedo dredge.

Sediment samples from the West Storm Drain, Bear Swamp, No. 4 Dam, and background were collected manually. A 2-in diameter, clear PVC

core tube, capped at one end, was pushed by hand approximately four inches into the sediment to obtain a sample. Generally, multiple core samples collected adjacent to one another were required to fill the requisite number of containers. Samples were collected from downstream to upstream locations to reduce the potential for suspended sediments to impact the sample results.

Deerfield River samples were collected both manually and with a Ponar dredge. Manual collections were made for samples SD-220 through SD-236, as described above. In Sherman Reservoir samples were collected either manually, with a Ponar dredge, or with a K-B corer. Manual samples were collected by divers. In some cases the divers collected the sediments in a capped gallon jug and brought the jug to the boat, where the sample was placed into containers. At other locations, the divers took the sample containers directly to fill them.

Surface water samples were collected into the sample containers by lowering the sample container into the surface water without disturbing the sediments.

2.4.2 Radiological Analyses

Sediment samples were analyzed for tritium, hard-to-detects, or gamma-emitting radionuclides (or combinations thereof) as requested by the DEP.

2.4.3 OHM Analyses

Sediment and surface water samples were collected for one or more of the following non-radiological parameters:

- EPH/VPH by MADEP Methods MADEP-EPH-98-1 and MADEP VPH-98-1;
- VOCs by GC/MS, SW-846 Method 8260B;
- SVOCs by GC/MS, SW-846 Method 8270C SVOCs;
- PCBs by GC, SW-846 Method 8082;
- PP13 Metals by SW-846 6010B;
- Boron and lithium by SW-846 Method 6010B; and
- Total uranium by ICP Trace.

2.4.4 Remedial Activities

Sediment remediation activities to address the release of paint chips containing PCBs were performed in November 2004 and wetland restoration activities continued through 2005. Detailed descriptions of the remedial activities and the closure sampling were presented in the TSCA Sediment Final Report (ERM, 2006).

2.5 FISH

2.5.1 Radiological Sampling Program

Fish tissue sampling was conducted in June and July 2006 to address the Department's comments in the Phase II Approval Letter. As requested by the Department, fish samples were collected at the following locations:

- Harriman Reservoir, consistent with historic background sampling locations;
- Southern end of Sherman Reservoir, near YNPS; and
- Deerfield River, between the outfall of the West Storm Drain Ditch and the Monroe Bridge Dam.

On Harriman and Sherman Reservoirs, trot lines and a boat electrofisher were used to collect fish. Two trot lines, each approximately 12-feet long with approximately eight baited hooks were fished for two days (pulled every 24 hours), with little success. Therefore, electrofishing was performed with a boat-mounted Smith Root Model GPP electrofisher; most of the samples were collected with this equipment.

On the Deerfield River, the fish sample was collected with the same boat electrofisher that was used on Harriman and Sherman Reservoirs. Other collection methods were attempted before the electrofisher was used because boat access was not readily available. A backpack electrofisher, trot lines, gill net, and trap nets were all used unsuccessfully. The boat electrofisher was eventually put in the river with the back-up support of a tow truck.

In accordance with "Radioassay Procedures for Environmental Samples," Environmental Health Series: Radiological Health, Public Health Service, United States Department of Health, Education, and Welfare, the edible portions of the fish samples were submitted for radiological analyses of gamma-emitting radionuclides and tritium. Because of the absence of

plant-related hard-to-detect radionuclides in sediment, it is unlikely that hard-to-detect radionuclides will be identified in the edible portions of fish, and these radionuclides were not included in the original analyses performed. YAEC has subsequently requested that analyses for hard-to-detect radionuclides be performed, as requested in the Phase II Approval Letter. The results of these analyses will be provided to the DEP under separate cover, upon their receipt and review.

2.5.2 OHM Sampling Program

No additional analysis of fish samples for OHM has been conducted since submittal of the Phase II Report.

3.0 EVALUATION OF NON-INDUSTRIAL PORTION OF SITE

3.1 OVERVIEW

YAEC intends to retain the plant parcel to serve as a buffer around the ISFSI (the Retained Parcel, see Figure 1). YAEC intends to divest the remainder of the property, which consists of the following two parcels:

- Rowe Parcel - Approximately 1,648 acres located in the northwest corner of Rowe, Massachusetts, to the east of the Deerfield River
- Monroe Parcel – Approximately 89 acres located in Monroe, Massachusetts, to the west of the Deerfield River

A Phase I Environmental Site Assessment (Phase I), dated 22 February 2006 (see Appendix C), was prepared in support of YAEC divestiture of the Rowe and Monroe Parcels. The overall objective of the environmental assessment was to provide an independent, professional opinion regarding recognized environmental conditions (as defined by *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process for Forestland or Rural Property* (ASTM E 2247-02)), if any, associated with the Rowe and Monroe Parcels.

YAEC retained Stratex, LLC to conduct a site walkover as a supplement to the Phase I to evaluate potential disposal areas. The findings of the site walkover were presented to YAEC in a letter report, dated 25 May 2006 (see Appendix D).

The findings of the Phase I Environmental Site Assessment and the site walkover are described below. The Department reviewed a number of the sites identified in the Stratex Report during a site visit on 21 June 2006.

3.2 ROWE PARCEL

3.2.1 Phase I Findings

The following is a summary of the findings for the Rowe Parcel:

- The Rowe Parcel is approximately 1,648 acres of land located in Rowe, Massachusetts.

- YAEC intends to retain ownership of the ISFSI and a buffer around it, which includes the footprint of the former YNPS (the Retained Parcel).
- Prior to the construction of the YNPS, the Rowe Parcel was primarily used for agricultural activities.
- Brick and grout generated during the redevelopment of the No. 5 hydroelectric station were placed on a portion of the Rowe Parcel in accordance with a DEP approval (the ABC Permitted Area).
- Miscellaneous construction debris (concrete and metal) were observed in wooded areas in the vicinity of the Furlon House and West Parking Areas.
- A heating oil underground storage tank was removed from the Furlon House Parking Area in 2003. There was no evidence of a release. Petroleum was detected above screening values in one soil sample collected in the Furlon House Parking Area, but sampling conducted after the preparation of the Phase I Report indicated that the prior results were attributable to an organic layer at the parking lot (see Section 4.2.2.3). No further investigations are planned in this area.
- Chemicals related to environmental sampling activities are stored in the Furlon House. Corrosion was present on some empty drums.
- Pesticides have been used within the transmission line easements.
- Lead was detected above screening values in a soil sample from the ABC Permitted Area, but sampling conducted after the preparation of the Phase I Report indicated that the prior results were anomalous (see Section 4.2.2.3). No further investigations are planned in this area.
- No significant impacts to groundwater were identified on the Rowe Parcel based on data from a water supply well at the Furlon House.
- The majority of the Rowe Parcel has been classified as a non-impacted area with respect to potential radiological impacts associated with the former YNPS. Three Class 3 areas are present on the Rowe Parcel – the Furlon House, the Furlon House Parking Area and the West Parking Area. Class 3 areas are defined as having the possibility of containing residual site radioactivity in excess of natural background or fallout levels and that may contain levels of residual radioactivity at a small fraction of the DCGL.
- No potential off-site sources of impact to the Rowe Parcel were identified. The Rowe Parcel is up-gradient of the former Hoosac Tunnel & Wilmington Railroad bed, the former YNPS, and the Sherman Hydroelectric Development.

3.2.2 Site Walkover

A total of 15 areas were identified on the Rowe Parcel that warrant further evaluation and/or removal of small quantities of debris. A variety of debris was found in the areas, such as containers for motor oil, brake fluid and antifreeze, kerosene lanterns, paint cans, gas cans, glass bottles, enamel pots and pans, roof shingles, small appliances, railroad ties, scrap metal, and drums.

YAEC has evaluated and removed the identified debris. Upon completion of removal actions, soil samples were collected in areas where OHM were suspected.

3.2.3 Conclusions

The assessment of the Rowe Parcel revealed no evidence of recognized environmental conditions except for the following:

- Potential radiological impacts associated with the Furlon House, Furlon House Parking Area, and West Parking Area, which were surveyed during the FSS to ensure compliance with the LTP, with no issues identified; and

- 15 waste disposal areas identified during the site walkover, all of which have been evaluated by YAEC and some of which were inspected by Department personnel during the June 2006 site visit. Based upon these investigations, two areas were selected for sampling to validate the absence of impact (see Section 4.2.2.3 for further details on sampling activities). Sample results indicated no further actions are required.

3.3 MONROE PARCEL

3.3.1 Findings

The following is a summary of the findings for the Monroe Parcel:

- The Monroe Parcel is approximately 89 acres of land located in Monroe, Massachusetts.
- The only documented current or past activity on the Monroe Parcel is logging. A portion of the parcel consists of old growth forest.

- The western boundary of the Monroe Parcel is Phelps Brook, which is designated as a surface water supply for the Town of Monroe.
- There was no evidence of past or current disposal activities on the Monroe Parcel based on a review of available aerial photographs, site walkovers conducted as part of the archeological and natural resources surveys, and interviews conducted as part of the Phase I.
- The Monroe Parcel has been classified as a non-impacted area with respect to potential radiological impacts associated with the former YNPS.
- No potential off-site sources of impact to the Monroe Parcel were identified.

3.3.2 Site Walkover

One area was identified during the Phase I walkover on the Monroe Parcel that warranted further evaluation and/or removal of small quantities of debris. The area was located in the vicinity of an old homestead in the northwest portion of the Monroe Parcel. Debris and trash, including glass, roofing shingles, wire, cable, enamel pots, glass and metal were observed. A 5-gallon can labeled as "Mobil Oil" was observed in the area.

YAEC has evaluated this area and has determined that no additional actions are required.

3.3.3 Conclusions

The assessment of the Monroe Parcel revealed no evidence of recognized environmental conditions except for the following:

- One waste disposal area identified during the site walkover has been evaluated by YAEC. Based upon these investigations, no further actions are required.

4.0 SUMMARY OF THE NATURE & EXTENT OF CONTAMINATION

4.1 OVERVIEW

This section provides a summary of the nature and extent of impact identified from radionuclides and OHM in the environment by media, i.e., soil, groundwater, sediment, surface water and fish. This summary is based on the results of past and ongoing investigations focusing on results generated since filing of the Phase II Report in January 2005. Once decommissioning, remedial and restoration actions are complete, an assessment of the level of risk to human health and the environment posed by residual impacts will be completed to support closure and restrictions on future use of the site.

4.2 SOIL

4.2.1 Radiological

Soil samples were collected in accordance with the FSS QAPP and approved procedures. These samples were routinely analyzed for tritium and gamma-emitting radionuclides. In addition, at least five percent of the samples underwent analysis for hard-to-detect radionuclides.

Table 4 provides the results for the FSS surface samples (top 6 inches of soil) collected in the area covered by the Beneficial Use Determination (BUD) prior to backfilling activities. This area encompasses the locations of major excavations, such as the SFP/IX Pit excavation, as well as minor excavations resulting from remediation and regrading. Subsurface samples addressing depths to three meters are currently being collected in a portion of the Industrial Area and are being analyzed as a part of ongoing FSS activities. The results of these analyses will be provided to the DEP as a part of the FSS report for the associated survey area.

During the data assessment phase of the FSS, the data are evaluated to determine whether the survey area has met the LTP criteria. Part of this assessment is a comparison of the radiological results for the samples against the DCGL. The DCGLs used for FSS at YNPS are included in the following table.

Radionuclide	Soil DCGL (pCi/g)
H-3	1.3E+02
C-14	1.9E+00
Fe-55	1.0E+04
Co-60	1.4E+00
Ni-63	2.8E+02
Sr-90	6.0E-01
Nb-94	2.5E+00
Tc-99	4.8E+00
Ag-108m	2.5E+00
Sb-125	1.1E+01
Cs-134	1.7E+00
Cs-137	3.0E+00
Eu-152	3.5E+00
Eu-154	3.3E+00
Eu-155	1.4E+02
Pu-238	1.1E+01
Pu-239/240	1.0E+01
Pu-241	3.4E+02
Am-241	1.0E+01
Cm-243/244	1.1E+01

Other evaluations are required if limits (either individual radionuclide or sum-of-fractions) are exceeded. The FSS reports for the individual survey units, which are being submitted to the Department under separate cover, may be referenced for this data review and interpretation.

4.2.2 Oil and/or Hazardous Materials

4.2.2.1 Background Areas

Eight additional background soil samples were collected to supplement the 2004 background soil dataset. Background soil sample results are presented in Table 5-1 and locations are shown on Figure 4A. None of the background samples exhibited OHM at levels exceeding Reportable Concentration S-1 (RCS-1) Standards.

4.2.2.2 Industrial Area

The following provides a summary of the investigation and remediation activities conducted in the Industrial Area at the site between January 2005 and August 2006:

- Baffle Tank Area - Discolored soils were noted during installation of a baffle tank in 2005. Two borings were advanced and soil samples were collected to investigate visual observations made during the installation of the baffle tank. The sample results are presented in Table 5-2 and the sample locations are presented in Figure 4B. All results were below RCS-1 Standards. No issues were noted during removal of the baffle tank. Confirmatory samples taken at that time also were below RCS-1 standards. Therefore, no further action is planned.

- Bulldozer Spill Area – On 27 June 2006, approximate five gallons of hydraulic fluid was released when a hydraulic seal broke on a bulldozer. Approximately 9 cubic yards of soil were excavated and shipped off-site for disposal. The limit of excavation was inspected, and one composite sample was collected for EPH. The sample results are presented in Table 5-3 and the sample locations are presented in Figure 4B. All results were below RCS-1 Standards. Therefore, no further action is planned.

- Dioxin Area - Prior sampling indicated that dioxins were present above the RCS-1 Standards. In September 2005, approximately 300 cubic yards of soil were excavated. Five confirmatory samples were collected from the limits of the excavation. The sample results are presented in Table 5-4 and the sample locations are presented in Figure 4B. All results were below RCS-1 Standards. Therefore, no further action is planned.

- Firewater Pumphouse Drywell Area - A drywell associated with the firewater pumphouse was investigated in compliance with Underground Injection Control (UIC) program requirements. Approximately 25 cubic yards of soil were excavated in September 2005 and April 2006. Five samples were collected from the limits of the excavation. The sample results are presented in Table 5-5 and the sample locations are presented in Figure 4B. All results were below RCS-1 Standards. Therefore, no further action is planned.

- Firewater Tank (Tank 55) Area – During the decommissioning of the Firewater Tank, petroleum impacts were observed and

approximately 220 cubic yards of soil were excavated and treated on-site in the thermal desorption unit. Six soil samples were collected in September 2005 at the limits of the excavation. The results at two of the locations exceeded the RCS-1 Standards for EPH. In November 2005, approximately 55 cubic yards of impacted material were excavated and shipped off-site. Three confirmatory soil samples were collected at the limits of the excavation. The sample results are presented in Table 5-6 and the sample locations are presented in Figure 4B. All final closure results were below RCS-1 Standards. Therefore, no further action is planned.

- Fuel Oil Tank Area - Petroleum was detected in the area of a former aboveground fuel oil storage tank berm during sampling in October 2004. Approximately 180 cubic yards of soil were excavated for treatment in August 2005 and five samples were collected from the limits of the excavation. One soil sample was collected following the removal of the fuel oil pumphouse in August 2005. The fuel oil line was removed in October 2005. During the course of removal activities, less than 10 gallons of fuel oil was released from the piping onto the ground surface. The fuel oil and approximately 5 cubic yards of soil were excavated and three confirmatory samples were collected along the length of the fuel line excavation. One additional soil sample was collected in December 2005 in response to visual observation of discolored soils near the former fuel line. The sample results are presented in Table 5-7 and the sample locations are presented in Figure 4B. C_{11} – C_{22} aromatics were detected in three soil samples slightly above RCS-1 Standard. However, the average concentration was below the RCS-1 Standards. Therefore, no further action is planned.

- Fuel Spill 164 Area – During Spring 2005, a small petroleum spill was observed to the south of the former Turbine Building. Approximately 2 cubic yards of soil were excavated in February 2006 and closure samples were collected for VPH. A sample was collected for EPH in March 2006. The sample results are presented in Table 5-8 and the sample locations are presented in Figure 4B. All results were below RCS-1 Standards. Therefore, no further action is planned.

- Old Shooting Range - Sampling in October 2003 indicated the presence of lead above RCS-1 Standards. In July 2005, a total of 80 cubic yards of soil were removed during two rounds of soil excavation. A total of 12 composite samples were collected during the course of remediation. The samples results are presented in

Table 5-9 and the sample locations are presented in Figure 4B. All the final lead results were below RCS-1 Standards. PCBs were detected in closure samples above the RCS-1 Standards, but below the PCB cleanup goal for the area (25,000 ug/kg). Therefore, no further action is planned.

- Peninsula Sand Blast Grit Area – During the excavation of utilities on the peninsula during Fall 2005, sand blast grit was observed and found to contain lead. Excavation activities were conducted in November 2005 and again in June and July 2006 to excavate impacted soil. Approximately 430 cubic yards of soil were removed and confirmatory samples were collected at 120 locations. The samples results are presented in Table 5-10 and the sample locations are presented in Figure 4B. Residual concentrations of lead were below the RCS-1 Standard. Therefore, no further action is planned.

- Potable Water Tank Area – In May 2006, soil samples were collected from beneath the administration building potable water tank for EPH and VPH deluxe to investigate for a possible layer of petroleum-impacted sand. The sample results are presented in Table 5-11 and the sample locations are presented in Figure 4B. All results were below RCS-1 Standards. Therefore, no further action is planned.

- Railroad Ties Area – From June through September 2005, eight soil samples, including one duplicate, were collected from excavation areas where railroad ties had been buried. Samples were analyzed for SVOCs. The sample results are presented in Table 5-12 and the sample locations are presented in Figure 4B. Benzo(a)pyrene was detected above the RCS-1 Standard in two samples. However, the samples were collected from within the footprint of the proposed deed restriction; therefore, no further action is planned.

- Railroad Tracks Area – Sample results from October 2003 and July 2004 indicated polycyclic aromatic hydrocarbons (PAHs) were present above RCS-1 Standards in proximity to a former railroad line. Seven additional borings were advanced between January and June 2005 to evaluate the nature of impact. In June 2006, two soil borings and one test pit were advanced to further determine the nature of the impact. The sample results are presented in Table 5-13 and the sample locations are presented in Figure 4B. A variety of PAHs were detected above the RCS-1 Standards. However, the PAHs appeared to be associated with creosote railroad ties from

the former abandoned railroad bed and the underlying fill material. The PAHs did not appear to be associated with a site-related release condition. Therefore, the PAHs will be evaluated in the risk assessment, and no further investigation is planned.

- South Yard Sand Blast Grit Area – During removal of the south road, sand blast grit was observed and sampled for metals and PCBs. Analytical results for the sand blast grit indicated that lead and cadmium exceeded the RCS-1 Standard while PCBs were below the clean-up goal of 1,000 ug/kg. Exploratory test pits were excavated to determine approximate limits of the impact area; while testing was conducted, these data were ultimately replaced with sidewall confirmation testing. During removal activities, petroleum impacts were also observed and EPH was detected above the RCS-1 Standard in one area. In July 2006, approximately 180 cubic yards of material were excavated and shipped off-site and 42 samples were collected from the limits of the excavation. The sample results are presented in Table 5-14 and the sample locations are presented in Figure 4B. All closure results were below the RCS-1 Standards for lead and EPH. Therefore, no further action is planned.

- Turbine Building Office Area – During excavation activities associated with the Sherman Dam extension in August 2006, a gray soil with petroleum odors was observed. Field observations and screening indicated possible petroleum impacts. Approximately 265 cubic yards of soil were excavated and shipped off-site for disposal. Ten samples were collected from the limits of the excavation. The sample results are presented in Table 5-15 and the sample locations are presented in Figure 4B. All closure results were below the method detection limits for EPH. Therefore, no further action is planned.

- Warehouse Garage Area – In April 2005, three samples were collected near the former Warehouse Garage to evaluate potential soil impacts in the vicinity of where the floor drain system exited the building. Samples were analyzed for VPH/EPH, PCBs and PP13 metals. The sample results are presented in Table 5-16 and the sample locations are presented in Figure 4B. All results were below RCS-1 Standards. Therefore, no further action is planned.

4.2.2.3 Non-Industrial Area

The following provides a summary of the investigation and remediation activities conducted in the Non-Industrial Area of the site between January 2005 and August 2006:

- ABC Lot Concrete Blocks Area – Sampling was conducted in October 2005 after removal of painted concrete blocks to evaluate potential for PCB-containing paint to impact soil. Six sample locations were targeted. The samples results are presented in Table 5-17 and the sample locations are presented in Figure 4A. All results were below the clean-up goal of 1,000 ug/kg. Therefore, no further action is planned.

- Concrete Block Forming Area – An area where concrete blocks were formed and painted during construction of the plant was evaluated for potential residual paint chips containing PCBs. Eight soil borings were advanced in January 2005 and samples were collected to a depth of 10 feet below grade. The samples results are presented in Table 5-18 and the sample locations are presented in Figure 4A. All results were below the clean-up goal of 1,000 ug/kg. Therefore, no further action is planned.

- Drum in Woods - A drum was discovered in the woods near the Industrial Area during decommissioning. The drum was removed and soil removal activities were conducted in 2004. VPH was detected in the 2004 confirmatory sample above the screening criteria. In 2005, less than 1 cubic yard of soil was manually excavated from the area and sampling was performed at the limits of the excavation to evaluate potential residual impacts. The sample results are presented in Table 5-19 and the sample locations are presented in Figure 4A. All results were below RCS-1 Standards. Therefore, no further action is planned.

- Furlon House Basement - A release of a small quantity of fuel oil (less than 10 gallons) occurred during the removal of a household fuel oil tank (above ground in the basement) in April 2006. Soil excavation activities were conducted. Approximately 15 cubic yards of soil were excavated from inside the basement and 25 cubic yards were excavated outside, adjacent to the foundation wall. The samples results are presented in Table 5-20 and the sample locations are presented in Figure 4A. All results were below RCS-1 Standards. Therefore, no further action is planned.

- Furlon House Parking Area - Prior sampling in October 2003 indicated the potential for petroleum in soil above RCs based on a Diesel Range Organics (DRO) analysis and observation of a dark layer of soil beneath the parking lot at the Furlon House. Four additional borings were advanced in the Furlon House Parking area in January 2005 and samples were collected for EPH and VPH. The samples results are presented in Table 5-21 and the sample locations are presented in Figure 4A. All results were below RCS-1 Standards. Historic exceedances of RCs for DRO were not reproducible. Two additional borings (SB-156R and SB-156RS) were advanced in April 2006 and field observations indicated that historic readings were attributed to organics (peat) observed in borings. Therefore, no further action is planned.

- Hair Pin Turn Area - Lead was detected above RCS-1 Standards during sampling in October 2003. A shallow test pit was advanced to investigate the anomalous lead results in June 2006. Samples were taken from the limits of the test pit. In addition, test pits were advanced for visual observations at four other locations in the area where debris associated with the historic disposal area during Dam #4 repairs was placed. A sample was collected from one of these pits for laboratory analysis. The samples results are presented in Table 5-22 and the sample locations are presented in Figure 4A. All results were below RCS-1 Standards. The historic lead sampling result was not reproducible and is considered to be anomalous. Therefore, no further action is planned.

- Mid-Lot West Debris Pile Area – Sampling of painted blocks from a debris pile at the west end of the Mid-Lot indicated the presence of PCB-containing paint. After the removal and off-site disposal of approximately 135 cubic yards of soil material in May 2006, four soil samples were collected from the limits of the disturbed area. The samples results are presented in Table 5-23 and the sample locations are presented in Figure 4A. All results were below the PCB clean-up goal of 1,000 ug/kg. Therefore, no further action is planned.

- Painted Concrete Blocks along Deerfield River – Removal of concrete blocks with PCB-containing paint along the Deerfield River was conducted in November 2005 and August 2006. After removal of the painted blocks and shallow underlying soils, seven closure samples were collected. The post-removal closure sample results are presented in Table 5-24 and the sample locations are

presented in Figure 4A. All results were below the PCB clean-up goal of 1,000 ug/kg. Therefore, no further action is planned.

- Relic Dumps – As described in Section 3.2.2. a site walkover of the non-industrial area was performed to identify historic land use of concern. Five areas described as relic dumps were reported as well as a logging yard and a few areas along Monroe Hill Road where minor amounts of trash disposal were observed. Yankee inspected each area and in a few areas removed waste items that posed potential environmental threats, such as old oil filters, empty oil jugs, and two rusted steel drums. Samples were collected under the drums and in an area where a significant collection of empty oil containers was found. The sample results are presented on Table 5-25 and the sample locations are shown on Figure 4A. All results were below RCS-1 Standards. Therefore, no further action is planned.

- Septic System – From January to July 2005, 13 borings were advanced to evaluate potential releases associated with septic system/leachfields. The sample results are presented in Table 5-26 and the sample locations are presented in Figure 4A. With the exception of benzo(a)pyrene at one location, all results were below RCS-1 Standards. The source of the PAHs was attributed to vehicle emissions since the area is actively used for parking. Therefore, the PAHs will be evaluated in the risk assessment, and no further investigation is planned.

- Snow Piles Area – From June to July 2005, areas where snow piles had been placed during winter road clearance were evaluated for potential residual paint chips containing PCBs. A total of 42 samples were collected in six areas at the site. The samples results are presented in Table 5-27 and the sample locations are presented in Figure 4A. All results were below the clean-up goal of 1,000 ug/kg. Therefore, no further action is planned.

4.3 SOIL GAS

A passive soil gas survey was performed between 20 April and 7 June 2005 at six locations using Goresorber devices. The sampling locations are shown in Figure 4B and the sample results are summarized below:

	SG001	SG002	SG003	SG005	SG008	SG013
1,1,1-trichloroethane	0.86	0.04	0.3	0.23	0.88	0.8
Chloroform	0.04	0.2	<0.03	<0.03	0.05	<0.03
Tetrachloroethene	0.21	<0.03	0.04	<0.03	0.11	<0.03

Note: Soil gas results are in units of micrograms

The soil gas survey results indicated the potential presence of residual solvents under the former Service Building and Turbine Building foundations. 1,1,1-Trichloroethane (TCA) was detected in all six samples, tetrachloroethene (PCE) was detected in three samples, and chloroform was detected in three samples. The passive soil gas results only indicate relative concentrations and are not comparable to regulatory standards. The detection of TCA, PCE, and chloroform will be further evaluated by the installation and sampling of newly installed monitoring well MW-112A.

4.4 GROUNDWATER

4.4.1 Updated Site Conceptual Model

The results of subsurface investigations were used in the development of a Site Conceptual Model (SCM) that summarizes the site geology and hydrogeology. The SCM describes the site as being comprised of the following four hydrogeologic units:

- Glaciofluvial - a relatively permeable sand/stratified drift ranging in thickness from zero to 40 feet that contains the water table at depths ranging from 4 to 20 feet below ground surface in the central portion of the Site.

- Upper Till - a relatively impermeable mix of sand, silt and clay that is very dense and compact underlying the stratified drift. Till has been encountered from zero to 210 feet below ground surface across the site. Groundwater within this unit is confined/semi-confined to silty sand lenses that are up to a few feet in thickness and laterally discontinuous. A contour map of the top of the till unit is provided in Figure 6A.

- Lower Till/Glaciolacustrine - an alternating sequence of fine silt and clay that is laminated (glaciolacustrine deposits) underlying the till at a depth of 100 feet below ground surface in the northern portion of the site. A contour map of the top of the glaciolacustrine unit is provided in Figure 6B.

- Bedrock - an albite gneiss encountered at depths ranging from zero to 210 feet below ground surface. The upper surface of the bedrock appears to be moderately fractured and capable of yielding a few gallons per minute. A contour map of the top of the bedrock is provided in Figure 6C.

Groundwater contour maps were prepared for the June 2006 groundwater sampling event. The contour maps for water levels in the glaciofluvial deposits, the upper till deposits, the lower till/glaciolacustrine deposits, and bedrock are presented in Figures 7A to 7D. The rate and direction of groundwater flow beneath the site varies depending on location and hydrogeologic unit, but is generally northwest to west toward the Deerfield River. The rate of flow is greatest in the glacioflucial deposits. Groundwater flow in the underlying till, glaciolacustrine and bedrock is subject to both confined and semi-confined flow conditions due to the dense and laterally heterogeneous nature of these units. Flow in these units is estimated to be substantially slower than the glaciolfuvial deposits, but is generally toward the Deerfield River. The Deerfield River is estimated to represent the western, down-gradient extent of groundwater flow, which eventually discharges to surface water.

4.4.2 Radiological Impacts to Site Groundwater

Tritium

A significant source of tritium for groundwater at the site was the former SFP and IX Pit. Two significant historical release events were identified during the Historical Site Assessment. The first event involved leakage from the IX Pit as a result of an operator failing to close the fill valve, after filling the IX Pit to its normal operating level. Water continued to flow into the pit from the Primary Water Storage Tank by gravity feed and subsequently seeped through the blacktop on the west side of the pit, at which time the operator noticed the water, diagnosed the cause, and closed the valve. The second event involved a leak at the construction joint at the common wall between the SFP and the IX Pit. Information indicates that the leak existed for about one year before it was successfully repaired in 1965. Additionally, YAEC believes the SFP leaked periodically before a steel liner was installed in 1979, based upon cracks observed in

the pit's walls; however, the amount of leakage is estimated to be minimal based on water level records and make-up rates.

The tritium results for groundwater samples collected between November 2005 and August 2006 are presented in Table 6 and the sample locations are shown in Figure 5. A tritium plume has been identified in the shallow glaciofluvial deposits originating from beneath the former footprint of the plant and extending northwest/west toward the Deerfield River. The highest concentrations of tritium detected in this shallow plume are 16,900 pCi/L (based on April 2006 result at MW-101A) at the plant and decreasing to 7,620 pCi/L (at MW-106A in July 2006) near the Deerfield River. Tritium levels in the glaciofluvial deposits continue to be below the EPA Maximum Contaminant Level (MCL) for tritium in drinking water of 20,000 pCi/L.

Tritium has been confirmed at a concentration above the EPA MCL in only one monitoring well location, MW-107C, located within a sand lens in the till just below the outwash. The highest level of tritium detected at MW-107C was 48,000 pCi/L in September 2003 and has decreased to 34,700 pCi/L (August 2006). Detected impacts at all other wells remain below the EPA MCL. The concentration of tritium is expected to continue to decrease via dilution, dispersion and radioactive decay (the half-life of tritium is approximately 12 years).

The distribution of tritium in the shallow stratified drift is consistent with the advective flow of groundwater down-gradient to the northwest/west of the plant. Concentrations tend to decrease down-gradient due to dilution and dispersion with increasing distance from the plant. Tritium in the underlying till is limited to confined/semi-confined sand lenses that appear to be laterally discontinuous, thereby limiting down-gradient transport, dilution or dispersion and resulting in concentrations remaining above the EPA MCL at one monitoring point (MW-107C). The laterally discontinuous, disconnected nature of these lenses within very tight till limits dilution or dispersion resulting in minimal dilution of tritium over time. While groundwater within these lenses may eventually migrate to surface water, it is likely that decay of tritium would have reduced the concentrations to negligible levels prior to discharging to surface water.

Low levels of tritium (i.e., under 5,000 pCi/L) have been identified in only one of the bedrock wells (MW-105B).

Although tritium is the only plant-related radionuclide consistently detected in the groundwater, low levels of Cs-137, Sr-90, and Co-60 have

been identified sporadically during analysis of groundwater; however, these instances were investigated and found to be caused by one of three reasons:

1. Intrusion of surface water, which had been in contact with contaminated soil, into damaged well heads or roadboxes in adjacent areas.
2. False positive detections from expected statistical variations in laboratory analyses.
3. Improper on-site laboratory practices that introduced contamination into the sample being analyzed (e.g., lab cross-contamination events).

Gross Alpha and Gross Beta

YAEC has also monitored gross alpha and gross beta activity in site groundwater. A technical report summarizing the gross alpha and gross beta data from 2004 is provided in Appendix E. As discussed in the report, the mapping of gross alpha and gross beta activity concentrations indicates that there are no consistent spatial or temporal correlations that would suggest the presence of a plume of gross alpha or gross beta activity from a plant-related source. The source of the measured gross alpha and gross beta activity in groundwater at YNPS is naturally-occurring radionuclides in the soil and bedrock (the uranium and thorium decay series).

4.4.3 Oil and/or Hazardous Material Impacts to Groundwater

4.4.3.1 OHM Parameters

Groundwater analytical results from November 2004 to present are summarized on Table 7. The results were compared to RCGW-1 standards and results above the standards are described below:

- Pentachlorophenol was detected as an estimated value in one sample from MW-108B (March 2005) above the RCGW-1 Standard. Pentachlorophenol was not detected in three subsequent sampling events. Therefore, no further sampling is planned to evaluate this issue.

- 2-Butanone (methyl ethyl ketone) was detected in MW-110C at a concentration of 1,310 ug/L and in MW-111B at a concentration of 2,320 ug/L, which exceeded the RCGW-1 Standard of 400 ug/L. The

elevated concentrations were detected in April 2006, during the first sampling round after the wells were installed. During the May/June 2006 sampling event, the highest concentration of 2-butanone in either well was 14 ug/L. These results suggest that the detection of 2-butanone was an artifact of the well installation process. Further monitoring is planned to determine whether the reported concentrations are representative of groundwater quality at those locations.

- Acetone was detected in MW-101C at a concentration of 3,400 ug/L, which exceeded the RCGW-1 Standard of 3,000 ug/L. Since 2004, MW-101C has been inaccessible and has not been sampled. Further monitoring is planned to determine whether the reported concentrations of acetone is representative of groundwater quality at this location.

- Antimony was detected in CB-3 at a concentration of 6.2 ug/L, which exceeded the RCGW-1 Standard of 6 ug/L. However, the average of the sample result with the duplicate sample from that well (2.6 ug/L) is below the RCGW-1. Therefore, no further sampling is planned to evaluate antimony at CB-3.

- Arsenic was detected in MW-101A at a concentration of 14.1 ug/L and in MW-107A at a concentration of 14.4 ug/L, which exceed the RCGW-1 standard of 10 ug/L. There is no known source for the arsenic impacts and the detections appear to be sporadic. Further monitoring is planned to determine whether the reported concentrations of arsenic are representative of groundwater quality at those locations.

- Silver was detected in MW-107A at a concentration of 7.8 ug/L, which exceeded the RCGW-1 Standard of 7 ug/L. Silver was not detected during one subsequent sampling event. As with arsenic, there is no known source for the silver impacts and the detection appears to be sporadic. Further monitoring is planned to determine whether the reported concentrations of silver are representative of groundwater quality at those locations.

Sampling results from 2003 and 2004 were also compared to RCGW-1 Standards (the Phase II Report compared groundwater results to either RCGW-1 or RCGW-2 Standards, depending on the location of the well relative to the boundaries of the Interim Wellhead Protection Area; however, based on subsequent discussions with the Department, all groundwater at the site is being considered as a potential source of drinking water and compared to RCGW-1 Standards). Therefore, a

discussion of historic results that exceeded RCGW-1 Standards is provided below.

- VPH (i.e., C_5-C_8 Aliphatics) was reported in the Phase II Report at MW-101C at a concentration of 1,830 ug/L in November 2004, which exceeded the RCGW-1 Standard of 400 ug/L. However, the data was rejected during the data validation process because the detection was attributed to interference by either acetone or isopropyl alcohol. Additional sampling is planned to further evaluate this issue.

- EPH (i.e., C_{11}-C_{22} aromatics) was detected at MW-6 at a concentration of 229 ug/L in March 2004 and at MW-101B at a concentration of 408 ug/L in May 2004, which exceeded the RCGW-1 Standard of 200 ug/L. EPH was not detected during one supplemental sampling round at each well. At least two additional sampling rounds are planned to further evaluate this issue.

- 1,1-dichloroethene (DCE) was detected in MW-105C at a concentration of 2.6 ug/L in November 2004, which exceeded the pre-April 2006 RCGW-1 Standard of 1 ug/L. Although the RCGW-1 Standard was changed to 7 ug/L in April 2006, additional sampling is planned based on the prior exceedance of the RCGW-1 Standard.

- Pentachlorophenol was detected in three wells (MW-109B, MW-109C, and MW-109D) at concentrations ranging from 2.1 to 14 ug/L in September 2004, which exceeded the RCGW-1 Standard of 1 ug/L. Additional sampling is planned to further evaluate this issue.

- Bis (2-ethylhexyl) phthalate (DEHP) was detected at MW-108B at a concentration of 36 ug/L in September 2004, which exceeded the RCGW-1 Standard of 6 ug/L. DEHP was also detected in the associated blank. DEHP was not detected during sampling in March 2005, November 2004 and May 2006. Therefore, no further sampling is planned.

- DEHP was detected at CW-10 at a concentration of 12 ug/L in July 2003, which exceeded the RCGW-1 Standard of 6 ug/L. DEHP was not detected during one subsequent sampling round. At least two additional sampling rounds are planned to further evaluate this issue.

- DEHP was detected at MW-105B at a concentration of 7.9 ug/L in September 2003, which exceeded the RCGW-1 Standard of 6 ug/L. DEHP was not detected during one subsequent sampling round. At

least two additional sampling rounds are planned to further evaluate this issue.

- PCBs were detected at MW-107D at a concentration of 0.45 ug/L (filtered) in August 2004 and at MW-107B at a concentration of 0.38 ug/L (total) in April 2004, which exceeded the RCGW-1 Standard of 0.3 ug/L. At that time, the detection was attributed to the presence of particulate paint chips. PCBs were not detected during sampling in November 2004 and April 2006. Therefore, no further sampling is planned to evaluate that issue.

- PCBs were detected in MW-5 above RCGW-1 Standard prior to being closed in November 2004. The historic detections of PCBs at MW-5 were generally attributed to the presence of particulate paint chips in the well. YAEC intends to utilize MW-110A as a replacement well for MW-5 and to monitor PCB concentrations at that location.

4.4.3.2 Water Supply Wells

YAEC currently has one water supply well. The Facility Water Supply well is located in the undeveloped portion of the site and is located hydraulically up-gradient of all known sources. The water supply well for the Furlon House (Visitor's Center) is currently being abandoned, as the Visitor's Center was demolished in July 2006.

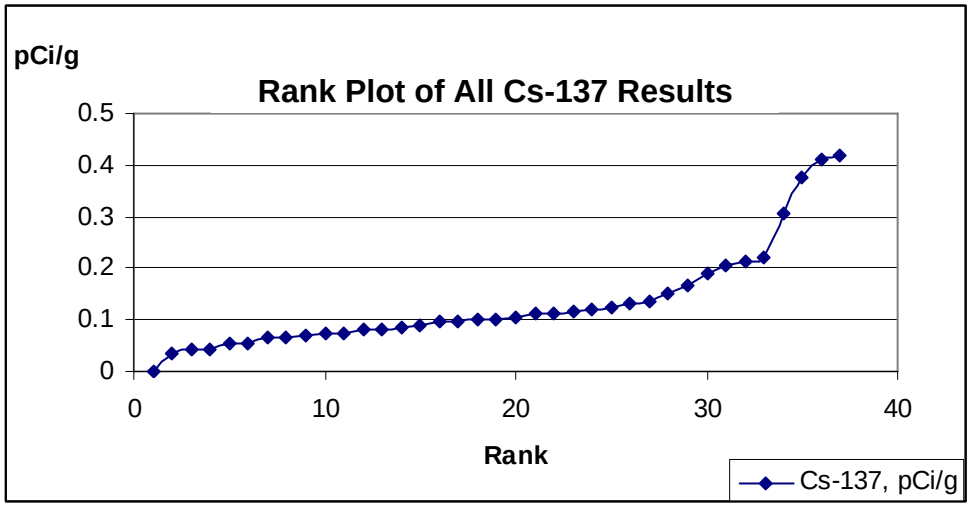
In 2005 and 2006, no compounds were detected above applicable RCs for either the Facility Water Supply Well or the Visitor Center Water Supply Well (Table 7).

4.5 SEDIMENT

4.5.1 Radiological

The Sherman Reservoir has been used as a source of cooling water and discharge (including stormwater discharge) for YNPS. These uses resulted in the introduction of small amounts of plant-related radioactivity into the reservoir and subsequently into the sediments.

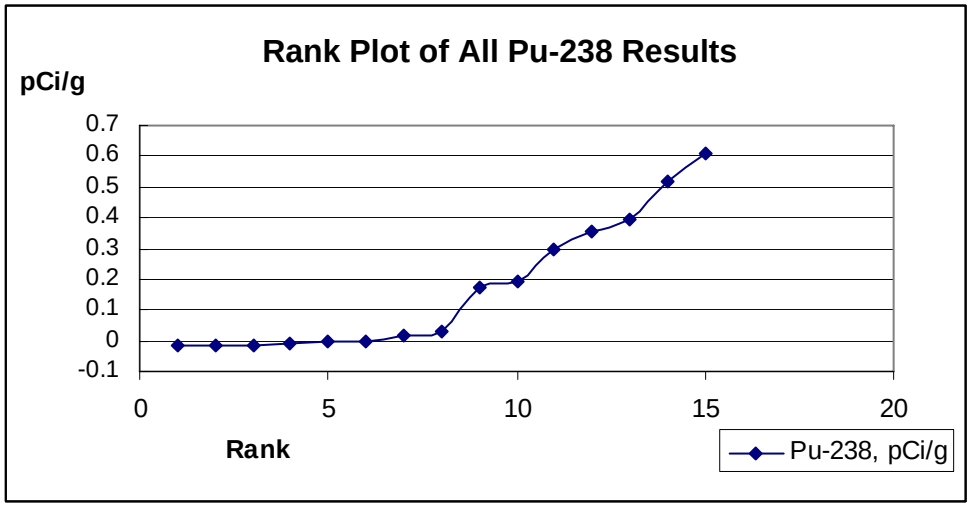
The sediment sample results are presented in Table 8-1 (upstream) and 8-2 (downstream) and sample locations are shown in Figures 8A, 8B and 8C. Gamma spectrometric results for the sediment samples had Cs-137 concentrations above their respective MDC values for all but three samples. The plot of these results is shown below.



A clear background distribution of results is seen between 0.0 and 0.22 pCi/g. Background levels of Cs-137 are expected as a result of fallout due to nuclear testing. The four samples that had values greater than this concentration were: SD-227 (0.412 pCi/g), SD-231 (0.375 pCi/g), SD-233 (0.418 pCi/g), SD-234 (0.307 pCi/g). These samples were all collected in the Deerfield River. Several other naturally-occurring radionuclides, such as those from the Ra-226 decay series (alpha, beta and gamma emitting radionuclides) and K-40, were also found in these samples.

Tritium analysis for sediment samples identified no positive results.

Analysis of hard-to-detect radionuclides resulted in some values for Pu-238 that were above the critical level. The distribution of these results is seen in the following graph:



The plot has a clear break point for background distribution at approximately 0.02 pCi/g. The two samples between 0.02 and 0.3 pCi/g did not have values that exceeded their sample specific critical levels. The samples with positive values were: SD-304R (0.3 pCi/g), SD-420 (0.39 pCi/g), SD-222 (0.519 pCi/g), SD-FD003 (0.354 pCi/g), and SD-409 (0.611 pCi/g).

The mean of these values is statistically different from that of the remainder of the data set; however, based upon the following conditions, these positive Pu-238 detects are believed to be invalid:

1. SD-FD003 is the field duplicate sample for SD-407. Sample SD-407 had no detectable transuranic radionuclides (this sample was analyzed twice and in both instance the transuranic concentration was not detectable).

2. Other radionuclides (fission products, transuranic and gamma emitters) would be identified as being present, if Pu-238 was actually present in samples.

Additional evaluations of these results are ongoing to further investigate these indications of the presence of Pu-238.

Pu-239/240 in sample SD-222 (0.29 pCi/g) was above its critical level (0.24 pCi/g), and SD-252 had Sr-90 and Tc-99 at their critical levels. Based on the remainder of the sample results for these radionuclides it appears that these three results are part of the background distribution of measurements made at the laboratory for these radionuclides.

4.5.2 Oil and/or Hazardous Materials

Sediment sample results are presented in Table 9 and sample locations are shown in Figures 8A, 8B and 8C. Sediment sampling results for Sherman Reservoir, West Storm Drain, Deerfield River, and Wheeler Brook were compared to background sediment results (the background data set includes samples collected in November 2002, August 2003 and June 2006). As shown in Table 10, summary statistics for the sediment results from the site were compared to background. Results were then compared to screening values defined in the Ecological Risk Assessment Work Plan. A summary of the values that exceeded background (based on comparison of median and maximum values) and the screening value is provided below:

- Acetone and a variety of PAHs, including anthracene, benzo(a) pyrene, fluorine, phenanthrene and pyrene, were detected in the background sediment samples above screening values.

- PAHs, including benzo(a)anthracene, benzo(a)fluoranthene, chrysene, fluoranthene, pyrene, and naphthalene, were detected in three sampling locations near the cooling water discharge structure at concentrations exceeding background and above the screening criteria. The PAH results will be further evaluated in the risk assessment.

- PCBs were detected in two sample locations in Sherman Reservoir above the screening value of 60 ug/kg. PCBs were detected at SD-008R at a concentration of 770 ug/kg; however, PCBs were non-detect in the associated duplicate sample. A second sample was collected from that location and PCBs were detected at a concentration of 1,911 ug/kg. Sample location SD-008 was re-occupied and four additional samples were collected to further evaluate the result. All results were non-detect in the subsequent samples. PCBs were detected at SD-012R at a concentration of 2,582 ug/kg. The sample location was re-occupied and four additional samples were collected to further evaluate the result. The maximum detected PCB concentration during the resampling was 663.5 ug/kg. The PCB results will be further evaluated in the risk characterization.

- Arsenic was detected at SD-056 (in Sherman Reservoir near discharge structure) at a concentration of 17.2 mg/kg and at SD-220 (along the seep line of Sherman Spring) at a concentration of 24.5 mg/kg, which exceeded the screening value of 9.79 mg/kg. The arsenic results will be further evaluated in the risk characterization.

- Cadmium was detected at SD-057 (in Sherman Reservoir near discharge structure) at a concentration of 6.22 mg/kg, which exceeded the screening value of 5 mg/kg. The cadmium results will be further evaluated in the risk characterization.

- Copper was detected in seven samples collected in Sherman Reservoir near the discharge structure at concentrations above the screening value of 150 mg/kg. The maximum copper concentration was 282 mg/kg at SD-008. The copper results will be further evaluated in the risk characterization.

- Mercury was detected in seven samples collected in Sherman Reservoir near the discharge structure and in one sample along the seep line of Sherman Spring at concentrations above the screening

value of 0.18 mg/kg. The maximum mercury concentration was 1.11 mg/kg at SD-056. The mercury results will be further evaluated in the risk characterization.

- Nickel was detected at SD-057 at a concentration of 54.1 mg/kg, which exceeded the screening value of 49 mg/kg. The nickel results will be further evaluated in the risk characterization.

- Zinc was detected at SD-057 at a concentration of 479 mg/kg, which exceeded the screening value of 460 mg/kg. The zinc results will be further evaluated in the risk characterization.

As shown in Table 10, screening values were not available for all OHM in sediment. For a number of compounds, the site maximum and/or median value exceeded the background data site maximum and/or median. The following compounds, which fall into this category, will be evaluated in the risk characterization:

- C_5-C_8 Aliphatics
- C_9-C_{10} Aromatics
- C_9-C_{12} Aliphatics
- Xylenes
- Methyl-t-butyl ether
- 2,6-Dinitrotoluene
- 2,4-Methylphenol
- Beryllium
- Boron
- Lithium
- Thallium

4.5.3 Total Uranium

Sediment samples underwent analysis for total uranium in response to the DEP's request, and a comparison between those results and established literature values for total uranium in background was made.

Sediment samples from 43 locations in the vicinity of the YNPS were collected and analyzed for total uranium content. Duplicate samples were also collected from selected sites, and some samples were analyzed more than once, yielding duplicate results. In comparing the uranium results to available ambient data, duplicate results were excluded. Seventeen of the YNPS results were detected above the Method Detection Level (MDL). The rest of the results were reported at concentrations at the MDL. The YNPS data are used in this comparison as reported, and are shown in Table 9.

The average concentration of natural uranium in soil given by the International Atomic Energy Agency (IAEA) [IAEA, 2006] is about 2 mg/kg of soil. Background levels of natural uranium in sediments, used for this comparison, were obtained from the National Uranium Resource Evaluation (NURE) Hydrogeochemical and Stream Sediment Reconnaissance Program (HSSR), via the National Geochemical Database (NGD) [Smith, S.M., 1997]. The NURE program was initiated in 1973 with a primary goal of identifying uranium resources in the United States. The Hydrogeochemical and Stream Sediment Reconnaissance (HSSR) program (initiated in 1975) was one component of the NURE. Planned systematic sampling of the entire United States began in 1976 under the responsibility of four Department of Energy National Laboratories: Lawrence Livermore Laboratory, Los Alamos Scientific Laboratory, Oak Ridge Gaseous Diffusion Plant, and Savannah River Laboratory (SRL). SRL, located in South Carolina, was initially assigned 25 states in the eastern United States. SRL collected about 400,000 water and sediment samples. A portion of these samples was sent to subcontractor laboratories for supplemental analyses.

The data selected for use in this comparison consisted of sediment samples obtained in Franklin County, MA. The NGD contains 142 results for uranium measured by delayed neutron analysis and 138 supplemental results analyzed by unspecified methods. Eleven samples were collected in the town of Rowe. Exact sampling locations can be reviewed by accessing the referenced IAEA website.

The following table presents the minimum, mean, and maximum values for each data set along with the standard deviation in the mean value.

Data Set	Region	No. of Data Points	Min.	Max.	Mean	STD (Mean)
YNPS	N/A	43	1.07	7.18	2.24	1.42
NGD: Delayed Neutron Analysis	Franklin County	142	1.00	112.60	4.14	9.65
NGD: Alternate Analysis	Franklin County	138	-0.10	16.60	2.67	2.19
NGD: Delayed Neutron Analysis	Rowe Only	11	1.70	4.80	2.98	1.02
NGD: Alternate Analysis	Rowe Only	11	-0.10	13.40	2.85	3.65

Note: Results are in units of mg/kg

It should be noted that the mean value for the sediments collected by YNPS is less than the mean value obtained from any other data set. Also of note is the fact that the maximum value associated with the YNPS data set (not detected above the MDL, see Table 9) is also lower than the maximum value from three of the four NGD data sets. Based on this data, uranium in sediments collected in the vicinity of YNPS is not elevated compared to those areas not impacted by plant operation.

4.6 SURFACE WATER

4.6.1 Radiological

Sample location for surface water were co-located with sediment sample locations (see Figure 8A, 8B and 8C) and were analyzed for tritium and gamma-emitting radionuclides. The results are listed in Table 11. The presence of some naturally-occurring radionuclides was detected in the surface waters of the reservoirs and the Deerfield River; however, no tritium was detected.

Tritium was detected in Sherman Spring and the West Storm Drain.

4.6.2 Oil and/or Hazardous Materials

Surface water sample OHM results are presented in Table 12 and the sampling locations are shown in Figures 8A, 8B and 8C. Cadmium was the only OHM detected in surface water above the screening values. The

concentration of cadmium was above the screening value in a sample at Sherman Spring and in three samples collected from the Deerfield River, downstream of Sherman Dam. It should be noted that the detection limit for several of the samples, including the background samples, were approximately 10 times higher than the screening value. Cadmium will be further evaluated in the risk assessment.

As with sediment, screening values were not available for all OHM in surface water (see Table 13). For a number of compounds without screening values, the site maximum and/or median value exceeded the background data site maximum and/or median. The following compounds, which fall into this category, will be evaluated in the risk characterization:

- Adjusted TPH
- C_9-C_{12} Aliphatics
- Xylenes
- Methyl-t-butyl ether
- 1,2,4-Trimethylbenzene
- 1,3,5-Trimethylbenzene
- Benzene
- Carbon disulfide
- Ethylbenzene
- t-Amyl methyl ether
- 1-Methylnaphthalene
- Lithium

4.7 FISH

4.7.1 Radiological Assessment

Radiological assessments of fish in Sherman Reservoir and the Deerfield River and at a control location, Harriman Reservoir, were performed for Phase II. Samples were prepared for analysis by boning and using only the flesh for analysis. Results of the analyses performed are provided in Table 14. The results of gamma spectrometry analysis had no detectable gamma emitting radionuclides in the fish samples except naturally occurring K-40. Tritium analysis for Harriman and Sherman Reservoir fish samples had concentrations of 0.173 and 0.504 pCi/g, respectively. The critical level for these results was 0.119 and 0.155 pCi/g, respectively. Tritium concentration in the Deerfield River fish was not detectable. Based upon the lack of detection of tritium in surface water and sediments, YAEC has concluded that the identification of tritium above the critical level in fish samples is due to naturally occurring variations and not plant operations.

4.7.2 OHM Assessment

As requested in the Phase II Approval Letter, this report includes a summary of the PCB analytical data from the fish sampling performed in November 2002. Fish were collected from three locations: near YAEC's East Storm Drain Outfall, at the northern end of Sherman Reservoir and a reference/background location in Harriman Reservoir. Yellow Perch (*Perca flavescens*) and White Sucker (*Catostomus commersoni*) were collected at all three locations.

Samples were analyzed for PCB Aroclors by Severn Trent Laboratories using EPA Method 8082 (see Table 15). Congener analyses of selected fish tissue were performed by the Geochemical & Environmental Research Group (GERG) at Texas A&M University using high-resolution gas chromatography with a low-resolution mass spectrometer (see Table 16). A total of eight composite fish samples were analyzed, representing two species (Yellow Perch and White Sucker) from two locations in Sherman Reservoir (East Storm Drain and North Sherman Reservoir) and a reference location in Harriman Reservoir. Aroclor results were presented in the PCB Phase II Report (ERM, 2003) and congener results were presented in the PCB Phase IV Report (ERM, 2004).

PCBs (both Aroclor 1254 and Aroclor 1260) were detected in some of the fish samples collected near the East Storm Drain Outfall. Three of the four fish samples taken from the east storm drain area contained Aroclor 1254 at concentrations ranging from 0.010 mg/kg to 0.067 mg/kg. Aroclor 1260 was also present in one fish sample at a concentration of 0.017 mg/kg. Of the six fish samples taken from the northern end of Sherman Pond, PCBs were detected in one sample at a concentration of 0.012 mg/kg (Aroclor 1260). PCBs were not detected in the six Harriman Reservoir samples collected to evaluate regional background concentrations.

The only significant change in total PCB results from the GERG method compared with the Aroclor analysis was the reported detection of PCBs by GERG in samples previously reported as non-detect, and reflects the greater sensitivity of the congener analytical method. The congener analysis demonstrates that PCBs occur in background samples in the range of 0.001 to 0.010 mg/kg. Overall, the congener results did not deviate significantly from the Aroclor results in the quantitative estimation for total PCB concentrations in fish tissue.

The observed congener composition of PCBs in fish was consistent with the expectation that congeners with higher levels of chlorination are more persistent and more likely to bioaccumulate in fish tissues.

4.8 HISTORIC RADIOLOGICAL MONITORING DATA

Radiological environmental monitoring was initiated in 1958, approximately two years before YNPS began commercial power production. The Phase II Report included a summary of the Radiological Environmental Monitoring Program (REMP) data generated between 1983 to 2003.

In response to a condition of the Phase II Approval Letter, the REMP data from 1958 to 1970 is provided in Appendix F. YAEC has monitored gross alpha and gross beta activity in well and surface water samples as a part of the environmental monitoring program since before plant operations began. Evaluations of gross alpha and gross beta concentration data indicate that there are no consistent spatial or temporal correlations that suggest the presence of gross alpha or gross beta activities resulting from plant operations. The source of the measured gross alpha and gross beta activity is naturally-occurring radionuclides, such as those found in the soil and bedrock. This issue is addressed in more detail in the technical report provided in Appendix E.

5.0 RISK ASSESSMENTS

As described in previous sections of this report, YAEC is conducting a comprehensive environmental closure program for both radionuclides and OHM. The goal of the program is to ensure that the site poses no adverse risks to human health or the environment. YAEC will be performing a cumulative risk assessment to evaluate the combined risk from both radionuclides and OHM. The cumulative risk assessment will be conducted adhering to MADEP and USEPA guidelines for both ecological and human health risk.

The cumulative risk assessment work plans for human health and the environment were transmitted to the Department by a letter from YAEC, dated 7 September 2006. The overall goal of the cumulative risk assessment is to establish whether post-closure site conditions (*e.g.*, existing structures removed, remediation of radionuclides and OHM as necessary, and site restoration including a final soil grading plan over the former industrial area) pose a significant risk to human health or the environment. The cumulative risk assessment will evaluate only those constituents that exceed local "background" conditions. This is particularly important for naturally occurring radionuclides, inorganic constituents (*e.g.*, metals), and other OHM associated with ubiquitous anthropogenic sources. Should the cumulative risk assessment identify potential risks above risk guidelines established by MADEP and USEPA, this will serve as the basis for identifying additional remedial measures or controls to reduce these potential risks.

An extensive environmental sampling program has been conducted at the site to support the site closure and risk assessments. Groundwater, soils, sediments, and fish have been sampled. The data have been evaluated pursuant to a QAPP, and have been assembled into a site database. The cumulative risk assessment will utilize the OHM data that have been collected since 2000, which was when the first sampling and notification occurred under the MCP. Radionuclide data have been collected following NRC protocols to support the LTP. Under this program, the FSS is nearing completion. The data collected for the FSS include soil, sediment, and groundwater samples, in addition to samples of concrete and other materials. As presented in Section 4.0, additional radiological samples were collected in 2006 specifically in response to requests by the MADEP. Radionuclide data collected for the FSS, the MADEP requested

sampling, and prior data from the HSA will be used to support the cumulative risk assessments.[i] All of the OHM and radionuclide data supporting the cumulative risk assessments will be tabulated and presented on maps in the risk assessment reports.

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i In particular, data collected at background locations collected for the HSA will be used. In addition, HSA data for the industrial area may be used to augment the FSS data.

6.0 CONCLUSIONS

The conclusions of the Supplemental Phase II Comprehensive Site Assessment for YNPS are presented below:

- The sources, nature and extent of impacts to the environment at YNPS have been defined. Additional investigation activities have addressed the conditions of approval stipulated by MADEP in the Phase II Approval Letter. No new or additional impacts were identified.

- Impacted soil and sediment have been adequately remediated. A limited program of confirmatory sampling and remediation is on-going to complete the decommissioning program.

- Areas of groundwater impact that exceed applicable or suitably analogous drinking water standards will continue to be monitored until impacts naturally attenuate (via dilution, dispersion, bio-transformation, radioactive decay) below drinking water standards.

- Portions of the site where residual concentrations of OHM in subsurface soil could pose a potential future risk of harm to human health, safety or public welfare will be subject to land use restrictions (e.g., Activity & Use Limitation or similar deed restriction) that will prohibit activities and uses that could result in adverse exposure and require the maintenance of controls (e.g., soil cover, 24-hour security) to prevent adverse exposure.

- Cumulative human health and environmental risk characterizations will be prepared to confirm and document that residual impacts remaining at the site will not pose a significant risk based on the planned land use restrictions. The risk assessment will be submitted to the Department under separate cover.

7.0 REFERENCES

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Tables

Table 1
Response to DEP Conditions in Phase II Approval Letter
Yankee Nuclear Power Station
Rowe, MA

	DEP Conditions	YAEC Response
1	The Phase II report is considered to be interim.	No action required.
2a	Requirements for non-radiological analyses for various media.	Sampling was conducted as requested, except as noted in 31 March 2006 letter from ERM to MADEP that described modifications to the Phase II sampling program (see Appendix B).
2b	Requirements for radiological analyses for various media.	Sampling was conducted as requested, except as noted in the text of the report.
3	QA/QC protocols should follow the QAPP and requirements of MADEP, USEPA, NRC and MADPH where applicable.	QA/QC protocols were followed.
4	All radiological data shall be reported as activity concentrations.	Results are presented in format requested by the Department.
5	Assessment activities shall be completed to document that the listed remedial standards have been met for the Site.	The assessment and remedial activities have been planned to achieve the remedial standards stated in the Phase II Approval Letter. Section 5 presents a summary of the plans for the cumulative risk assessments.
6	Sufficient soil samples must be analyzed for parameters outlined in Condition 2.	The soil sampling program has been designed to provide sufficient data to support the cumulative risk assessment, as well as other applicable regulatory programs. The soil sampling results are discussed in Section 4.2.
7	New MW clusters shall be installed near the SFP/IXP complex and downgradient of the leach field.	As described in Section 2.3 and Table 2, additional wells were installed near the Ion Exchange Pit and the Spent Fuel Pool in March 2006.
8	An additional comprehensive site wide GW sampling round for rad and non-rad parameters shall be included in the Phase II.	A comprehensive groundwater sampling round was conducted in April/May 2006 (see Sections 2.3 and 4.4).
8	Plans for well closures.	Section 2.3.1 provides a description of the status of the wells and the plans for well closures.
9	All MWs shall be installed and low-flow sampled in accordance with MADEP and USEPA guidance.	As described in Sections 2.3, well installation and groundwater sampling was performed in accordance with MADEP and USEPA guidance.
10	An additional comprehensive site-wide gauging round and associated contour map shall be included in the Phase II.	A gauging round conducted on 26 June 2006 was used to construct groundwater elevation contour maps (see Figures 7A to 7D).
11	Surface water and sediment samples shall be collected at Sherman Reservoir, Surface Springs, Deerfield River below Sherman Dam and at background locations. Analyses should comply with Condition 2.	Sampling was conducted as requested, except as noted in the text of the report. The results of the sampling program are presented in Sections 4.4 and 4.5.
12	An additional round of fish sampling for radiological analyses shall be included in the Phase II.	Fish samples were collected and analyzed by gamma spectroscopy and tritium. The results of the fish sampling program are presented in Section 4.7 and Table 14 of the report. Analysis of other hard-to-detect radionuclides will be provided under separate cover, when the analyses are complete.
13	Comply will all other applicable regulations set by NRC, USEPA, MADPH and Conservation Commission.	Work conducted as part of the Phase II report was performed in accordance with applicable regulatory requirements.

Table 1
Response to DEP Conditions in Phase II Approval Letter
Yankee Nuclear Power Station
Rowe, MA

	Comment	Response
14a	Include maps showing all existing and abandoned wells, soil, surface water, sediment, fish samples, geologic cross-sections.	Figure 5 provides a map showing the location of the existing and abandoned wells. Figures 3, 4A and 4B show the locations of the soil samples. Figures 8A, 8B and 8C show the locations of the sediments, surface water, and fish samples. An updated geologic cross-section was not available at the time this report was prepared. An updated cross-section will be presented under separate cover.
14b	Tabular summaries of all rad and non-rad data along with appropriate screening criteria.	The data generated as part of the Phase II work are presented in Tables 3 to 16.
14c	Groundwater contour map	Groundwater contour maps for the 26 June 2006 gauging event are presented as Figures 7A and 7D.
14d	Top of bedrock, top of glaciolacustrine unit, and top of glacial till unit	The tops of the geologic units are presented in Figures 6A, 6B and 6C.
14e	Contour maps of gross alpha and gross beta activity in groundwater (2003 or 2004)	Appendix E includes the contour maps of gross alpha and beta activity for the 2004 data set.
14f	Summary (or data) for pre-1971 REMP	Section 4.8 and Appendix F present the pre-1971 REMP data.
14f	ASTM Phase I for Non-Industrial Area	Section 3.0 and Appendices C and D present the Phase I for the non-industrial area.
14f	PCB analytical data for fish sampling previously performed	Section 4.7.2 and Tables 15 and 16 present the PCB fish data.
14g	Final scope of work for Cumulative Risk Assessment	The scope of work for the risk assessment was presented to the Department under separate cover, in a letter dated 7 September 2006.
15	The cumulative Risk Assessment must be submitted by 1 October 2006.	Based on the schedule for the Final Status Survey, it will not be possible to complete the cumulative risk assessments by 1 October 2006. YAEC will submit a schedule to the Department once it has been finalized.
16	Appropriate health and safety measures shall be used at all times.	YAEC performed the Phase II work in accordance with applicable health and safety requirements.

Table 2
Summary of Existing Monitoring Wells
Yankee Nuclear Power Station
Rowe, MA

Monitoring Well ID	Date Completed	Well Location	Total Depth Drilled (feet)	Well Screen Length (feet)	Well Screen Interval (ft bg)	Geologic Unit at Screen Interval
CB-3R	29-Aug-06	Northeast of former Fire Tank	16	10	6 to 16	Sand & Gravel
CB-4	5-May-93	Old septic leaching field	19	10	9 to 19	Sand & Gravel
CB-6	13-Sep-94	Sherman dam embankment, south side; Sherman Spring area	25	10	15 to 25	Sand & Gravel
CB-8	20-Sep-94	North of old PCA in outdoor rad storage area.	19	5	14 to 19	Till
CW-2	29-Apr-93	West of Safety Injection Tanks	20	10	9 to 19	Sand & Gravel
CW-5R	30-Aug-06	Near former fuel oil line	17	10	7 to 17	Sand & Gravel
CW-10	8-Jun-98	North of Stores warehouse	30	15	15 to 30	Bedrock
CFW-1	13-Dec-99	Southeast construction fill area margin	8	5	3 to 8	Sand & Gravel
CFW-5	14-Dec-99	Southeast construction fill area margin	5	5	1 to 5	Sand & Gravel
CFW-6	14-Dec-99	Southeast construction fill area margin	6	5	1 to 6	Sand & Gravel
MW-6R	29-Aug-06	West side of Vapor Container	20	10	8 to 18	Sand & Gravel
MW-100A	5-Aug-03	Northern area of Radiation Control Area (RCA)	20	10	10 to 20	Sand & Gravel
MW-100B	4-Aug-03		43	10	32.9 to 42.9	Bedrock
MW-101A	11-Apr-06	South side of Vapor Container	23.5	5	18 to 23	Fill
MW-101B	13-Aug-03		156	10	142 to 152	Bedrock
MW-101C	15-Aug-03		99	5	94 to 99	Sand and Silt
MW-102A	31-Jul-03	North Side of Vapor Container	39	5	33 to 38	Sand and Silt
MW-102B	24-Jul-03		131.5	10	120.2 to 130.2	Bedrock
MW-102C	29-Jul-03		99	5	94 to 99	Sand & Gravel
MW-102D	10-Feb-06		22	10	11 to 21	Sand & Gravel
MW-103A	17-Jul-03	Northwest side of Security Center	26	10	15 to 25	Stratified Drift
MW-103B	10-Jul-03		295	10	284.5 to 294.5	Bedrock
MW-103C	16-Jul-03		125	10	115 to 125	Laminated Clay & Sand
MW-104A	6-Feb-06	Downgradient mid-plume location	27	10	10 to 20	Sand & Gravel
MW-104B	3-Sep-03		194.5	10	184 to 194	Bedrock
MW-104C	11-Sep-03		99	10	87 to 97	Laminated Silt & Sand
MW-104D	8-Sep-06		50	5	40 to 45	Sand Lens in Till
MW-105A	8-Feb-06	North of Service Building	25	10	10 to 20	Sand & Gravel
MW-105B	20-Aug-03		75	10	64 to 74	Bedrock
MW-105C	21-Aug-03		45	10	27 to 37	Silt and Sand
MW-106A	30-Aug-04	Downgradient portion of site near to Deerfield River	22	10	12 to 22	Sand & Gravel
MW-106B	27-Aug-04		265	10	251 to 261	Bedrock
MW-106C	8-Sep-04		95	5	90 to 95	Sand and Silt
MW-106D	14-Sep-04		155	10	144 to 154	Sand and Silt
MW-107A	5-Apr-06	NE side of Vapor Container and NW of Spent Fuel Pool	30	5	21 to 26	Sand & Gravel
MW-107B	17-Sep-03		110	10	99.7 to 109.7	Bedrock
MW-107C	19-Sep-03		32	5	27 to 32	Sand and Silt
MW-107D	24-Sep-03		81.2	5	75 to 80	Sand and Silt
MW-107E	15-May-06		70	5	52 to 57	Sand Lens in Till
MW-107F	23-May-06		57	5	49 to 54	Sand Lens in Till
MW-108A	17-Jul-04	Peninsula near Sherman Reservoir	25	10	14.7 to 24.7	Sand and Silt
MW-108B	16-Jul-04		215	10	205 to 215	Bedrock
MW-108C	8-Jul-04		170	5	60 to 65	Silty fine Sand
MW-109A	3-Feb-06	West side of Industrial Area	20	10	10 to 20	Sand & Gravel
MW-109B	2-Aug-04		190	10	180 to 190	Bedrock
MW-109C	9-Aug-04		55	5	49 to 54	Sand with Silt
MW-109D	6-Aug-04		113	5	88.7 to 93.7	Sand & Gravel
MW-110A	16-Feb-06	Adjacent to area of release associated with Ion Exchange Pit	31	5	25 to 30	Sand & Gravel
MW-110B	6-Mar-06		110	10	100 to 110	Bedrock
MW-110C	20-Mar-06		51	5	46 to 51	Sand Lens in Till
MW-110D	17-Mar-06		88	5	83 to 88	Sand Lens in Till
MW-111A	30-Mar-06	Northeast side of Spent Fuel Pool, downgradient of fuel transfer shute	23	5	18 to 23	Sand & Gravel
MW-111B	28-Mar-06		80	10	70 to 80	Bedrock
MW-111C	31-Mar-06		41	5	32 to 37	Sand Lens in Till
MW-112A	30-Aug-06	Downgradient of former solvent usage area	24	10	13 to 23	Sand & Gravel
MW-113A	27-Apr-06	Northern portion of site adjacent to Deerfield River	25	10	15 to 25	Sand & Gravel
MW-113C	26-Apr-06		140	10	127 to 137	Sand and Silt

Table 3
Summary of Analyses for Radiological Groundwater Sampling Campaigns
Yankee Nuclear Power Station
Rowe, MA

	Winter 2005				Spring 2006				Summer 2006				Fall 2006			
Analytical Suite	**A**	**B**	**C**	**D**	**A**	**B**	**C**	**D**	**A**	**B**	**C**	**D**	**A**	**B**	**C**	**D**
Well ID																
CB-3/CB-3R					X	X	X	X	X	X			X	X	X	X
CB-4	X	X	X	X	X	X	X	X	X	X			X	X	X	X
CB-6	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CB-8					X	X	X	X	X	X			X	X	X	X
CW-10					X	X	X	X	X	X			X	X	X	X
CFW-1					X	X	X	X	X	X			X	X	X	X
CFW-5					X	X	X	X	X	X			X	X	X	X
CFW-6					X	X	X	X	X	X			X	X	X	X
MW-100A					X	X	X	X	X	X			X	X	X	X
MW-100B					X	X	X	X	X	X			X	X	X	X
MW-101A					X	X	X	X	X	X	X	X	X	X	X	X
MW-101B					X	X	X	X	X	X			X	X	X	X
MW-101C									X	X	X	X	X	X	X	X
MW-102A					X	X	X	X	X	X	X	X	X	X	X	X
MW-102B					X	X	X	X	X	X			X	X	X	X
MW-102C					X	X	X	X	X	X	X	X	X	X	X	X
MW-102D					X	X	X	X	X	X	X	X	X	X	X	X
MW-103A	X	X	X	X	X	X	X	X	X	X			X	X	X	X
MW-103B	X	X	X	X	X	X	X	X	X	X			X	X	X	X
MW-103C	X	X	X	X	X	X	X	X	X	X			X	X	X	X
MW-104A					X	X	X	X	X	X	X	X	X	X	X	X
MW-104B	X	X	X	X	X	X	X	X	X	X			X	X	X	X
MW-104C	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MW-104D													X	X	X	X
MW-105A					X	X	X	X	X	X			X	X	X	X
MW-105B					X	X	X	X	X	X	X	X	X	X	X	X
MW-105C					X	X	X	X	X	X			X	X	X	X
MW-106A	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MW-106B	X	X	X	X	X	X	X	X	X	X			X	X	X	X
MW-106C	X	X	X	X	X	X	X	X	X	X			X	X	X	X
MW-106D	X	X	X	X	X	X	X	X	X	X			X	X	X	X
MW-107A					X	X	X	X	X	X	X	X	X	X	X	X
MW-107B	X	X	X	X	X	X	X	X	X	X			X	X	X	X
MW-107C	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MW-107D	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MW-107E									X	X	X	X	X	X	X	X
MW-107F									X	X	X	X	X	X	X	X
MW-108A	X	X	X	X	X	X	X	X	X	X			X	X	X	X
MW-108B	X	X	X	X	X	X	X	X	X	X			X	X	X	X
MW-108C	X	X	X	X	X	X	X	X	X	X			X	X	X	X
MW-109A					X	X	X	X	X	X			X	X	X	X
MW-109B					X	X	X	X	X	X			X	X	X	X
MW-109C					X	X	X	X	X	X			X	X	X	X
MW-109D					X	X	X	X	X	X			X	X	X	X

Table 3
Summary of Analyses for Radiological Groundwater Sampling Campaigns
Yankee Nuclear Power Station
Rowe, MA

	Winter 2005				Spring 2006				Summer 2006				Fall 2006			
Analytical Suite	**A**	**B**	**C**	**D**	**A**	**B**	**C**	**D**	**A**	**B**	**C**	**D**	**A**	**B**	**C**	**D**
MW-110A					X	X	X	X	X	X	X	X	X	X	X	X
MW-110B					X	X	X	X	X	X			X	X	X	X
MW-110C					X	X	X	X	X	X			X	X	X	X
MW-110D					X	X	X	X	X	X			X	X	X	X
MW-111A					X	X	X	X	X	X	X	X	X	X	X	X
MW-111B					X	X	X	X	X	X			X	X	X	X
MW-111C					X	X	X	X	X	X			X	X	X	X
MW-112A													X	X	X	X
MW-113A									X	X	X	X	X	X	X	X
MW-113C									X	X	X	X	X	X	X	X
SP-1 (Spring)	X	X	X	X	X	X	X	X	X	X			X	X	X	X
Plant Water Well					X	X	X	X	X	X			X	X	X	X
Furlon House Water Well					X	X	X	X	X	X						

Suite A	**Suite B**	**Suite C**	**Suite D**
Cobalt-60	Tritium	Strontium-90	Americium-241
Cesium-134	Gross alpha/beta	Carbon-14	Plutonium-238
Cesium-137		Iron-55	Plutonium-239
Niobium-94		Nickle-63	Plutonium-240
Antimony-125		Technicium-99	Plutonium-241
Europium-152			Curium-242
Europium-154			Curium-243
Europium-155			Curium-244
Silver-108m			

Table 4
Summary of Radiological
Analytical Results for Soil
Yankee Nuclear Power Station
Rowe, MA

Radionuclide	Activity	Critical Level	MDC
NOL-01-01-001-F			
Ag-108m	ND	3.061E-02	4.472E-02
Am-241	ND	7.643E-01	1.083E+00
Co-60	ND	2.844E-02	4.218E-02
Cs-134	ND	3.474E-02	4.921E-02
Cs-137	ND	3.305E-02	4.825E-02
Eu-152	ND	9.511E-02	1.362E-01
Eu-154	ND	8.253E-02	1.180E-01
Eu-155	ND	1.827E-01	2.608E-01
Nb-94	ND	1.824E-02	2.813E-02
Sb-125	1.290E-01	6.161E-02	9.865E-02
C-14	2.700E-01	1.351E-01	1.880E-01
Cm-243	ND	8.738E-03	6.690E-02
Fe-55	ND	6.256E+00	8.170E+00
Ni-63	ND	1.480E+00	2.330E+00
Pu-238	ND	3.413E-02	6.640E-02
Pu-239	ND	1.654E-02	5.190E-02
Pu-241	ND	7.305E+00	1.090E+01
Sr-90	ND	1.736E-02	3.280E-02
Tc-99	2.260E-01	1.794E-01	2.530E-01
NOL-01-01-002-F			
Ag-108m	ND	4.177E-02	6.326E-02
Am-241	ND	1.752E-01	2.546E-01
Co-60	ND	3.827E-02	5.801E-02
Cs-134	ND	2.887E-05	5.146E-02
Cs-137	4.992E-02	4.333E-02	5.835E-02
Eu-152	ND	1.116E-01	1.414E-01
Eu-154	ND	7.195E-02	9.175E-02
Eu-155	ND	1.130E-01	1.604E-01
Nb-94	ND	2.301E-02	3.431E-02
Sb-125	1.390E-01	7.809E-02	1.094E-01
NOL-01-01-003-F			
Ag-108m	NA	0.000E+00	9.601E-02
Am-241	ND	1.858E-01	2.686E-01
Co-60	ND	4.033E-02	5.663E-02
Cs-134	ND	7.097E-02	1.036E-01
Cs-137	1.369E-01	5.057E-02	5.059E-02
Eu-152	ND	8.327E-02	1.211E-01
Eu-154	ND	8.082E-02	1.074E-01
Eu-155	ND	1.194E-01	1.687E-01
Nb-94	ND	2.986E-02	4.153E-02
Sb-125	7.140E-02	5.989E-02	1.500E-01
NOL-01-01-004-F			
Ag-108m	ND	3.095E-02	4.443E-02
Am-241	ND	7.574E-01	1.064E+00
Co-60	ND	1.406E-01	4.230E-02
Cs-134	ND	6.623E-02	9.541E-02
Cs-137	9.555E-02	3.946E-02	3.983E-02
Eu-152	ND	1.577E-01	1.448E-01
Eu-154	ND	7.452E-02	1.070E-01
Eu-155	ND	1.274E-01	1.844E-01
Nb-94	ND	1.416E-02	2.198E-02
Sb-125	9.436E-02	6.363E-02	9.974E-02

Table 4
Summary of Radiological
Analytical Results for Soil
Yankee Nuclear Power Station
Rowe, MA

Radionuclide	Activity	Critical Level	MDC
NOL-01-01-005-F			
Ag-108m	NA	0.000E+00	7.307E-02
Am-241	ND	8.834E-01	1.070E+00
Co-60	6.770E-02	2.446E-02	3.557E-02
Cs-134	NA	0.000E+00	9.281E-02
Cs-137	1.414E-01	5.328E-02	5.162E-02
Eu-152	ND	1.046E-01	1.506E-01
Eu-154	ND	7.645E-02	1.102E-01
Eu-155	ND	1.801E-01	2.590E-01
Nb-94	ND	1.940E-02	2.856E-02
Sb-125	5.907E-02	5.719E-02	1.175E-01
C-14	4.860E+00	1.678E-01	1.280E-01
Cm-243	ND	5.662E-02	1.820E-01
Fe-55	ND	6.408E+00	8.080E+00
H-3	ND	2.714E+00	3.970E+00
Nb-95	ND	3.798E-02	6.390E-02
Ni-63	ND	1.713E+00	2.500E+00
Pu-238	ND	3.565E-02	1.180E-01
Pu-239	ND	6.058E-02	9.370E-02
Pu-241	ND	4.718E+00	7.200E+00
Sr-90	ND	1.386E-02	2.730E-02
Tc-99	ND	2.097E-01	3.040E-01
U-235	1.940E-01	1.491E-01	2.540E-01
U-238	ND	1.305E+00	1.920E+00
NOL-01-01-006-F			
Ag-108m	ND	3.650E-02	5.571E-02
Am-241	ND	2.307E-01	3.065E-01
Co-60	ND	4.126E-02	5.479E-02
Cs-134	2.460E-02	1.734E-02	3.864E-02
Cs-137	3.347E-01	7.578E-02	5.978E-02
Eu-152	ND	1.049E-01	1.508E-01
Eu-154	ND	8.191E-02	1.087E-01
Eu-155	ND	1.246E-01	1.796E-01
Nb-94	ND	8.682E-03	5.091E-02
Sb-125	ND	9.936E-02	1.474E-01
C-14	2.630E-01	1.491E-01	2.080E-01
Cm-243	ND	6.303E-02	1.820E-01
Fe-55	ND	5.021E+00	6.440E+00
H-3	ND	2.680E+00	4.170E+00
Nb-95	ND	3.903E-02	6.460E-02
Ni-63	ND	1.375E+00	2.020E+00
Pu-238	ND	6.932E-02	1.620E-01
Pu-239	ND	6.734E-02	1.430E-01
Pu-241	ND	5.056E+00	7.640E+00
Sr-90	ND	1.468E-02	2.540E-02
Tc-99	ND	1.829E-01	2.670E-01
U-235	ND	1.561E-01	2.630E-01
U-238	ND	1.072E+00	1.720E+00

Table 4
Summary of Radiological
Analytical Results for Soil
Yankee Nuclear Power Station
Rowe, MA

Radionuclide	Activity	Critical Level	MDC
NOL-01-01-007-F			
Ag-108m	ND	4.547E-02	6.677E-02
Am-241	ND	7.377E-01	2.939E-01
Co-60	4.076E-02	3.508E-02	4.442E-02
Cs-134	2.085E-02	1.774E-02	4.807E-02
Cs-137	9.316E-02	5.955E-02	6.431E-02
Eu-152	ND	1.167E-01	1.496E-01
Eu-154	ND	2.408E-01	1.108E-01
Eu-155	ND	1.265E-01	1.815E-01
Nb-94	ND	8.425E-03	4.890E-02
Sb-125	7.948E-02	5.640E-02	1.382E-01
Ag-108m	ND	3.336E-02	4.860E-02
Am-241	ND	7.372E-01	1.027E+00
Co-60	3.870E-02	2.444E-02	4.009E-02
Cs-134	ND	1.428E-02	1.639E-02
Cs-137	9.665E-02	4.748E-02	4.886E-02
Eu-152	9.034E-02	7.263E-02	1.598E-01
Eu-154	ND	7.883E-02	1.130E-01
Eu-155	ND	1.775E-01	2.496E-01
Nb-94	ND	2.291E-02	3.463E-02
Sb-125	9.082E-02	7.259E-02	1.085E-01
C-14	1.180E-01	9.297E-02	1.320E-01
Cm-243	ND	9.506E-02	2.020E-01
Fe-55	ND	4.299E+00	5.270E+00
H-3	ND	2.295E+00	3.640E+00
Nb-95	ND	3.658E-02	5.790E-02
Ni-63	ND	1.526E+00	2.280E+00
Pu-238	ND	5.464E-02	1.130E-01
Pu-239	ND	8.202E-02	1.940E-01
Pu-241	ND	5.068E+00	7.850E+00
Sr-90	ND	1.282E-02	2.780E-02
Tc-99	ND	2.155E-01	3.160E-01
U-235	ND	1.351E-01	2.220E-01
U-238	ND	1.074E+00	1.380E+00
NOL-01-01-009-F			
Ag-108m	ND	3.863E-02	5.827E-02
Am-241	ND	4.365E-01	6.261E-01
Co-60	ND	3.066E-02	4.448E-02
Cs-134	ND	7.130E-02	1.038E-01
Cs-137	6.359E-02	4.605E-02	5.286E-02
Eu-152	ND	9.609E-02	1.293E-01
Eu-154	ND	8.393E-02	1.184E-01
Eu-155	ND	4.785E-01	2.469E-01
Nb-94	ND	3.198E-02	4.750E-02
Sb-125	8.276E-02	6.587E-02	1.344E-01

Table 4
Summary of Radiological
Analytical Results for Soil
Yankee Nuclear Power Station
Rowe, MA

Radionuclide	Activity	Critical Level	MDC
NOL-01-01-010-F			
Ag-108m	ND	7.430E-02	1.090E-01
Am-241	ND	5.574E-01	2.858E-01
Co-60	1.845E-01	4.750E-02	4.528E-02
Cs-134	2.257E-02	1.817E-02	9.334E-02
Cs-137	ND	4.756E-02	5.638E-02
Eu-152	ND	9.598E-02	1.387E-01
Eu-154	ND	7.912E-02	1.075E-01
Eu-155	ND	9.495E-02	1.360E-01
Nb-94	ND	3.901E-02	5.269E-02
Sb-125	1.030E-01	7.573E-02	1.412E-01
C-14	ND	9.786E-02	1.540E-01
Cm-243	ND	3.518E-02	7.340E-02
Fe-55	ND	2.831E+00	3.440E+00
Ni-63	ND	1.293E+00	1.940E+00
Pu-238	ND	2.039E-02	5.200E-02
Pu-239	ND	1.934E-02	4.130E-02
Pu-241	ND	5.848E+00	8.950E+00
Sr-90	ND	1.654E-02	3.080E-02
Tc-99	ND	1.666E-01	2.430E-01
NOL-01-01-011-F			
Ag-108m	ND	3.069E-02	4.757E-02
Am-241	ND	4.769E-01	6.823E-01
Co-60	ND	3.845E-02	5.843E-02
Cs-134	ND	3.217E-02	4.848E-02
Cs-137	ND	3.461E-02	5.313E-02
Eu-152	ND	1.075E-01	1.543E-01
Eu-154	ND	8.606E-02	9.358E-02
Eu-155	ND	3.106E+00	2.299E-01
Nb-94	ND	3.177E-02	4.644E-02
Sb-125	5.800E-02	5.300E-02	1.444E-01
C-14	1.470E-01	1.138E-01	1.710E-01
Cm-243	ND	5.417E-02	1.180E-01
Fe-55	ND	2.843E+00	3.420E+00
Ni-63	ND	1.491E+00	2.340E+00
Pu-238	ND	2.551E-02	7.240E-02
Pu-239	ND	2.738E-02	6.390E-02
Pu-241	ND	6.256E+00	9.510E+00
Sr-90	ND	1.375E-02	2.800E-02
Tc-99	ND	1.678E-01	2.430E-01
NOL-01-01-012-F			
Ag-108m	ND	3.344E-02	4.828E-02
Am-241	ND	1.130E+00	1.069E+00
Co-60	ND	2.481E-02	3.847E-02
Cs-134	ND	2.793E-02	3.973E-02
Cs-137	ND	2.761E-02	3.961E-02
Eu-152	ND	1.540E-01	1.390E-01
Eu-154	ND	5.982E-02	8.600E-02
Eu-155	ND	1.488E-01	2.139E-01
Nb-94	ND	1.740E-02	2.574E-02
Sb-125	1.114E-01	5.632E-02	9.342E-02
C-14	ND	8.831E-02	1.310E-01
Cm-243	ND	6.442E-02	1.820E-01
Fe-55	ND	5.965E+00	7.180E+00
H-3	ND	2.726E+00	4.250E+00
Nb-95	ND	3.996E-02	6.500E-02
Ni-63	ND	1.584E+00	2.400E+00
Pu-238	ND	4.159E-02	9.860E-02
Pu-239	ND	1.305E-02	8.630E-02
Pu-241	ND	5.522E+00	8.400E+00
Sr-90	ND	1.899E-02	3.360E-02
Tc-99	2.370E-01	2.155E-01	3.080E-01
U-235	2.210E-01	2.027E-01	2.230E-01
U-238	ND	1.316E+00	1.440E+00

Table 4
Summary of Radiological
Analytical Results for Soil
Yankee Nuclear Power Station
Rowe, MA

Radionuclide	Activity	Critical Level	MDC
NOL-01-01-013-F			
Ag-108m	ND	4.486E-02	6.543E-02
Am-241	ND	7.272E-01	1.052E+00
Co-60	ND	3.377E-01	3.943E-02
Cs-134	2.148E-02	1.408E-02	9.426E-02
Cs-137	ND	1.853E-01	4.023E-02
Eu-152	ND	1.030E-01	1.478E-01
Eu-154	ND	7.739E-02	1.111E-01
Eu-155	ND	1.616E-01	2.280E-01
Nb-94	ND	2.026E-02	3.013E-02
Sb-125	1.071E-01	6.640E-02	9.500E-02
NOL-01-01-014-F			
Ag-108m	ND	2.302E-02	3.476E-02
Am-241	ND	8.535E-01	1.181E+00
Co-60	ND	2.725E-01	4.371E-02
Cs-134	ND	7.066E-02	9.943E-02
Cs-137	ND	2.159E-01	4.905E-02
Eu-152	ND	1.093E-01	1.557E-01
Eu-154	ND	7.706E-02	1.098E-01
Eu-155	ND	1.760E-01	2.509E-01
Nb-94	ND	1.911E-02	2.735E-02
Sb-125	6.430E-02	4.514E-02	1.159E-01
C-14	ND	1.005E-01	1.460E-01
Cm-243	ND	4.392E-02	7.900E-02
Fe-55	ND	3.845E+00	4.580E+00
Ni-63	ND	1.806E+00	2.690E+00
Pu-238	ND	2.027E-02	5.010E-02
Pu-239	ND	3.122E-02	8.590E-02
Pu-241	ND	5.883E+00	8.650E+00
Sr-90	ND	1.375E-02	2.850E-02
Tc-99	ND	1.782E-01	2.560E-01
NOL-01-01-015-F			
Ag-108m	ND	2.105E-02	2.877E-02
Am-241	ND	8.717E-01	1.220E+00
Co-60	ND	7.241E-01	4.188E-02
Cs-134	ND	4.215E-02	6.122E-02
Cs-137	ND	3.667E-02	3.274E-02
Eu-152	5.886E-02	5.555E-02	1.587E-01
Eu-154	ND	8.007E-02	1.143E-01
Eu-155	ND	1.807E-01	2.540E-01
Nb-94	NA	0.000E+00	3.546E-02
Sb-125	9.164E-02	4.347E-02	1.203E-01
NOL-01-01-016-F			
Ag-108m	ND	3.695E-02	5.198E-02
Am-241	ND	7.865E-01	1.132E+00
Co-60	ND	2.418E-02	3.576E-02
Cs-134	ND	6.494E-02	9.328E-02
Cs-137	ND	4.445E-02	4.676E-02
Eu-152	5.690E-02	5.401E-02	1.577E-01
Eu-154	ND	7.464E-02	1.075E-01
Eu-155	ND	1.441E-01	2.053E-01
Nb-94	ND	2.602E-02	3.888E-02
Sb-125	9.639E-02	5.852E-02	8.866E-02

Table 4
Summary of Radiological
Analytical Results for Soil
Yankee Nuclear Power Station
Rowe, MA

Radionuclide	Activity	Critical Level	MDC
NOL-01-01-017-F			
Ag-108m	ND	3.568E-02	5.046E-02
Am-241	ND	7.623E-01	1.076E+00
Co-60	ND	7.551E-01	3.577E-02
Cs-134	ND	5.983E-02	8.597E-02
Cs-137	ND	2.455E-02	3.549E-02
Eu-152	ND	9.756E-02	1.400E-01
Eu-154	1.221E-01	4.113E-02	8.759E-02
Eu-155	ND	1.580E-01	2.237E-01
Nb-94	ND	2.539E-02	3.784E-02
Sb-125	7.850E-02	5.205E-02	1.004E-01
C-14	ND	8.924E-02	1.290E-01
Cm-243	ND	4.439E-02	1.580E-01
Fe-55	ND	5.580E+00	7.020E+00
H-3	6.890E+00	3.041E+00	4.020E+00
Nb-95	ND	4.532E-02	7.400E-02
Ni-63	ND	1.666E+00	2.480E+00
Pu-238	ND	2.505E-02	1.370E-01
Pu-239	ND	2.936E-02	7.240E-02
Pu-241	ND	4.835E+00	7.480E+00
Sr-90	ND	1.433E-02	2.670E-02
Tc-99	ND	1.957E-01	2.870E-01
U-235	ND	1.771E-01	2.920E-01
U-238	ND	1.117E+00	1.900E+00
NOL-01-02-001-F			
Ag-108m	ND	4.087E-02	6.138E-02
Am-241	ND	4.665E-01	6.657E-01
Co-60	ND	4.700E-02	6.456E-02
Cs-134	2.393E-02	1.944E-02	9.353E-02
Cs-137	3.692E-01	8.760E-02	7.240E-02
Eu-152	1.643E-01	1.450E-01	1.811E-01
Eu-154	ND	9.420E-02	1.239E-01
Eu-155	ND	3.991E-01	2.831E-01
Nb-94	ND	3.217E-02	4.839E-02
Sb-125	ND	9.070E-02	1.338E-01
C-14	ND	1.001E-01	1.440E-01
Cm-243	ND	2.971E-02	4.530E-02
Fe-55	ND	3.635E+00	4.410E+00
Nb-95	ND	6.745E-02	1.120E-01
Ni-63	ND	1.375E+00	2.000E+00
Pu-238	ND	2.481E-02	6.550E-02
Pu-239	ND	3.239E-02	5.350E-02
Pu-241	ND	6.093E+00	9.410E+00
Sr-90	ND	1.992E-02	3.920E-02
Tc-99	ND	2.015E-01	2.900E-01
U-235	ND	1.643E-01	2.510E-01
U-238	ND	1.480E+00	1.630E+00
NOL-01-02-002-F			
Ag-108m	ND	4.683E-02	6.819E-02
Am-241	ND	4.829E-01	6.969E-01
Co-60	4.296E-02	4.211E-02	5.582E-02
Cs-134	ND	4.239E-02	6.075E-02
Cs-137	3.065E-01	7.865E-02	6.931E-02
Eu-152	ND	1.224E-01	1.750E-01
Eu-154	ND	8.991E-02	1.265E-01
Eu-155	ND	1.093E+00	2.133E-01
Nb-94	ND	3.826E-02	5.705E-02
Sb-125	ND	1.636E-01	1.525E-01
C-14	ND	1.052E-01	1.550E-01
Cm-243	ND	1.666E-02	3.540E-02
Fe-55	ND	3.507E+00	4.270E+00
Nb-95	ND	7.945E-02	1.270E-01
Ni-63	ND	1.433E+00	2.250E+00
Pu-238	ND	3.076E-02	7.070E-02
Pu-239	ND	3.052E-02	6.800E-02
Pu-241	ND	6.606E+00	9.980E+00
Sr-90	ND	1.759E-02	4.000E-02
Tc-99	ND	1.852E-01	2.710E-01
U-235	ND	2.039E-01	3.230E-01
U-238	9.200E-01	6.908E-01	8.490E-01

Table 4
Summary of Radiological
Analytical Results for Soil
Yankee Nuclear Power Station
Rowe, MA

Radionuclide	Activity	Critical Level	MDC
NOL-01-02-003-F			
Ag-108m	ND	5.263E-02	7.874E-02
Am-241	ND	6.272E-01	9.002E-01
Co-60	2.769E-01	7.080E-02	6.162E-02
Cs-134	ND	5.442E-02	7.760E-02
Cs-137	3.677E-01	1.008E-01	8.814E-02
Eu-152	ND	1.511E-01	2.159E-01
Eu-154	ND	1.025E-01	1.468E-01
Eu-155	ND	2.386E-01	3.352E-01
Nb-94	ND	4.668E-02	7.042E-02
Sb-125	1.784E-01	1.329E-01	1.931E-01
C-14	1.050E-01	9.040E-02	1.290E-01
Cm-243	ND	5.534E-02	1.180E-01
Fe-55	ND	3.914E+00	4.890E+00
H-3	ND	4.695E+00	6.780E+00
Nb-95	ND	1.701E-01	2.240E-01
Ni-63	ND	1.036E+00	1.550E+00
Pu-238	ND	3.332E-02	8.190E-02
Pu-239	ND	4.707E-02	1.000E-01
Pu-241	ND	4.578E+00	7.020E+00
Sr-90	ND	1.445E-02	2.280E-02
Tc-99	ND	2.481E-01	3.620E-01
U-235	ND	2.260E-01	2.370E-01
U-238	9.190E-01	7.293E-01	5.610E-01
NOL-01-02-004-F			
Ag-108m	ND	3.921E-02	5.778E-02
Am-241	ND	5.072E-01	7.217E-01
Co-60	ND	6.735E-03	6.744E-02
Cs-134	ND	7.245E-02	1.053E-01
Cs-137	ND	3.370E-02	4.566E-02
Eu-152	ND	1.153E-01	1.643E-01
Eu-154	ND	8.336E-02	1.189E-01
Eu-155	ND	1.834E-01	2.592E-01
Nb-94	ND	3.449E-02	5.065E-02
Sb-125	ND	9.215E-02	1.376E-01
C-14	ND	1.039E-01	1.530E-01
Cm-243	ND	1.748E-02	4.290E-02
Fe-55	ND	4.392E+00	5.390E+00
Nb-95	ND	6.967E-02	9.510E-02
Ni-63	ND	1.584E+00	2.380E+00
Pu-238	ND	1.922E-02	6.940E-02
Pu-239	ND	2.924E-02	3.170E-02
Pu-241	ND	7.235E+00	1.090E+01
Sr-90	ND	2.365E-02	4.890E-02
Tc-99	ND	2.050E-01	2.980E-01
U-235	ND	2.540E-01	2.450E-01
U-238	ND	6.186E-01	7.430E-01
NOL-01-02-005-F			
Ag-108m	ND	4.739E-02	7.042E-02
Am-241	ND	4.541E-01	6.407E-01
Co-60	ND	8.280E-02	8.684E-02
Cs-134	ND	3.529E-02	5.333E-02
Cs-137	1.355E-01	7.972E-02	8.267E-02
Eu-152	ND	1.514E-01	2.045E-01
Eu-154	ND	1.065E-01	1.272E-01
Eu-155	2.222E-01	2.130E-01	2.982E-01
Nb-94	ND	3.813E-02	5.661E-02
Sb-125	ND	1.048E-01	1.525E-01
C-14	ND	1.188E-01	1.770E-01
Cm-243	ND	3.320E-02	2.120E-01
Fe-55	ND	5.091E+00	6.330E+00
H-3	ND	5.219E+00	7.790E+00
Nb-95	ND	4.450E-02	4.400E-02
Ni-63	ND	1.981E+00	2.980E+00
Pu-238	ND	9.926E-02	1.960E-01
Pu-239	ND	7.806E-02	2.440E-01
Pu-241	ND	3.914E+00	5.860E+00
Sr-90	ND	1.561E-02	2.940E-02
Tc-99	ND	1.864E-01	2.690E-01
U-235	ND	1.316E-01	1.540E-01
U-238	6.050E-01	4.101E-01	4.120E-01

Table 4
Summary of Radiological
Analytical Results for Soil
Yankee Nuclear Power Station
Rowe, MA

Radionuclide	Activity	Critical Level	MDC
NOL-01-02-006-F			
Ag-108m	ND	4.694E-02	6.947E-02
Am-241	ND	4.660E-01	6.727E-01
Co-60	ND	3.954E-02	6.021E-02
Cs-134	1.398E-02	1.116E-02	5.578E-02
Cs-137	1.261E-01	6.105E-02	6.116E-02
Eu-152	ND	1.190E-01	1.718E-01
Eu-154	ND	8.344E-02	1.150E-01
Eu-155	ND	1.806E-01	2.596E-01
Nb-94	ND	3.502E-02	5.165E-02
Sb-125	8.476E-02	6.878E-02	1.571E-01
C-14	ND	1.103E-01	1.610E-01
Cm-243	ND	2.050E-02	6.440E-02
Fe-55	ND	1.305E+01	1.640E+01
Nb-95	ND	6.710E-02	5.790E-02
Ni-63	ND	1.468E+00	2.290E+00
Pu-238	ND	1.887E-02	6.640E-02
Pu-239	ND	1.120E-02	6.410E-02
Pu-241	ND	7.701E+00	1.150E+01
Sr-90	ND	1.806E-02	3.440E-02
Tc-99	ND	1.817E-01	2.650E-01
U-235	ND	1.491E-01	1.880E-01
U-238	1.740E+00	1.491E+00	1.320E+00
NOL-01-02-007-F			
Ag-108m	ND	5.965E-02	8.532E-02
Am-241	ND	4.907E-01	7.011E-01
Co-60	1.636E-01	5.177E-02	5.600E-02
Cs-134	2.998E-02	2.467E-02	4.552E-02
Cs-137	4.014E-01	1.104E-01	9.258E-02
Eu-152	1.604E-01	1.167E-01	1.944E-01
Eu-154	ND	9.790E-02	1.401E-01
Eu-155	ND	2.121E-01	2.993E-01
Nb-94	NA	0.000E+00	8.195E-02
Sb-125	1.435E-01	1.336E-01	1.562E-01
C-14	ND	1.247E-01	1.780E-01
Cm-243	ND	2.307E-02	4.920E-02
Fe-55	ND	4.509E+00	5.400E+00
Nb-95	ND	4.835E-02	6.760E-02
Ni-63	ND	1.829E+00	2.810E+00
Pu-238	ND	1.771E-02	6.000E-02
Pu-239	ND	3.413E-02	6.650E-02
Pu-241	ND	6.291E+00	9.530E+00
Sr-90	ND	1.270E-02	2.790E-02
Tc-99	ND	1.922E-01	2.800E-01
U-235	ND	1.282E-01	2.010E-01
U-238	ND	1.212E+00	9.500E-01
NOL-01-02-008-F			
Ag-108m	ND	5.257E-02	7.731E-02
Am-241	ND	4.199E-01	6.066E-01
Co-60	2.515E-01	7.260E-02	7.067E-02
Cs-134	2.894E-02	2.611E-02	1.050E-01
Cs-137	5.643E-01	1.084E-01	8.461E-02
Eu-152	ND	1.340E-01	1.921E-01
Eu-154	ND	9.501E-02	1.347E-01
Eu-155	ND	2.060E-01	2.938E-01
Nb-94	ND	3.997E-02	6.035E-02
Sb-125	ND	2.719E-01	2.002E-01
C-14	ND	1.076E-01	1.570E-01
Cm-243	ND	2.738E-02	3.420E-02
Fe-55	ND	3.635E+00	4.440E+00
Nb-95	8.910E-02	7.724E-02	1.260E-01
Ni-63	ND	1.549E+00	2.390E+00
Pu-238	ND	1.561E-02	4.460E-02
Pu-239	ND	4.334E-02	6.080E-02
Pu-241	ND	7.200E+00	1.080E+01
Sr-90	ND	2.015E-02	3.620E-02
Tc-99	ND	2.004E-01	2.890E-01
U-235	ND	2.109E-01	2.830E-01
U-238	1.350E+00	8.539E-01	7.490E-01

Table 4
Summary of Radiological
Analytical Results for Soil
Yankee Nuclear Power Station
Rowe, MA

Radionuclide	Activity	Critical Level	MDC
NOL-01-02-009-F			
Ag-108m	ND	4.664E-02	6.774E-02
Am-241	ND	9.500E-03	7.550E-01
Co-60	9.806E-02	4.366E-02	7.893E-02
Cs-134	3.178E-02	2.597E-02	5.049E-02
Cs-137	1.934E+00	1.627E-01	7.636E-02
Eu-152	ND	1.348E-01	1.924E-01
Eu-154	ND	9.851E-02	1.407E-01
Eu-155	ND	3.000E-01	2.941E-01
Nb-94	ND	3.982E-02	5.896E-02
Sb-125	6.607E-02	5.503E-02	2.008E-01
C-14	ND	9.099E-02	1.350E-01
Cm-243	ND	2.225E-02	1.870E-02
Fe-55	ND	4.019E+00	4.880E+00
Nb-95	ND	8.668E-02	1.230E-01
Ni-63	ND	1.503E+00	2.280E+00
Pu-238	ND	2.714E-02	4.480E-02
Pu-239	ND	1.421E-02	3.820E-02
Pu-241	ND	6.804E+00	1.020E+01
Sr-90	ND	1.689E-02	3.460E-02
Tc-99	ND	2.085E-01	3.100E-01
U-235	ND	2.120E-01	3.130E-01
U-238	ND	7.328E-01	8.840E-01
NOL-01-02-010-F			
Ag-108m	ND	4.421E-02	6.496E-02
Am-241	ND	4.306E-01	6.220E-01
Co-60	ND	6.932E-03	6.985E-02
Cs-134	2.652E-02	1.952E-02	1.015E-01
Cs-137	ND	4.522E-02	6.624E-02
Eu-152	ND	1.207E-01	1.741E-01
Eu-154	ND	9.302E-02	1.311E-01
Eu-155	ND	2.765E-01	2.863E-01
Nb-94	ND	4.212E-02	6.161E-02
Sb-125	ND	1.004E-01	1.476E-01
C-14	ND	1.177E-01	1.730E-01
Cm-243	ND	1.082E-01	2.250E-01
Fe-55	ND	4.287E+00	5.270E+00
H-3	ND	5.184E+00	8.000E+00
Nb-95	ND	2.458E-02	3.730E-02
Ni-63	ND	1.666E+00	2.520E+00
Pu-238	ND	1.062E-01	2.820E-01
Pu-239	ND	5.615E-02	1.380E-01
Pu-241	ND	4.101E+00	5.960E+00
Sr-90	ND	2.120E-02	3.580E-02
Tc-99	ND	2.447E-01	3.540E-01
U-235	ND	1.033E-01	1.700E-01
U-238	ND	1.074E+00	1.310E+00
NOL-01-02-011-F			
Ag-108m	ND	3.903E-02	5.911E-02
Am-241	ND	4.412E-01	6.365E-01
Co-60	ND	3.874E-02	5.930E-02
Cs-134	ND	4.489E-02	6.407E-02
Cs-137	ND	4.127E-02	5.733E-02
Eu-152	ND	1.324E-01	1.737E-01
Eu-154	ND	7.989E-02	1.127E-01
Eu-155	ND	1.877E-01	2.696E-01
Nb-94	ND	2.854E-02	4.452E-02
Sb-125	ND	1.257E-01	1.524E-01
C-14	ND	1.073E-01	1.560E-01
Cm-243	ND	2.575E-02	5.480E-02
Fe-55	ND	3.646E+00	4.410E+00
Nb-95	ND	5.883E-02	9.500E-02
Ni-63	ND	1.876E+00	2.790E+00
Pu-238	ND	1.864E-02	7.080E-02
Pu-239	ND	1.410E-02	3.800E-02
Pu-241	ND	6.990E+00	1.050E+01
Sr-90	ND	1.981E-02	3.830E-02
Tc-99	ND	1.957E-01	2.880E-01
U-235	ND	1.771E-01	2.180E-01
U-238	9.530E-01	7.607E-01	5.840E-01

Table 4
Summary of Radiological
Analytical Results for Soil
Yankee Nuclear Power Station
Rowe, MA

Radionuclide	Activity	Critical Level	MDC
NOL-01-02-012-F			
Ag-108m	ND	4.929E-02	7.388E-02
Am-241	ND	5.362E-01	7.729E-01
Co-60	1.219E-01	5.116E-02	4.270E-02
Cs-134	ND	3.538E-02	5.288E-02
Cs-137	3.421E-01	8.037E-02	7.095E-02
Eu-152	ND	4.114E-01	1.829E-01
Eu-154	ND	9.459E-02	1.334E-01
Eu-155	ND	2.075E-01	2.915E-01
Nb-94	ND	4.880E-02	7.135E-02
Sb-125	ND	1.144E-01	1.689E-01
C-14	ND	1.212E-01	1.750E-01
Cm-243	ND	4.229E-02	8.360E-02
Fe-55	ND	3.146E+00	3.830E+00
Nb-95	ND	6.536E-02	7.340E-02
Ni-63	1.680E+00	1.340E+00	1.880E+00
Pu-238	ND	6.839E-02	1.370E-01
Pu-239	ND	5.208E-02	5.650E-02
Pu-241	ND	4.742E+00	7.110E+00
Sr-90	ND	2.342E-02	4.310E-02
Tc-99	ND	2.598E-01	3.830E-01
U-235	ND	1.188E-01	1.840E-01
U-238	ND	1.736E+00	1.510E+00
NOL-01-02-013-F			
Ag-108m	ND	3.642E-02	5.060E-02
Am-241	ND	5.205E-01	7.449E-01
Co-60	3.619E-01	7.120E-02	7.293E-02
Cs-134	ND	4.824E-02	6.954E-02
Cs-137	5.560E-01	9.897E-02	8.025E-02
Eu-152	ND	3.480E-01	1.895E-01
Eu-154	ND	9.091E-02	1.307E-01
Eu-155	ND	2.137E-01	3.046E-01
Nb-94	ND	4.280E-02	6.410E-02
Sb-125	1.710E-01	1.315E-01	1.714E-01
C-14	ND	1.164E-01	1.690E-01
Cm-243	ND	3.017E-02	7.420E-02
Fe-55	ND	3.495E+00	4.290E+00
Nb-95	ND	4.695E-02	6.370E-02
Ni-63	1.480E+00	1.375E+00	1.960E+00
Pu-238	ND	8.004E-02	1.440E-01
Pu-239	ND	3.239E-02	9.750E-02
Pu-241	ND	5.161E+00	7.870E+00
Sr-90	1.130E-01	2.202E-02	2.150E-02
Tc-99	ND	2.656E-01	3.970E-01
U-235	ND	9.437E-02	1.450E-01
U-238	ND	8.703E-01	8.540E-01
NOL-01-02-014-F			
Ag-108m	2.010E-01	8.861E-02	0.08417
Ag-110m	ND	2.913E-02	0.0386
Am-241	ND	5.527E-01	0.789
Ba-133	ND	2.924E-02	0.0376
Ce-141	ND	1.094E-01	0.172
Co-60	1.418E-01	6.435E-02	0.07499
Cs-134	ND	4.964E-02	0.07042
Cs-137	1.270E-01	5.057E-02	0.05575
Eu-152	ND	1.385E-01	0.1993
Eu-154	8.911E-02	7.934E-02	0.1479
Eu-155	2.196E-01	2.056E-01	0.2879
Nb-94	NA	0.000E+00	0.06937
Nb-95	ND	8.924E-02	0.124
Sb-125	1.295E-01	6.606E-02	0.1806
U-235	ND	1.223E-01	0.197
U-238	ND	1.363E+00	1.19
C-14	ND	1.235E-01	0.181
Cm-243	ND	3.099E-02	0.0658
Fe-55	ND	3.472E+00	4.27
Ni-63	ND	1.235E+00	1.85
Pu-238	ND	4.299E-02	0.106
Pu-239	ND	5.266E-02	0.179
Pu-241	ND	5.476E+00	8.26
Sr-90	ND	1.864E-02	0.0342
Tc-99	ND	2.540E-01	0.381

Table 4
Summary of Radiological
Analytical Results for Soil
Yankee Nuclear Power Station
Rowe, MA

Radionuclide	Activity	Critical Level	MDC
NOL-01-02-015-F			
Ag-108m	ND	4.086E-02	6.164E-02
Am-241	ND	4.466E-01	6.447E-01
Co-60	ND	3.412E-02	5.207E-02
Cs-134	ND	6.246E-02	9.118E-02
Cs-137	2.253E-01	6.331E-02	5.614E-02
Eu-152	ND	1.566E-01	1.562E-01
Eu-154	ND	8.254E-02	1.083E-01
Eu-155	ND	1.734E-01	2.474E-01
Nb-94	ND	3.214E-02	4.915E-02
Sb-125	ND	1.429E-01	1.246E-01
C-14	ND	1.146E-01	1.650E-01
Cm-243	ND	7.771E-03	4.950E-02
Fe-55	ND	4.602E+00	5.510E+00
Nb-95	ND	5.697E-02	6.350E-02
Ni-63	ND	1.445E+00	2.230E+00
Pu-238	ND	3.180E-02	5.790E-02
Pu-239	ND	2.458E-02	6.800E-02
Pu-241	ND	6.209E+00	9.210E+00
Sr-90	ND	1.538E-02	3.070E-02
Tc-99	ND	1.911E-01	2.790E-01
U-235	1.000E-01	8.143E-02	1.380E-01
U-238	ND	4.252E-01	3.560E-01
NOL-01-03-001-F			
Ag-108m	ND	5.696E-02	8.208E-02
Am-241	ND	4.861E-01	6.957E-01
Co-60	7.048E-02	4.025E-02	6.325E-02
Cs-134	ND	4.912E-02	6.972E-02
Cs-137	3.859E-01	8.239E-02	6.817E-02
Eu-152	ND	1.268E-01	1.685E-01
Eu-154	ND	8.942E-02	1.279E-01
Eu-155	ND	1.916E-01	2.701E-01
Nb-94	ND	3.109E-02	4.250E-02
Sb-125	ND	1.147E-01	1.680E-01
NOL-01-03-002-F			
Ag-108m	ND	4.970E-02	7.276E-02
Am-241	ND	5.756E-01	8.275E-01
Co-60	8.584E-02	4.206E-02	6.269E-02
Cs-134	2.755E-02	2.615E-02	5.678E-02
Cs-137	5.021E-01	9.425E-02	7.263E-02
Eu-152	ND	1.563E-01	2.091E-01
Eu-154	ND	9.742E-02	1.399E-01
Eu-155	ND	2.190E-01	3.123E-01
Nb-94	ND	3.758E-02	5.479E-02
Sb-125	ND	1.245E-01	1.843E-01
NOL-01-03-003-F			
Ag-108m	5.922E-02	2.442E-02	4.428E-02
Am-241	ND	4.630E-01	6.631E-01
Co-60	6.645E-02	3.804E-02	5.176E-02
Cs-134	ND	4.007E-02	5.900E-02
Cs-137	2.765E-01	6.685E-02	5.832E-02
Eu-152	ND	1.422E-01	1.876E-01
Eu-154	ND	7.490E-02	1.083E-01
Eu-155	ND	6.583E-01	2.617E-01
Nb-94	ND	4.090E-02	6.055E-02
Sb-125	ND	9.837E-02	1.463E-01
Ag-108m	ND	4.986E-02	7.233E-02
Am-241	ND	4.879E-01	6.969E-01
Co-60	ND	4.725E-02	6.868E-02
Cs-134	2.296E-02	1.769E-02	6.093E-02
Cs-137	2.175E-01	8.926E-02	7.952E-02
Eu-152	ND	6.916E-02	1.855E-01
Eu-154	ND	9.443E-02	1.315E-01
Eu-155	ND	2.067E-01	2.972E-01
Nb-94	ND	3.187E-02	4.902E-02
Sb-125	1.491E-01	1.310E-01	1.377E-01

Table 4
Summary of Radiological
Analytical Results for Soil
Yankee Nuclear Power Station
Rowe, MA

Radionuclide	Activity	Critical Level	MDC
NOL-01-03-005-F			
Ag-108m	ND	5.077E-02	7.406E-02
Am-241	ND	5.068E-01	7.322E-01
Co-60	ND	4.763E-02	6.574E-02
Cs-134	ND	2.820E-02	4.332E-02
Cs-137	8.884E-02	5.499E-02	5.970E-02
Eu-152	ND	1.202E-01	1.740E-01
Eu-154	ND	8.828E-02	1.248E-01
Eu-155	ND	1.982E-01	2.810E-01
Nb-94	ND	3.060E-02	4.629E-02
Sb-125	ND	1.218E-01	1.539E-01
Ag-108m	ND	5.088E-02	7.039E-02
Am-241	ND	5.409E-01	7.755E-01
Co-60	4.876E-01	7.256E-02	4.008E-02
Cs-134	NA	0.000E+00	1.190E-01
Cs-137	1.477E+00	1.460E-01	7.411E-02
Eu-152	ND	2.384E-01	1.963E-01
Eu-154	ND	1.882E-01	1.403E-01
Eu-155	ND	2.033E-01	2.857E-01
Nb-94	ND	4.140E-02	6.154E-02
Sb-125	ND	1.574E-01	2.007E-01
NOL-01-03-007-F			
Ag-108m	ND	4.060E-02	6.091E-02
Am-241	ND	3.528E-01	5.122E-01
Co-60	ND	6.271E-03	6.341E-02
Cs-134	2.028E-02	1.173E-02	6.792E-02
Cs-137	ND	4.487E-02	6.731E-02
Eu-152	ND	3.328E-01	1.814E-01
Eu-154	ND	3.738E-02	1.313E-01
Eu-155	ND	1.917E-01	2.699E-01
Nb-94	ND	3.977E-02	5.876E-02
Sb-125	9.755E-02	8.811E-02	1.505E-01
NOL-01-03-008-F			
Ag-108m	2.325E-01	8.171E-02	7.295E-02
Am-241	ND	2.640E-01	3.400E-01
Co-60	ND	3.609E-02	4.937E-02
Cs-134	2.103E-02	1.962E-02	5.450E-02
Cs-137	1.180E+00	1.237E-01	6.750E-02
Eu-152	ND	1.057E-01	1.519E-01
Eu-154	1.660E-01	8.446E-02	1.156E-01
Eu-155	ND	1.343E-01	1.927E-01
Nb-94	ND	2.966E-02	4.333E-02
Sb-125	ND	1.330E-01	1.538E-01
NOL-01-03-009-F			
Ag-108m	NA	0.000E+00	8.379E-02
Am-241	ND	4.581E-01	6.541E-01
Co-60	ND	4.079E-02	5.587E-02
Cs-134	ND	3.865E-02	5.624E-02
Cs-137	1.252E-01	6.207E-02	6.071E-02
Eu-152	ND	1.405E-01	1.786E-01
Eu-154	ND	8.656E-02	1.210E-01
Eu-155	ND	1.841E-01	2.648E-01
Nb-94	ND	3.094E-02	4.582E-02
Sb-125	ND	9.835E-02	1.447E-01
NOL-01-03-010-F			
Ag-108m	ND	3.905E-02	5.748E-02
Am-241	ND	2.216E-01	2.940E-01
Co-60	ND	3.573E-02	4.999E-02
Cs-134	1.933E-02	1.504E-02	4.792E-02
Cs-137	ND	3.608E-02	5.123E-02
Eu-152	ND	9.327E-02	1.346E-01
Eu-154	ND	6.070E-02	8.763E-02
Eu-155	ND	9.472E-02	1.358E-01
Nb-94	ND	3.425E-02	4.889E-02
Sb-125	9.148E-02	6.750E-02	1.495E-01

Table 4
Summary of Radiological
Analytical Results for Soil
Yankee Nuclear Power Station
Rowe, MA

Radionuclide	Activity	Critical Level	MDC
NOL-01-03-011-F			
Ag-108m	NA	0.000E+00	9.008E-02
Am-241	ND	3.665E-01	2.964E-01
Co-60	ND	3.239E-02	4.934E-02
Cs-134	3.322E-02	1.874E-02	2.304E-02
Cs-137	ND	3.047E-02	4.458E-02
Eu-152	ND	1.147E-01	1.504E-01
Eu-154	ND	7.624E-02	1.009E-01
Eu-155	ND	1.224E-01	1.725E-01
Nb-94	ND	3.353E-02	4.778E-02
Sb-125	8.416E-02	6.821E-02	1.337E-01
C-14	2.930E-01	1.316E-01	1.820E-01
Cm-243	ND	1.538E-01	2.770E-01
Fe-55	ND	1.177E+01	1.430E+01
H-3	ND	2.749E+00	4.070E+00
Nb-95	ND	3.984E-02	9.740E-02
Ni-63	ND	3.879E+00	5.760E+00
Pu-238	ND	8.936E-02	2.280E-01
Pu-239	1.870E-01	1.619E-01	1.480E-01
Pu-241	2.190E+01	5.976E+00	8.110E+00
Sr-90	ND	7.107E-01	1.460E+00
Tc-99	ND	3.134E-01	4.630E-01
U-235	ND	3.157E-01	4.720E-01
U-238	ND	4.509E+00	4.030E+00
NOL-01-03-012-F			
Ag-108m	ND	4.811E-02	6.995E-02
Am-241	ND	1.809E-01	2.569E-01
Co-60	ND	3.729E-02	5.468E-02
Cs-134	7.790E-03	6.390E-03	5.543E-02
Cs-137	ND	5.048E-02	5.917E-02
Eu-152	ND	2.729E-01	1.591E-01
Eu-154	ND	7.721E-02	1.111E-01
Eu-155	ND	1.281E-01	1.838E-01
Nb-94	ND	3.706E-02	5.195E-02
Sb-125	9.706E-02	7.307E-02	1.486E-01
NOL-01-03-013-F			
Ag-108m	ND	3.919E-02	5.797E-02
Am-241	ND	8.350E-01	2.989E-01
Co-60	8.031E-02	3.622E-02	4.798E-02
Cs-134	ND	1.157E-01	1.062E-01
Cs-137	ND	3.802E-02	5.446E-02
Eu-152	ND	1.144E-01	1.516E-01
Eu-154	ND	8.436E-02	1.094E-01
Eu-155	ND	1.255E-01	1.797E-01
Nb-94	ND	8.047E-02	3.913E-02
Sb-125	9.002E-02	7.316E-02	1.232E-01
NOL-01-03-014-F			
Ag-108m	ND	3.669E-02	5.402E-02
Am-241	ND	2.519E-01	3.166E-01
Co-60	ND	3.868E-02	5.263E-02
Cs-134	ND	4.441E-02	5.969E-02
Cs-137	ND	5.938E-02	5.825E-02
Eu-152	ND	9.360E-02	1.356E-01
Eu-154	ND	2.064E-02	9.753E-02
Eu-155	ND	1.275E-01	1.802E-01
Nb-94	ND	1.134E-02	6.451E-02
Sb-125	1.318E-01	7.977E-02	1.273E-01
C-14	4.660E-01	1.375E-01	1.840E-01
Cm-243	ND	1.386E-01	2.520E-01
Fe-55	ND	1.421E+01	1.740E+01
H-3	ND	2.843E+00	4.310E+00
Nb-95	ND	6.116E-02	7.070E-02
Ni-63	ND	3.891E+00	5.730E+00
Pu-238	ND	5.510E-02	1.480E-01
Pu-239	ND	7.980E-02	2.040E-01
Pu-241	1.030E+01	7.561E+00	1.080E+01
Sr-90	ND	6.874E-01	1.220E+00
Tc-99	ND	3.775E-01	5.510E-01
U-235	ND	2.342E-01	3.480E-01
U-238	ND	1.021E+00	1.010E+00

Table 4
Summary of Radiological
Analytical Results for Soil
Yankee Nuclear Power Station
Rowe, MA

Radionuclide	Activity	Critical Level	MDC
NOL-01-03-015-F			
Ag-108m	ND	3.070E-02	4.305E-02
Am-241	ND	4.569E-01	6.610E-01
Co-60	ND	3.922E-02	5.489E-02
Cs-134	ND	4.142E-02	6.040E-02
Cs-137	ND	3.980E-02	5.965E-02
Eu-152	ND	1.200E-01	1.722E-01
Eu-154	ND	9.237E-02	1.303E-01
Eu-155	ND	1.933E-01	2.728E-01
Nb-94	ND	3.354E-02	5.119E-02
Sb-125	ND	8.421E-02	1.266E-01
NOL-01-04-001-F			
Ag-108m	ND	4.899E-02	7.033E-02
Am-241	ND	4.790E-01	6.838E-01
Co-60	ND	3.716E-02	5.086E-02
Cs-134	ND	8.617E-02	1.247E-01
Cs-137	ND	4.723E-02	7.054E-02
Eu-152	ND	1.440E-01	1.818E-01
Eu-154	ND	9.013E-02	1.263E-01
Eu-155	ND	1.839E-01	2.622E-01
Nb-94	ND	3.487E-02	5.213E-02
Sb-125	7.859E-02	5.767E-02	1.571E-01
C-14	ND	1.049E-01	1.520E-01
Cm-243	ND	5.510E-02	1.370E-01
Fe-55	ND	6.477E+00	7.760E+00
H-3	ND	2.610E+00	4.330E+00
Nb-95	ND	9.693E-02	1.310E-01
Ni-63	ND	1.899E+00	3.290E+00
Pu-238	ND	3.763E-02	1.080E-01
Pu-239	ND	3.670E-02	9.880E-02
Pu-241	ND	5.021E+00	7.500E+00
Sr-90	ND	2.027E-02	3.980E-02
Tc-99	ND	2.388E-01	3.530E-01
U-235	ND	1.144E-01	1.960E-01
U-238	1.300E+00	1.163E+00	1.130E+00
NOL-01-04-002-F			
Ag-108m	ND	3.155E-02	4.568E-02
Am-241	ND	7.627E-01	1.075E+00
Co-60	ND	2.463E-02	3.563E-02
Cs-134	2.535E-02	1.271E-02	3.327E-02
Cs-137	ND	2.898E-02	4.058E-02
Eu-152	ND	1.084E-01	1.482E-01
Eu-154	ND	6.756E-02	9.737E-02
Eu-155	ND	1.638E-01	2.301E-01
Nb-94	ND	2.564E-03	3.422E-02
Sb-125	1.028E-01	5.323E-02	1.012E-01
C-14	ND	1.042E-01	1.520E-01
Cm-243	ND	6.338E-02	1.390E-01
Fe-55	ND	3.320E+00	4.010E+00
H-3	ND	2.505E+00	3.840E+00
Nb-95	ND	9.169E-02	1.250E-01
Ni-63	ND	1.864E+00	3.280E+00
Pu-238	ND	2.889E-02	9.780E-02
Pu-239	ND	2.714E-02	8.480E-02
Pu-241	ND	5.044E+00	7.260E+00
Sr-90	ND	2.214E-02	4.390E-02
Tc-99	ND	2.447E-01	3.510E-01
U-235	ND	1.143E-01	1.740E-01
U-238	ND	1.031E+00	1.040E+00
NOL-01-04-003-F			
Ag-108m	ND	6.021E-02	8.460E-02
Am-241	ND	5.201E-01	7.484E-01
Co-60	8.488E-02	4.467E-02	5.956E-02
Cs-134	ND	4.773E-02	6.781E-02
Cs-137	ND	4.918E-02	7.010E-02
Eu-152	ND	1.364E-01	1.957E-01
Eu-154	ND	1.026E-01	1.433E-01
Eu-155	ND	1.733E+00	3.048E-01
Nb-94	ND	3.335E-02	4.972E-02
Sb-125	1.816E-01	8.647E-02	1.486E-01

Table 4
Summary of Radiological
Analytical Results for Soil
Yankee Nuclear Power Station
Rowe, MA

Radionuclide	Activity	Critical Level	MDC
NOL-01-04-004-F			
Ag-108m	ND	3.375E-02	4.815E-02
Am-241	ND	8.188E-01	1.174E+00
Co-60	ND	2.781E-02	4.100E-02
Cs-134	2.244E-02	1.416E-02	3.031E-02
Cs-137	ND	3.233E-02	4.570E-02
Eu-152	1.652E-01	9.406E-02	1.554E-01
Eu-154	ND	8.376E-02	1.202E-01
Eu-155	ND	1.774E-01	2.503E-01
Nb-94	NA	0.000E+00	4.090E-02
Sb-125	9.033E-02	4.812E-02	1.219E-01
NOL-01-04-005-F			
Ag-108m	ND	5.042E-02	7.207E-02
Am-241	ND	4.505E-01	6.444E-01
Co-60	ND	5.228E-02	7.475E-02
Cs-134	2.646E-02	1.806E-02	1.152E-01
Cs-137	ND	4.080E-02	5.984E-02
Eu-152	ND	2.365E-01	1.653E-01
Eu-154	ND	9.129E-02	1.307E-01
Eu-155	ND	1.913E-01	2.692E-01
Nb-94	ND	3.275E-02	5.029E-02
Sb-125	ND	9.112E-02	1.304E-01
C-14	ND	1.018E-01	1.490E-01
Cm-243	ND	3.891E-02	1.220E-01
Fe-55	ND	6.431E+00	7.730E+00
H-3	ND	2.691E+00	3.870E+00
Nb-95	ND	1.106E-01	1.720E-01
Ni-63	ND	2.318E+00	3.490E+00
Pu-238	ND	2.819E-02	8.810E-02
Pu-239	ND	5.219E-02	1.090E-01
Pu-241	ND	5.196E+00	7.730E+00
Sr-90	ND	1.817E-02	3.850E-02
Tc-99	ND	2.412E-01	3.500E-01
U-235	ND	1.410E-01	2.160E-01
U-238	ND	7.025E-01	6.260E-01
NOL-01-04-006-F			
Ag-108m	ND	4.636E-02	6.967E-02
Am-241	ND	5.075E-01	7.291E-01
Co-60	7.258E-02	5.005E-02	6.229E-02
Cs-134	ND	4.034E-02	5.881E-02
Cs-137	ND	5.240E-02	7.601E-02
Eu-152	ND	1.331E-01	1.774E-01
Eu-154	ND	9.763E-02	1.373E-01
Eu-155	ND	1.678E-01	2.394E-01
Nb-94	ND	4.188E-02	6.283E-02
Sb-125	8.088E-02	7.372E-02	1.442E-01
NOL-01-04-007-F			
Ag-108m	2.666E-01	6.295E-02	5.938E-02
Am-241	ND	9.691E-01	1.395E+00
Co-60	9.914E-01	1.085E-01	6.093E-02
Cs-134	3.753E-02	2.179E-02	3.261E-02
Cs-137	1.297E-01	5.291E-02	5.627E-02
Eu-152	ND	1.357E-01	1.803E-01
Eu-154	2.522E-01	7.292E-02	1.382E-01
Eu-155	ND	2.012E-01	2.887E-01
Nb-94	ND	3.316E-02	4.923E-02
Sb-125	1.070E-01	6.252E-02	1.502E-01
NOL-01-04-008-F			
Ag-108m	ND	4.871E-02	7.295E-02
Am-241	ND	5.021E-01	7.188E-01
Co-60	ND	4.139E-02	5.802E-02
Cs-134	ND	4.400E-02	6.361E-02
Cs-137	5.712E-02	4.765E-02	6.400E-02
Eu-152	ND	1.307E-01	1.869E-01
Eu-154	ND	8.615E-02	1.230E-01
Eu-155	ND	1.974E-01	2.811E-01
Nb-94	NA	0.000E+00	5.021E-02
Sb-125	5.553E-02	4.632E-02	1.636E-01

Table 4
Summary of Radiological
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Radionuclide	Activity	Critical Level	MDC
NOL-01-04-009-F			
Ag-108m	ND	2.705E-02	4.026E-02
Am-241	ND	7.755E-01	1.095E+00
Co-60	9.114E-02	2.560E-02	3.215E-02
Cs-134	2.002E-02	1.420E-02	7.991E-02
Cs-137	8.554E-02	4.095E-02	4.336E-02
Eu-152	ND	1.135E-01	1.507E-01
Eu-154	ND	7.442E-02	1.070E-01
Eu-155	ND	1.711E-01	2.459E-01
Nb-94	ND	2.432E-02	3.600E-02
Sb-125	1.353E-01	7.274E-02	9.637E-02
NOL-01-04-010-F			
Ag-108m	ND	2.233E-02	3.179E-02
Am-241	ND	8.510E-01	1.201E+00
Co-60	3.605E-02	2.394E-02	3.981E-02
Cs-134	ND	3.190E-02	4.492E-02
Cs-137	ND	2.708E-02	3.658E-02
Eu-152	1.723E-01	7.568E-02	1.601E-01
Eu-154	ND	7.622E-02	1.089E-01
Eu-155	ND	1.727E-01	2.423E-01
Nb-94	ND	2.511E-02	3.713E-02
Sb-125	1.094E-01	6.495E-02	1.093E-01
NOL-01-04-011-F			
Ag-108m	ND	1.328E-03	5.304E-02
Am-241	ND	8.750E-01	1.256E+00
Co-60	2.199E-01	4.632E-02	4.250E-02
Cs-134	ND	3.522E-02	4.952E-02
Cs-137	5.918E-02	4.013E-02	4.685E-02
Eu-152	1.384E-01	7.594E-02	1.665E-01
Eu-154	ND	8.268E-02	1.187E-01
Eu-155	2.167E-01	1.844E-01	2.572E-01
Nb-94	ND	2.683E-02	4.033E-02
Sb-125	9.593E-02	5.367E-02	1.260E-01
NOL-01-04-012-F			
Ag-108m	ND	4.164E-02	6.257E-02
Am-241	ND	5.004E-01	7.218E-01
Co-60	ND	4.004E-02	5.486E-02
Cs-134	2.994E-02	2.160E-02	5.453E-02
Cs-137	ND	3.312E-02	4.610E-02
Eu-152	ND	1.508E-01	1.998E-01
Eu-154	ND	8.448E-02	1.209E-01
Eu-155	ND	2.560E-01	2.063E-01
Nb-94	NA	0.000E+00	6.798E-02
Sb-125	1.221E-01	9.322E-02	1.444E-01
NOL-01-04-013-F			
Ag-108m	ND	5.494E-02	7.996E-02
Am-241	ND	5.907E-02	7.147E-01
Co-60	ND	3.777E-02	5.704E-02
Cs-134	ND	8.728E-02	1.266E-01
Cs-137	4.998E-02	4.568E-02	5.791E-02
Eu-152	1.204E-01	1.060E-01	1.926E-01
Eu-154	ND	2.741E-02	1.343E-01
Eu-155	ND	2.006E-01	2.843E-01
Nb-94	ND	3.891E-02	5.891E-02
Sb-125	1.208E-01	8.188E-02	1.631E-01

Table 4
Summary of Radiological
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Yankee Nuclear Power Station
Rowe, MA

Radionuclide	Activity	Critical Level	MDC
NOL-01-04-014-F			
Ag-108m	ND	4.992E-02	7.201E-02
Am-241	ND	4.461E-01	6.431E-01
Co-60	ND	3.269E-02	5.192E-02
Cs-134	ND	4.709E-02	6.887E-02
Cs-137	ND	3.633E-02	5.346E-02
Eu-152	ND	1.433E-01	1.724E-01
Eu-154	ND	9.080E-02	1.272E-01
Eu-155	ND	2.217E-01	2.673E-01
Nb-94	ND	3.899E-02	5.758E-02
Sb-125	ND	1.509E-01	1.501E-01
C-14	ND	1.051E-01	1.530E-01
Cm-243	ND	5.371E-02	1.600E-01
Fe-55	ND	3.926E+00	4.710E+00
H-3	ND	2.668E+00	3.940E+00
Nb-95	ND	8.027E-02	1.150E-01
Ni-63	ND	1.794E+00	2.680E+00
Pu-238	ND	3.483E-02	1.300E-01
Pu-239	ND	2.784E-02	7.980E-02
Pu-241	ND	4.916E+00	7.350E+00
Sr-90	ND	2.039E-02	4.620E-02
Tc-99	ND	2.400E-01	3.470E-01
U-235	ND	1.247E-01	1.710E-01
U-238	ND	1.235E+00	1.230E+00
NOL-01-04-015-F			
Ag-108m	ND	3.592E-02	5.250E-02
Am-241	ND	8.305E-01	1.185E+00
Co-60	ND	2.889E-02	4.340E-02
Cs-134	2.441E-02	1.570E-02	8.290E-02
Cs-137	9.631E-02	4.947E-02	5.009E-02
Eu-152	1.091E-01	9.561E-02	1.592E-01
Eu-154	ND	7.164E-02	1.029E-01
Eu-155	ND	1.813E-01	2.605E-01
Nb-94	ND	2.456E-02	3.713E-02
Sb-125	9.620E-02	5.175E-02	1.157E-01
NOL-02-01-001-F			
Ag-108m	ND	3.506E-02	5.333E-02
Am-241	ND	2.314E-01	3.102E-01
Co-60	5.494E-02	3.341E-02	5.555E-02
Cs-134	1.961E-02	1.335E-02	5.393E-02
Cs-137	2.351E-01	8.560E-02	7.765E-02
Eu-152	ND	1.044E-01	1.502E-01
Eu-154	ND	7.638E-02	1.097E-01
Eu-155	ND	1.294E-01	1.856E-01
Nb-94	ND	2.908E-02	4.354E-02
Sb-125	ND	1.160E-01	1.510E-01
NOL-02-01-002-F			
Ag-108m	ND	3.590E-02	5.267E-02
Am-241	ND	2.153E-01	3.088E-01
Co-60	ND	3.755E-02	5.432E-02
Cs-134	2.413E-02	1.561E-02	2.045E-02
Cs-137	ND	1.143E-01	4.959E-02
Eu-152	1.229E-01	1.093E-01	1.524E-01
Eu-154	ND	7.447E-02	1.067E-01
Eu-155	ND	1.297E-01	1.815E-01
Nb-94	ND	3.957E-02	5.415E-02
Sb-125	6.631E-02	6.217E-02	1.582E-01
NOL-02-01-003-F			
Ag-108m	ND	4.428E-02	6.594E-02
Am-241	ND	2.131E-01	3.045E-01
Co-60	ND	4.449E-02	5.935E-02
Cs-134	ND	4.277E-02	5.610E-02
Cs-137	1.895E-01	6.995E-02	7.001E-02
Eu-152	ND	1.084E-01	1.553E-01
Eu-154	ND	7.867E-02	1.126E-01
Eu-155	ND	1.271E-01	1.782E-01
Nb-94	ND	3.067E-02	4.737E-02
Sb-125	1.431E-01	8.041E-02	1.374E-01

Table 4
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Radionuclide	Activity	Critical Level	MDC
NOL-02-01-004-F			
Ag-108m	ND	3.997E-02	5.921E-02
Am-241	ND	2.266E-01	3.262E-01
Co-60	ND	4.649E-02	6.726E-02
Cs-134	2.345E-02	2.036E-02	9.411E-02
Cs-137	ND	8.159E-02	6.223E-02
Eu-152	ND	1.203E-01	1.580E-01
Eu-154	ND	1.429E-01	1.132E-01
Eu-155	ND	1.335E-01	1.875E-01
Nb-94	ND	2.764E-02	3.943E-02
Sb-125	1.186E-01	8.145E-02	1.507E-01
NOL-02-01-005-F			
Ag-108m	ND	3.440E-02	5.216E-02
Am-241	ND	2.286E-01	3.301E-01
Co-60	ND	4.244E-02	6.651E-02
Cs-134	2.667E-02	1.996E-02	5.049E-02
Cs-137	ND	4.131E-02	5.746E-02
Eu-152	1.405E-01	1.189E-01	1.588E-01
Eu-154	ND	7.870E-02	1.133E-01
Eu-155	ND	1.199E-01	1.715E-01
Nb-94	ND	3.669E-02	5.653E-02
Sb-125	1.362E-01	9.568E-02	1.152E-01
C-14	ND	8.539E-02	1.260E-01
Cm-243	ND	6.571E-02	1.590E-01
Fe-55	ND	4.590E+00	5.570E+00
H-3	ND	4.171E+00	6.350E+00
Nb-95	ND	5.604E-02	7.890E-02
Ni-63	ND	1.153E+00	1.780E+00
Pu-238	ND	3.041E-02	9.150E-02
Pu-239	ND	6.256E-02	1.070E-01
Pu-241	ND	5.103E+00	7.800E+00
Sr-90	ND	2.505E-02	4.660E-02
Tc-99	ND	2.586E-01	3.750E-01
U-235	ND	1.468E-01	2.330E-01
U-238	2.170E+00	1.782E+00	1.400E+00
NOL-02-01-006-F			
Ag-108m	ND	4.463E-02	6.320E-02
Am-241	ND	2.156E-01	3.109E-01
Co-60	ND	4.774E-02	6.514E-02
Cs-134	3.896E-02	2.095E-02	5.039E-02
Cs-137	2.101E-01	6.446E-02	5.769E-02
Eu-152	ND	1.128E-01	1.617E-01
Eu-154	ND	7.761E-02	1.111E-01
Eu-155	ND	9.478E-02	1.347E-01
Nb-94	ND	4.091E-02	5.818E-02
Sb-125	1.539E-01	9.561E-02	1.306E-01
NOL-02-01-007-F			
Ag-108m	ND	4.814E-02	6.884E-02
Am-241	ND	7.448E-01	2.964E-01
Co-60	ND	4.498E-02	6.713E-02
Cs-134	ND	4.861E-02	6.554E-02
Cs-137	ND	4.370E-02	6.069E-02
Eu-152	ND	1.357E-01	1.658E-01
Eu-154	ND	7.922E-02	1.133E-01
Eu-155	1.630E-01	1.301E-01	1.808E-01
Nb-94	ND	1.170E-02	6.652E-02
Sb-125	1.094E-01	8.418E-02	1.253E-01

Table 4
Summary of Radiological
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Radionuclide	Activity	Critical Level	MDC
NOL-02-01-008-F			
Ag-108m	ND	3.809E-02	5.691E-02
Am-241	ND	2.489E-01	3.561E-01
Co-60	8.807E-02	6.327E-02	7.950E-02
Cs-134	ND	4.942E-02	6.481E-02
Cs-137	ND	5.430E-02	7.454E-02
Eu-152	ND	3.111E-01	1.563E-01
Eu-154	ND	1.889E-01	1.199E-01
Eu-155	1.899E-01	1.490E-01	2.064E-01
Nb-94	ND	9.386E-02	6.136E-02
Sb-125	1.350E-01	9.849E-02	1.537E-01
C-14	ND	8.749E-02	1.310E-01
Cm-243	ND	6.943E-02	1.530E-01
Fe-55	ND	6.175E+00	7.390E+00
H-3	ND	4.311E+00	6.580E+00
Nb-95	ND	5.988E-02	8.920E-02
Ni-63	ND	1.293E+00	1.920E+00
Pu-238	ND	9.425E-02	1.600E-01
Pu-239	ND	6.093E-02	1.510E-01
Pu-241	ND	5.522E+00	8.540E+00
Sr-90	ND	2.901E-02	5.730E-02
Tc-99	ND	2.714E-01	3.920E-01
U-235	ND	1.689E-01	2.750E-01
U-238	ND	1.270E+00	1.870E+00
NOL-02-01-009-F			
Ag-108m	ND	4.425E-02	6.461E-02
Am-241	ND	1.878E-01	2.709E-01
Co-60	ND	3.925E-02	5.522E-02
Cs-134	ND	7.596E-02	1.101E-01
Cs-137	ND	4.088E-02	6.004E-02
Eu-152	ND	1.112E-01	1.437E-01
Eu-154	ND	1.484E-01	1.053E-01
Eu-155	ND	1.429E-01	2.044E-01
Nb-94	ND	2.888E-02	4.160E-02
Sb-125	9.182E-02	5.617E-02	1.611E-01
NOL-02-01-010-F			
Ag-108m	ND	4.809E-02	6.992E-02
Am-241	ND	2.507E-01	3.610E-01
Co-60	ND	4.678E-02	6.794E-02
Cs-134	ND	7.072E-02	1.032E-01
Cs-137	ND	4.145E-02	6.172E-02
Eu-152	ND	1.332E-01	1.778E-01
Eu-154	ND	9.729E-02	1.282E-01
Eu-155	1.799E-01	1.469E-01	2.042E-01
Nb-94	ND	9.851E-02	5.480E-02
Sb-125	ND	9.527E-02	1.385E-01
NOL-02-01-011-F			
Ag-108m	ND	5.858E-02	8.444E-02
Am-241	ND	2.418E-01	3.479E-01
Co-60	ND	5.108E-02	7.275E-02
Cs-134	2.014E-02	1.794E-02	5.286E-02
Cs-137	ND	7.285E-01	5.945E-02
Eu-152	ND	2.234E-01	1.720E-01
Eu-154	ND	2.242E-01	1.296E-01
Eu-155	ND	1.485E-01	2.128E-01
Nb-94	ND	4.494E-02	6.600E-02
Sb-125	9.923E-02	7.683E-02	1.545E-01
NOL-02-01-012-F			
Ag-108m	NA	0.000E+00	1.231E-01
Am-241	ND	3.687E-01	3.255E-01
Co-60	ND	4.323E-02	6.329E-02
Cs-134	ND	9.062E-02	1.312E-01
Cs-137	ND	4.696E-02	6.857E-02
Eu-152	ND	1.404E-01	1.799E-01
Eu-154	ND	9.774E-02	1.273E-01
Eu-155	1.708E-01	1.451E-01	2.021E-01
Nb-94	ND	4.450E-02	6.468E-02
Sb-125	1.245E-01	8.198E-02	1.728E-01

Table 4
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Radionuclide	Activity	Critical Level	MDC
NOL-02-01-013-F			
Ag-108m	ND	6.352E-02	9.260E-02
Am-241	ND	2.857E-01	3.837E-01
Co-60	1.967E-01	6.282E-02	5.768E-02
Cs-134	2.534E-02	1.659E-02	7.198E-02
Cs-137	2.218E-01	8.603E-02	7.992E-02
Eu-152	ND	2.224E-01	1.745E-01
Eu-154	ND	5.034E-01	1.323E-01
Eu-155	ND	1.616E-01	2.319E-01
Nb-94	ND	5.086E-02	7.096E-02
Sb-125	1.249E-01	1.072E-01	1.816E-01
NOL-02-01-014-F			
Ag-108m	ND	3.156E-02	4.892E-02
Am-241	ND	2.933E-01	3.304E-01
Co-60	5.163E-02	3.170E-02	5.015E-02
Cs-134	ND	3.010E-02	4.198E-02
Cs-137	ND	4.293E-02	6.524E-02
Eu-152	ND	1.161E-01	1.672E-01
Eu-154	ND	8.389E-02	1.207E-01
Eu-155	1.651E-01	1.358E-01	1.886E-01
Nb-94	ND	3.971E-02	5.668E-02
Sb-125	1.336E-01	9.233E-02	1.486E-01
NOL-02-01-015-F			
Ag-108m	ND	5.185E-02	7.562E-02
Am-241	ND	2.123E-01	3.000E-01
Co-60	5.034E-02	3.070E-02	4.788E-02
Cs-134	2.595E-02	1.863E-02	4.290E-02
Cs-137	4.330E-02	3.989E-02	5.399E-02
Eu-152	ND	1.083E-01	1.407E-01
Eu-154	ND	8.068E-02	1.068E-01
Eu-155	ND	1.270E-01	1.820E-01
Nb-94	ND	3.168E-02	4.809E-02
Sb-125	1.393E-01	1.013E-01	1.254E-01
NOL-02-02-001-F			
Ag-108m	ND	3.412E-02	5.264E-02
Am-241	ND	4.712E-01	6.798E-01
Co-60	ND	5.121E-02	7.466E-02
Cs-134	ND	3.061E-02	4.594E-02
Cs-137	ND	3.824E-02	5.504E-02
Eu-152	ND	1.175E-01	1.686E-01
Eu-154	ND	1.156E-01	1.208E-01
Eu-155	ND	1.894E-01	2.246E-01
Nb-94	ND	3.188E-02	4.869E-02
Sb-125	9.391E-02	8.299E-02	1.362E-01
NOL-02-02-002-F			
Ag-108m	ND	4.938E-02	7.213E-02
Am-241	ND	4.740E-01	6.862E-01
Co-60	7.915E-02	3.611E-02	8.068E-02
Cs-134	ND	3.902E-02	5.718E-02
Cs-137	ND	3.876E-02	5.932E-02
Eu-152	ND	1.328E-01	1.900E-01
Eu-154	ND	8.686E-02	1.239E-01
Eu-155	ND	1.907E-01	2.743E-01
Nb-94	ND	3.399E-02	5.007E-02
Sb-125	7.589E-02	7.123E-02	1.487E-01
NOL-02-02-003-F			
Ag-108m	ND	2.756E-02	4.057E-02
Am-241	ND	8.733E-01	1.185E+00
Co-60	ND	2.699E-02	4.173E-02
Cs-134	1.578E-02	1.390E-02	3.578E-02
Cs-137	1.826E-01	5.470E-02	
Eu-152	ND	1.000E-01	1.434E-01
Eu-154	ND	8.041E-02	1.160E-01
Eu-155	ND	1.433E-01	2.072E-01
Nb-94	ND	2.131E-02	3.283E-02
Sb-125	1.150E-01	7.632E-02	1.181E-01

Table 4
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Radionuclide	Activity	Critical Level	MDC
NOL-02-02-004-F			
Ag-108m	ND	2.864E-02	4.269E-02
Am-241	ND	5.632E-01	7.939E-01
Co-60	7.363E-02	2.723E-02	
Cs-134	1.427E-02	9.972E-03	3.838E-02
Cs-137	1.143E-01	5.045E-02	
Eu-152	6.099E-02	5.060E-02	1.548E-01
Eu-154	ND	7.736E-02	1.114E-01
Eu-155	ND	1.601E-01	2.304E-01
Nb-94	ND	2.192E-02	3.167E-02
Sb-125	ND	7.604E-02	1.117E-01
NOL-02-02-005-F			
Ag-108m	ND	2.681E-02	3.894E-02
Am-241	ND	5.928E-01	8.503E-01
Co-60	ND	2.511E-02	3.663E-02
Cs-134	1.709E-02	1.200E-02	3.297E-02
Cs-137	5.638E-02	2.845E-02	
Eu-152	5.593E-02	4.701E-02	1.218E-01
Eu-154	ND	7.041E-02	1.004E-01
Eu-155	ND	1.542E-01	2.216E-01
Nb-94	ND	1.317E-02	2.014E-02
Sb-125	6.881E-02	5.989E-02	8.842E-02
C-14	ND	1.044E-01	1.530E-01
Cm-243	ND	4.345E-02	5.160E-02
Fe-55	ND	2.248E+00	2.960E+00
H-3	ND	4.718E+00	6.800E+00
Nb-95	ND	7.328E-03	1.760E-02
Ni-63	ND	2.004E+00	3.060E+00
Pu-238	ND	3.006E-02	3.560E-02
Pu-239	7.570E-02	7.386E-02	6.560E-02
Pu-241	ND	4.695E+00	6.990E+00
Sr-90	ND	1.375E-02	2.320E-02
Tc-99	ND	2.749E-01	4.120E-01
U-235	ND	5.429E-02	1.720E-01
U-238	6.340E-01	4.427E-01	1.160E+00
NOL-02-02-006-F			
Ag-108m	ND	2.788E-02	4.059E-02
Am-241	ND	7.850E-01	1.098E+00
Co-60	ND	7.067E-02	3.530E-02
Cs-134	1.296E-02	8.078E-03	3.511E-02
Cs-137	6.032E-02	2.857E-02	
Eu-152	ND	9.784E-02	1.413E-01
Eu-154	ND	7.355E-02	1.059E-01
Eu-155	1.692E-01	1.617E-01	2.261E-01
Nb-94	ND	1.659E-02	2.311E-02
Sb-125	8.934E-02	6.298E-02	8.966E-02
NOL-02-02-007-F			
Ag-108m	ND	2.902E-02	4.171E-02
Am-241	ND	7.692E-01	1.083E+00
Co-60	ND	2.722E-02	4.169E-02
Cs-134	ND	2.751E-02	3.931E-02
Cs-137	ND	3.834E-02	4.261E-02
Eu-152	ND	1.137E-01	1.523E-01
Eu-154	ND	7.722E-02	1.110E-01
Eu-155	ND	1.450E-01	2.077E-01
Nb-94	ND	2.729E-02	4.072E-02
Sb-125	9.559E-02	4.553E-02	1.065E-01

Table 4
Summary of Radiological
Analytical Results for Soil
Yankee Nuclear Power Station
Rowe, MA

Radionuclide	Activity	Critical Level	MDC
NOL-02-02-008-F			
Ag-108m	ND	3.851E-02	5.776E-02
Am-241	ND	4.920E-01	7.066E-01
Co-60	ND	3.874E-02	5.742E-02
Cs-134	ND	2.722E-02	4.178E-02
Cs-137	ND	3.552E-02	5.147E-02
Eu-152	ND	1.181E-01	1.691E-01
Eu-154	ND	7.531E-02	1.086E-01
Eu-155	ND	1.891E-01	2.663E-01
Nb-94	ND	3.080E-02	4.742E-02
Sb-125	1.074E-01	8.268E-02	9.296E-02
C-14	ND	1.876E-01	2.740E-01
Cm-243	ND	5.336E-02	1.130E-01
Fe-55	ND	2.202E+00	2.840E+00
H-3	1.200E+01	6.198E+00	8.120E+00
Nb-95	1.020E-02	9.157E-03	1.720E-02
Ni-63	ND	2.400E+00	3.660E+00
Pu-238	ND	3.984E-02	6.060E-02
Pu-239	ND	4.147E-02	8.830E-02
Pu-241	ND	8.050E+00	1.170E+01
Sr-90	1.790E-02	1.096E-02	1.760E-02
Tc-99	ND	2.691E-01	3.920E-01
U-235	ND	4.229E-02	1.540E-01
U-238	ND	4.870E-01	1.260E+00
NOL-02-02-009-F			
Ag-108m	ND	3.226E-02	4.705E-02
Am-241	ND	3.188E-01	1.161E+00
Co-60	ND	1.799E-01	5.237E-02
Cs-134	ND	3.136E-02	4.438E-02
Cs-137	2.214E-01	4.965E-02	
Eu-152	ND	1.078E-01	1.314E-01
Eu-154	ND	7.608E-02	1.090E-01
Eu-155	ND	1.660E-01	2.333E-01
Nb-94	ND	2.073E-02	3.181E-02
Sb-125	8.523E-02	5.930E-02	1.219E-01
Ag-108m	ND	4.380E-02	6.388E-02
Am-241	ND	4.502E-01	6.493E-01
Co-60	ND	4.029E-02	6.314E-02
Cs-134	2.651E-02	2.082E-02	4.593E-02
Cs-137	ND	4.118E-02	5.714E-02
Eu-152	ND	1.267E-01	1.676E-01
Eu-154	ND	9.479E-02	1.332E-01
Eu-155	ND	5.465E-01	2.419E-01
Nb-94	ND	3.838E-02	5.877E-02
Sb-125	1.254E-01	8.292E-02	1.402E-01
NOL-02-02-011-F			
Ag-108m	ND	4.090E-02	6.116E-02
Am-241	ND	4.618E-01	6.624E-01
Co-60	ND	3.195E-02	4.725E-02
Cs-134	1.452E-02	1.340E-02	5.250E-02
Cs-137	ND	4.363E-02	6.436E-02
Eu-152	ND	1.251E-01	1.799E-01
Eu-154	ND	8.971E-02	1.290E-01
Eu-155	ND	1.748E-01	2.484E-01
Nb-94	ND	3.127E-02	4.790E-02
Sb-125	ND	1.616E-01	1.377E-01
Ag-108m	ND	3.460E-02	5.164E-02
Am-241	ND	4.618E-01	6.602E-01
Co-60	ND	3.706E-02	5.776E-02
Cs-134	ND	2.504E-02	3.828E-02
Cs-137	ND	4.162E-02	6.315E-02
Eu-152	ND	1.326E-01	1.914E-01
Eu-154	ND	5.395E+00	1.159E-01
Eu-155	ND	1.260E+00	2.328E-01
Nb-94	ND	3.698E-02	5.505E-02
Sb-125	9.612E-02	7.450E-02	1.433E-01

Table 4
Summary of Radiological
Analytical Results for Soil
Yankee Nuclear Power Station
Rowe, MA

Radionuclide	Activity	Critical Level	MDC
NOL-02-02-013-F			
Ag-108m	ND	2.678E-02	3.918E-02
Am-241	ND	7.487E-01	1.057E+00
Co-60	ND	3.226E-02	3.935E-02
Cs-134	1.421E-02	9.839E-03	3.036E-02
Cs-137	7.093E-02	3.733E-02	
Eu-152	7.815E-02	6.795E-02	1.318E-01
Eu-154	ND	7.209E-02	1.034E-01
Eu-155	ND	1.604E-01	2.275E-01
Nb-94	ND	1.994E-02	2.959E-02
Sb-125	7.791E-02	6.877E-02	8.464E-02
NOL-02-02-014-F			
Ag-108m	ND	3.178E-02	4.679E-02
Am-241	ND	4.638E-01	6.696E-01
Co-60	ND	4.888E-02	6.310E-02
Cs-134	ND	2.587E-02	3.856E-02
Cs-137	ND	3.576E-02	5.078E-02
Eu-152	ND	1.216E-01	1.640E-01
Eu-154	ND	9.914E-02	1.274E-01
Eu-155	ND	2.529E-01	2.617E-01
Nb-94	ND	3.519E-02	5.305E-02
Sb-125	9.437E-02	5.821E-02	1.449E-01
NOL-02-02-015-F			
Ag-108m	ND	2.681E-02	3.942E-02
Am-241	ND	7.513E-01	1.074E+00
Co-60	5.371E-02	2.597E-02	
Cs-134	1.832E-02	1.257E-02	2.502E-02
Cs-137	1.228E-01	4.192E-02	
Eu-152	ND	1.549E-01	1.396E-01
Eu-154	ND	6.480E-02	9.299E-02
Eu-155	ND	1.545E-01	2.169E-01
Nb-94	ND	1.780E-02	2.482E-02
Sb-125	1.099E-01	6.024E-02	1.011E-01
NOL-02-02-016-F			
Ag-108m	ND	2.317E-02	3.466E-02
Am-241	ND	7.274E-01	1.024E+00
Co-60	4.595E-02	2.194E-02	
Cs-134	1.675E-02	1.322E-02	5.835E-02
Cs-137	1.049E-01	4.470E-02	
Eu-152	ND	9.336E-02	1.345E-01
Eu-154	ND	7.062E-02	1.008E-01
Eu-155	ND	1.341E-01	1.928E-01
Nb-94	ND	1.969E-02	2.955E-02
Sb-125	1.050E-01	5.994E-02	8.356E-02
NOL-02-02-017-F			
Ag-108m	ND	2.414E-02	3.617E-02
Am-241	ND	6.499E-01	8.939E-01
Co-60	7.615E-02	2.296E-02	
Cs-134	2.088E-02	1.491E-02	2.651E-02
Cs-137	1.406E-01	4.766E-02	
Eu-152	ND	1.038E-01	1.389E-01
Eu-154	ND	7.356E-02	1.052E-01
Eu-155	ND	1.590E-01	2.250E-01
Nb-94	ND	2.392E-02	3.559E-02
Sb-125	6.600E-02	4.380E-02	1.042E-01
NOL-02-02-018-F			
Ag-108m	ND	3.764E-02	5.606E-02
Am-241	ND	4.931E-01	7.135E-01
Co-60	ND	3.948E-02	5.651E-02
Cs-134	ND	2.247E-02	3.528E-02
Cs-137	ND	5.315E-02	7.937E-02
Eu-152	ND	1.153E-01	1.652E-01
Eu-154	ND	7.770E-02	1.115E-01
Eu-155	ND	1.616E-01	2.337E-01
Nb-94	ND	2.993E-02	4.537E-02
Sb-125	ND	1.180E-01	1.376E-01

Table 4
Summary of Radiological
Analytical Results for Soil
Yankee Nuclear Power Station
Rowe, MA

Radionuclide	Activity	Critical Level	MDC
NOL-02-02-019-F			
Ag-108m	ND	3.812E-02	5.566E-02
Am-241	ND	4.461E-01	6.407E-01
Co-60	4.478E-02	3.229E-02	5.409E-02
Cs-134	ND	3.036E-02	4.355E-02
Cs-137	6.683E-02	3.828E-02	
Eu-152	ND	1.149E-01	1.547E-01
Eu-154	ND	8.554E-02	1.192E-01
Eu-155	ND	1.755E-01	2.487E-01
Nb-94	ND	3.073E-02	4.783E-02
Sb-125	ND	8.967E-02	1.323E-01
NOL-02-02-020-F			
Ag-108m	ND	3.541E-02	5.334E-02
Am-241	ND	4.612E-01	6.592E-01
Co-60	ND	3.426E-02	5.424E-02
Cs-134	ND	2.957E-02	4.273E-02
Cs-137	ND	3.595E-02	5.242E-02
Eu-152	ND	1.348E-01	1.723E-01
Eu-154	ND	8.560E-02	1.233E-01
Eu-155	ND	1.431E+00	2.522E-01
Nb-94	ND	2.800E-02	4.230E-02
Sb-125	1.033E-01	7.974E-02	1.072E-01
NOL-02-03-001-F			
Ag-108m	ND	5.086E-02	7.569E-02
Am-241	ND	2.045E-01	2.948E-01
Co-60	ND	3.973E-02	5.637E-02
Cs-134	ND	3.182E-02	4.618E-02
Cs-137	4.842E-02	4.026E-02	5.411E-02
Eu-152	ND	7.559E-02	1.084E-01
Eu-154	ND	7.056E-02	9.478E-02
Eu-155	ND	1.128E-01	1.587E-01
Nb-94	ND	2.470E-02	3.624E-02
Sb-125	ND	8.305E-02	1.235E-01
NOL-02-03-002-F			
Ag-108m	ND	3.060E-02	4.531E-02
Am-241	ND	8.282E-01	1.197E+00
Co-60	ND	9.697E-02	4.269E-02
Cs-134	2.296E-02	1.406E-02	6.431E-02
Cs-137	ND	3.229E-02	4.545E-02
Eu-152	ND	1.681E-01	1.400E-01
Eu-154	ND	8.150E-02	1.164E-01
Eu-155	ND	1.801E-01	2.587E-01
Nb-94	ND	2.483E-02	3.746E-02
Sb-125	1.427E-01	7.822E-02	8.376E-02
NOL-02-03-003-F			
Ag-108m	ND	4.254E-02	6.255E-02
Am-241	ND	1.933E-01	2.753E-01
Co-60	1.084E-01	4.144E-02	
Cs-134	ND	3.176E-02	4.738E-02
Cs-137	2.121E-01	6.699E-02	
Eu-152	ND	1.098E-01	1.489E-01
Eu-154	ND	7.263E-02	9.777E-02
Eu-155	ND	1.273E-01	1.829E-01
Nb-94	ND	3.227E-02	4.541E-02
Sb-125	1.032E-01	8.027E-02	1.580E-01
NOL-02-03-004-F			
Ag-108m	ND	2.849E-02	4.140E-02
Am-241	ND	7.543E-01	1.088E+00
Co-60	4.883E-02	3.015E-02	3.882E-02
Cs-134	1.302E-02	1.192E-02	3.619E-02
Cs-137	5.046E-02	3.956E-02	
Eu-152	ND	1.068E-01	1.468E-01
Eu-154	ND	7.198E-02	1.025E-01
Eu-155	ND	1.566E-01	2.199E-01
Nb-94	ND	2.304E-02	3.402E-02
Sb-125	9.243E-02	5.439E-02	1.038E-01

Table 4
Summary of Radiological
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Yankee Nuclear Power Station
Rowe, MA

Radionuclide	Activity	Critical Level	MDC
NOL-02-03-005-F			
Ag-108m	ND	3.039E-02	4.340E-02
Am-241	ND	7.262E-01	1.024E+00
Co-60	ND	4.819E-02	3.971E-02
Cs-134	9.950E-03	9.351E-03	3.655E-02
Cs-137	ND	2.561E-02	3.670E-02
Eu-152	9.083E-02	5.247E-02	1.414E-01
Eu-154	ND	6.789E-02	9.611E-02
Eu-155	1.608E-01	1.527E-01	2.133E-01
Nb-94	ND	1.999E-02	2.937E-02
Sb-125	8.172E-02	6.116E-02	8.226E-02
NOL-02-03-006-F			
Ag-108m	ND	4.703E-02	7.040E-02
Am-241	ND	4.125E-01	5.874E-01
Co-60	6.252E-02	3.419E-02	5.177E-02
Cs-134	ND	3.087E-02	4.538E-02
Cs-137	1.330E-01	5.683E-02	
Eu-152	ND	1.110E-01	1.601E-01
Eu-154	ND	8.723E-02	1.210E-01
Eu-155	ND	1.762E-01	2.505E-01
Nb-94	ND	3.858E-02	5.870E-02
Sb-125	4.906E-02	4.660E-02	1.422E-01
NOL-02-03-007-F			
Ag-108m	ND	4.074E-02	6.122E-02
Am-241	ND	2.327E-01	3.200E-01
Co-60	ND	4.505E-02	6.514E-02
Cs-134	ND	4.690E-02	6.338E-02
Cs-137	ND	3.477E-02	4.808E-02
Eu-152	ND	1.204E-01	1.450E-01
Eu-154	ND	7.987E-02	8.549E-02
Eu-155	1.475E-01	1.218E-01	1.699E-01
Nb-94	ND	2.249E-02	3.270E-02
Sb-125	1.697E-01	8.543E-02	1.167E-01
NOL-02-03-008-F			
Ag-108m	ND	2.831E-02	4.142E-02
Am-241	ND	1.619E-01	2.319E-01
Co-60	ND	1.866E-02	2.691E-02
Cs-134	1.640E-02	1.120E-02	7.565E-02
Cs-137	ND	2.490E-02	3.529E-02
Eu-152	ND	7.841E-02	1.109E-01
Eu-154	ND	5.884E-02	8.156E-02
Eu-155	1.481E-01	9.777E-02	1.358E-01
Nb-94	ND	2.126E-02	3.107E-02
Sb-125	9.247E-02	4.844E-02	9.033E-02
NOL-02-03-009-F			
Ag-108m	ND	2.730E-02	3.910E-02
Am-241	ND	1.659E-01	2.378E-01
Co-60	ND	1.963E-01	3.989E-02
Cs-134	ND	2.269E-02	3.092E-02
Cs-137	1.088E-01	3.572E-02	
Eu-152	ND	6.776E-02	9.750E-02
Eu-154	ND	5.453E-02	7.821E-02
Eu-155	1.573E-01	9.898E-02	1.375E-01
Nb-94	ND	2.234E-02	2.701E-02
Sb-125	1.045E-01	5.908E-02	8.660E-02
C-14	ND	1.992E-01	2.900E-01
Cm-243	ND	4.695E-02	1.160E-01
Fe-55	ND	1.121E+01	1.730E+01
H-3	ND	5.441E+00	8.680E+00
Nb-95	1.220E-02	8.260E-03	2.070E-02
Ni-63	ND	7.351E+00	1.140E+01
Pu-238	ND	8.854E-02	1.320E-01
Pu-239	ND	4.264E-02	1.220E-01
Pu-241	ND	7.503E+00	1.090E+01
Sr-90	ND	1.957E-02	4.700E-02
Tc-99	ND	2.225E-01	3.280E-01
U-235	ND	4.497E-02	1.870E-01
U-238	4.020E-01	3.740E-01	1.410E+00

Table 4
Summary of Radiological
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Rowe, MA

Radionuclide	Activity	Critical Level	MDC
NOL-02-03-010-F			
Ag-108m	ND	2.178E-02	3.238E-02
Am-241	ND	7.180E-01	9.950E-01
Co-60	8.479E-02	3.206E-02	
Cs-134	1.305E-02	8.471E-03	3.453E-02
Cs-137	1.171E-01	4.510E-02	
Eu-152	9.517E-02	5.513E-02	1.291E-01
Eu-154	ND	6.424E-02	9.225E-02
Eu-155	ND	1.347E-01	1.933E-01
Nb-94	ND	2.321E-02	3.410E-02
Sb-125	6.591E-02	3.991E-02	1.005E-01
NOL-02-03-011-F			
Ag-108m	ND	2.446E-02	3.675E-02
Am-241	ND	6.905E-01	9.995E-01
Co-60	ND	1.965E-02	3.021E-02
Cs-134	1.686E-02	1.181E-02	3.278E-02
Cs-137	ND	2.829E-02	3.967E-02
Eu-152	ND	9.824E-02	1.416E-01
Eu-154	ND	7.255E-02	1.041E-01
Eu-155	ND	1.605E-01	2.263E-01
Nb-94	ND	2.177E-02	3.245E-02
Sb-125	4.070E-02	3.303E-02	1.122E-01
NOL-02-03-012-F			
Ag-108m	ND	2.857E-02	4.211E-02
Am-241	ND	8.416E-01	1.176E+00
Co-60	ND	2.851E-02	4.115E-02
Cs-134	1.599E-02	1.226E-02	3.739E-02
Cs-137	9.105E-02	4.185E-02	
Eu-152	ND	1.018E-01	1.444E-01
Eu-154	ND	7.781E-02	1.104E-01
Eu-155	ND	1.665E-01	2.336E-01
Nb-94	ND	2.395E-02	3.471E-02
Sb-125	1.029E-01	6.854E-02	1.032E-01
C-14	ND	1.631E-01	2.410E-01
Cm-243	ND	1.538E-02	9.820E-02
Fe-55	ND	1.258E+01	1.890E+01
H-3	ND	4.683E+00	7.650E+00
Nb-95	ND	7.724E-03	1.930E-02
Ni-63	ND	7.118E+00	1.110E+01
Pu-238	ND	7.829E-02	2.480E-01
Pu-239	ND	5.732E-02	1.620E-01
Pu-241	ND	7.526E+00	1.100E+01
Sr-90	ND	2.260E-02	4.180E-02
Tc-99	ND	2.248E-01	3.280E-01
U-235	ND	4.846E-02	1.690E-01
U-238	6.500E-01	4.742E-01	1.270E+00
NOL-02-03-013-F			
Ag-108m	ND	2.656E-02	3.908E-02
Am-241	ND	1.687E-01	2.420E-01
Co-60	4.637E-02	2.245E-02	3.439E-02
Cs-134	ND	2.577E-02	3.527E-02
Cs-137	1.035E-01	4.094E-02	
Eu-152	ND	8.417E-02	1.192E-01
Eu-154	ND	6.008E-02	8.364E-02
Eu-155	1.607E-01	1.034E-01	1.438E-01
Nb-94	ND	2.308E-02	3.261E-02
Sb-125	8.310E-02	4.548E-02	9.759E-02
NOL-02-03-014-F			
Ag-108m	ND	4.325E-02	6.320E-02
Am-241	ND	4.659E-01	6.709E-01
Co-60	ND	4.911E-02	6.467E-02
Cs-134	ND	2.952E-02	4.405E-02
Cs-137	ND	3.973E-02	5.780E-02
Eu-152	ND	9.423E-02	1.337E-01
Eu-154	ND	8.732E-02	1.227E-01
Eu-155	ND	2.299E-01	2.792E-01
Nb-94	ND	3.893E-02	5.955E-02
Sb-125	1.206E-01	9.251E-02	1.348E-01

Table 4
Summary of Radiological
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Rowe, MA

Radionuclide	Activity	Critical Level	MDC
NOL-02-03-015-F			
Ag-108m	ND	3.559E-02	5.319E-02
Am-241	ND	3.840E-01	5.507E-01
Co-60	ND	3.630E-02	5.440E-02
Cs-134	ND	2.731E-02	4.157E-02
Cs-137	ND	3.492E-02	5.122E-02
Eu-152	ND	9.875E-02	1.429E-01
Eu-154	ND	8.085E-02	1.137E-01
Eu-155	ND	3.194E-01	2.428E-01
Nb-94	ND	2.743E-02	4.191E-02
Sb-125	5.691E-02	5.290E-02	1.221E-01
NOL-02-04-001-F			
Ag-108m	ND	2.568E-02	3.720E-02
Am-241	ND	1.305E-01	1.871E-01
Co-60	ND	2.134E-02	3.079E-02
Cs-134	1.547E-02	1.211E-02	5.883E-02
Cs-137	ND	2.444E-02	3.464E-02
Eu-152	ND	7.361E-02	1.050E-01
Eu-154	ND	6.350E-02	7.711E-02
Eu-155	1.016E-01	9.579E-02	1.343E-01
Nb-94	ND	2.153E-02	2.654E-02
Sb-125	1.316E-01	5.587E-02	8.559E-02
NOL-02-04-002-F			
Ag-108m	ND	3.785E-02	5.490E-02
Am-241	ND	1.454E-01	2.078E-01
Co-60	ND	1.762E-02	2.697E-02
Cs-134	1.535E-02	1.300E-02	2.127E-02
Cs-137	ND	4.042E-02	3.354E-02
Eu-152	8.055E-02	3.668E-02	9.784E-02
Eu-154	ND	1.015E-01	7.238E-02
Eu-155	ND	9.023E-02	1.272E-01
Nb-94	ND	1.962E-02	2.569E-02
Sb-125	1.013E-01	4.439E-02	7.802E-02
NOL-02-04-003-F			
Ag-108m	ND	3.716E-02	5.250E-02
Am-241	ND	3.874E-01	5.393E-01
Co-60	ND	7.710E-03	7.865E-02
Cs-134	ND	2.918E-02	4.403E-02
Cs-137	ND	4.195E-02	5.832E-02
Eu-152	ND	1.345E-01	1.833E-01
Eu-154	ND	9.135E-02	1.305E-01
Eu-155	ND	2.158E-01	3.084E-01
Nb-94	ND	4.058E-02	6.265E-02
Sb-125	1.505E-01	1.219E-01	1.439E-01
NOL-02-04-004-F			
Ag-108m	ND	2.321E-02	3.354E-02
Am-241	ND	2.095E-01	2.243E-01
Co-60	ND	2.448E-02	3.607E-02
Cs-134	2.039E-02	1.158E-02	6.834E-02
Cs-137	ND	2.827E-02	4.110E-02
Eu-152	ND	8.100E-02	1.166E-01
Eu-154	ND	6.326E-02	8.793E-02
Eu-155	1.209E-01	1.031E-01	1.442E-01
Nb-94	ND	1.699E-02	2.402E-02
Sb-125	6.761E-02	5.460E-02	8.476E-02
NOL-02-04-005-F			
Ag-108m	ND	2.189E-02	3.246E-02
Am-241	ND	1.477E-01	2.110E-01
Co-60	ND	2.327E-02	3.469E-02
Cs-134	1.826E-02	1.142E-02	6.240E-02
Cs-137	ND	2.814E-02	4.146E-02
Eu-152	ND	7.464E-02	1.069E-01
Eu-154	ND	5.617E-02	8.035E-02
Eu-155	1.024E-01	9.923E-02	1.394E-01
Nb-94	ND	1.686E-02	2.382E-02
Sb-125	1.158E-01	4.945E-02	8.411E-02

Table 4
Summary of Radiological
Analytical Results for Soil
Yankee Nuclear Power Station
Rowe, MA

Radionuclide	Activity	Critical Level	MDC
NOL-02-04-006-F			
Ag-108m	ND	2.026E-02	2.961E-02
Am-241	ND	1.545E-01	2.126E-01
Co-60	ND	1.911E-02	2.784E-02
Cs-134	6.374E-03	5.950E-03	3.106E-02
Cs-137	ND	2.374E-02	3.403E-02
Eu-152	ND	6.990E-02	1.001E-01
Eu-154	ND	4.466E-02	6.404E-02
Eu-155	9.989E-02	8.703E-02	1.219E-01
Nb-94	ND	1.614E-02	2.352E-02
Sb-125	8.406E-02	5.421E-02	5.463E-02
NOL-02-04-007-F			
Ag-108m	ND	4.197E-02	6.221E-02
Am-241	ND	2.680E-01	3.667E-01
Co-60	ND	5.204E-02	7.517E-02
Cs-134	ND	4.105E-02	6.161E-02
Cs-137	ND	4.592E-02	6.763E-02
Eu-152	ND	1.232E-01	1.651E-01
Eu-154	ND	8.995E-02	1.190E-01
Eu-155	ND	1.393E-01	1.986E-01
Nb-94	ND	3.829E-02	5.898E-02
Sb-125	1.707E-01	1.187E-01	1.443E-01
NOL-02-04-008-F			
Ag-108m	ND	4.191E-02	6.227E-02
Am-241	ND	2.988E-01	3.228E-01
Co-60	ND	4.900E-02	7.092E-02
Cs-134	2.846E-02	2.211E-02	4.566E-02
Cs-137	ND	4.969E-02	6.272E-02
Eu-152	ND	1.059E-01	1.425E-01
Eu-154	ND	7.962E-02	1.131E-01
Eu-155	1.538E-01	1.326E-01	1.854E-01
Nb-94	ND	2.949E-02	4.421E-02
Sb-125	1.318E-01	8.212E-02	1.093E-01
NOL-02-04-009-F			
Ag-108m	ND	3.951E-02	5.903E-02
Am-241	ND	3.428E-01	2.916E-01
Co-60	ND	3.937E-02	5.720E-02
Cs-134	2.818E-02	1.615E-02	5.603E-02
Cs-137	ND	1.279E-01	7.196E-02
Eu-152	ND	1.088E-01	1.561E-01
Eu-154	ND	9.312E-02	1.211E-01
Eu-155	ND	1.441E-01	2.066E-01
Nb-94	ND	3.710E-02	5.244E-02
Sb-125	8.938E-02	7.446E-02	1.448E-01
C-14	ND	9.297E-02	1.380E-01
Cm-243	ND	2.703E-01	3.200E-01
Fe-55	ND	1.608E+02	1.920E+02
H-3	ND	4.520E+00	6.710E+00
Nb-95	ND	1.375E-02	3.530E-02
Ni-63	ND	5.557E+00	8.110E+00
Pu-238	ND	7.398E-02	1.170E-01
Pu-239	ND	5.219E-02	1.000E-01
Pu-241	ND	2.307E+01	3.490E+01
Sr-90	ND	2.202E-02	3.420E-02
Tc-99	ND	2.563E-01	3.770E-01
U-235	ND	9.064E-02	3.390E-01
U-238	ND	1.004E+00	2.780E+00
NOL-02-04-010-F			
Ag-108m	ND	2.121E-02	3.154E-02
Am-241	ND	1.666E-01	2.270E-01
Co-60	1.401E-01	3.443E-02	
Cs-134	1.550E-02	9.543E-03	3.504E-02
Cs-137	1.120E-01	2.969E-02	
Eu-152	ND	7.802E-02	1.118E-01
Eu-154	ND	6.947E-02	6.922E-02
Eu-155	1.324E-01	1.027E-01	1.435E-01
Nb-94	ND	2.077E-02	3.106E-02
Sb-125	8.123E-02	4.336E-02	8.466E-02

Table 4
Summary of Radiological
Analytical Results for Soil
Yankee Nuclear Power Station
Rowe, MA

Radionuclide	Activity	Critical Level	MDC
NOL-02-04-011-F			
Ag-108m	ND	3.497E-02	5.396E-02
Am-241	ND	4.879E-01	6.998E-01
Co-60	ND	5.046E-02	7.678E-02
Cs-134	ND	3.335E-02	5.064E-02
Cs-137	ND	3.556E-02	5.511E-02
Eu-152	ND	1.252E-01	1.803E-01
Eu-154	ND	8.209E-02	1.182E-01
Eu-155	ND	9.475E-01	2.978E-01
Nb-94	ND	3.626E-02	5.317E-02
Sb-125	1.239E-01	9.169E-02	1.561E-01
C-14	ND	8.796E-02	1.330E-01
Cm-243	ND	1.631E-01	2.570E-01
Fe-55	ND	2.342E+01	2.780E+01
H-3	ND	4.392E+00	7.120E+00
Nb-95	ND	1.666E-02	4.600E-02
Ni-63	ND	6.221E+00	9.080E+00
Pu-238	ND	8.143E-02	1.500E-01
Pu-239	ND	6.046E-02	1.500E-01
Pu-241	ND	2.761E+01	4.340E+01
Sr-90	ND	2.283E-02	3.130E-02
Tc-99	ND	2.749E-01	4.030E-01
U-235	ND	1.066E-01	3.960E-01
U-238	ND	1.549E+00	4.370E+00
NOL-02-04-012-F			
Ag-108m	ND	2.175E-02	3.013E-02
Am-241	ND	9.224E-01	1.222E+00
Co-60	ND	5.240E-02	4.841E-02
Cs-134	3.389E-02	1.615E-02	7.361E-02
Cs-137	ND	3.287E-02	4.767E-02
Eu-152	ND	1.121E-01	1.610E-01
Eu-154	ND	8.350E-02	1.203E-01
Eu-155	ND	1.871E-01	2.664E-01
Nb-94	ND	2.617E-02	3.891E-02
Sb-125	1.457E-01	6.283E-02	1.271E-01
NOL-02-04-013-F			
Ag-108m	ND	3.913E-02	5.981E-02
Am-241	ND	5.165E-01	7.461E-01
Co-60	ND	6.051E-02	8.767E-02
Cs-134	ND	3.882E-02	5.786E-02
Cs-137	9.362E-02	6.764E-02	
Eu-152	ND	1.179E-01	1.598E-01
Eu-154	ND	3.701E-02	1.302E-01
Eu-155	ND	2.212E-01	2.716E-01
Nb-94	ND	3.750E-02	5.358E-02
Sb-125	ND	1.044E-01	1.517E-01
NOL-02-04-014-F			
Ag-108m	ND	3.820E-02	5.513E-02
Am-241	ND	8.943E-01	1.221E+00
Co-60	2.859E-01	4.977E-02	
Cs-134	ND	1.829E-02	2.490E-02
Cs-137	ND	3.537E-02	4.948E-02
Eu-152	1.118E-01	9.523E-02	1.619E-01
Eu-154	ND	8.174E-02	1.176E-01
Eu-155	ND	1.820E-01	2.610E-01
Nb-94	ND	2.484E-02	3.704E-02
Sb-125	9.880E-02	6.169E-02	1.133E-01
NOL-02-04-015-F			
Ag-108m	ND	5.351E-02	7.815E-02
Am-241	ND	1.512E+00	1.135E+00
Co-60	ND	3.202E-02	4.823E-02
Cs-134	1.476E-02	9.906E-03	4.703E-02
Cs-137	ND	3.461E-02	4.800E-02
Eu-152	ND	1.786E-01	1.733E-01
Eu-154	ND	8.594E-02	1.239E-01
Eu-155	ND	1.360E-01	1.954E-01
Nb-94	ND	2.199E-02	3.254E-02
Sb-125	1.392E-01	7.110E-02	1.251E-01

Table 4
Summary of Radiological
Analytical Results for Soil
Yankee Nuclear Power Station
Rowe, MA

Radionuclide	Activity	Critical Level	MDC
NOL-02-04-016-F			
Ag-108m	ND	4.608E-02	6.770E-02
Am-241	ND	4.446E-01	3.503E-01
Co-60	ND	4.439E-02	6.684E-02
Cs-134	ND	4.301E-02	5.579E-02
Cs-137	3.207E-01	8.577E-02	
Eu-152	ND	1.040E-01	1.404E-01
Eu-154	ND	8.026E-02	1.146E-01
Eu-155	ND	1.379E-01	1.949E-01
Nb-94	ND	3.145E-02	4.474E-02
Sb-125	1.358E-01	9.651E-02	1.452E-01
NOL-02-04-017-F			
Ag-108m	ND	4.378E-02	6.504E-02
Am-241	ND	4.511E-01	6.526E-01
Co-60	ND	4.197E-02	6.142E-02
Cs-134	ND	3.473E-02	5.151E-02
Cs-137	ND	3.828E-02	5.780E-02
Eu-152	ND	1.360E-01	1.757E-01
Eu-154	ND	8.783E-02	1.217E-01
Eu-155	ND	1.926E-01	2.723E-01
Nb-94	ND	3.131E-02	4.788E-02
Sb-125	1.365E-01	8.910E-02	1.387E-01
NOL-02-04-018-F			
Ag-108m	ND	3.370E-02	5.081E-02
Am-241	ND	4.151E-01	5.971E-01
Co-60	ND	3.199E-02	4.946E-02
Cs-134	ND	3.681E-02	5.525E-02
Cs-137	3.952E-02	3.799E-02	5.137E-02
Eu-152	ND	1.046E-01	1.514E-01
Eu-154	ND	9.727E-02	1.179E-01
Eu-155	ND	1.460E+00	2.575E-01
Nb-94	ND	3.574E-02	5.403E-02
Sb-125	9.436E-02	7.804E-02	1.433E-01
NOL-02-04-019-F			
Ag-108m	ND	4.004E-02	5.797E-02
Am-241	ND	2.191E-01	3.157E-01
Co-60	ND	1.143E+00	5.404E-02
Cs-134	ND	4.493E-02	5.225E-02
Cs-137	ND	4.644E-02	6.711E-02
Eu-152	ND	1.118E-01	1.601E-01
Eu-154	ND	1.094E-01	1.222E-01
Eu-155	ND	1.237E-01	1.756E-01
Nb-94	ND	5.820E-02	5.565E-02
Sb-125	8.770E-02	8.400E-02	1.453E-01
NOL-02-04-020-F			
Ag-108m	ND	3.368E-02	4.824E-02
Am-241	ND	8.988E-01	1.215E+00
Co-60	ND	2.329E-02	3.362E-02
Cs-134	2.057E-02	1.041E-02	4.271E-02
Cs-137	ND	2.970E-02	4.331E-02
Eu-152	ND	1.113E-01	1.522E-01
Eu-154	ND	7.800E-02	1.117E-01
Eu-155	ND	1.889E-01	2.707E-01
Nb-94	ND	2.422E-02	3.618E-02
Sb-125	9.444E-02	4.755E-02	1.153E-01
NOL-03-01-001-F			
Ag-108m	ND	7.269E-03	9.955E-02
Am-241	ND	6.219E-01	3.422E-01
Co-60	2.625E+00	1.788E-01	7.952E-02
Cs-134	ND	5.995E-02	7.927E-02
Cs-137	3.792E-01	1.066E-01	1.014E-01
Eu-152	ND	3.306E-02	1.791E-01
Eu-154	ND	9.902E-02	1.417E-01
Eu-155	2.047E-01	1.458E-01	2.026E-01
Nb-94	ND	6.515E-02	9.537E-02
Sb-125	1.642E-01	9.920E-02	2.006E-01

Table 4
Summary of Radiological
Analytical Results for Soil
Yankee Nuclear Power Station
Rowe, MA

Radionuclide	Activity	Critical Level	MDC
NOL-03-01-002-F			
Ag-108m	ND	5.971E-02	8.680E-02
Am-241	ND	2.727E-01	3.677E-01
Co-60	1.150E+00	1.188E-01	7.722E-02
Cs-134	ND	7.675E-02	1.110E-01
Cs-137	2.738E-01	9.433E-02	9.236E-02
Eu-152	ND	1.297E-01	1.850E-01
Eu-154	ND	8.854E-02	1.261E-01
Eu-155	ND	1.501E-01	2.149E-01
Nb-94	ND	1.008E-01	7.322E-02
Sb-125	1.417E-01	1.251E-01	1.873E-01
NOL-03-01-003-F			
Ag-108m	ND	5.721E-02	8.316E-02
Am-241	ND	2.556E-01	3.680E-01
Co-60	3.251E-01	6.497E-02	7.076E-02
Cs-134	ND	4.594E-02	6.122E-02
Cs-137	ND	4.983E-02	7.127E-02
Eu-152	ND	1.364E-01	1.726E-01
Eu-154	ND	9.771E-02	1.269E-01
Eu-155	ND	1.561E-01	2.236E-01
Nb-94	ND	4.039E-02	5.968E-02
Sb-125	1.555E-01	1.037E-01	1.616E-01
NOL-03-01-004-F			
Ag-108m	ND	5.389E-02	7.816E-02
Am-241	ND	2.542E-01	3.653E-01
Co-60	2.269E+00	1.715E-01	9.069E-02
Cs-134	ND	5.100E-02	7.431E-02
Cs-137	2.470E-01	9.663E-02	1.012E-01
Eu-152	ND	1.320E-01	1.883E-01
Eu-154	ND	9.105E-02	1.299E-01
Eu-155	ND	1.533E-01	2.193E-01
Nb-94	ND	6.906E-02	1.010E-01
Sb-125	ND	1.515E-01	2.073E-01
NOL-03-01-005-F			
Ag-108m	ND	4.982E-02	7.182E-02
Am-241	ND	2.022E-01	2.898E-01
Co-60	4.028E-01	6.908E-02	5.652E-02
Cs-134	4.052E-02	2.775E-02	3.300E-02
Cs-137	ND	4.188E-02	6.142E-02
Eu-152	ND	9.714E-02	1.378E-01
Eu-154	ND	8.494E-02	1.158E-01
Eu-155	1.502E-01	1.289E-01	1.796E-01
Nb-94	ND	5.107E-02	6.432E-02
Sb-125	1.037E-01	7.961E-02	1.406E-01
NOL-03-01-006-F			
Ag-108m	ND	5.619E-02	7.930E-02
Am-241	ND	7.655E-01	3.469E-01
Co-60	ND	4.797E-02	7.035E-02
Cs-134	2.570E-02	1.766E-02	6.118E-02
Cs-137	ND	5.087E-02	5.929E-02
Eu-152	ND	1.324E-01	1.739E-01
Eu-154	ND	8.610E-02	1.239E-01
Eu-155	ND	1.122E-01	1.570E-01
Nb-94	ND	3.775E-02	5.607E-02
Sb-125	8.247E-02	6.421E-02	1.677E-01

Table 4
Summary of Radiological
Analytical Results for Soil
Yankee Nuclear Power Station
Rowe, MA

Radionuclide	Activity	Critical Level	MDC
NOL-03-01-007-F			
Ag-108m	ND	5.659E-02	8.352E-02
Am-241	ND	2.811E-02	3.087E-01
Co-60	1.820E+00	1.411E-01	6.445E-02
Cs-134	ND	4.579E-02	6.574E-02
Cs-137	1.594E-01	6.604E-02	7.383E-02
Eu-152	ND	1.178E-01	1.615E-01
Eu-154	ND	8.576E-02	1.219E-01
Eu-155	ND	1.484E-01	2.124E-01
Nb-94	ND	5.690E-02	8.090E-02
Sb-125	7.348E-02	6.730E-02	1.890E-01
C-14	1.170E-01	1.120E-01	1.580E-01
Cm-243	ND	8.027E-02	1.590E-01
Fe-55	ND	2.982E+00	3.530E+00
H-3	ND	2.225E+00	3.420E+00
Nb-95	ND	4.602E-02	6.710E-02
Ni-63	7.840E+00	2.225E+00	2.820E+00
Pu-238	ND	1.456E-01	3.580E-01
Pu-239	ND	1.015E-01	1.660E-01
Pu-241	ND	6.408E+00	9.470E+00
Sr-90	1.690E-02	1.200E-02	1.770E-02
Tc-99	3.680E-01	2.179E-01	3.030E-01
U-235	ND	1.782E-01	2.100E-01
U-238	6.080E-01	5.883E-01	5.720E-01
NOL-03-01-008-F			
Ag-108m	ND	6.966E-02	1.016E-01
Am-241	ND	5.327E-01	4.132E-01
Co-60	1.610E+00	1.448E-01	7.114E-02
Cs-134	ND	5.591E-02	7.402E-02
Cs-137	2.778E-01	1.027E-01	9.859E-02
Eu-152	ND	1.574E-01	1.916E-01
Eu-154	ND	3.691E-01	1.468E-01
Eu-155	ND	1.710E-01	2.448E-01
Nb-94	ND	5.243E-02	7.514E-02
Sb-125	1.589E-01	1.072E-01	1.970E-01
C-14	ND	1.102E-01	1.620E-01
Cm-243	ND	5.219E-02	1.110E-01
Fe-55	ND	3.076E+00	3.610E+00
H-3	ND	3.122E+00	4.820E+00
Nb-95	ND	4.765E-02	6.490E-02
Ni-63	5.290E+00	2.167E+00	2.880E+00
Pu-238	ND	1.351E-01	2.660E-01
Pu-239	ND	9.856E-02	2.430E-01
Pu-241	ND	6.116E+00	9.280E+00
Sr-90	1.380E-02	1.024E-02	1.530E-02
Tc-99	ND	2.074E-01	3.010E-01
U-235	ND	1.351E-01	2.130E-01
U-238	1.230E+00	1.177E+00	1.300E+00
NOL-03-01-009-F			
Ag-108m	ND	5.268E-02	7.886E-02
Am-241	ND	2.764E-01	3.971E-01
Co-60	5.285E-01	9.654E-02	6.351E-02
Cs-134	2.726E-02	2.380E-02	7.233E-02
Cs-137	ND	5.030E-02	7.484E-02
Eu-152	ND	1.288E-01	1.837E-01
Eu-154	ND	1.222E-01	1.350E-01
Eu-155	ND	1.634E-01	2.343E-01
Nb-94	ND	4.437E-02	6.330E-02
Sb-125	1.308E-01	8.931E-02	1.875E-01
NOL-03-01-010-F			
Ag-108m	ND	6.021E-02	8.604E-02
Am-241	ND	2.775E-01	3.727E-01
Co-60	3.280E-01	6.654E-02	6.541E-02
Cs-134	1.207E-02	1.158E-02	6.939E-02
Cs-137	5.257E-02	4.938E-02	6.735E-02
Eu-152	ND	1.384E-01	1.754E-01
Eu-154	ND	9.859E-02	1.258E-01
Eu-155	ND	1.498E-01	2.149E-01
Nb-94	ND	6.903E-02	6.311E-02
Sb-125	ND	8.179E-02	1.854E-01

Table 4
Summary of Radiological
Analytical Results for Soil
Yankee Nuclear Power Station
Rowe, MA

Radionuclide	Activity	Critical Level	MDC
NOL-03-01-011-F			
Ag-108m	ND	7.027E-02	1.025E-01
Am-241	ND	3.202E-01	4.592E-01
Co-60	1.856E-01	7.726E-02	8.999E-02
Cs-134	1.537E-02	1.262E-02	8.733E-02
Cs-137	ND	5.571E-02	8.255E-02
Eu-152	ND	3.141E-01	2.104E-01
Eu-154	ND	1.062E-01	1.521E-01
Eu-155	ND	1.485E-01	2.115E-01
Nb-94	ND	4.889E-02	7.128E-02
Sb-125	1.362E-01	9.451E-02	2.124E-01
NOL-03-01-012-F			
Ag-108m	ND	4.741E-02	7.067E-02
Am-241	ND	2.748E-01	3.479E-01
Co-60	ND	4.254E-02	6.204E-02
Cs-134	ND	5.114E-02	6.874E-02
Cs-137	ND	1.417E-01	7.976E-02
Eu-152	ND	1.057E-01	1.453E-01
Eu-154	ND	8.390E-02	1.203E-01
Eu-155	1.750E-01	1.389E-01	1.930E-01
Nb-94	ND	3.189E-02	4.796E-02
Sb-125	1.629E-01	1.227E-01	1.332E-01
NOL-03-01-013-F			
Ag-108m	ND	3.894E-02	5.911E-02
Am-241	ND	2.281E-01	3.286E-01
Co-60	2.691E-01	8.385E-02	6.119E-02
Cs-134	ND	4.519E-02	5.850E-02
Cs-137	4.970E-02	4.642E-02	6.333E-02
Eu-152	ND	1.641E-01	1.501E-01
Eu-154	ND	7.613E-02	1.087E-01
Eu-155	ND	1.309E-01	1.849E-01
Nb-94	ND	3.046E-02	4.425E-02
Sb-125	6.543E-02	5.746E-02	1.581E-01
NOL-03-01-014-F			
Ag-108m	ND	5.637E-02	8.221E-02
Am-241	ND	2.714E-01	3.534E-01
Co-60	7.007E-01	9.807E-02	6.622E-02
Cs-134	2.801E-02	2.357E-02	5.238E-02
Cs-137	3.253E-01	8.893E-02	8.173E-02
Eu-152	ND	2.153E-01	1.766E-01
Eu-154	ND	1.362E-01	1.246E-01
Eu-155	ND	1.439E-01	2.053E-01
Nb-94	ND	4.619E-02	6.518E-02
Sb-125	ND	9.774E-02	1.431E-01
NOL-03-01-015-F			
Ag-108m	ND	4.509E-02	6.527E-02
Am-241	ND	2.372E-01	3.101E-01
Co-60	1.626E-01	6.120E-02	6.471E-02
Cs-134	1.549E-02	1.360E-02	5.334E-02
Cs-137	ND	3.520E-02	4.865E-02
Eu-152	ND	1.092E-01	1.501E-01
Eu-154	ND	7.533E-02	1.080E-01
Eu-155	ND	1.008E-01	1.433E-01
Nb-94	ND	4.471E-02	5.446E-02
Sb-125	1.001E-01	8.344E-02	1.332E-01
NOL-03-01-016-F			
Ag-108m	ND	3.447E-02	5.002E-02
Am-241	ND	3.208E-01	3.130E-01
Co-60	1.369E-01	5.765E-02	5.867E-02
Cs-134	4.025E-02	2.051E-02	4.779E-02
Cs-137	9.457E-02	5.952E-02	6.253E-02
Eu-152	ND	2.717E-01	1.580E-01
Eu-154	ND	8.907E-02	1.149E-01
Eu-155	ND	1.243E-01	1.739E-01
Nb-94	ND	2.974E-02	4.472E-02
Sb-125	1.113E-01	9.006E-02	1.338E-01

Table 4
Summary of Radiological
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Yankee Nuclear Power Station
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Radionuclide	Activity	Critical Level	MDC
NOL-03-01-017-F			
Ag-108m	ND	5.668E-02	8.294E-02
Am-241	ND	2.643E-01	3.591E-01
Co-60	1.517E+00	1.295E-01	6.005E-02
Cs-134	ND	3.981E-02	5.819E-02
Cs-137	2.072E-01	7.195E-02	7.682E-02
Eu-152	ND	1.209E-01	1.727E-01
Eu-154	ND	8.696E-02	1.241E-01
Eu-155	1.528E-01	1.402E-01	1.958E-01
Nb-94	ND	5.438E-02	7.787E-02
Sb-125	ND	1.040E-01	1.529E-01
NOL-03-01-018-F			
Ag-108m	ND	5.778E-02	8.167E-02
Am-241	ND	8.283E-01	3.239E-01
Co-60	4.513E-01	6.986E-02	5.844E-02
Cs-134	3.803E-02	2.991E-02	3.706E-02
Cs-137	ND	4.764E-02	6.758E-02
Eu-152	ND	1.008E-01	1.447E-01
Eu-154	ND	8.569E-02	1.227E-01
Eu-155	ND	1.366E-01	1.952E-01
Nb-94	ND	1.273E-02	7.137E-02
Sb-125	1.229E-01	1.166E-01	1.191E-01
NOL-03-01-019-F			
Ag-108m	ND	4.790E-02	7.151E-02
Am-241	ND	3.539E-01	3.295E-01
Co-60	2.705E-01	6.712E-02	6.716E-02
Cs-134	2.148E-02	1.494E-02	5.563E-02
Cs-137	1.475E-01	7.758E-02	7.458E-02
Eu-152	ND	1.122E-01	1.612E-01
Eu-154	ND	7.680E-02	1.108E-01
Eu-155	1.543E-01	1.310E-01	1.827E-01
Nb-94	ND	1.092E-02	6.209E-02
Sb-125	1.231E-01	1.042E-01	1.257E-01
NOL-03-01-020-F			
Ag-108m	ND	5.065E-02	7.243E-02
Am-241	ND	1.468E-01	2.121E-01
Co-60	1.867E-01	6.999E-02	6.207E-02
Cs-134	1.744E-02	1.198E-02	6.738E-02
Cs-137	1.610E-01	6.137E-02	6.031E-02
Eu-152	ND	1.167E-01	1.541E-01
Eu-154	ND	5.901E-02	1.143E-01
Eu-155	ND	1.301E-01	1.845E-01
Nb-94	ND	3.831E-02	5.702E-02
Sb-125	1.097E-01	7.204E-02	1.628E-01
NOL-03-01-021-F			
Ag-108m	ND	4.683E-02	7.045E-02
Am-241	ND	1.929E-01	2.757E-01
Co-60	6.504E-01	8.269E-02	5.517E-02
Cs-134	ND	1.045E-01	6.531E-02
Cs-137	4.621E-01	8.800E-02	7.096E-02
Eu-152	ND	2.799E-01	1.634E-01
Eu-154	ND	8.144E-02	1.111E-01
Eu-155	ND	1.279E-01	1.804E-01
Nb-94	ND	3.334E-02	4.897E-02
Sb-125	ND	1.228E-01	1.469E-01
NOL-03-01-022-F			
Ag-108m	ND	4.793E-02	7.172E-02
Am-241	ND	2.544E-01	3.413E-01
Co-60	3.011E-01	6.115E-02	5.081E-02
Cs-134	8.643E-03	7.110E-03	6.971E-02
Cs-137	8.855E-02	4.479E-02	5.380E-02
Eu-152	ND	1.281E-01	1.694E-01
Eu-154	ND	9.304E-02	1.214E-01
Eu-155	ND	1.383E-01	1.981E-01
Nb-94	ND	3.886E-02	5.797E-02
Sb-125	ND	9.325E-02	1.376E-01

Table 4
Summary of Radiological
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Radionuclide	Activity	Critical Level	MDC
NOL-03-01-023-F			
Ag-108m	ND	6.630E-02	9.704E-02
Am-241	ND	2.303E-01	3.304E-01
Co-60	ND	3.914E-02	5.636E-02
Cs-134	2.542E-02	1.596E-02	4.995E-02
Cs-137	ND	3.902E-02	5.808E-02
Eu-152	ND	1.160E-01	1.668E-01
Eu-154	ND	8.058E-02	1.146E-01
Eu-155	ND	1.292E-01	1.852E-01
Nb-94	ND	4.690E-02	4.807E-02
Sb-125	1.774E-01	9.895E-02	1.372E-01
NOL-03-01-024-F			
Ag-108m	ND	3.744E-02	5.501E-02
Am-241	ND	3.235E-01	3.282E-01
Co-60	1.047E-01	4.816E-02	5.653E-02
Cs-134	1.524E-02	1.077E-02	5.353E-02
Cs-137	ND	4.130E-02	5.694E-02
Eu-152	1.396E-01	9.793E-02	1.531E-01
Eu-154	ND	1.567E-01	1.094E-01
Eu-155	1.593E-01	1.244E-01	1.729E-01
Nb-94	ND	3.336E-02	4.698E-02
Sb-125	8.717E-02	7.801E-02	1.356E-01
NOL-03-02-001-F			
Ag-108m	ND	3.003E-02	4.403E-02
Am-241	ND	1.569E-01	2.276E-01
Co-60	ND	5.613E-02	8.092E-02
Cs-134	ND	2.501E-02	3.576E-02
Cs-137	ND	5.736E-02	6.065E-02
Eu-152	ND	1.030E-01	1.330E-01
Eu-154	ND	6.908E-02	9.947E-02
Eu-155	ND	1.197E-01	1.690E-01
Nb-94	ND	3.239E-02	4.626E-02
Sb-125	ND	9.537E-02	1.397E-01
NOL-03-02-002-F			
Ag-108m	ND	3.617E-02	5.113E-02
Am-241	ND	4.166E-01	5.970E-01
Co-60	ND	4.146E-02	6.048E-02
Cs-134	ND	2.695E-02	4.074E-02
Cs-137	ND	3.890E-02	5.643E-02
Eu-152	ND	1.224E-01	1.626E-01
Eu-154	ND	1.561E-01	1.166E-01
Eu-155	ND	1.723E-01	2.461E-01
Nb-94	ND	2.630E-02	4.007E-02
Sb-125	ND	8.674E-02	1.296E-01
NOL-03-02-003-F			
Ag-108m	ND	2.578E-02	3.691E-02
Am-241	ND	1.646E-01	2.255E-01
Co-60	ND	2.167E-02	3.132E-02
Cs-134	1.535E-02	1.181E-02	5.922E-02
Cs-137	3.661E-02	2.498E-02	3.370E-02
Eu-152	ND	9.026E-02	1.063E-01
Eu-154	ND	1.034E-01	7.053E-02
Eu-155	1.022E-01	9.446E-02	1.325E-01
Nb-94	ND	5.463E-03	3.003E-02
Sb-125	1.059E-01	5.394E-02	6.879E-02
NOL-03-02-004-F			
Ag-108m	ND	2.674E-02	3.822E-02
Am-241	ND	1.484E-01	1.957E-01
Co-60	ND	2.060E-02	2.929E-02
Cs-134	ND	2.495E-02	3.412E-02
Cs-137	5.246E-02	3.380E-02	
Eu-152	ND	7.547E-02	1.060E-01
Eu-154	ND	5.236E-02	7.016E-02
Eu-155	1.093E-01	9.411E-02	1.318E-01
Nb-94	ND	5.420E-03	2.979E-02
Sb-125	6.875E-02	4.547E-02	7.682E-02

Table 4
Summary of Radiological
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Rowe, MA

Radionuclide	Activity	Critical Level	MDC
NOL-03-02-005-F			
Ag-108m	ND	3.141E-02	4.634E-02
Am-241	ND	1.777E-01	2.538E-01
Co-60	ND	5.268E-02	7.903E-02
Cs-134	ND	6.413E-02	5.042E-02
Cs-137	ND	1.068E-01	6.046E-02
Eu-152	ND	1.721E-01	1.396E-01
Eu-154	ND	7.945E-02	1.081E-01
Eu-155	ND	1.343E-01	1.881E-01
Nb-94	ND	3.110E-02	4.482E-02
Sb-125	ND	2.468E-01	1.535E-01
NOL-03-02-006-F			
Ag-108m	2.338E-02	1.170E-02	1.343E-02
Am-241	ND	1.347E-01	1.869E-01
Co-60	ND	4.719E-02	2.779E-02
Cs-134	ND	2.251E-02	3.088E-02
Cs-137	ND	2.138E-02	3.026E-02
Eu-152	ND	6.794E-02	9.102E-02
Eu-154	ND	5.158E-02	7.136E-02
Eu-155	9.465E-02	8.360E-02	1.172E-01
Nb-94	ND	1.876E-02	2.646E-02
Sb-125	7.920E-02	4.364E-02	7.512E-02
NOL-03-02-007-F			
Ag-108m	ND	2.378E-02	3.514E-02
Am-241	ND	2.055E-01	2.111E-01
Co-60	ND	2.548E-01	3.017E-02
Cs-134	1.685E-02	1.090E-02	5.647E-02
Cs-137	ND	2.264E-02	3.178E-02
Eu-152	ND	6.960E-02	9.880E-02
Eu-154	ND	4.569E-02	6.476E-02
Eu-155	ND	9.174E-02	1.294E-01
Nb-94	ND	1.627E-02	2.402E-02
Sb-125	5.038E-02	3.402E-02	8.042E-02
NOL-03-02-008-F			
Ag-108m	ND	4.438E-02	6.279E-02
Am-241	ND	4.771E-01	6.896E-01
Co-60	ND	3.764E-02	5.988E-02
Cs-134	ND	3.118E-02	4.567E-02
Cs-137	5.317E-02	4.878E-02	
Eu-152	ND	1.395E-01	1.878E-01
Eu-154	ND	8.616E-02	1.211E-01
Eu-155	ND	4.238E-01	2.304E-01
Nb-94	ND	3.711E-02	5.481E-02
Sb-125	8.697E-02	7.857E-02	1.421E-01
NOL-03-02-009-F			
Ag-108m	ND	2.455E-02	3.655E-02
Am-241	ND	7.188E-01	1.013E+00
Co-60	ND	3.021E-02	4.051E-02
Cs-134	6.224E-03	4.229E-03	3.581E-02
Cs-137	3.827E-02	2.932E-02	3.980E-02
Eu-152	ND	1.008E-01	1.442E-01
Eu-154	ND	7.123E-02	1.021E-01
Eu-155	ND	1.589E-01	2.245E-01
Nb-94	ND	2.018E-02	2.969E-02
Sb-125	7.294E-02	4.752E-02	9.967E-02
NOL-03-02-010-F			
Ag-108m	ND	3.458E-02	5.120E-02
Am-241	ND	1.707E-01	2.327E-01
Co-60	ND	1.072E+00	7.636E-02
Cs-134	ND	3.616E-02	4.404E-02
Cs-137	ND	2.838E-02	4.196E-02
Eu-152	ND	1.018E-01	1.357E-01
Eu-154	ND	6.903E-02	9.924E-02
Eu-155	ND	1.104E-01	1.551E-01
Nb-94	ND	3.167E-02	4.786E-02
Sb-125	ND	9.464E-02	1.376E-01

Table 4
Summary of Radiological
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Radionuclide	Activity	Critical Level	MDC
NOL-03-02-011-F			
Ag-108m	ND	3.727E-02	5.477E-02
Am-241	ND	4.546E-01	6.546E-01
Co-60	ND	4.788E-02	6.978E-02
Cs-134	2.719E-02	2.420E-02	3.883E-02
Cs-137	ND	4.194E-02	6.119E-02
Eu-152	ND	1.126E-01	1.627E-01
Eu-154	ND	9.030E-02	9.309E-02
Eu-155	ND	1.411E-01	2.035E-01
Nb-94	ND	3.138E-02	4.553E-02
Sb-125	8.078E-02	6.151E-02	1.444E-01
NOL-03-02-012-F			
Ag-108m	ND	2.945E-02	4.183E-02
Am-241	ND	1.559E-01	2.146E-01
Co-60	ND	4.565E-02	3.226E-02
Cs-134	1.719E-02	1.176E-02	3.104E-02
Cs-137	ND	2.448E-02	3.606E-02
Eu-152	ND	7.198E-02	1.036E-01
Eu-154	ND	5.256E-02	7.516E-02
Eu-155	ND	9.467E-02	1.330E-01
Nb-94	ND	2.145E-02	3.033E-02
Sb-125	9.530E-02	4.436E-02	8.325E-02
NOL-03-02-013-F			
Ag-108m	ND	3.164E-02	4.862E-02
Am-241	ND	4.289E-01	2.705E-01
Co-60	ND	5.362E-02	7.726E-02
Cs-134	ND	7.652E-02	4.143E-02
Cs-137	ND	3.292E-02	4.793E-02
Eu-152	ND	1.094E-01	1.431E-01
Eu-154	ND	7.892E-02	1.049E-01
Eu-155	ND	1.297E-01	1.860E-01
Nb-94	ND	3.207E-02	4.557E-02
Sb-125	ND	9.743E-02	1.422E-01
C-14	ND	1.887E-01	2.820E-01
Cm-243	ND	2.819E-01	5.210E-01
Fe-55	ND	1.149E+01	1.700E+01
H-3	ND	5.161E+00	8.400E+00
Nb-95	ND	9.576E-03	2.290E-02
Ni-63	ND	6.757E+00	1.080E+01
Pu-238	ND	4.171E-02	1.120E-01
Pu-239	ND	4.555E-02	1.470E-01
Pu-241	ND	7.887E+00	1.180E+01
Sr-90	ND	1.946E-02	4.170E-02
Tc-99	ND	2.295E-01	3.440E-01
U-235	ND	5.988E-02	1.800E-01
U-238	5.260E-01	3.996E-01	1.220E+00
NOL-03-02-014-F			
Ag-108m	ND	4.726E-02	7.014E-02
Am-241	ND	5.453E-01	7.810E-01
Co-60	ND	4.810E-02	7.083E-02
Cs-134	3.636E-02	2.768E-02	5.259E-02
Cs-137	ND	4.281E-02	5.911E-02
Eu-152	ND	1.129E-01	1.611E-01
Eu-154	ND	1.003E-01	1.397E-01
Eu-155	ND	1.754E-01	2.503E-01
Nb-94	ND	3.541E-02	5.204E-02
Sb-125	1.051E-01	8.468E-02	1.985E-01
NOL-03-02-015-F			
Ag-108m	ND	3.798E-02	5.564E-02
Am-241	ND	4.085E-01	5.907E-01
Co-60	ND	4.387E-02	6.375E-02
Cs-134	ND	3.562E-02	5.300E-02
Cs-137	ND	4.460E-02	6.728E-02
Eu-152	ND	1.336E-01	1.626E-01
Eu-154	ND	7.854E-02	1.062E-01
Eu-155	ND	1.748E-01	2.475E-01
Nb-94	ND	3.114E-02	4.746E-02
Sb-125	1.146E-01	9.328E-02	1.308E-01

Table 4
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Radionuclide	Activity	Critical Level	MDC
NOL-03-02-016-F			
Ag-108m	ND	3.415E-02	5.139E-02
Am-241	ND	2.073E-01	2.737E-01
Co-60	ND	3.513E-02	4.870E-02
Cs-134	ND	3.934E-02	5.305E-02
Cs-137	4.674E-02	4.033E-02	5.457E-02
Eu-152	ND	1.061E-01	1.423E-01
Eu-154	ND	7.021E-02	1.009E-01
Eu-155	ND	1.198E-01	1.705E-01
Nb-94	ND	2.947E-02	4.159E-02
Sb-125	8.862E-02	6.685E-02	1.216E-01
NOL-03-02-017-F			
Ag-108m	ND	2.973E-02	4.239E-02
Am-241	ND	2.053E-01	2.381E-01
Co-60	ND	1.953E-02	2.826E-02
Cs-134	2.911E-02	1.448E-02	1.932E-02
Cs-137	ND	2.302E-02	3.435E-02
Eu-152	ND	9.012E-02	1.148E-01
Eu-154	ND	5.643E-02	7.842E-02
Eu-155	1.189E-01	9.572E-02	1.336E-01
Nb-94	ND	1.993E-02	2.990E-02
Sb-125	1.072E-01	6.344E-02	7.936E-02
NOL-03-02-018-F			
Ag-108m	ND	3.133E-02	4.599E-02
Am-241	ND	1.551E-01	2.242E-01
Co-60	ND	5.930E-02	8.568E-02
Cs-134	ND	3.726E-02	4.835E-02
Cs-137	ND	3.498E-02	5.196E-02
Eu-152	ND	1.101E-01	1.471E-01
Eu-154	ND	7.022E-02	1.007E-01
Eu-155	ND	1.254E-01	1.764E-01
Nb-94	ND	3.773E-02	5.236E-02
Sb-125	ND	7.825E-02	1.117E-01
C-14	ND	1.759E-01	2.580E-01
Cm-243	ND	8.598E-02	1.760E-01
Fe-55	ND	1.122E+01	1.660E+01
H-3	ND	4.672E+00	7.580E+00
Nb-95	ND	7.677E-03	2.280E-02
Ni-63	ND	1.375E+01	2.180E+01
Pu-238	ND	7.922E-02	2.050E-01
Pu-239	ND	2.179E-02	1.310E-01
Pu-241	ND	9.145E+00	1.340E+01
Sr-90	ND	1.724E-02	3.920E-02
Tc-99	ND	2.109E-01	3.180E-01
U-235	ND	4.509E-02	1.640E-01
U-238	ND	7.095E-01	1.370E+00
NOL-03-02-019-F			
Ag-108m	ND	3.666E-03	1.159E-02
Am-241	ND	9.197E-03	1.851E-02
Co-60	ND	8.733E-04	1.800E-02
Cs-134	ND	3.154E-03	9.108E-03
Cs-137	ND	5.654E-03	1.143E-02
Eu-152	ND	4.075E-03	9.284E-03
Eu-154	ND	3.428E-03	6.710E-03
Eu-155	ND	2.905E-03	9.184E-03
Nb-94	ND	9.259E-04	1.241E-02
Sb-125	ND	3.924E-03	2.150E-02
NOL-03-02-020-F			
Ag-108m	ND	2.830E-02	3.942E-02
Am-241	ND	4.923E-01	7.067E-01
Co-60	ND	4.274E-02	6.715E-02
Cs-134	2.725E-02	2.167E-02	5.338E-02
Cs-137	ND	3.268E-02	4.875E-02
Eu-152	ND	1.328E-01	1.817E-01
Eu-154	ND	8.414E-02	1.190E-01
Eu-155	ND	1.481E-01	2.140E-01
Nb-94	ND	2.815E-02	4.168E-02
Sb-125	ND	1.415E-01	1.644E-01

Table 4
Summary of Radiological
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Radionuclide	Activity	Critical Level	MDC
NOL-04-01-001-F			
Ag-108m	ND	5.384E-02	7.769E-02
Am-241	ND	2.439E-01	3.282E-01
Co-60	ND	8.615E-03	7.675E-02
Cs-134	1.125E-02	8.865E-03	6.944E-02
Cs-137	ND	4.213E-02	6.188E-02
Eu-152	ND	1.034E-01	1.480E-01
Eu-154	ND	6.813E-02	9.751E-02
Eu-155	1.630E-01	1.255E-01	1.742E-01
Nb-94	ND	3.416E-02	4.766E-02
Sb-125	1.020E-01	7.063E-02	1.258E-01
NOL-04-01-002-F			
Ag-108m	ND	1.479E-02	2.160E-02
Am-241	ND	7.217E-01	1.026E+00
Co-60	ND	1.785E-01	3.620E-02
Cs-134	1.119E-02	7.362E-03	3.461E-02
Cs-137	ND	2.689E-02	3.829E-02
Eu-152	ND	9.430E-02	1.356E-01
Eu-154	ND	6.788E-02	9.751E-02
Eu-155	ND	1.542E-01	2.173E-01
Nb-94	ND	2.305E-02	3.455E-02
Sb-125	7.787E-02	6.026E-02	9.075E-02
NOL-04-01-003-F			
Ag-108m	ND	3.995E-02	5.848E-02
Am-241	ND	6.407E-01	9.275E-01
Co-60	ND	4.568E-02	3.446E-02
Cs-134	1.386E-02	1.186E-02	5.613E-02
Cs-137	ND	2.840E-02	4.119E-02
Eu-152	7.172E-02	4.845E-02	1.254E-01
Eu-154	ND	6.957E-02	9.901E-02
Eu-155	1.788E-01	1.577E-01	2.201E-01
Nb-94	ND	1.757E-02	2.660E-02
Sb-125	8.048E-02	5.668E-02	8.873E-02
NOL-04-01-004-F			
Ag-108m	ND	3.392E-02	4.841E-02
Am-241	ND	8.667E-01	1.251E+00
Co-60	ND	2.550E-02	3.921E-02
Cs-134	2.381E-02	1.870E-02	3.702E-02
Cs-137	ND	3.129E-02	4.477E-02
Eu-152	ND	1.147E-01	1.649E-01
Eu-154	ND	8.381E-02	1.202E-01
Eu-155	1.801E-01	1.788E-01	2.503E-01
Nb-94	ND	2.293E-02	3.203E-02
Sb-125	9.414E-02	6.193E-02	1.075E-01
NOL-04-01-005-F			
Ag-108m	ND	3.394E-02	4.896E-02
Am-241	ND	8.629E-01	1.203E+00
Co-60	ND	2.585E-02	3.870E-02
Cs-134	1.588E-02	1.274E-02	4.023E-02
Cs-137	ND	2.779E-02	4.043E-02
Eu-152	9.828E-02	6.618E-02	1.498E-01
Eu-154	ND	6.345E-02	9.172E-02
Eu-155	ND	1.794E-01	2.522E-01
Nb-94	ND	2.192E-02	3.259E-02
Sb-125	9.849E-02	6.833E-02	8.367E-02
NOL-04-01-006-F			
Ag-108m	ND	3.734E-02	5.524E-02
Am-241	ND	2.726E-01	2.880E-01
Co-60	ND	4.002E-02	5.792E-02
Cs-134	1.471E-02	1.369E-02	5.434E-02
Cs-137	ND	3.147E-02	4.408E-02
Eu-152	ND	1.139E-01	1.403E-01
Eu-154	ND	7.028E-02	1.009E-01
Eu-155	ND	1.266E-01	1.809E-01
Nb-94	ND	2.610E-02	4.063E-02
Sb-125	8.304E-02	6.785E-02	1.131E-01

Table 4
Summary of Radiological
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Radionuclide	Activity	Critical Level	MDC
NOL-04-01-007-F			
Ag-108m	ND	5.475E-02	8.220E-02
Am-241	ND	4.834E-01	6.974E-01
Co-60	ND	4.309E-02	6.625E-02
Cs-134	ND	3.061E-02	4.663E-02
Cs-137	5.562E-02	4.366E-02	5.685E-02
Eu-152	ND	1.063E-01	1.527E-01
Eu-154	ND	8.939E-02	1.259E-01
Eu-155	ND	1.651E-01	2.382E-01
Nb-94	ND	3.705E-02	5.698E-02
Sb-125	1.389E-01	9.330E-02	1.522E-01
NOL-04-01-008-F			
Ag-108m	ND	4.841E-02	6.914E-02
Am-241	ND	2.176E-01	2.897E-01
Co-60	ND	3.753E-02	5.699E-02
Cs-134	ND	3.590E-02	5.216E-02
Cs-137	ND	1.051E+00	5.770E-02
Eu-152	6.368E-02	6.133E-02	1.482E-01
Eu-154	ND	7.860E-02	1.064E-01
Eu-155	ND	1.187E-01	1.662E-01
Nb-94	ND	3.070E-02	4.308E-02
Sb-125	ND	7.833E-02	1.145E-01
NOL-04-01-009-F			
Ag-108m	ND	4.211E-02	6.187E-02
Am-241	ND	4.521E-01	6.532E-01
Co-60	ND	4.002E-02	5.782E-02
Cs-134	ND	3.457E-02	5.060E-02
Cs-137	1.528E-01	6.534E-02	6.328E-02
Eu-152	ND	1.092E-01	1.571E-01
Eu-154	ND	6.011E-02	8.755E-02
Eu-155	ND	3.068E-01	2.665E-01
Nb-94	ND	3.127E-02	4.816E-02
Sb-125	ND	1.276E-01	1.424E-01
NOL-04-01-010-F			
Ag-108m	ND	2.766E-02	3.976E-02
Am-241	ND	7.235E-01	1.037E+00
Co-60	2.967E-02	2.019E-02	3.591E-02
Cs-134	8.803E-03	7.638E-03	3.520E-02
Cs-137	6.881E-02	3.445E-02	
Eu-152	8.416E-02	7.471E-02	1.131E-01
Eu-154	ND	7.339E-02	1.051E-01
Eu-155	ND	1.564E-01	2.204E-01
Nb-94	ND	1.937E-02	2.964E-02
Sb-125	7.680E-02	7.407E-02	1.066E-01
NOL-04-01-011-F			
Ag-108m	ND	5.134E-02	7.333E-02
Am-241	ND	5.760E-01	3.115E-01
Co-60	ND	4.117E-02	6.027E-02
Cs-134	ND	3.410E-02	5.094E-02
Cs-137	ND	4.088E-02	5.785E-02
Eu-152	ND	8.989E-02	1.299E-01
Eu-154	ND	8.237E-02	1.119E-01
Eu-155	ND	1.290E-01	1.815E-01
Nb-94	ND	3.755E-02	5.329E-02
Sb-125	8.068E-02	7.003E-02	1.335E-01

Table 4
Summary of Radiological
Analytical Results for Soil
Yankee Nuclear Power Station
Rowe, MA

Radionuclide	Activity	Critical Level	MDC
NOL-04-01-012-F			
Ag-108m	ND	6.195E-02	8.875E-02
Co-60	ND	4.040E-02	5.699E-02
Cs-134	4.186E-02	3.199E-02	4.586E-02
Cs-137	ND	4.684E-02	7.070E-02
Eu-152	ND	1.393E-01	1.879E-01
Eu-154	ND	9.236E-02	1.322E-01
Eu-155	ND	5.444E-01	3.212E-01
Nb-94	ND	3.850E-02	5.753E-02
Sb-125	1.499E-01	1.072E-01	1.689E-01
C-14	ND	9.297E-02	1.390E-01
Cm-243	ND	9.157E-02	1.650E-01
Fe-55	ND	1.258E+01	1.670E+01
H-3	ND	4.089E+00	6.170E+00
Nb-95	2.790E-02	1.817E-02	3.720E-02
Ni-63	ND	5.883E+00	8.900E+00
Pu-238	ND	2.796E-02	6.880E-02
Pu-239	ND	3.728E-02	1.400E-01
Pu-241	ND	1.619E+01	2.390E+01
Sr-90	ND	1.328E-02	2.740E-02
Tc-99	ND	1.806E-01	2.650E-01
U-235	ND	1.061E-01	2.710E-01
U-238	ND	1.188E+00	2.650E+00
NOL-04-01-013-F			
Ag-108m	ND	3.160E-02	4.625E-02
Am-241	ND	7.897E-01	1.133E+00
Co-60	1.181E-01	3.158E-02	4.042E-02
Cs-134	1.911E-02	1.113E-02	3.459E-02
Cs-137	4.649E-01	6.380E-02	4.641E-02
Eu-152	ND	1.004E-01	1.437E-01
Eu-154	ND	6.614E-02	9.465E-02
Eu-155	ND	1.701E-01	2.406E-01
Nb-94	ND	2.058E-02	3.001E-02
Sb-125	7.840E-02	6.407E-02	8.305E-02
NOL-04-01-014-F			
Ag-108m	ND	2.718E-02	4.036E-02
Am-241	ND	6.421E-01	9.293E-01
Co-60	ND	1.378E-01	3.216E-02
Cs-134	2.505E-02	1.303E-02	2.254E-02
Cs-137	ND	2.487E-02	3.569E-02
Eu-152	ND	1.052E-01	1.371E-01
Eu-154	ND	6.966E-02	9.961E-02
Eu-155	ND	1.590E-01	2.281E-01
Nb-94	ND	1.871E-02	2.677E-02
Sb-125	7.929E-02	5.804E-02	9.419E-02
NOL-04-01-015-F			
Ag-108m	ND	4.035E-02	5.986E-02
Am-241	NA	0.000E+00	7.051E-01
Co-60	1.698E-01	7.818E-02	6.142E-02
Cs-134	ND	3.511E-02	5.172E-02
Cs-137	1.305E-01	6.308E-02	6.222E-02
Eu-152	ND	1.826E-01	1.863E-01
Eu-154	ND	8.730E-02	1.225E-01
Eu-155	ND	4.320E-01	2.412E-01
Nb-94	ND	3.386E-02	5.158E-02
Sb-125	7.835E-02	6.942E-02	1.547E-01
NOL-04-01-016-F			
Ag-108m	ND	2.880E-02	4.142E-02
Am-241	ND	5.125E-01	7.446E-01
Co-60	ND	4.565E-02	3.238E-02
Cs-134	2.023E-02	1.219E-02	5.147E-02
Cs-137	ND	2.699E-02	3.800E-02
Eu-152	8.296E-02	6.196E-02	1.334E-01
Eu-154	ND	6.281E-02	9.061E-02
Eu-155	NA	0.000E+00	2.383E-01
Nb-94	ND	2.021E-02	2.967E-02
Sb-125	7.415E-02	4.756E-02	1.061E-01

Table 4
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Radionuclide	Activity	Critical Level	MDC
NOL-04-01-017-F			
Ag-108m	ND	2.539E-02	3.751E-02
Am-241	ND	6.827E-01	9.633E-01
Co-60	ND	2.566E-02	3.529E-02
Cs-134	1.295E-02	9.413E-03	3.713E-02
Cs-137	8.144E-02	3.708E-02	3.923E-02
Eu-154	ND	7.062E-02	1.012E-01
Eu-155	ND	1.608E-01	2.303E-01
Nb-94	ND	2.151E-02	3.174E-02
Sb-125	1.086E-01	5.008E-02	9.416E-02
NOL-04-01-018-F			
Ag-108m	ND	3.883E-02	5.726E-02
Am-241	ND	6.809E-01	9.462E-01
Co-60	ND	3.179E-02	3.687E-02
Cs-134	1.048E-02	8.553E-03	3.586E-02
Cs-137	ND	2.433E-02	3.691E-02
Eu-152	ND	1.585E-01	1.497E-01
Eu-154	ND	7.402E-02	1.065E-01
Eu-155	ND	1.678E-01	2.411E-01
Nb-94	ND	1.923E-02	2.930E-02
Sb-125	6.945E-02	5.431E-02	1.002E-01
NOL-04-01-019-F			
Ag-108m	ND	4.238E-02	6.408E-02
Am-241	ND	2.521E-01	3.242E-01
Co-60	1.203E-01	5.602E-02	
Cs-134	ND	8.802E-02	1.270E-01
Cs-137	1.642E-01	7.281E-02	
Eu-152	ND	1.846E-01	1.551E-01
Eu-154	ND	7.989E-02	1.148E-01
Eu-155	1.428E-01	1.306E-01	1.824E-01
Nb-94	ND	3.714E-02	5.280E-02
Sb-125	1.665E-01	1.124E-01	1.456E-01
NOL-04-01-020-F			
Ag-108m	ND	2.914E-02	4.293E-02
Am-241	ND	6.778E-01	9.517E-01
Co-60	3.764E-01	4.353E-02	
Cs-134	1.474E-02	1.205E-02	3.929E-02
Cs-137	1.127E-01	4.743E-02	
Eu-152	ND	1.112E-01	1.532E-01
Eu-154	ND	8.317E-02	1.175E-01
Eu-155	ND	1.485E-01	2.131E-01
Nb-94	ND	3.066E-02	4.486E-02
Sb-125	1.042E-01	7.867E-02	1.119E-01
C-14	ND	1.014E-01	1.480E-01
Cm-243	ND	6.163E-02	1.660E-01
Fe-55	ND	1.144E+01	1.490E+01
H-3	ND	4.112E+00	5.860E+00
Nb-95	ND	8.539E-03	2.020E-02
Ni-63	ND	5.545E+00	8.390E+00
Pu-238	ND	2.947E-02	3.490E-02
Pu-239	ND	3.029E-02	6.430E-02
Pu-241	ND	1.200E+01	1.790E+01
Sr-90	ND	1.794E-02	2.690E-02
Tc-99	ND	1.724E-01	2.530E-01
U-235	ND	4.345E-02	1.640E-01
U-238	ND	3.833E-01	1.340E+00
NOL-05-01-001-F			
Ag-108m	ND	1.872E-02	2.861E-02
Am-241	ND	7.664E-01	1.099E+00
Co-60	ND	6.359E-02	3.735E-02
Cs-134	1.781E-02	1.472E-02	3.398E-02
Cs-137	ND	3.141E-02	4.434E-02
Eu-152	1.500E-01	7.927E-02	1.377E-01
Eu-154	ND	7.214E-02	1.023E-01
Eu-155	ND	1.429E-01	2.044E-01
Nb-94	ND	2.045E-02	3.023E-02
Sb-125	9.994E-02	6.430E-02	1.088E-01

Table 4
Summary of Radiological
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Radionuclide	Activity	Critical Level	MDC
NOL-05-01-002-F			
Ag-108m	ND	3.058E-02	4.638E-02
Am-241	ND	3.978E-01	2.731E-01
Co-60	ND	3.926E-02	5.619E-02
Cs-134	ND	1.132E-01	1.181E-01
Cs-137	ND	3.714E-02	5.124E-02
Eu-152	ND	1.066E-01	1.401E-01
Eu-154	ND	8.049E-02	9.841E-02
Eu-155	1.259E-01	1.126E-01	1.573E-01
Nb-94	ND	3.587E-02	5.023E-02
Sb-125	7.775E-02	6.288E-02	1.095E-01
NOL-05-01-003-F			
Ag-108m	ND	5.038E-02	7.256E-02
Am-241	ND	3.079E-01	2.951E-01
Co-60	ND	5.726E-02	6.290E-02
Cs-134	ND	3.364E-02	4.989E-02
Cs-137	ND	3.722E-02	5.504E-02
Eu-152	ND	1.063E-01	1.251E-01
Eu-154	ND	1.611E-01	1.039E-01
Eu-155	ND	1.190E-01	1.668E-01
Nb-94	ND	2.287E-02	3.613E-02
Sb-125	8.024E-02	7.126E-02	1.355E-01
NOL-05-01-004-F			
Ag-108m	ND	3.991E-02	5.889E-02
Am-241	ND	2.221E-01	2.993E-01
Co-60	ND	4.051E-02	5.928E-02
Cs-134	ND	4.047E-02	5.444E-02
Cs-137	ND	3.814E-02	4.520E-02
Eu-152	ND	1.259E-01	1.499E-01
Eu-154	ND	7.457E-02	1.067E-01
Eu-155	ND	1.245E-01	1.789E-01
Nb-94	ND	4.579E-02	5.588E-02
Sb-125	1.205E-01	6.486E-02	1.418E-01
NOL-05-01-005-F			
Ag-108m	ND	2.681E-02	3.940E-02
Am-241	ND	3.018E-01	1.098E+00
Co-60	ND	6.283E-02	3.389E-02
Cs-134	ND	2.546E-02	3.712E-02
Cs-137	ND	2.218E-02	3.296E-02
Eu-152	1.078E-01	6.414E-02	1.360E-01
Eu-154	ND	7.470E-02	1.073E-01
Eu-155	ND	1.576E-01	2.221E-01
Nb-94	ND	2.806E-02	4.191E-02
Sb-125	9.766E-02	6.182E-02	9.646E-02
NOL-05-01-006-F			
Ag-108m	ND	2.555E-02	3.732E-02
Am-241	ND	7.727E-01	1.087E+00
Co-60	ND	1.008E-01	4.124E-02
Cs-134	ND	2.833E-02	4.047E-02
Cs-137	6.997E-02	4.378E-02	
Eu-152	ND	9.826E-02	1.324E-01
Eu-154	ND	6.585E-02	9.498E-02
Eu-155	1.811E-01	1.624E-01	2.265E-01
Nb-94	ND	2.104E-02	3.090E-02
Sb-125	8.123E-02	5.780E-02	1.012E-01
NOL-05-01-007-F			
Ag-108m	ND	2.599E-02	3.833E-02
Am-241	ND	8.219E-01	8.304E-01
Co-60	ND	1.784E-02	2.771E-02
Cs-134	1.043E-02	9.156E-03	3.315E-02
Cs-137	ND	2.344E-02	3.273E-02
Eu-152	ND	9.425E-02	1.348E-01
Eu-154	ND	6.424E-02	9.193E-02
Eu-155	ND	1.536E-01	2.208E-01
Nb-94	ND	2.038E-02	2.986E-02
Sb-125	ND	6.607E-02	9.611E-02
NOL-05-01-008-F			
Ag-108m	ND	4.870E-02	6.944E-02
Am-241	ND	2.691E-01	3.058E-01
Co-60	ND	3.097E-02	4.754E-02
Cs-134	ND	1.007E-01	1.172E-01
Cs-137	ND	3.809E-02	5.637E-02
Eu-152	ND	1.125E-01	1.459E-01

Table 4
Summary of Radiological
Analytical Results for Soil
Yankee Nuclear Power Station
Rowe, MA

Radionuclide	Activity	Critical Level	MDC
Eu-154	ND	7.051E-02	1.014E-01
Eu-155	ND	1.208E-01	1.692E-01
Nb-94	ND	3.429E-02	4.873E-02
Sb-125	9.155E-02	6.574E-02	1.245E-01
NOL-05-01-009-F			
Ag-108m	ND	2.459E-02	3.608E-02
Am-241	ND	8.425E-01	8.436E-01
Co-60	ND	2.432E-02	3.629E-02
Cs-134	2.247E-02	1.163E-02	3.483E-02
Cs-137	ND	2.546E-02	3.629E-02
Eu-152	ND	1.153E-01	1.514E-01
Eu-154	ND	7.433E-02	1.064E-01
Eu-155	ND	1.728E-01	2.475E-01
Nb-94	ND	2.427E-02	3.527E-02
Sb-125	6.884E-02	4.364E-02	1.015E-01
NOL-05-01-010-F			
Ag-108m	ND	3.492E-02	5.117E-02
Am-241	ND	7.156E-01	1.028E+00
Co-60	ND	2.043E-02	3.042E-02
Cs-134	1.634E-02	1.143E-02	4.124E-02
Cs-137	3.335E-02	2.721E-02	3.706E-02
Eu-152	ND	9.380E-02	1.342E-01
Eu-154	ND	7.189E-02	1.029E-01
Eu-155	ND	1.306E-01	1.846E-01
Nb-94	ND	2.084E-02	3.031E-02
Sb-125	1.033E-01	7.033E-02	9.461E-02
C-14	ND	1.026E-01	1.500E-01
Cm-243	ND	2.610E-02	3.100E-02
Fe-55	ND	1.258E+01	1.620E+01
H-3	ND	4.311E+00	6.430E+00
Nb-95	9.340E-03	7.631E-03	2.070E-02
Ni-63	ND	5.301E+00	8.130E+00
Pu-238	ND	2.994E-02	6.360E-02
Pu-239	ND	3.076E-02	7.560E-02
Pu-241	ND	1.177E+01	1.760E+01
Sr-90	ND	1.305E-02	1.880E-02
Tc-99	ND	1.689E-01	2.470E-01
U-235	6.580E-02	6.000E-02	1.920E-01
U-238	6.300E-01	6.046E-01	2.000E+00
NOL-05-01-011-F			
Ag-108m	ND	6.215E-02	9.151E-02
Am-241	ND	2.418E-01	3.304E-01
Co-60	5.567E-02	4.056E-02	5.035E-02
Cs-134	ND	1.711E-02	8.007E-03
Cs-137	6.067E-02	4.035E-02	5.242E-02
Eu-152	ND	1.058E-01	1.513E-01
Eu-154	ND	7.416E-02	1.058E-01
Eu-155	2.044E-01	1.255E-01	1.730E-01
Nb-94	ND	2.514E-02	3.814E-02
Sb-125	ND	1.035E-01	1.419E-01
NOL-05-01-012-F			
Ag-108m	ND	5.182E-02	7.442E-02
Am-241	ND	2.304E-01	3.075E-01
Co-60	ND	3.992E-02	5.988E-02
Cs-134	ND	4.722E-02	6.353E-02
Cs-137	2.374E-01	7.463E-02	
Eu-152	ND	1.015E-01	1.459E-01
Eu-154	ND	6.864E-02	9.802E-02
Eu-155	ND	1.166E-01	1.673E-01
Nb-94	ND	9.001E-03	5.210E-02
Sb-125	1.244E-01	1.142E-01	1.436E-01
NOL-05-01-013-F			
Ag-108m	ND	5.215E-02	7.628E-02
Am-241	ND	2.323E-01	3.064E-01
Co-60	ND	3.868E-02	5.539E-02
Cs-134	2.748E-02	1.934E-02	3.475E-02
Cs-137	4.520E-02	4.202E-02	5.717E-02
Eu-152	1.088E-01	1.027E-01	1.508E-01
Eu-154	ND	1.316E-01	1.025E-01
Eu-155	1.552E-01	1.228E-01	1.707E-01
Nb-94	ND	3.386E-02	5.221E-02
Sb-125	9.426E-02	5.674E-02	1.506E-01
C-14	ND	1.096E-01	1.590E-01

Table 4
Summary of Radiological
Analytical Results for Soil
Yankee Nuclear Power Station
Rowe, MA

Radionuclide	Activity	Critical Level	MDC
Cm-243	ND	3.996E-02	4.740E-02
Fe-55	ND	1.177E+01	1.500E+01
H-3	ND	4.334E+00	6.280E+00
Nb-95	1.210E-02	6.943E-03	1.630E-02
Ni-63	ND	6.035E+00	8.580E+00
Pu-238	ND	2.749E-02	5.830E-02
Pu-239	ND	3.099E-02	9.690E-02
Pu-241	ND	1.549E+01	2.280E+01
Sr-90	ND	1.410E-02	2.050E-02
Tc-99	ND	1.934E-01	2.850E-01
U-235	4.660E-02	4.392E-02	1.540E-01
U-238	5.930E-01	4.229E-01	1.160E+00
NOL-05-01-014-F			
Ag-108m	ND	2.754E-02	3.951E-02
Am-241	ND	7.115E-01	9.917E-01
Co-60	ND	8.843E-02	2.798E-02
Cs-134	1.581E-02	9.739E-03	2.913E-02
Cs-137	ND	2.816E-02	3.934E-02
Eu-152	ND	8.651E-02	1.245E-01
Eu-154	ND	6.644E-02	9.495E-02
Eu-155	ND	1.539E-01	2.206E-01
Nb-94	ND	1.819E-02	2.712E-02
Sb-125	4.324E-02	3.490E-02	1.007E-01
NOL-05-01-015-F			
Ag-108m	ND	3.167E-02	4.635E-02
Am-241	ND	9.784E-01	1.178E+00
Co-60	1.506E-01	3.782E-02	
Cs-134	1.659E-02	1.370E-02	3.547E-02
Cs-137	1.828E-01	4.984E-02	
Eu-152	ND	1.196E-01	1.596E-01
Eu-154	ND	7.865E-02	1.123E-01
Eu-155	2.108E-01	1.702E-01	2.366E-01
Nb-94	ND	2.479E-02	3.652E-02
Sb-125	1.509E-01	7.069E-02	1.118E-01
NOL-05-01-016-F			
Ag-108m	ND	4.493E-02	6.539E-02
Am-241	ND	2.232E-01	3.015E-01
Co-60	ND	3.265E-02	4.482E-02
Cs-134	2.774E-02	1.886E-02	3.772E-02
Cs-137	ND	3.795E-02	5.413E-02
Eu-152	ND	8.626E-02	1.069E-01
Eu-154	ND	3.155E-01	9.685E-02
Eu-155	ND	1.175E-01	1.687E-01
Nb-94	ND	2.933E-02	4.391E-02
Sb-125	1.041E-01	7.571E-02	1.140E-01
NOL-05-01-017-F			
Ag-108m	ND	3.780E-02	5.697E-02
Am-241	ND	2.060E-01	2.738E-01
Co-60	ND	3.179E-02	4.398E-02
Cs-134	ND	2.309E-02	3.469E-02
Cs-137	ND	3.916E-02	5.445E-02
Eu-152	ND	9.984E-02	1.324E-01
Eu-154	ND	6.178E-02	8.307E-02
Eu-155	ND	1.189E-01	1.704E-01
Nb-94	ND	2.211E-02	3.377E-02
Sb-125	1.039E-01	7.276E-02	1.087E-01
NOL-05-01-018-F			
Ag-108m	ND	2.058E-02	3.119E-02
Am-241	ND	8.379E-01	1.179E+00
Co-60	ND	9.625E-02	3.943E-02
Cs-134	2.543E-02	1.614E-02	3.316E-02
Cs-137	6.314E-02	4.326E-02	
Eu-152	ND	9.906E-02	1.408E-01
Eu-154	ND	7.296E-02	1.048E-01
Eu-155	ND	1.467E-01	2.109E-01
Nb-94	ND	2.396E-02	3.606E-02
Sb-125	1.072E-01	5.711E-02	9.920E-02
NOL-05-01-019-F			
Ag-108m	ND	3.786E-02	5.541E-02
Am-241	ND	1.984E-01	2.864E-01
Co-60	ND	3.222E-02	5.057E-02
Cs-134	ND	7.990E-02	1.151E-01
Cs-137	ND	3.635E-02	5.185E-02

Table 4
Summary of Radiological
Analytical Results for Soil
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Rowe, MA

Radionuclide	Activity	Critical Level	MDC
Eu-152	ND	1.030E-01	1.386E-01
Eu-154	ND	6.819E-02	9.817E-02
Eu-155	ND	1.156E-01	1.625E-01
Nb-94	ND	2.617E-01	4.769E-02
Sb-125	1.089E-01	7.225E-02	1.220E-01
NOL-05-01-020-F			
Ag-108m	ND	7.007E-02	1.030E-01
Am-241	ND	2.273E-01	3.031E-01
Co-60	ND	5.058E-02	6.560E-02
Cs-134	ND	3.292E-02	4.765E-02
Cs-137	4.213E-02	3.887E-02	5.264E-02
Eu-152	ND	1.026E-01	1.466E-01
Eu-154	ND	7.459E-02	1.065E-01
Eu-155	1.418E-01	1.247E-01	1.738E-01
Nb-94	ND	3.690E-02	5.574E-02
Sb-125	1.146E-01	8.539E-02	1.235E-01
NOL-05-02-006-F			
Ag-108m	ND	4.818E-02	7.031E-02
Am-241	ND	5.018E-01	7.182E-01
Co-60	5.109E-02	3.531E-02	5.541E-02
Cs-134	3.471E-02	2.213E-02	2.606E-02
Cs-137	1.322E-01	6.867E-02	
Eu-152	ND	1.140E-01	1.629E-01
Eu-154	ND	8.963E-02	1.289E-01
Eu-155	ND	2.690E-01	2.779E-01
Nb-94	ND	3.440E-02	5.304E-02
Sb-125	7.299E-02	6.255E-02	1.405E-01
Nb-95	ND	6.815E+00	1.040E+01
U-235	2.250E-01	1.922E-01	3.210E-01
U-238	ND	3.029E+00	2.520E+00
NOL-05-02-016-F			
Ag-108m	ND	2.772E-02	4.062E-02
Am-241	ND	7.385E-01	1.057E+00
Co-60	ND	2.769E-02	3.925E-02
Cs-134	ND	5.046E-02	7.260E-02
Cs-137	ND	2.619E-02	3.846E-02
Eu-152	ND	1.125E-01	1.458E-01
Eu-154	ND	6.650E-02	9.437E-02
Eu-155	ND	1.697E-01	2.435E-01
Nb-94	ND	2.135E-02	3.056E-02
Sb-125	9.982E-02	5.666E-02	1.125E-01
NOL-05-02-022-F			
Ag-108m	ND	5.195E-02	7.448E-02
Am-241	ND	4.365E-01	6.323E-01
Co-60	6.162E-01	9.204E-02	
Cs-134	ND	5.206E-02	7.374E-02
Cs-137	2.189E-01	6.976E-02	
Eu-152	ND	1.434E-01	2.061E-01
Eu-154	ND	1.108E-01	1.563E-01
Eu-155	2.238E-01	2.062E-01	2.891E-01
Nb-94	ND	5.139E-02	7.538E-02
Sb-125	9.783E-02	8.200E-02	1.839E-01
Nb-95	ND	9.786E+00	1.450E+01
U-235	2.770E-01	1.829E-01	3.040E-01
U-238	ND	1.031E+00	8.090E-01
NOL-05-02-023-F			
Ag-108m	ND	3.179E-02	4.547E-02
Am-241	ND	8.345E-01	1.153E+00
Co-60	ND	3.818E-02	5.197E-02
Cs-134	9.407E-03	7.060E-03	4.395E-02
Cs-137	1.191E-01	4.627E-02	
Eu-152	ND	1.098E-01	1.579E-01
Eu-154	ND	8.172E-02	1.172E-01
Eu-155	ND	1.724E-01	2.419E-01
Nb-94	ND	2.447E-02	3.623E-02
Sb-125	1.066E-01	6.164E-02	1.126E-01
NOL-05-02-026-F			
Ag-108m	ND	2.981E-02	4.232E-02
Am-241	ND	1.476E-01	2.108E-01
Co-60	4.196E-01	3.873E-02	
Cs-134	2.740E-02	1.292E-02	4.645E-02
Cs-137	1.299E-01	5.220E-02	
Eu-152	ND	8.173E-02	1.079E-01

Table 4
Summary of Radiological
Analytical Results for Soil
Yankee Nuclear Power Station
Rowe, MA

Radionuclide	Activity	Critical Level	MDC
Eu-154	ND	6.172E-02	6.944E-02
Eu-155	1.021E-01	9.211E-02	1.290E-01
Nb-94	ND	2.429E-02	3.451E-02
Sb-125	9.342E-02	5.024E-02	8.218E-02
NOL-06-01-001-F			
Ag-108m	ND	2.822E-02	4.208E-02
Am-241	ND	7.099E-01	9.314E-01
Co-60	ND	2.567E-02	3.740E-02
Cs-134	3.642E-02	1.599E-02	2.386E-02
Cs-137	3.554E-02	3.193E-02	4.365E-02
Eu-152	ND	1.297E-01	1.560E-01
Eu-154	ND	8.155E-02	1.169E-01
Eu-155	ND	1.865E-01	2.678E-01
Nb-94	ND	2.140E-02	3.209E-02
Sb-125	9.352E-02	6.661E-02	1.023E-01
NOL-06-01-002-F			
Ag-108m	ND	3.945E-02	5.889E-02
Am-241	ND	5.164E-01	7.468E-01
Co-60	1.727E-01	6.228E-02	6.158E-02
Cs-134	ND	4.569E-02	6.757E-02
Cs-137	1.265E-01	6.696E-02	6.537E-02
Eu-152	ND	1.284E-01	1.738E-01
Eu-154	ND	9.275E-02	1.266E-01
Eu-155	ND	2.014E-01	2.832E-01
Nb-94	ND	3.498E-02	5.109E-02
Sb-125	ND	1.091E-01	1.591E-01
NOL-06-01-003-F			
Ag-108m	NA	0.000E+00	9.153E-02
Am-241	ND	4.865E-01	7.055E-01
Co-60	ND	4.797E-02	7.552E-02
Cs-134	ND	3.308E-02	5.064E-02
Cs-137	ND	4.380E-02	6.359E-02
Eu-152	ND	2.163E-01	1.790E-01
Eu-154	ND	8.315E-02	1.192E-01
Eu-155	ND	7.190E-01	3.056E-01
Nb-94	NA	0.000E+00	6.466E-02
Sb-125	8.612E-02	7.743E-02	1.298E-01
NOL-06-01-004-F			
Ag-108m	ND	2.863E-02	4.256E-02
Am-241	ND	7.693E-01	1.113E+00
Co-60	ND	4.110E-01	3.819E-02
Cs-134	ND	3.154E-02	4.465E-02
Cs-137	ND	2.882E-02	4.230E-02
Eu-152	1.102E-01	7.676E-02	1.489E-01
Eu-154	ND	7.577E-02	1.090E-01
Eu-155	ND	1.764E-01	2.492E-01
Nb-94	ND	2.168E-02	3.226E-02
Sb-125	9.380E-02	8.427E-02	1.005E-01
NOL-06-01-005-F			
Ag-108m	3.817E-02	1.716E-02	3.181E-02
Am-241	ND	1.176E+00	1.236E+00
Co-60	3.210E-01	4.881E-02	5.017E-02
Cs-134	7.352E-03	6.710E-03	4.591E-02
Cs-137	6.668E-01	8.069E-02	5.241E-02
Eu-152	ND	1.123E-01	1.610E-01
Eu-154	ND	8.002E-02	1.144E-01
Eu-155	ND	1.663E-01	2.349E-01
Nb-94	ND	2.914E-02	4.318E-02
Sb-125	9.982E-02	7.528E-02	1.223E-01
NOL-06-01-006-F			
Ag-108m	ND	3.473E-02	5.429E-02
Am-241	ND	5.070E-01	7.238E-01
Co-60	5.467E-02	5.007E-02	6.483E-02
Cs-134	ND	4.510E-02	6.446E-02
Cs-137	1.585E-01	6.624E-02	6.498E-02
Eu-152	ND	1.672E-01	1.836E-01
Eu-154	ND	1.656E-01	1.281E-01
Eu-155	ND	2.086E-01	2.984E-01
Nb-94	ND	3.437E-02	5.427E-02
Sb-125	1.115E-01	8.232E-02	1.424E-01
NOL-06-01-007-F			
Ag-108m	ND	3.426E-02	4.984E-02
Am-241	ND	1.064E+00	1.171E+00

Table 4
Summary of Radiological
Analytical Results for Soil
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Rowe, MA

Radionuclide	Activity	Critical Level	MDC
Co-60	1.011E-01	3.599E-02	4.370E-02
Cs-134	ND	2.531E-02	3.718E-02
Cs-137	1.992E-01	5.256E-02	4.806E-02
Eu-152	ND	1.080E-01	1.549E-01
Eu-154	ND	7.570E-02	1.093E-01
Eu-155	1.884E-01	1.703E-01	2.373E-01
Nb-94	ND	2.092E-02	3.072E-02
Sb-125	6.982E-02	5.891E-02	1.174E-01
NOL-06-01-008-F			
Ag-108m	ND	3.519E-02	5.183E-02
Am-241	ND	4.760E-01	6.899E-01
Co-60	ND	3.390E-02	5.346E-02
Cs-134	ND	2.295E-02	3.622E-02
Cs-137	9.595E-02	6.543E-02	6.184E-02
Eu-152	ND	1.199E-01	1.591E-01
Eu-154	ND	8.317E-02	1.172E-01
Eu-155	ND	1.777E-01	2.525E-01
Nb-94	ND	3.451E-02	5.325E-02
Sb-125	4.246E-02	4.125E-02	1.349E-01
NOL-06-01-009-F			
Ag-108m	ND	3.175E-02	4.637E-02
Am-241	ND	8.187E-01	1.155E+00
Co-60	ND	2.330E-02	3.658E-02
Cs-137	9.566E-02	4.620E-02	4.554E-02
Eu-152	ND	9.721E-02	1.397E-01
Eu-154	ND	7.064E-02	1.015E-01
Eu-155	ND	1.545E-01	2.227E-01
Nb-94	ND	2.123E-02	3.149E-02
Sb-125	8.200E-02	5.625E-02	1.079E-01
NOL-06-01-010-F			
Ag-108m	ND	4.056E-02	5.934E-02
Am-241	ND	4.945E-01	7.140E-01
Co-60	ND	6.539E-03	6.669E-02
Cs-134	ND	3.871E-02	5.550E-02
Cs-137	ND	4.681E-02	6.623E-02
Eu-152	ND	1.063E-01	1.543E-01
Eu-154	ND	7.684E-02	1.107E-01
Eu-155	ND	1.838E-01	2.620E-01
Nb-94	ND	3.298E-02	5.158E-02
Sb-125	ND	8.277E-02	1.192E-01
NOL-06-01-011-F			
Ag-108m	ND	3.266E-02	4.670E-02
Am-241	ND	7.063E-01	1.015E+00
Co-60	ND	2.584E-02	3.805E-02
Cs-134	1.779E-02	1.103E-02	3.988E-02
Cs-137	6.094E-02	2.888E-02	3.360E-02
Eu-152	6.922E-02	6.157E-02	1.441E-01
Eu-154	ND	7.261E-02	1.044E-01
Eu-155	ND	1.625E-01	2.279E-01
Nb-94	ND	1.830E-02	2.651E-02
Sb-125	9.008E-02	6.389E-02	9.525E-02
NOL-06-01-012-F			
Ag-108m	ND	2.636E-02	3.902E-02
Am-241	ND	6.759E-01	9.450E-01
Co-60	ND	2.778E-02	2.607E-02
Cs-134	ND	2.812E-02	3.953E-02
Cs-137	ND	2.581E-02	3.676E-02
Eu-152	ND	1.156E-01	1.483E-01
Eu-154	ND	6.627E-02	9.492E-02
Eu-155	ND	1.641E-01	2.311E-01
Nb-94	ND	2.350E-02	3.492E-02
Sb-125	1.175E-01	6.705E-02	8.328E-02
NOL-06-01-013-F			
Ag-108m	ND	2.415E-02	3.708E-02
Am-241	ND	4.801E-01	6.889E-01
Co-60	ND	2.734E-02	4.585E-02
Cs-134	ND	1.771E-02	2.861E-02
Cs-137	NA	0.000E+00	4.462E-02
Eu-152	ND	9.637E-01	1.467E-01
Eu-154	ND	7.717E-02	1.115E-01
Eu-155	ND	1.750E-01	2.512E-01
Nb-94	ND	2.228E-02	3.469E-02
Sb-125	ND	3.571E-01	8.369E-02

Table 4
Summary of Radiological
Analytical Results for Soil
Yankee Nuclear Power Station
Rowe, MA

Radionuclide	Activity	Critical Level	MDC
NOL-06-01-014-F			
Ag-108m	3.196E-02	2.327E-02	2.654E-02
Am-241	ND	5.158E-01	7.441E-01
Co-60	ND	4.352E-02	6.446E-02
Cs-134	ND	3.818E-02	5.693E-02
Cs-137	ND	4.608E-02	6.297E-02
Eu-152	ND	1.210E-01	1.753E-01
Eu-154	ND	8.059E-02	1.094E-01
Eu-155	ND	6.690E-01	2.844E-01
Nb-94	ND	3.467E-02	5.257E-02
Sb-125	ND	9.796E-02	1.445E-01
NOL-06-01-015-F-SD			
Ag-108m	ND	2.585E-02	3.666E-02
Am-241	ND	1.348E-01	1.830E-01
Co-60	ND	1.651E-01	3.384E-02
Cs-134	1.159E-02	7.325E-03	2.724E-02
Cs-137	1.485E-01	3.541E-02	3.126E-02
Eu-152	ND	5.139E-02	7.257E-02
Eu-154	ND	4.709E-02	6.659E-02
Eu-155	9.230E-02	8.592E-02	1.198E-01
Nb-94	ND	1.738E-02	2.443E-02
Sb-125	7.396E-02	5.118E-02	7.038E-02
NOL-06-01-016-F			
Ag-108m	ND	2.291E-02	3.652E-02
Am-241	ND	4.893E-01	7.022E-01
Co-60	ND	8.620E-02	6.370E-02
Cs-134	ND	4.116E-02	5.929E-02
Cs-137	ND	3.508E-02	5.175E-02
Eu-152	ND	1.617E-01	1.602E-01
Eu-154	ND	8.501E-02	1.225E-01
Eu-155	ND	1.786E-01	2.538E-01
Nb-94	ND	2.929E-02	4.181E-02
Sb-125	1.020E-01	9.427E-02	1.460E-01
NOL-06-01-017-F			
Ag-108m	ND	2.697E-02	4.007E-02
Am-241	ND	6.421E-01	8.954E-01
Co-60	9.180E-02	3.006E-02	3.529E-02
Cs-134	ND	2.346E-02	3.477E-02
Cs-137	1.210E-01	3.631E-02	3.505E-02
Eu-152	5.634E-02	4.828E-02	1.492E-01
Eu-154	ND	7.836E-02	1.116E-01
Eu-155	ND	1.653E-01	2.338E-01
Nb-94	ND	2.236E-02	3.313E-02
Sb-125	7.957E-02	4.681E-02	1.121E-01
NOL-06-01-018-F			
Ag-108m	ND	4.011E-02	5.937E-02
Am-241	ND	1.350E+00	1.528E+00
Co-60	ND	1.641E+00	6.818E-02
Cs-134	ND	8.397E-02	1.220E-01
Cs-137	4.502E-01	8.706E-02	6.520E-02
Eu-152	ND	1.265E-01	1.799E-01
Eu-154	ND	8.616E-02	1.228E-01
Eu-155	ND	2.178E-01	3.135E-01
Nb-94	ND	3.369E-02	5.261E-02
Sb-125	ND	9.149E-02	1.314E-01
NOL-06-01-019-F			
Ag-108m	NA	0.000E+00	1.090E-01
Am-241	ND	7.233E-01	1.050E+00
Co-60	ND	8.455E-02	1.237E-01
Cs-134	ND	7.535E-02	1.135E-01
Cs-137	3.833E-01	1.241E-01	1.022E-01
Eu-152	ND	1.409E-01	2.061E-01
Eu-155	ND	9.943E-01	2.942E-01
Nb-94	ND	5.843E-02	9.159E-02
Sb-125	ND	1.532E-01	2.251E-01
NOL-06-01-020-F			
Ag-108m	ND	4.253E-02	6.244E-02
Am-241	ND	1.053E+00	1.484E+00
Co-60	ND	2.970E-01	8.884E-02
Cs-134	ND	3.453E-02	5.248E-02
Cs-137	3.244E-01	7.677E-02	6.263E-02
Eu-152	ND	1.324E-01	1.927E-01
Eu-154	ND	1.012E-01	1.464E-01

Table 4
Summary of Radiological
Analytical Results for Soil
Yankee Nuclear Power Station
Rowe, MA

Radionuclide	Activity	Critical Level	MDC
Eu-155	ND	2.323E-01	3.281E-01
Nb-94	ND	3.550E-02	5.202E-02
Sb-125	ND	9.845E-02	1.417E-01
NOL-06-02-001-F			
Ag-108m	ND	3.018E-02	4.273E-02
Am-241	ND	2.227E-01	2.388E-01
Co-60	ND	9.171E-02	2.889E-02
Cs-134	1.603E-02	1.159E-02	3.184E-02
Cs-137	ND	4.736E-02	3.304E-02
Eu-152	ND	8.203E-02	1.085E-01
Eu-154	ND	5.499E-02	7.900E-02
Eu-155	ND	9.680E-02	1.364E-01
Nb-94	ND	1.687E-02	2.463E-02
Sb-125	7.440E-02	4.350E-02	8.604E-02
NOL-06-02-002-F			
Ag-108m	ND	2.353E-02	3.442E-02
Am-241	ND	9.603E-01	1.171E+00
Co-60	ND	2.345E-02	3.615E-02
Cs-134	1.845E-02	1.290E-02	3.500E-02
Cs-137	ND	4.988E-02	4.528E-02
Eu-152	ND	1.035E-01	1.491E-01
Eu-154	ND	7.257E-02	1.045E-01
Eu-155	ND	1.724E-01	2.482E-01
Nb-94	ND	1.952E-02	2.905E-02
Sb-125	1.157E-01	8.421E-02	1.008E-01
NOL-06-02-003-F			
Ag-108m	ND	2.178E-02	3.243E-02
Am-241	ND	6.315E-01	9.071E-01
Co-60	ND	6.111E-02	3.885E-02
Cs-134	1.630E-02	1.309E-02	3.029E-02
Cs-137	ND	3.659E-02	4.310E-02
Eu-152	ND	1.093E-01	1.483E-01
Eu-154	ND	8.052E-02	1.149E-01
Eu-155	ND	1.823E-01	2.617E-01
Nb-94	ND	1.847E-02	2.835E-02
Sb-125	1.314E-01	6.820E-02	1.041E-01
NOL-06-02-004-F			
Ag-108m	ND	3.180E-02	4.912E-02
Am-241	ND	2.317E-01	3.110E-01
Co-60	ND	4.395E-02	5.726E-02
Cs-134	ND	4.552E-02	6.104E-02
Cs-137	ND	4.370E-02	6.249E-02
Eu-152	ND	1.531E-01	1.451E-01
Eu-154	ND	1.496E-01	9.910E-02
Eu-155	1.598E-01	1.255E-01	1.744E-01
Nb-94	ND	3.432E-02	5.283E-02
Sb-125	1.531E-01	1.109E-01	1.190E-01
NOL-06-02-005-F			
Ag-108m	ND	4.185E-02	6.258E-02
Am-241	ND	2.122E-01	2.868E-01
Co-60	ND	3.336E-02	4.646E-02
Cs-134	1.721E-02	1.148E-02	5.702E-02
Cs-137	ND	8.473E-02	5.253E-02
Eu-152	1.377E-01	1.186E-01	1.283E-01
Eu-154	ND	7.391E-02	1.061E-01
Eu-155	ND	1.213E-01	1.737E-01
Nb-94	ND	1.053E-02	5.960E-02
Sb-125	1.096E-01	7.254E-02	9.948E-02
NOL-06-02-006-F			
Ag-108m	ND	2.340E-02	3.468E-02
Am-241	ND	6.709E-01	9.649E-01
Co-60	ND	4.599E-02	3.635E-02
Cs-134	2.469E-02	1.359E-02	2.809E-02
Cs-137	ND	2.235E-02	3.322E-02
Eu-152	1.031E-01	5.512E-02	1.355E-01
Eu-154	ND	6.687E-02	9.521E-02
Eu-155	ND	1.496E-01	2.146E-01
Nb-94	ND	1.918E-02	2.689E-02
Sb-125	4.744E-02	3.331E-02	1.040E-01
NOL-06-02-007-F			
Ag-108m	ND	2.767E-02	4.016E-02
Am-241	ND	6.997E-01	1.014E+00
Co-60	ND	5.188E-02	3.897E-02

Table 4
Summary of Radiological
Analytical Results for Soil
Yankee Nuclear Power Station
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Radionuclide	Activity	Critical Level	MDC
Cs-134	2.048E-02	1.191E-02	3.752E-02
Cs-137	3.297E-02	2.692E-02	3.635E-02
Eu-152	ND	1.663E-01	1.349E-01
Eu-154	ND	8.064E-02	1.151E-01
Eu-155	ND	1.702E-01	2.412E-01
Nb-94	ND	2.197E-02	3.288E-02
Sb-125	9.407E-02	6.024E-02	1.105E-01
NOL-06-02-008-F			
Ag-108m	ND	3.862E-02	5.777E-02
Am-241	ND	2.168E-01	3.114E-01
Co-60	ND	3.671E-02	5.249E-02
Cs-134	2.936E-02	1.549E-02	9.529E-02
Cs-137	ND	3.231E-02	4.695E-02
Eu-152	ND	2.448E-01	1.379E-01
Eu-154	ND	7.320E-02	1.051E-01
Eu-155	ND	9.583E-02	1.382E-01
Nb-94	ND	3.374E-02	4.983E-02
Sb-125	6.226E-02	5.240E-02	1.364E-01
NOL-06-02-009-F			
Ag-108m	ND	3.846E-02	5.699E-02
Am-241	ND	5.192E-01	7.459E-01
Co-60	ND	3.870E-02	6.082E-02
Cs-134	ND	3.185E-02	4.570E-02
Cs-137	ND	3.607E-02	5.462E-02
Eu-152	ND	1.536E-01	1.819E-01
Eu-154	ND	9.322E-02	1.334E-01
Eu-155	ND	2.159E-01	2.713E-01
Nb-94	ND	3.358E-02	5.167E-02
Sb-125	9.158E-02	8.835E-02	1.724E-01
NOL-06-02-010-F			
Ag-108m	ND	3.742E-02	5.733E-02
Am-241	ND	4.804E-01	6.915E-01
Co-60	ND	8.670E-03	8.583E-02
Cs-134	ND	3.403E-02	5.090E-02
Cs-137	ND	4.179E-02	6.105E-02
Eu-152	ND	1.283E-01	1.742E-01
Eu-154	ND	8.377E-02	1.178E-01
Eu-155	ND	1.878E-01	2.666E-01
Nb-94	ND	3.667E-02	5.633E-02
Sb-125	ND	1.428E-01	1.505E-01
NOL-06-02-011-F			
Ag-108m	ND	2.117E-02	3.340E-02
Am-241	ND	1.992E-01	2.873E-01
Co-60	ND	3.758E-02	5.435E-02
Cs-134	ND	3.716E-02	4.886E-02
Cs-137	ND	2.742E-02	3.972E-02
Eu-152	ND	9.661E-02	1.382E-01
Eu-154	ND	7.230E-02	8.630E-02
Eu-155	ND	1.150E-01	1.618E-01
Nb-94	ND	3.542E-02	5.050E-02
Sb-125	ND	1.854E-01	1.275E-01
NOL-06-02-012-F			
Ag-108m	ND	3.300E-02	4.784E-02
Am-241	ND	3.318E-01	3.402E-01
Co-60	5.332E-02	3.695E-02	6.228E-02
Cs-134	ND	2.826E-02	4.229E-02
Cs-137	1.213E-01	5.883E-02	
Eu-152	ND	1.231E-01	1.656E-01
Eu-154	ND	8.290E-02	1.116E-01
Eu-155	ND	1.342E-01	1.882E-01
Nb-94	ND	3.820E-02	5.460E-02
Sb-125	1.187E-01	8.851E-02	1.414E-01
NOL-06-02-013-F			
Ag-108m	ND	3.160E-02	4.627E-02
Am-241	ND	9.199E-01	1.125E+00
Co-60	ND	2.537E-02	3.951E-02
Cs-134	3.773E-02	1.790E-02	2.074E-02
Cs-137	6.281E-02	3.032E-02	
Eu-152	ND	2.144E-01	1.619E-01
Eu-154	ND	8.337E-02	1.202E-01
Eu-155	ND	1.922E-01	2.732E-01
Nb-94	ND	1.969E-02	2.974E-02
Sb-125	6.502E-02	5.759E-02	1.228E-01

Table 4
Summary of Radiological
Analytical Results for Soil
Yankee Nuclear Power Station
Rowe, MA

Radionuclide	Activity	Critical Level	MDC
C-14	2.200E-01	1.911E-01	2.730E-01
Cm-243	ND	9.623E-02	1.650E-01
Fe-55	ND	1.158E+01	1.640E+01
H-3	ND	5.522E+00	8.620E+00
Nb-95	1.710E-02	7.689E-03	2.160E-02
Ni-63	ND	5.254E+00	8.230E+00
Pu-238	ND	7.701E-02	2.580E-01
Pu-239	ND	4.567E-02	1.310E-01
Pu-241	ND	7.060E+00	1.040E+01
Sr-90	ND	2.575E-02	4.800E-02
Tc-99	ND	2.365E-01	3.580E-01
U-235	ND	4.730E-02	1.730E-01
U-238	ND	4.835E-01	1.400E+00
NOL-06-02-014-F			
Ag-108m	ND	2.357E-02	3.447E-02
Am-241	ND	1.470E-01	2.112E-01
Co-60	ND	2.211E-02	3.302E-02
Cs-134	ND	2.455E-02	3.359E-02
Cs-137	ND	2.280E-02	3.269E-02
Eu-152	ND	7.287E-02	1.001E-01
Eu-154	ND	5.173E-02	7.353E-02
Eu-155	ND	9.105E-02	1.283E-01
Nb-94	6.440E-03	6.102E-03	2.949E-02
Sb-125	6.824E-02	4.554E-02	6.926E-02
NOL-06-02-015-F			
Ag-108m	ND	4.314E-02	6.192E-02
Am-241	ND	2.215E-01	2.934E-01
Co-60	ND	3.099E-02	4.562E-02
Cs-134	ND	4.407E-02	5.951E-02
Cs-137	ND	3.355E-02	4.757E-02
Eu-152	ND	1.075E-01	1.464E-01
Eu-154	ND	8.478E-02	1.108E-01
Eu-155	ND	1.002E-01	1.429E-01
Nb-94	ND	2.882E-02	4.165E-02
Sb-125	1.015E-01	6.922E-02	1.315E-01
C-14	ND	1.992E-01	2.980E-01
Cm-243	ND	1.375E-01	2.520E-01
Fe-55	ND	1.212E+01	1.740E+01
H-3	ND	5.347E+00	8.230E+00
Nb-95	ND	8.073E-03	2.030E-02
Ni-63	ND	5.068E+00	7.700E+00
Pu-238	ND	1.643E-01	4.370E-01
Pu-239	ND	1.012E-01	2.810E-01
Pu-241	ND	8.493E+00	1.240E+01
Sr-90	ND	1.748E-02	3.680E-02
Tc-99	ND	2.283E-01	3.330E-01
U-235	ND	6.303E-02	1.690E-01
U-238	ND	5.767E-01	1.380E+00
NOL-06-02-016-F			
Ag-108m	ND	2.690E-02	3.991E-02
Am-241	ND	7.693E-01	1.112E+00
Co-60	ND	2.476E-02	3.477E-02
Cs-134	2.049E-02	1.554E-02	3.873E-02
Cs-137	5.218E-02	3.331E-02	4.427E-02
Eu-152	ND	9.913E-02	1.414E-01
Eu-154	ND	7.745E-02	1.114E-01
Eu-155	ND	1.742E-01	2.500E-01
Nb-94	ND	1.987E-02	2.907E-02
Sb-125	9.463E-02	5.664E-02	1.041E-01
NOL-06-02-017-F			
Ag-108m	ND	1.654E-02	2.555E-02
Am-241	ND	1.014E+00	1.070E+00
Co-60	ND	4.744E-02	3.491E-02
Cs-134	ND	1.416E-02	2.153E-02
Cs-137	ND	2.450E-02	3.588E-02
Eu-152	ND	1.263E-01	1.328E-01
Eu-154	ND	6.472E-02	9.332E-02
Eu-155	ND	1.277E-01	1.842E-01
Nb-94	ND	1.572E-02	2.229E-02
Sb-125	7.942E-02	5.985E-02	8.495E-02
NOL-06-02-018-F			
Ag-108m	ND	3.263E-02	4.663E-02
Am-241	ND	1.420E-01	1.943E-01

Table 4
Summary of Radiological
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Rowe, MA

Radionuclide	Activity	Critical Level	MDC
Co-60	ND	2.656E-02	3.839E-02
Cs-134	1.832E-02	1.152E-02	7.150E-02
Cs-137	ND	2.079E-02	3.021E-02
Eu-152	ND	7.690E-02	1.099E-01
Eu-154	ND	6.151E-02	8.833E-02
Eu-155	1.230E-01	1.057E-01	1.476E-01
Nb-94	ND	5.881E-02	2.868E-02
Sb-125	9.718E-02	5.258E-02	9.069E-02
NOL-06-02-019-F			
Ag-108m	ND	4.539E-02	6.780E-02
Am-241	ND	3.466E-01	5.073E-01
Co-60	ND	3.570E-02	5.481E-02
Cs-134	ND	3.168E-02	4.653E-02
Cs-137	ND	4.740E-02	6.842E-02
Eu-152	ND	1.296E-01	1.653E-01
Eu-154	ND	7.957E-02	1.155E-01
Eu-155	ND	1.902E-01	2.681E-01
Nb-94	ND	4.080E-02	6.276E-02
Sb-125	1.365E-01	7.370E-02	1.324E-01
NOL-06-02-020-F			
Ag-108m	ND	4.110E-02	5.991E-02
Am-241	ND	1.575E-01	2.253E-01
Co-60	ND	2.552E-02	3.611E-02
Cs-134	1.824E-02	1.176E-02	7.403E-02
Cs-137	6.524E-02	4.167E-02	
Eu-152	ND	5.695E-02	7.986E-02
Eu-154	ND	6.094E-02	7.832E-02
Eu-155	1.009E-01	9.969E-02	1.398E-01
Nb-94	ND	1.816E-02	2.586E-02
Sb-125	4.935E-02	3.668E-02	9.341E-02
NOL-06-03-001-F			
Ag-108m	ND	2.831E-02	4.160E-02
Am-241	ND	7.828E-01	1.124E+00
Co-60	ND	2.579E-02	3.681E-02
Cs-134	1.230E-02	8.687E-03	3.725E-02
Cs-137	ND	2.571E-02	3.819E-02
Eu-152	ND	1.041E-01	1.500E-01
Eu-154	ND	7.513E-02	1.080E-01
Eu-155	ND	1.724E-01	2.475E-01
Nb-94	ND	1.932E-02	2.947E-02
Sb-125	1.379E-01	6.569E-02	9.930E-02
NOL-06-03-002-F			
Ag-108m	ND	4.833E-02	7.078E-02
Am-241	ND	8.739E-01	1.257E+00
Co-60	8.431E-01	7.255E-02	4.388E-02
Cs-134	ND	5.341E-02	7.741E-02
Cs-137	6.008E-01	7.513E-02	5.294E-02
Eu-152	ND	1.198E-01	1.717E-01
Eu-154	ND	9.098E-02	1.310E-01
Eu-155	ND	1.804E-01	2.554E-01
Nb-94	ND	3.629E-02	5.386E-02
Sb-125	8.659E-02	7.260E-02	1.235E-01
NOL-06-03-003-F			
Ag-108m	ND	3.959E-02	5.902E-02
Am-241	ND	4.817E-01	6.950E-01
Co-60	1.446E-01	5.687E-02	5.534E-02
Cs-134	8.346E-03	7.416E-03	5.761E-02
Cs-137	1.275E-01	7.046E-02	7.080E-02
Eu-152	ND	1.254E-01	1.807E-01
Eu-154	ND	9.649E-02	1.336E-01
Eu-155	ND	1.808E-01	2.611E-01
Nb-94	ND	3.104E-02	4.838E-02
Sb-125	1.323E-01	7.153E-02	1.621E-01
NOL-06-03-004-F			
Ag-108m	ND	2.906E-02	4.274E-02
Am-241	ND	7.320E-01	1.055E+00
Co-60	ND	2.375E-02	3.660E-02
Cs-134	2.133E-02	1.239E-02	2.199E-02
Cs-137	ND	2.914E-02	4.246E-02
Eu-152	ND	1.073E-01	1.446E-01
Eu-154	ND	6.801E-02	9.807E-02
Eu-155	ND	1.794E-01	2.574E-01
Nb-94	ND	2.394E-02	3.537E-02

Table 4
Summary of Radiological
Analytical Results for Soil
Yankee Nuclear Power Station
Rowe, MA

Radionuclide	Activity	Critical Level	MDC
Sb-125	7.985E-02	4.738E-02	1.015E-01
NOL-06-03-005-F			
Ag-108m	ND	4.266E-02	6.241E-02
Am-241	ND	7.857E-01	1.132E+00
Co-60	3.024E-01	4.065E-02	3.896E-02
Cs-134	1.133E-02	7.885E-03	4.219E-02
Cs-137	3.921E-01	5.716E-02	4.287E-02
Eu-152	ND	1.036E-01	1.493E-01
Eu-154	ND	6.105E-02	8.800E-02
Eu-155	NA	0.000E+00	2.414E-01
Nb-94	ND	2.423E-02	3.584E-02
Sb-125	1.178E-01	8.626E-02	9.944E-02
C-14	1.270E-01	1.060E-01	1.510E-01
Cm-243	ND	5.942E-02	1.360E-01
Fe-55	ND	2.703E+00	3.160E+00
H-3	ND	5.056E+00	7.540E+00
Nb-95	ND	9.670E-02	7.860E-02
Ni-63	ND	1.922E+00	3.360E+00
Pu-238	ND	8.295E-02	1.600E-01
Pu-239	ND	3.973E-02	1.370E-01
Pu-241	ND	6.675E+00	9.960E+00
Sr-90	ND	2.085E-02	3.650E-02
Tc-99	ND	2.388E-01	3.520E-01
U-235	9.750E-02	7.980E-02	8.940E-02
U-238	3.860E-01	2.493E-01	2.170E-01
NOL-06-03-006-F			
Ag-108m	ND	4.575E-02	6.719E-02
Am-241	ND	3.723E-01	5.378E-01
Co-60	ND	3.547E-02	5.123E-02
Cs-134	1.448E-02	1.265E-02	5.747E-02
Cs-137	ND	3.941E-02	5.783E-02
Eu-152	ND	1.353E-01	1.850E-01
Eu-154	ND	1.240E-01	1.290E-01
Eu-155	ND	1.774E-01	2.517E-01
Nb-94	ND	2.949E-02	4.528E-02
Sb-125	7.250E-02	6.607E-02	1.385E-01
C-14	ND	1.075E-01	1.570E-01
Cm-243	ND	5.860E-02	1.190E-01
Fe-55	ND	6.396E+00	7.620E+00
H-3	ND	5.033E+00	7.960E+00
Nb-95	ND	7.200E-02	1.050E-01
Ni-63	ND	2.097E+00	3.770E+00
Pu-238	ND	5.942E-02	2.390E-01
Pu-239	ND	2.132E-02	1.320E-01
Pu-241	ND	4.811E+00	7.260E+00
Sr-90	ND	1.852E-02	3.780E-02
Tc-99	ND	2.447E-01	3.610E-01
U-235	1.380E-01	1.163E-01	1.970E-01
U-238	ND	1.152E+00	1.130E+00
NOL-06-03-007-F			
Ag-108m	ND	4.179E-02	6.287E-02
Am-241	ND	5.196E-01	7.426E-01
Co-60	5.045E-02	4.558E-02	5.987E-02
Cs-134	3.904E-02	2.137E-02	1.124E-01
Cs-137	1.953E-01	8.714E-02	8.204E-02
Eu-152	ND	2.591E-01	1.847E-01
Eu-154	ND	9.974E-02	1.311E-01
Eu-155	ND	2.008E-01	2.828E-01
Nb-94	ND	3.454E-02	4.964E-02
Sb-125	9.850E-02	8.473E-02	1.597E-01
NOL-06-03-008-F			
Ag-108m	ND	2.434E-02	3.515E-02
Am-241	ND	7.804E-01	1.124E+00
Co-60	7.743E-02	3.384E-02	3.651E-02
Cs-134	1.951E-02	1.485E-02	8.411E-02
Cs-137	2.032E-01	5.899E-02	5.330E-02
Eu-152	1.211E-01	7.731E-02	1.389E-01
Eu-154	ND	8.133E-02	1.165E-01
Eu-155	ND	1.686E-01	2.417E-01
Nb-94	ND	2.224E-02	3.358E-02
Sb-125	ND	7.625E-02	1.099E-01
NOL-06-03-009-F			
Ag-108m	ND	3.907E-02	5.648E-02

Table 4
Summary of Radiological
Analytical Results for Soil
Yankee Nuclear Power Station
Rowe, MA

Radionuclide	Activity	Critical Level	MDC
Am-241	ND	8.992E-01	1.285E+00
Co-60	1.363E+00	9.432E-02	4.806E-02
Cs-134	2.187E-02	1.963E-02	4.825E-02
Cs-137	3.333E-01	6.857E-02	6.126E-02
Eu-152	ND	1.163E-01	1.576E-01
Eu-154	ND	8.800E-02	1.256E-01
Eu-155	ND	1.869E-01	2.651E-01
Nb-94	ND	3.662E-02	5.281E-02
Sb-125	9.717E-02	6.902E-02	1.459E-01
NOL-06-03-010-F			
Ag-108m	ND	5.610E-02	8.085E-02
Am-241	ND	5.303E-01	7.609E-01
Co-60	ND	4.887E-02	7.083E-02
Cs-134	2.767E-02	2.201E-02	5.185E-02
Cs-137	1.109E-01	6.621E-02	7.152E-02
Eu-152	ND	1.517E-01	2.183E-01
Eu-154	ND	9.692E-02	1.392E-01
Eu-155	ND	2.087E-01	2.997E-01
Nb-94	ND	4.545E-02	6.877E-02
Sb-125	6.640E-02	6.381E-02	1.562E-01
NOL-06-03-011-F			
Ag-108m	ND	4.361E-02	6.355E-02
Am-241	ND	7.793E-01	1.088E+00
Co-60	2.883E-02	2.008E-02	2.542E-02
Cs-134	2.898E-02	1.456E-02	2.445E-02
Cs-137	6.184E-02	3.516E-02	3.966E-02
Eu-152	1.296E-01	8.683E-02	1.405E-01
Eu-154	ND	7.325E-02	1.045E-01
Eu-155	ND	1.619E-01	2.276E-01
Nb-94	ND	1.993E-02	2.919E-02
Sb-125	9.905E-02	7.341E-02	9.755E-02
C-14	ND	1.030E-01	1.490E-01
Cm-243	ND	6.967E-02	1.400E-01
Fe-55	ND	6.209E+00	7.500E+00
H-3	ND	4.532E+00	7.060E+00
Nb-95	1.500E-01	1.002E-01	1.670E-01
Ni-63	ND	1.887E+00	3.310E+00
Pu-238	ND	3.227E-02	9.250E-02
Pu-239	ND	1.701E-02	1.050E-01
Pu-241	ND	5.208E+00	7.820E+00
Sr-90	ND	1.561E-02	3.760E-02
Tc-99	ND	2.493E-01	3.660E-01
U-235	ND	2.132E-01	2.210E-01
U-238	ND	6.617E-01	6.030E-01
NOL-06-03-012-F			
Ag-108m	ND	3.983E-02	6.066E-02
Am-241	ND	5.424E-01	7.783E-01
Co-60	6.794E-02	4.219E-02	6.775E-02
Cs-134	2.941E-02	1.999E-02	5.615E-02
Cs-137	1.854E-01	7.118E-02	6.401E-02
Eu-152	ND	1.883E-01	1.908E-01
Eu-154	ND	1.487E-01	1.470E-01
Eu-155	ND	2.032E-01	2.865E-01
Nb-94	ND	3.996E-02	6.100E-02
Sb-125	9.253E-02	7.613E-02	1.794E-01
NOL-06-03-013-F			
Ag-108m	ND	3.451E-02	4.919E-02
Am-241	ND	5.336E-01	7.640E-01
Co-60	4.798E-02	4.417E-02	5.787E-02
Cs-134	2.877E-02	1.997E-02	6.319E-02
Cs-137	7.469E-02	5.773E-02	6.622E-02
Eu-152	ND	1.434E-01	1.974E-01
Eu-154	ND	1.054E-01	1.486E-01
Eu-155	ND	4.546E-01	3.221E-01
Nb-94	ND	3.526E-02	5.375E-02
Sb-125	1.075E-01	8.686E-02	1.567E-01
C-14	ND	1.044E-01	1.500E-01
Cm-243	ND	5.697E-02	2.060E-01
Fe-55	ND	3.751E+00	4.580E+00
H-3	ND	5.557E+00	7.980E+00
Nb-95	ND	8.644E-02	1.150E-01
Ni-63	ND	1.724E+00	2.570E+00
Pu-238	ND	1.305E-01	3.210E-01
Pu-239	ND	1.270E-01	2.870E-01

Table 4
Summary of Radiological
Analytical Results for Soil
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Radionuclide	Activity	Critical Level	MDC
Pu-241	ND	5.860E+00	8.710E+00
Sr-90	ND	1.957E-02	4.900E-02
Tc-99	ND	2.458E-01	3.540E-01
U-235	ND	1.316E-01	1.550E-01
U-238	5.460E-01	3.274E-01	3.620E-01
NOL-06-03-014-F			
Ag-108m	ND	3.030E-02	4.481E-02
Am-241	ND	7.893E-01	1.127E+00
Co-60	ND	2.435E-02	3.521E-02
Cs-134	1.940E-02	1.389E-02	4.271E-02
Cs-137	ND	2.771E-02	3.834E-02
Eu-152	8.020E-02	5.601E-02	1.477E-01
Eu-154	ND	6.917E-02	9.892E-02
Eu-155	ND	1.522E-01	2.161E-01
Nb-94	ND	2.381E-02	3.450E-02
Sb-125	1.249E-01	7.847E-02	9.290E-02
NOL-06-03-015-F			
Ag-108m	ND	2.441E-02	3.571E-02
Am-241	ND	4.574E-01	6.607E-01
Co-60	ND	3.891E-02	5.872E-02
Cs-134	4.212E-02	2.204E-02	2.384E-02
Cs-137	ND	4.085E-02	6.140E-02
Eu-152	ND	1.122E-01	1.614E-01
Eu-154	ND	3.404E-02	1.197E-01
Eu-155	ND	1.746E-01	2.455E-01
Nb-94	ND	3.317E-02	5.084E-02
Sb-125	1.042E-01	8.968E-02	1.234E-01
OMB-06-02-001-F-CR			
Ag-108m	ND	4.356E-02	6.372E-02
Am-241	ND	4.279E-01	6.209E-01
Co-60	ND	3.256E-02	5.058E-02
Cs-134	ND	3.380E-02	4.880E-02
Cs-137	ND	3.665E-02	5.560E-02
Eu-152	ND	1.110E-01	1.454E-01
Eu-154	ND	5.640E-02	8.195E-02
Eu-155	ND	1.660E-01	2.353E-01
Nb-94	NA	0.000E+00	4.735E-02
Sb-125	ND	8.284E-02	1.244E-01
OOL-02-01-001-F			
Ag-108m	ND	5.275E-02	7.743E-02
Am-241	ND	5.139E-01	7.380E-01
Co-60	4.278E-01	1.009E-01	6.208E-02
Cs-134	ND	8.056E-02	1.175E-01
Cs-137	3.998E-01	8.508E-02	6.991E-02
Eu-152	ND	1.177E-01	1.703E-01
Eu-154	ND	8.382E-02	1.211E-01
Eu-155	ND	1.801E-01	2.531E-01
Nb-94	ND	5.078E-02	7.529E-02
Sb-125	ND	9.724E-02	1.438E-01
OOL-02-01-002-F			
Ag-108m	ND	3.576E-02	5.058E-02
Am-241	ND	6.712E-01	9.577E-01
Co-60	4.018E-02	1.974E-02	3.116E-02
Cs-134	1.613E-02	1.380E-02	9.789E-02
Cs-137	7.081E-02	4.543E-02	4.697E-02
Eu-152	ND	1.156E-01	1.539E-01
Eu-154	ND	7.512E-02	1.074E-01
Eu-155	1.755E-01	1.571E-01	2.192E-01
Nb-94	ND	2.470E-02	3.661E-02
Sb-125	9.664E-02	4.697E-02	1.087E-01
OOL-02-01-003-F			
Ag-108m	ND	4.182E-02	6.161E-02
Am-241	ND	4.697E-01	6.763E-01
Co-60	ND	4.483E-02	6.312E-02
Cs-134	ND	2.554E-02	3.903E-02
Cs-137	1.158E-01	5.901E-02	6.156E-02
Eu-152	ND	1.388E-01	1.668E-01
Eu-154	ND	3.411E-02	1.202E-01
Eu-155	ND	1.917E-01	2.689E-01
Nb-94	ND	3.560E-02	5.383E-02
Sb-125	1.011E-01	7.576E-02	1.229E-01
OOL-02-01-004-F			
Ag-108m	ND	3.169E-02	4.634E-02

Table 4
Summary of Radiological
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Radionuclide	Activity	Critical Level	MDC
Am-241	ND	3.841E-02	1.099E+00
Co-60	ND	2.058E-02	3.197E-02
Cs-134	ND	3.238E-02	4.538E-02
Cs-137	ND	4.486E-02	4.195E-02
Eu-152	ND	2.162E-01	1.330E-01
Eu-154	ND	6.424E-02	9.289E-02
Eu-155	ND	1.319E-01	1.904E-01
Nb-94	ND	1.942E-02	2.932E-02
Sb-125	8.158E-02	6.280E-02	1.027E-01
OOL-02-01-005-F			
Ag-108m	ND	3.761E-02	5.291E-02
Am-241	ND	7.176E-01	1.035E+00
Co-60	ND	2.138E-02	3.011E-02
Cs-134	ND	2.966E-02	4.206E-02
Cs-137	ND	2.705E-02	3.819E-02
Eu-152	ND	1.034E-01	1.477E-01
Eu-154	ND	7.120E-02	1.013E-01
Eu-155	ND	1.680E-01	2.414E-01
Nb-94	ND	2.263E-02	3.336E-02
Sb-125	1.079E-01	5.800E-02	1.014E-01
OOL-02-01-006-F			
Ag-108m	ND	1.986E-02	3.018E-02
Am-241	ND	7.421E-01	1.046E+00
Co-60	ND	2.504E-02	3.652E-02
Cs-134	ND	6.510E-02	9.358E-02
Cs-137	ND	2.848E-02	3.996E-02
Eu-152	ND	1.088E-01	1.434E-01
Eu-154	ND	7.614E-02	1.091E-01
Eu-155	ND	1.597E-01	2.248E-01
Nb-94	ND	1.988E-02	2.910E-02
Sb-125	8.068E-02	4.804E-02	1.040E-01
OOL-02-01-007-F			
Ag-108m	ND	4.204E-02	5.913E-02
Am-241	ND	9.533E-01	1.142E+00
Co-60	2.906E-01	5.466E-02	4.007E-02
Cs-134	1.592E-02	1.367E-02	1.013E-01
Cs-137	6.496E-01	6.947E-02	4.360E-02
Eu-152	1.440E-01	9.406E-02	1.537E-01
Eu-154	ND	7.465E-02	1.072E-01
Eu-155	ND	1.684E-01	2.387E-01
Nb-94	ND	2.342E-02	3.325E-02
Sb-125	ND	9.089E-02	1.306E-01
OOL-02-01-008-F			
Ag-108m	NA	0.000E+00	1.013E-01
Am-241	ND	4.696E-01	6.729E-01
Co-60	ND	3.792E-02	5.577E-02
Cs-134	2.931E-02	1.943E-02	4.715E-02
Cs-137	6.421E-02	5.308E-02	6.108E-02
Eu-152	ND	1.308E-01	1.654E-01
Eu-154	ND	8.491E-02	1.175E-01
Eu-155	ND	1.867E-01	2.666E-01
Nb-94	ND	2.988E-02	4.606E-02
Sb-125	ND	2.418E-01	1.520E-01
OOL-02-01-009-F			
Ag-108m	ND	3.503E-02	5.008E-02
Am-241	ND	7.924E-01	1.114E+00
Co-60	ND	2.424E-02	3.690E-02
Cs-134	ND	2.634E-02	3.872E-02
Cs-137	7.676E-02	4.657E-02	4.794E-02
Eu-152	9.266E-02	7.534E-02	1.341E-01
Eu-154	ND	7.386E-02	1.065E-01
Eu-155	ND	1.619E-01	2.270E-01
Nb-94	ND	2.093E-02	3.187E-02
Sb-125	1.003E-01	6.169E-02	1.001E-01
OOL-02-01-010-F			
Ag-108m	ND	4.049E-02	5.653E-02
Am-241	ND	7.449E-01	1.045E+00
Co-60	4.934E-02	2.418E-02	2.728E-02
Cs-134	ND	3.335E-02	4.696E-02
Cs-137	1.100E-01	4.619E-02	4.434E-02
Eu-152	ND	1.078E-01	1.381E-01
Eu-154	ND	6.990E-02	9.998E-02
Eu-155	ND	1.595E-01	2.255E-01

Table 4
Summary of Radiological
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Radionuclide	Activity	Critical Level	MDC
Nb-94	ND	2.255E-02	3.402E-02
Sb-125	6.241E-02	4.307E-02	1.031E-01
OOL-02-01-011-F			
Ag-108m	NA	0.000E+00	1.035E-01
Am-241	ND	5.146E-01	7.402E-01
Co-60	ND	4.447E-02	6.831E-02
Cs-134	ND	4.141E-02	5.969E-02
Cs-137	8.813E-01	1.177E-01	7.431E-02
Eu-152	ND	1.471E-01	1.813E-01
Eu-154	ND	8.980E-02	1.289E-01
Eu-155	ND	9.045E-01	2.840E-01
Nb-94	ND	3.533E-02	5.333E-02
Sb-125	1.354E-01	1.050E-01	1.644E-01
OOL-02-01-012-F			
Ag-108m	ND	3.182E-02	4.551E-02
Am-241	ND	6.639E-01	9.641E-01
Co-60	ND	5.592E-02	4.337E-02
Cs-134	ND	7.187E-02	1.034E-01
Cs-137	ND	2.721E-02	4.072E-02
Eu-152	ND	1.167E-01	1.525E-01
Eu-154	ND	7.777E-02	1.117E-01
Eu-155	ND	1.539E-01	2.213E-01
Nb-94	ND	1.875E-02	2.883E-02
Sb-125	8.101E-02	5.252E-02	1.089E-01
OOL-02-01-013-F			
Ag-108m	ND	3.216E-02	4.631E-02
Am-241	ND	8.315E-01	1.077E+00
Co-60	8.728E-02	3.468E-02	4.459E-02
Cs-134	ND	6.876E-02	9.888E-02
Cs-137	1.034E-01	4.625E-02	4.368E-02
Eu-152	7.786E-02	5.670E-02	1.390E-01
Eu-154	ND	7.338E-02	1.056E-01
Eu-155	1.694E-01	1.606E-01	2.246E-01
Nb-94	ND	2.034E-02	3.000E-02
Sb-125	ND	7.262E-02	1.001E-01
OOL-02-01-014-F			
Ag-108m	ND	3.501E-02	5.343E-02
Am-241	ND	4.363E-01	6.334E-01
Co-60	ND	3.842E-02	5.682E-02
Cs-134	ND	8.062E-02	1.176E-01
Cs-137	ND	3.573E-02	5.301E-02
Eu-152	1.013E-01	9.429E-02	1.475E-01
Eu-154	ND	8.169E-02	1.136E-01
Eu-155	ND	3.846E-01	2.742E-01
Nb-94	ND	2.668E-02	4.150E-02
Sb-125	ND	1.263E-01	1.409E-01
OOL-02-01-015-F			
Ag-108m	ND	2.854E-02	4.137E-02
Am-241	ND	8.007E-01	1.012E+00
Co-60	ND	2.268E-02	3.457E-02
Cs-134	ND	6.007E-02	8.656E-02
Cs-137	2.537E-02	2.524E-02	3.475E-02
Eu-152	ND	1.126E-01	1.331E-01
Eu-154	ND	6.893E-02	9.892E-02
Eu-155	ND	1.544E-01	2.173E-01
Nb-94	ND	2.152E-02	3.207E-02
Sb-125	9.726E-02	5.125E-02	8.804E-02
OOL-02-01-016-F			
Ag-108m	ND	4.016E-02	5.898E-02
Am-241	ND	4.695E-01	6.788E-01
Co-60	ND	3.351E-02	5.447E-02
Cs-134	2.771E-02	1.675E-02	5.335E-02
Cs-137	ND	3.450E-02	5.168E-02
Eu-152	ND	1.475E-01	1.366E-01
Eu-154	ND	4.920E-04	9.918E-02
Eu-155	ND	1.853E-01	2.644E-01
Nb-94	ND	2.913E-02	4.431E-02
Sb-125	1.067E-01	9.959E-02	1.039E-01
OOL-02-01-017-F			
Ag-108m	ND	4.047E-02	6.038E-02
Am-241	ND	4.960E-01	7.115E-01
Co-60	ND	4.667E-02	6.811E-02
Cs-134	2.204E-02	1.961E-02	5.738E-02

Table 4
Summary of Radiological
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Radionuclide	Activity	Critical Level	MDC
Cs-137	ND	3.849E-02	5.367E-02
Eu-152	ND	1.709E-01	1.648E-01
Eu-154	ND	8.389E-02	1.212E-01
Eu-155	ND	1.797E-01	2.548E-01
Nb-94	NA	0.000E+00	6.760E-02
Sb-125	1.115E-01	9.200E-02	1.228E-01
OOL-02-01-018-F			
Ag-108m	ND	4.219E-02	6.329E-02
Am-241	ND	4.157E-01	5.935E-01
Co-60	ND	3.295E-02	5.165E-02
Cs-134	ND	3.261E-02	4.912E-02
Cs-137	ND	3.460E-02	4.920E-02
Eu-152	ND	1.219E-01	1.644E-01
Eu-154	ND	7.820E-02	1.101E-01
Eu-155	ND	1.625E-01	2.298E-01
Nb-94	ND	3.045E-02	4.605E-02
Sb-125	ND	1.232E-01	1.273E-01
OOL-02-01-019-F			
Ag-108m	ND	4.205E-02	6.266E-02
Am-241	ND	4.398E-01	6.332E-01
Co-60	ND	4.041E-02	5.909E-02
Cs-134	ND	7.827E-02	1.139E-01
Cs-137	ND	4.101E-02	5.908E-02
Eu-152	ND	1.116E-01	1.609E-01
Eu-154	ND	7.937E-02	1.150E-01
Eu-155	ND	6.312E-01	2.685E-01
Nb-94	ND	3.549E-02	5.342E-02
Sb-125	ND	2.117E-01	1.584E-01
OOL-02-01-020-F			
Ag-108m	ND	2.087E-02	3.023E-02
Am-241	ND	4.564E-01	6.544E-01
Co-60	ND	3.069E-02	4.917E-02
Cs-134	ND	8.203E-02	1.193E-01
Cs-137	ND	3.850E-02	5.653E-02
Eu-152	ND	1.161E-01	1.460E-01
Eu-154	ND	7.041E-02	1.012E-01
Eu-155	ND	1.706E-01	2.423E-01
Nb-94	ND	2.551E-02	3.984E-02
Sb-125	ND	8.548E-02	1.264E-01
OOL-02-02-001-F			
Ag-108m	ND	3.252E-02	4.727E-02
Am-241	ND	8.032E-01	1.159E+00
Co-60	ND	2.418E-02	3.662E-02
Cs-134	ND	2.918E-02	4.118E-02
Cs-137	ND	3.225E-02	4.659E-02
Eu-152	ND	1.028E-01	1.461E-01
Eu-154	ND	7.018E-02	9.995E-02
Eu-155	ND	1.717E-01	2.413E-01
Nb-94	ND	1.979E-02	2.980E-02
Sb-125	5.873E-02	4.061E-02	1.133E-01
OOL-02-02-002-F			
Ag-108m	ND	2.892E-02	3.971E-02
Am-241	ND	5.660E-01	8.181E-01
Co-60	ND	5.285E-02	8.061E-02
Cs-134	ND	4.400E-02	6.534E-02
Cs-137	ND	3.795E-02	5.593E-02
Eu-152	ND	5.514E-02	1.992E-01
Eu-154	ND	9.185E-02	1.330E-01
Eu-155	ND	2.189E-01	3.115E-01
Nb-94	ND	3.993E-02	6.104E-02
Sb-125	1.843E-01	1.076E-01	1.579E-01
C-14	ND	1.247E-01	1.840E-01
Cm-243	ND	1.021E-01	3.340E-01
Fe-55	ND	1.864E+00	2.500E+00
H-3	ND	7.491E+00	1.200E+01
Nb-95	ND	1.157E-02	2.680E-02
Ni-63	ND	1.782E+00	2.630E+00
Pu-238	ND	4.345E-02	1.070E-01
Pu-239	ND	1.782E-02	1.070E-01
Pu-241	ND	1.114E+01	1.720E+01
Sr-90	ND	2.272E-02	4.270E-02
Tc-99	ND	2.190E-01	3.180E-01
U-235	ND	6.804E-02	2.480E-01

Table 4
Summary of Radiological
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Radionuclide	Activity	Critical Level	MDC
U-238	ND	8.202E-01	2.120E+00
OOL-02-02-003-F			
Ag-108m	ND	3.474E-02	5.218E-02
Am-241	ND	5.021E-01	7.220E-01
Co-60	ND	4.291E-02	6.277E-02
Cs-134	ND	3.134E-02	4.594E-02
Cs-137	ND	3.879E-02	5.741E-02
Eu-152	ND	1.305E-01	1.868E-01
Eu-154	ND	8.539E-02	1.220E-01
Eu-155	ND	1.834E-01	2.582E-01
Nb-94	ND	3.392E-02	5.148E-02
Sb-125	1.088E-01	8.584E-02	1.176E-01
OOL-02-02-004-F			
Ag-108m	ND	2.113E-02	3.190E-02
Am-241	ND	8.619E-01	1.244E+00
Co-60	ND	2.338E-02	3.523E-02
Cs-134	1.122E-02	7.370E-03	3.679E-02
Cs-137	ND	2.916E-02	4.249E-02
Eu-152	1.094E-01	8.950E-02	1.374E-01
Eu-154	ND	6.002E-02	8.655E-02
Eu-155	ND	1.717E-01	2.426E-01
Nb-94	ND	2.507E-02	3.662E-02
Sb-125	1.079E-01	6.590E-02	1.032E-01
OOL-02-02-005-F			
Ag-108m	ND	4.188E-02	6.299E-02
Am-241	ND	4.802E-01	6.924E-01
Co-60	ND	4.293E-02	6.280E-02
Cs-134	ND	2.736E-02	4.156E-02
Cs-137	ND	4.093E-02	6.199E-02
Eu-152	ND	1.352E-01	1.752E-01
Eu-154	ND	9.641E-02	1.339E-01
Eu-155	ND	2.815E-01	2.358E-01
Nb-94	ND	3.091E-02	4.728E-02
Sb-125	1.072E-01	9.325E-02	1.039E-01
OOL-02-02-006-F			
Ag-108m	ND	3.427E-02	4.870E-02
Am-241	ND	7.344E-01	1.031E+00
Co-60	ND	5.796E-01	3.869E-02
Cs-134	1.693E-02	9.129E-03	3.665E-02
Cs-137	ND	2.764E-02	4.069E-02
Eu-152	1.047E-01	6.451E-02	1.445E-01
Eu-154	ND	7.541E-02	1.085E-01
Eu-155	ND	1.745E-01	2.504E-01
Nb-94	ND	2.410E-02	3.555E-02
Sb-125	9.136E-02	5.327E-02	1.032E-01
OOL-02-02-007-F			
Ag-108m	ND	4.421E-02	6.454E-02
Am-241	ND	7.569E-01	1.068E+00
Co-60	ND	7.655E-02	3.495E-02
Cs-134	NA	0.000E+00	6.978E-02
Cs-137	ND	2.473E-02	3.637E-02
Eu-152	6.330E-02	5.105E-02	1.501E-01
Eu-154	ND	7.215E-02	1.034E-01
Eu-155	ND	1.679E-01	2.408E-01
Nb-94	ND	2.083E-02	3.022E-02
Sb-125	1.076E-01	6.513E-02	1.019E-01
OOL-02-02-008-F			
Ag-108m	ND	4.527E-02	6.599E-02
Am-241	ND	8.219E-01	1.184E+00
Co-60	3.319E-02	2.664E-02	3.532E-02
Cs-134	ND	3.037E-02	4.292E-02
Cs-137	1.405E-01	4.134E-02	3.996E-02
Eu-152	1.059E-01	7.648E-02	1.472E-01
Eu-154	ND	7.555E-02	1.083E-01
Eu-155	ND	1.759E-01	2.522E-01
Nb-94	NA	0.000E+00	3.069E-02
Sb-125	5.801E-02	4.048E-02	1.124E-01
OOL-02-02-009-F			
Ag-108m	ND	3.448E-02	5.328E-02
Am-241	ND	5.020E-01	7.147E-01
Co-60	ND	1.034E-02	6.926E-02
Cs-134	ND	2.720E-02	4.107E-02
Cs-137	ND	3.602E-02	5.385E-02

Table 4
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Radionuclide	Activity	Critical Level	MDC
Eu-152	ND	1.419E-01	1.856E-01
Eu-154	ND	1.375E-01	1.356E-01
Eu-155	ND	2.438E-01	2.830E-01
Nb-94	ND	2.674E-02	3.987E-02
Sb-125	1.443E-01	1.302E-01	1.292E-01
OOL-02-02-010-F			
Ag-108m	ND	2.150E-02	3.133E-02
Am-241	ND	7.225E-01	1.020E+00
Co-60	ND	2.401E-02	3.652E-02
Cs-134	1.372E-02	9.136E-03	3.755E-02
Cs-137	ND	2.800E-02	4.123E-02
Eu-152	ND	1.140E-01	1.530E-01
Eu-154	ND	7.269E-02	1.038E-01
Eu-155	ND	1.700E-01	2.396E-01
Nb-94	ND	2.125E-02	3.162E-02
Sb-125	8.525E-02	4.784E-02	1.093E-01
C-14	ND	1.258E-01	1.860E-01
Cm-243	ND	6.675E-02	1.580E-01
Fe-55	ND	1.596E+00	2.090E+00
H-3	ND	6.209E+00	8.780E+00
Nb-95	ND	1.212E-02	3.080E-02
Ni-63	ND	1.689E+00	2.530E+00
Pu-238	ND	4.194E-02	1.500E-01
Pu-239	ND	3.577E-02	1.020E-01
Pu-241	ND	6.699E+00	1.020E+01
Sr-90	ND	2.458E-02	4.270E-02
Tc-99	ND	2.248E-01	3.200E-01
U-235	ND	7.095E-02	2.630E-01
U-238	ND	8.155E-01	2.850E+00
OOL-02-02-011-F			
Ag-108m	ND	2.844E-02	4.131E-02
Am-241	ND	4.597E-01	6.562E-01
Co-60	ND	4.896E-02	6.681E-02
Cs-134	ND	2.970E-02	4.372E-02
Cs-137	ND	3.170E-02	4.693E-02
Eu-152	ND	1.242E-01	1.789E-01
Eu-154	ND	8.934E-02	1.282E-01
Eu-155	ND	1.676E-01	2.016E-01
Nb-94	NA	0.000E+00	3.154E-02
Sb-125	ND	9.264E-02	1.348E-01
OOL-02-02-012-F			
Ag-108m	ND	2.686E-02	3.978E-02
Am-241	ND	8.046E-01	1.136E+00
Co-60	ND	2.160E-02	3.369E-02
Cs-134	2.127E-02	1.243E-02	3.825E-02
Cs-137	ND	2.521E-02	3.683E-02
Eu-152	ND	9.966E-02	1.431E-01
Eu-154	ND	7.200E-02	1.038E-01
Eu-155	ND	1.658E-01	2.379E-01
Nb-94	ND	1.826E-02	2.642E-02
Ag-108m	ND	4.210E-02	6.356E-02
Am-241	ND	4.325E-01	6.261E-01
Co-60	ND	5.247E-02	5.993E-02
Cs-134	ND	3.263E-02	4.901E-02
Cs-137	ND	3.588E-02	5.221E-02
Eu-152	ND	1.379E-01	1.835E-01
Eu-154	ND	9.399E-02	1.321E-01
Eu-155	ND	2.760E-01	2.699E-01
Nb-94	ND	2.989E-02	4.659E-02
Sb-125	7.614E-02	5.776E-02	1.438E-01
OOL-02-02-014-F			
Ag-108m	ND	4.158E-02	6.110E-02
Am-241	ND	4.907E-01	7.117E-01
Co-60	ND	5.260E-02	7.480E-02
Cs-134	2.604E-02	1.973E-02	5.639E-02
Cs-137	ND	3.424E-02	5.015E-02
Eu-152	ND	3.124E-01	1.813E-01
Eu-154	ND	9.775E-02	1.372E-01
Eu-155	ND	2.036E-01	2.919E-01
Nb-94	ND	3.050E-02	4.777E-02
Sb-125	6.126E-02	4.673E-02	1.644E-01
OOL-02-02-015-F			
Ag-108m	ND	3.196E-02	4.557E-02

Table 4
Summary of Radiological
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Radionuclide	Activity	Critical Level	MDC
Am-241	ND	6.791E-01	9.569E-01
Co-60	ND	2.572E-02	3.788E-02
Cs-134	1.955E-02	1.364E-02	5.854E-02
Cs-137	ND	1.262E-01	3.335E-02
Eu-152	ND	1.220E-01	1.510E-01
Eu-154	ND	7.558E-02	1.084E-01
Eu-155	ND	1.687E-01	2.370E-01
Nb-94	ND	1.486E-02	2.294E-02
Sb-125	7.738E-02	4.997E-02	1.093E-01
OOL-02-02-016-F			
Ag-108m	ND	4.057E-02	5.942E-02
Am-241	ND	5.061E-01	7.293E-01
Co-60	ND	4.102E-02	6.336E-02
Cs-134	1.928E-02	1.676E-02	5.247E-02
Cs-137	ND	3.449E-02	4.714E-02
Eu-152	ND	1.296E-01	1.864E-01
Eu-154	ND	1.015E-01	1.427E-01
Eu-155	ND	1.790E-01	2.581E-01
Nb-94	ND	3.431E-02	5.148E-02
Sb-125	8.160E-02	4.952E-02	1.558E-01
OOL-02-02-017-F			
Ag-108m	ND	4.040E-02	6.062E-02
Am-241	ND	3.716E-01	5.321E-01
Co-60	ND	4.136E-02	6.526E-02
Cs-134	2.215E-02	1.865E-02	7.149E-02
Cs-137	NA	0.000E+00	6.190E-02
Eu-152	ND	1.446E-01	1.801E-01
Eu-154	ND	9.290E-02	1.334E-01
Eu-155	ND	1.846E-01	2.631E-01
Nb-94	NA	0.000E+00	5.186E-02
Sb-125	1.051E-01	9.575E-02	1.359E-01
OOL-02-02-018-F			
Ag-108m	ND	3.982E-02	5.874E-02
Am-241	ND	4.353E-01	6.203E-01
Co-60	ND	3.844E-02	5.591E-02
Cs-134	3.079E-02	1.977E-02	4.845E-02
Cs-137	ND	3.825E-02	5.771E-02
Eu-152	ND	1.328E-01	1.817E-01
Eu-154	ND	8.637E-02	1.217E-01
Eu-155	ND	7.128E-01	2.441E-01
Nb-94	ND	3.047E-02	4.744E-02
Sb-125	1.245E-01	7.131E-02	1.484E-01
OOL-02-02-019-F			
Ag-108m	ND	2.723E-02	4.021E-02
Am-241	ND	8.138E-01	1.148E+00
Co-60	ND	1.104E+00	3.289E-02
Cs-134	2.810E-02	1.498E-02	1.674E-02
Cs-137	ND	2.602E-02	3.812E-02
Eu-152	6.494E-02	5.424E-02	1.553E-01
Eu-154	ND	3.387E-03	9.611E-02
Eu-155	ND	1.730E-01	2.480E-01
Nb-94	ND	2.153E-02	3.197E-02
Sb-125	8.370E-02	5.437E-02	1.066E-01
OOL-02-02-020-F			
Ag-108m	ND	3.975E-02	5.934E-02
Am-241	ND	4.835E-01	6.986E-01
Co-60	ND	7.172E-02	6.188E-02
Cs-134	ND	1.313E-02	5.144E-02
Cs-137	ND	3.824E-02	5.825E-02
Eu-152	ND	1.350E-01	1.946E-01
Eu-154	ND	9.305E-02	1.338E-01
Eu-155	ND	1.894E-01	2.676E-01
Nb-94	ND	4.067E-02	5.984E-02
Sb-125	1.078E-01	8.739E-02	1.580E-01
OOL-02-04-001-F			
Ag-108m	ND	2.812E-02	4.116E-02
Am-241	ND	7.922E-01	1.112E+00
Co-60	ND	8.470E-02	4.088E-02
Cs-134	ND	2.422E-02	3.385E-02
Cs-137	4.281E-02	3.458E-02	
Eu-152	ND	1.038E-01	1.496E-01
Eu-154	ND	7.440E-02	1.060E-01
Eu-155	ND	1.670E-01	2.396E-01

Table 4
Summary of Radiological
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Radionuclide	Activity	Critical Level	MDC
Nb-94	ND	2.159E-02	3.275E-02
Sb-125	1.039E-01	6.825E-02	9.451E-02
OOL-02-04-002-F			
Ag-108m	ND	2.763E-02	4.045E-02
Am-241	ND	7.724E-01	1.115E+00
Co-60	ND	8.115E-02	4.290E-02
Cs-134	ND	3.466E-02	4.807E-02
Cs-137	ND	3.104E-02	4.493E-02
Eu-152	ND	1.156E-01	1.522E-01
Eu-154	ND	7.626E-02	1.093E-01
Eu-155	ND	1.727E-01	2.481E-01
Nb-94	ND	2.388E-02	3.592E-02
Sb-125	8.366E-02	5.704E-02	8.054E-02
OOL-02-04-003-F			
Ag-108m	ND	2.935E-02	4.150E-02
Am-241	ND	1.633E-01	2.143E-01
Co-60	ND	4.686E-02	3.800E-02
Cs-134	1.411E-02	9.816E-03	5.928E-02
Cs-137	ND	2.373E-02	3.412E-02
Eu-152	ND	7.598E-02	1.064E-01
Eu-154	ND	6.022E-02	7.846E-02
Eu-155	ND	9.506E-02	1.337E-01
Nb-94	ND	2.354E-02	2.887E-02
Sb-125	8.125E-02	5.597E-02	7.961E-02
OOL-02-04-004-F			
Ag-108m	ND	4.274E-02	6.317E-02
Am-241	ND	4.575E-01	6.597E-01
Co-60	ND	4.232E-02	6.404E-02
Cs-134	4.031E-02	3.532E-02	4.432E-02
Cs-137	ND	3.835E-02	5.709E-02
Eu-152	ND	1.186E-01	1.703E-01
Eu-154	ND	8.162E-02	1.176E-01
Eu-155	ND	1.459E+00	2.753E-01
Nb-94	ND	4.446E-02	6.709E-02
Sb-125	6.171E-02	5.639E-02	1.557E-01
OOL-02-04-005-F			
Ag-108m	ND	3.016E-02	4.225E-02
Am-241	ND	1.547E-01	2.216E-01
Co-60	ND	1.783E-02	2.673E-02
Cs-134	ND	2.666E-02	3.634E-02
Cs-137	4.595E-02	3.998E-02	
Eu-152	ND	2.119E-02	1.103E-01
Eu-154	ND	5.704E-02	7.742E-02
Eu-155	ND	9.861E-02	1.393E-01
Nb-94	ND	2.162E-02	3.059E-02
Sb-125	9.115E-02	5.838E-02	7.788E-02
OOL-02-04-006-F			
Ag-108m	ND	3.940E-02	5.868E-02
Am-241	ND	2.081E-01	3.006E-01
Co-60	ND	3.877E-02	5.725E-02
Cs-134	ND	4.647E-02	6.237E-02
Cs-137	ND	3.745E-02	5.348E-02
Eu-152	ND	1.420E-01	1.445E-01
Eu-154	ND	6.970E-02	1.008E-01
Eu-155	1.466E-01	1.289E-01	1.802E-01
Nb-94	ND	1.063E-02	6.092E-02
Sb-125	9.769E-02	9.037E-02	1.459E-01
OOL-02-04-007-F			
Ag-108m	ND	2.602E-02	3.698E-02
Am-241	ND	1.417E-01	1.958E-01
Co-60	ND	1.722E-02	2.595E-02
Cs-134	1.273E-02	9.360E-03	5.925E-02
Cs-137	ND	2.099E-02	3.078E-02
Eu-152	4.605E-02	3.722E-02	1.004E-01
Eu-154	ND	4.884E-02	7.024E-02
Eu-155	ND	8.617E-02	1.213E-01
Nb-94	ND	4.960E-03	2.738E-02
Sb-125	8.504E-02	4.967E-02	7.536E-02
OOL-02-04-008-F			
Ag-108m	ND	4.582E-02	6.707E-02
Am-241	ND	6.917E-01	9.915E-01
Co-60	ND	3.951E-02	3.463E-02
Cs-134	ND	2.765E-02	4.005E-02

Table 4
Summary of Radiological
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Radionuclide	Activity	Critical Level	MDC
Cs-137	ND	2.487E-02	3.593E-02
Eu-152	ND	9.080E-02	1.311E-01
Eu-154	ND	7.376E-02	1.056E-01
Eu-155	ND	1.675E-01	2.372E-01
Nb-94	ND	2.299E-02	3.475E-02
Sb-125	9.385E-02	5.167E-02	1.136E-01
OOL-02-04-009-F			
Ag-108m	ND	3.552E-02	5.400E-02
Am-241	ND	1.617E-01	2.329E-01
Co-60	ND	4.101E-02	6.376E-02
Cs-134	2.026E-02	1.770E-02	1.038E-01
Cs-137	ND	3.503E-02	5.083E-02
Eu-152	ND	7.771E-02	1.130E-01
Eu-154	ND	7.954E-02	1.081E-01
Eu-155	ND	1.285E-01	1.826E-01
Nb-94	ND	2.888E-02	4.263E-02
Sb-125	1.037E-01	8.011E-02	1.304E-01
OOL-02-04-010-F			
Ag-108m	ND	4.575E-02	6.631E-02
Am-241	ND	2.353E-01	3.028E-01
Co-60	ND	3.114E-02	4.660E-02
Cs-134	2.421E-02	1.803E-02	3.501E-02
Cs-137	ND	3.416E-02	5.168E-02
Eu-152	ND	1.957E-01	1.438E-01
Eu-154	ND	8.101E-02	1.007E-01
Eu-155	ND	1.195E-01	1.684E-01
Nb-94	ND	2.922E-02	4.441E-02
Sb-125	ND	8.345E-02	1.181E-01
OOL-02-04-011-F			
Ag-108m	ND	3.556E-02	5.170E-02
Am-241	ND	8.533E-01	1.231E+00
Co-60	ND	3.054E-02	4.601E-02
Cs-134	1.150E-02	8.042E-03	4.574E-02
Cs-137	ND	3.111E-02	4.586E-02
Eu-152	ND	1.122E-01	1.600E-01
Eu-154	ND	8.142E-02	1.164E-01
Eu-155	ND	1.513E-01	2.172E-01
Nb-94	ND	2.524E-02	3.691E-02
Sb-125	8.749E-02	7.189E-02	9.142E-02
OOL-02-04-012-F			
Ag-108m	ND	4.139E-02	6.074E-02
Am-241	ND	3.808E-01	5.507E-01
Co-60	ND	5.257E-02	7.617E-02
Cs-134	2.649E-02	2.183E-02	6.052E-02
Cs-137	ND	3.814E-02	5.793E-02
Eu-152	ND	2.172E-01	1.793E-01
Eu-154	ND	9.039E-02	1.251E-01
Eu-155	ND	1.613E-01	2.331E-01
Nb-94	ND	2.703E-02	4.196E-02
Sb-125	1.316E-01	9.729E-02	1.443E-01
OOL-02-04-013-F			
Ag-108m	ND	4.312E-02	6.459E-02
Am-241	ND	4.864E-01	6.941E-01
Co-60	ND	5.112E-02	6.469E-02
Cs-134	ND	2.824E-02	4.102E-02
Cs-137	ND	3.855E-02	5.901E-02
Eu-152	ND	1.298E-01	1.734E-01
Eu-154	ND	8.279E-02	1.168E-01
Eu-155	ND	1.961E-01	2.822E-01
Nb-94	ND	2.705E-02	4.308E-02
Sb-125	1.470E-01	7.154E-02	1.577E-01
OOL-02-04-014-F			
Ag-108m	ND	3.892E-02	5.603E-02
Am-241	ND	5.215E-01	7.447E-01
Co-60	ND	4.088E-02	6.401E-02
Cs-134	ND	3.116E-02	4.498E-02
Cs-137	ND	3.956E-02	5.748E-02
Eu-152	ND	2.659E-01	1.710E-01
Eu-154	ND	8.112E-02	1.166E-01
Eu-155	ND	1.927E-01	2.757E-01
Nb-94	ND	3.199E-02	4.580E-02
Sb-125	1.549E-01	1.031E-01	1.289E-01
OOL-02-04-015-F			

Table 4
Summary of Radiological
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Radionuclide	Activity	Critical Level	MDC
Ag-108m	ND	7.355E-02	1.082E-01
Am-241	ND	2.294E-01	3.313E-01
Co-60	ND	8.358E-02	6.239E-02
Cs-134	2.111E-02	2.007E-02	1.039E-01
Cs-137	ND	4.212E-02	6.130E-02
Eu-152	ND	1.218E-01	1.525E-01
Eu-154	ND	7.963E-02	1.149E-01
Eu-155	1.344E-01	1.258E-01	1.760E-01
Nb-94	ND	2.437E-01	5.702E-02
Sb-125	ND	7.124E-02	1.626E-01
OOL-02-04-016-F			
Ag-108m	ND	2.481E-02	3.649E-02
Am-241	ND	7.622E-01	1.092E+00
Co-60	ND	6.009E-02	3.754E-02
Cs-134	1.568E-02	1.041E-02	3.228E-02
Cs-137	3.095E-02	3.085E-02	4.268E-02
Eu-152	5.426E-02	4.778E-02	1.441E-01
Eu-154	ND	7.385E-02	1.064E-01
Eu-155	ND	1.645E-01	2.343E-01
Nb-94	ND	2.199E-02	3.303E-02
Sb-125	8.342E-02	6.589E-02	1.023E-01
OOL-02-04-017-F			
Ag-108m	ND	4.655E-02	6.697E-02
Am-241	ND	2.046E-01	2.956E-01
Co-60	ND	5.958E-03	5.486E-02
Cs-134	ND	8.522E-02	4.376E-02
Cs-137	ND	3.455E-02	4.973E-02
Eu-152	ND	1.122E-01	1.512E-01
Eu-154	ND	7.426E-02	1.066E-01
Eu-155	1.472E-01	1.212E-01	1.690E-01
Nb-94	ND	3.279E-02	5.019E-02
Sb-125	7.459E-02	5.116E-02	1.500E-01
OOL-02-04-018-F			
Ag-108m	ND	1.652E-02	2.383E-02
Am-241	ND	1.536E-01	2.095E-01
Co-60	ND	1.102E+00	2.810E-02
Cs-134	1.587E-02	9.924E-03	6.461E-02
Cs-137	ND	5.531E-02	3.870E-02
Eu-152	ND	6.031E-02	8.642E-02
Eu-154	ND	6.205E-02	7.281E-02
Eu-155	1.131E-01	9.594E-02	1.344E-01
Nb-94	ND	2.025E-02	2.877E-02
Sb-125	6.083E-02	5.104E-02	8.134E-02
OOL-02-04-019-F			
Ag-108m	ND	4.464E-02	6.731E-02
Am-241	ND	4.825E-01	6.946E-01
Co-60	ND	3.646E-02	5.327E-02
Cs-134	ND	2.804E-02	4.246E-02
Cs-137	ND	2.818E-02	4.058E-02
Eu-152	ND	5.121E-01	1.465E-01
Eu-154	ND	6.887E-02	9.700E-02
Eu-155	ND	1.718E-01	2.432E-01
Nb-94	ND	3.781E-02	5.695E-02
Sb-125	ND	1.007E-01	1.477E-01
OOL-02-04-020-F			
Ag-108m	ND	3.099E-02	4.513E-02
Am-241	ND	8.457E-01	1.190E+00
Co-60	ND	2.512E-02	3.900E-02
Cs-134	3.559E-02	1.787E-02	2.224E-02
Cs-137	3.060E-02	2.193E-02	
Eu-152	9.663E-02	8.087E-02	1.447E-01
Eu-154	ND	7.618E-02	1.090E-01
Eu-155	ND	1.657E-01	2.325E-01
Nb-94	ND	2.072E-02	3.136E-02
Sb-125	1.192E-01	6.973E-02	1.057E-01
OOL-10-03-001-F			
Ag-108m	ND	4.404E-02	6.435E-02
Am-241	ND	8.131E-01	1.146E+00
Co-60	ND	2.401E-02	3.680E-02
Cs-134	ND	2.305E-02	3.315E-02
Cs-137	ND	3.249E-02	4.655E-02
Eu-152	ND	1.576E-01	1.112E-01
Eu-154	ND	6.807E-02	9.750E-02

Table 4
Summary of Radiological
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Radionuclide	Activity	Critical Level	MDC
Eu-155	ND	1.665E-01	2.394E-01
Nb-94	ND	2.455E-02	3.675E-02
Sb-125	1.045E-01	5.974E-02	9.460E-02
OOL-10-03-002-F			
Ag-108m	ND	2.450E-02	3.559E-02
Am-241	ND	1.466E-01	2.099E-01
Co-60	ND	1.860E-02	2.847E-02
Cs-134	1.439E-02	9.151E-03	2.648E-02
Cs-137	ND	2.304E-02	3.385E-02
Eu-152	ND	2.623E-01	1.070E-01
Eu-154	ND	5.282E-02	7.564E-02
Eu-155	1.733E-01	9.190E-02	1.269E-01
Nb-94	ND	2.560E-02	2.660E-02
Sb-125	6.086E-02	4.494E-02	6.754E-02
C-14	ND	1.864E-01	2.760E-01
Cm-243	ND	4.276E-02	1.380E-01
Fe-55	ND	1.316E+01	1.940E+01
H-3	ND	5.650E+00	8.830E+00
Nb-95	1.290E-02	1.064E-02	2.020E-02
Ni-63	ND	6.419E+00	1.010E+01
Pu-238	ND	1.102E-01	2.740E-01
Pu-239	ND	9.879E-02	2.740E-01
Pu-241	1.010E+01	8.644E+00	1.210E+01
Sr-90	ND	1.771E-02	4.210E-02
Tc-99	ND	2.202E-01	3.300E-01
U-235	ND	4.357E-02	1.700E-01
U-238	ND	3.879E-01	1.400E+00
OOL-10-03-003-F			
Ag-108m	ND	3.043E-02	4.424E-02
Am-241	ND	8.188E-01	1.154E+00
Co-60	ND	2.175E-02	3.324E-02
Cs-134	1.018E-02	6.987E-03	3.721E-02
Cs-137	ND	2.584E-02	3.805E-02
Eu-152	ND	1.364E-01	1.479E-01
Eu-154	ND	5.971E-02	8.589E-02
Eu-155	ND	1.591E-01	2.286E-01
Nb-94	ND	2.236E-02	3.321E-02
Sb-125	1.169E-01	6.982E-02	9.799E-02
OOL-10-03-004-F			
Ag-108m	ND	3.458E-02	5.193E-02
Am-241	ND	4.750E-01	6.861E-01
Co-60	ND	5.970E-03	6.089E-02
Cs-134	ND	3.280E-02	4.959E-02
Cs-137	ND	3.312E-02	4.889E-02
Eu-152	ND	1.143E-01	1.646E-01
Eu-154	ND	8.365E-02	1.175E-01
Eu-155	ND	1.536E-01	2.215E-01
Nb-94	ND	3.239E-02	4.824E-02
Sb-125	ND	1.342E-01	1.535E-01
OOL-10-03-005-F			
Ag-108m	ND	2.388E-02	3.520E-02
Am-241	ND	6.127E-01	8.452E-01
Co-60	ND	3.033E-01	3.050E-02
Cs-134	8.661E-03	7.501E-03	3.276E-02
Cs-137	ND	2.012E-02	2.914E-02
Eu-152	ND	5.322E-01	1.190E-01
Eu-154	ND	6.313E-02	9.055E-02
Eu-155	ND	1.396E-01	1.965E-01
Nb-94	ND	2.026E-02	2.992E-02
Sb-125	6.294E-02	5.242E-02	9.607E-02
OOL-10-03-006-F			
Ag-108m	ND	2.961E-02	4.291E-02
Am-241	ND	7.220E-01	1.033E+00
Co-60	ND	2.456E-02	3.541E-02
Cs-134	ND	2.713E-02	3.841E-02
Cs-137	3.004E-02	2.445E-02	3.294E-02
Eu-152	8.871E-02	7.875E-02	1.439E-01
Eu-154	ND	7.440E-02	1.069E-01
Eu-155	ND	1.627E-01	2.308E-01
Nb-94	ND	1.855E-02	2.760E-02
Sb-125	9.591E-02	6.715E-02	8.840E-02
OOL-10-03-007-F			
Ag-108m	ND	4.265E-02	6.202E-02

Table 4
Summary of Radiological
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Radionuclide	Activity	Critical Level	MDC
Am-241	ND	2.312E-01	2.823E-01
Co-60	ND	3.109E-02	4.852E-02
Cs-134	1.805E-02	1.507E-02	8.166E-02
Cs-137	ND	5.445E-02	6.416E-02
Eu-152	ND	1.547E-01	1.425E-01
Eu-154	ND	7.023E-02	9.970E-02
Eu-155	ND	1.222E-01	1.724E-01
Nb-94	ND	3.089E-02	4.407E-02
Sb-125	1.101E-01	1.061E-01	1.177E-01
OOL-10-03-008-F			
Ag-108m	ND	2.773E-02	3.958E-02
Am-241	ND	1.595E-01	2.218E-01
Co-60	ND	4.636E-02	2.946E-02
Cs-134	2.025E-02	1.033E-02	6.523E-02
Cs-137	ND	2.381E-02	3.490E-02
Eu-152	ND	7.604E-02	1.039E-01
Eu-154	ND	5.648E-02	7.676E-02
Eu-155	9.450E-02	9.117E-02	1.276E-01
Nb-94	ND	1.805E-02	2.602E-02
Sb-125	9.862E-02	4.079E-02	7.702E-02
OOL-10-03-009-F			
Ag-108m	ND	3.279E-02	5.002E-02
Am-241	ND	4.237E-01	6.125E-01
Co-60	ND	4.048E-02	6.444E-02
Cs-134	ND	2.586E-02	4.002E-02
Cs-137	ND	3.589E-02	5.008E-02
Eu-152	ND	1.777E-01	1.623E-01
Eu-154	ND	8.511E-02	1.153E-01
Eu-155	ND	1.821E-01	2.554E-01
Nb-94	ND	3.188E-02	5.004E-02
Sb-125	ND	9.311E-02	1.367E-01
OOL-10-03-010-F			
Ag-108m	ND	2.953E-02	4.283E-02
Am-241	ND	1.438E-01	2.068E-01
Co-60	ND	2.127E-02	3.166E-02
Cs-134	ND	2.660E-02	3.650E-02
Cs-137	ND	2.380E-02	3.403E-02
Eu-152	ND	7.424E-02	1.063E-01
Eu-154	ND	5.737E-02	7.898E-02
Eu-155	ND	9.110E-02	1.283E-01
Nb-94	ND	2.650E-02	2.329E-02
Sb-125	8.863E-02	4.967E-02	7.909E-02
C-14	ND	1.887E-01	2.750E-01
Cm-243	ND	1.841E-02	1.110E-01
Fe-55	ND	1.116E+01	1.630E+01
H-3	ND	5.266E+00	8.380E+00
Nb-95	1.020E-02	8.854E-03	2.110E-02
Ni-63	ND	6.850E+00	1.030E+01
Pu-238	ND	9.262E-02	2.250E-01
Pu-239	ND	7.060E-02	1.740E-01
Pu-241	ND	9.821E+00	1.440E+01
Sr-90	ND	1.503E-02	4.010E-02
Tc-99	ND	2.214E-01	3.220E-01
U-235	ND	5.557E-02	1.670E-01
U-238	ND	3.716E-01	1.170E+00
OOL-10-03-011-F			
Ag-108m	ND	3.554E-02	5.319E-02
Am-241	ND	4.656E-01	6.681E-01
Co-60	ND	7.708E-02	6.661E-02
Cs-134	2.485E-02	1.960E-02	4.783E-02
Cs-137	ND	3.014E-02	4.505E-02
Eu-152	ND	2.689E-01	1.674E-01
Eu-154	ND	2.027E-01	1.169E-01
Eu-155	ND	6.604E-01	2.793E-01
Nb-94	ND	3.080E-02	4.654E-02
Sb-125	8.820E-02	5.972E-02	1.383E-01
Am-241	ND	4.295E-01	6.152E-01
Co-60	ND	4.895E-02	7.143E-02
Cs-134	ND	3.485E-02	5.269E-02
Cs-137	ND	4.477E-02	6.766E-02
Eu-152	1.765E-01	1.171E-01	1.933E-01
Eu-154	ND	8.724E-02	1.245E-01
Eu-155	ND	1.975E-01	2.797E-01
Nb-94	ND	4.160E-02	6.309E-02

Table 4
Summary of Radiological
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Radionuclide	Activity	Critical Level	MDC
Sb-125	1.678E-01	8.888E-02	1.532E-01
OOL-10-03-013-F			
Ag-108m	ND	2.190E-02	3.242E-02
Am-241	ND	5.908E-01	8.507E-01
Co-60	ND	1.054E-01	2.827E-02
Cs-134	1.443E-02	9.441E-03	2.994E-02
Cs-137	ND	2.064E-02	2.957E-02
Eu-152	ND	8.673E-02	1.173E-01
Eu-154	ND	6.062E-02	8.649E-02
Eu-155	ND	1.276E-01	1.839E-01
Nb-94	ND	1.456E-02	2.263E-02
Sb-125	ND	4.972E-02	7.314E-02
Ag-108m	ND	6.712E-02	9.834E-02
Am-241	ND	1.885E-01	2.710E-01
Co-60	ND	4.706E-02	4.405E-02
Cs-134	3.042E-02	1.585E-02	4.709E-02
Cs-137	ND	3.047E-02	4.486E-02
Eu-152	ND	1.081E-01	1.467E-01
Eu-154	5.278E-02	4.092E-02	8.916E-02
Eu-155	ND	1.173E-01	1.650E-01
Nb-94	ND	2.857E-02	4.303E-02
Sb-125	ND	9.575E-02	1.318E-01
OOL-10-03-015-F			
Ag-108m	ND	1.985E-02	2.881E-02
Am-241	ND	1.130E-01	1.626E-01
Co-60	2.179E-02	2.075E-02	2.856E-02
Cs-134	1.562E-02	9.159E-03	3.362E-02
Cs-137	2.249E-02	1.718E-02	
Eu-152	ND	7.668E-02	1.080E-01
Eu-154	ND	5.677E-02	7.546E-02
Eu-155	1.303E-01	9.313E-02	1.298E-01
Nb-94	ND	1.544E-02	2.178E-02
Sb-125	1.021E-01	5.765E-02	7.327E-02
OOL-10-03-016-F			
Ag-108m	ND	3.860E-02	5.749E-02
Am-241	ND	2.422E-01	3.309E-01
Co-60	ND	4.440E-02	6.287E-02
Cs-134	ND	2.885E-02	4.369E-02
Cs-137	ND	3.303E-02	5.010E-02
Eu-152	ND	1.035E-01	1.209E-01
Eu-154	ND	8.989E-02	1.176E-01
Eu-155	ND	1.276E-01	1.816E-01
Nb-94	ND	3.344E-02	4.702E-02
Sb-125	9.372E-02	6.511E-02	1.291E-01
OOL-10-03-017-F			
Ag-108m	ND	1.481E-02	2.201E-02
Am-241	ND	1.312E-01	1.885E-01
Co-60	ND	4.702E-02	2.988E-02
Cs-134	ND	2.367E-02	3.242E-02
Cs-137	ND	1.920E-02	2.816E-02
Eu-152	ND	5.425E-02	7.809E-02
Eu-154	ND	5.631E-02	6.643E-02
Eu-155	1.039E-01	8.490E-02	1.187E-01
Nb-94	ND	1.629E-02	2.327E-02
Sb-125	1.002E-01	4.975E-02	6.840E-02
OOL-10-03-018-F			
Ag-108m	ND	2.088E-02	2.962E-02
Am-241	ND	6.532E-01	9.310E-01
Co-60	ND	2.415E-02	3.549E-02
Cs-134	ND	2.584E-02	3.678E-02
Cs-137	ND	2.658E-02	3.723E-02
Eu-152	2.725E-02	2.645E-02	1.336E-01
Eu-154	ND	6.784E-02	9.737E-02
Eu-155	ND	1.208E-01	1.733E-01
Nb-94	ND	2.405E-02	3.585E-02
Sb-125	7.097E-02	5.110E-02	8.180E-02
OOL-10-03-019-F			
Ag-108m	ND	3.965E-02	6.040E-02
Am-241	ND	4.971E-01	7.110E-01
Co-60	ND	6.733E-02	7.057E-02
Cs-134	ND	3.517E-02	5.268E-02
Cs-137	ND	4.360E-02	6.590E-02
Eu-152	ND	1.170E-01	1.668E-01

Table 4
Summary of Radiological
Analytical Results for Soil
Yankee Nuclear Power Station
Rowe, MA

Radionuclide	Activity	Critical Level	MDC
Eu-154	ND	7.556E-02	1.087E-01
Eu-155	ND	2.025E-01	2.914E-01
Nb-94	ND	3.568E-02	5.458E-02
Sb-125	1.121E-01	7.073E-02	1.514E-01
OOL-10-03-020-F			
Ag-108m	ND	3.521E-02	5.119E-02
Am-241	ND	1.924E-01	2.741E-01
Co-60	ND	3.423E-02	5.309E-02
Cs-134	1.618E-02	1.559E-02	4.769E-02
Cs-137	ND	2.011E-01	5.195E-02
Eu-152	ND	1.028E-01	1.478E-01
Eu-154	ND	6.996E-02	1.007E-01
Eu-155	1.614E-01	1.205E-01	1.674E-01
Nb-94	ND	2.827E-02	4.078E-02
Sb-125	9.527E-02	6.699E-02	1.310E-01
OOL-12-01-001-F			
Ag-108m	ND	3.356E-02	4.848E-02
Am-241	ND	4.427E-01	6.391E-01
Co-60	ND	4.155E-02	5.983E-02
Cs-134	ND	2.891E-02	4.147E-02
Cs-137	7.054E-02	4.362E-02	
Eu-152	ND	1.232E-01	1.676E-01
Eu-154	ND	7.998E-02	1.155E-01
Eu-155	ND	1.444E+00	2.544E-01
Nb-94	ND	3.512E-02	5.379E-02
Sb-125	ND	9.033E-02	1.338E-01
OOL-12-01-002-F			
Ag-108m	4.876E-02	3.140E-02	6.556E-02
Am-241	ND	2.458E-01	3.293E-01
Co-60	2.886E-01	5.674E-02	
Cs-134	1.684E-02	1.511E-02	6.136E-02
Cs-137	7.797E-01	1.058E-01	
Eu-152	ND	1.932E-01	1.574E-01
Eu-154	ND	1.090E-01	1.136E-01
Eu-155	ND	1.195E-01	1.703E-01
Nb-94	ND	3.255E-02	4.680E-02
Sb-125	ND	1.178E-01	1.609E-01
OOL-12-01-003-F			
Ag-108m	ND	2.661E-02	3.816E-02
Am-241	ND	1.495E-01	2.147E-01
Co-60	ND	1.750E-01	3.581E-02
Cs-134	ND	2.537E-02	3.460E-02
Cs-137	ND	2.414E-02	3.440E-02
Eu-152	ND	7.637E-02	1.079E-01
Eu-154	ND	5.170E-02	7.417E-02
Eu-155	9.861E-02	9.241E-02	1.296E-01
Nb-94	ND	2.290E-02	3.026E-02
Sb-125	4.668E-02	3.282E-02	8.002E-02
OOL-12-01-004-F			
Ag-108m	ND	4.707E-02	6.914E-02
Am-241	ND	4.819E-01	6.967E-01
Co-60	ND	4.625E-02	7.222E-02
Cs-134	3.141E-02	2.427E-02	6.131E-02
Cs-137	1.963E-01	8.183E-02	
Eu-152	ND	1.678E-01	2.009E-01
Eu-154	ND	9.536E-02	1.361E-01
Eu-155	ND	2.051E-01	2.896E-01
Nb-94	ND	3.704E-02	5.278E-02
Sb-125	1.384E-01	8.384E-02	1.721E-01
OOL-12-01-005-F			
Ag-108m	ND	2.871E-02	4.082E-02
Am-241	ND	7.705E-01	1.086E+00
Co-60	ND	2.332E-02	3.341E-02
Cs-134	ND	4.074E-02	5.901E-02
Cs-137	1.171E-01	4.427E-02	
Eu-152	4.734E-02	4.275E-02	1.449E-01
Eu-154	ND	7.224E-02	1.034E-01
Eu-155	ND	1.531E-01	2.161E-01
Nb-94	ND	2.325E-02	3.361E-02
Sb-125	1.010E-01	5.267E-02	1.023E-01
OOL-12-01-006-F			
Ag-108m	ND	3.104E-02	4.505E-02
Am-241	ND	7.488E-01	1.052E+00

Table 4
Summary of Radiological
Analytical Results for Soil
Yankee Nuclear Power Station
Rowe, MA

Radionuclide	Activity	Critical Level	MDC
Co-60	2.560E-02	2.340E-02	3.165E-02
Cs-134	ND	2.732E-02	4.013E-02
Cs-137	ND	3.007E-02	4.277E-02
Eu-152	1.236E-01	9.252E-02	1.400E-01
Eu-154	ND	7.423E-02	1.060E-01
Eu-155	ND	1.564E-01	2.244E-01
Nb-94	ND	2.276E-02	3.421E-02
Sb-125	7.749E-02	5.480E-02	1.035E-01
OOL-12-01-007-F			
Ag-108m	ND	3.851E-02	5.577E-02
Am-241	ND	1.514E-01	2.103E-01
Co-60	ND	2.127E-02	3.077E-02
Cs-134	1.293E-02	9.579E-03	2.019E-02
Cs-137	8.138E-02	3.988E-02	
Eu-152	ND	7.422E-02	1.065E-01
Eu-154	ND	5.164E-02	7.366E-02
Eu-155	1.112E-01	9.457E-02	1.326E-01
Nb-94	ND	1.778E-02	2.539E-02
Sb-125	1.099E-01	5.324E-02	7.717E-02
OOL-12-01-008-F			
Ag-108m	ND	3.709E-02	5.606E-02
Am-241	ND	5.882E-01	2.045E-01
Co-60	ND	3.676E-02	5.319E-02
Cs-134	ND	1.153E-01	1.059E-01
Cs-137	1.125E-01	5.782E-02	
Eu-152	ND	2.636E-01	1.112E-01
Eu-154	ND	2.255E-01	9.825E-02
Eu-155	1.240E-01	1.150E-01	1.609E-01
Nb-94	ND	5.346E-02	4.278E-02
Sb-125	ND	8.671E-02	1.287E-01
OOL-12-01-009-F			
Ag-108m	ND	2.958E-02	4.624E-02
Am-241	ND	4.098E-01	5.778E-01
Co-60	ND	4.740E-02	6.988E-02
Cs-134	ND	3.125E-02	4.808E-02
Cs-137	5.167E-02	4.614E-02	6.238E-02
Eu-152	ND	8.659E-02	1.263E-01
Eu-154	ND	7.617E-02	1.076E-01
Eu-155	ND	1.782E-01	2.599E-01
Nb-94	ND	2.309E-02	3.736E-02
Sb-125	1.257E-01	6.265E-02	1.320E-01
OOL-12-01-010-F			
Ag-108m	ND	1.799E-02	2.680E-02
Am-241	ND	1.313E-01	1.876E-01
Co-60	ND	1.850E-02	2.706E-02
Cs-134	1.479E-02	1.084E-02	5.302E-02
Cs-137	6.331E-02	3.299E-02	
Eu-152	ND	6.360E-02	9.007E-02
Eu-154	ND	4.275E-02	5.863E-02
Eu-155	ND	8.014E-02	1.134E-01
Nb-94	ND	1.911E-02	2.710E-02
Sb-125	4.127E-02	3.585E-02	7.173E-02
OOL-12-01-011-F			
Ag-108m	ND	4.169E-02	6.137E-02
Am-241	ND	2.268E-01	3.267E-01
Co-60	ND	3.799E-02	5.941E-02
Cs-134	2.016E-02	1.527E-02	5.181E-02
Cs-137	ND	3.311E-02	5.016E-02
Eu-152	ND	1.090E-01	1.574E-01
Eu-154	ND	7.865E-02	1.138E-01
Eu-155	2.118E-01	1.278E-01	1.784E-01
Nb-94	ND	3.187E-02	4.548E-02
Sb-125	1.376E-01	1.063E-01	1.199E-01
OOL-12-01-012-F			
Ag-108m	ND	4.036E-02	5.910E-02
Am-241	ND	8.903E-01	9.986E-01
Co-60	ND	2.448E-02	3.618E-02
Cs-134	2.331E-02	1.186E-02	3.048E-02
Cs-137	3.396E-02	2.421E-02	
Eu-152	ND	9.690E-02	1.388E-01
Eu-154	ND	7.198E-02	1.036E-01
Eu-155	ND	1.628E-01	2.305E-01
Nb-94	ND	1.661E-02	2.382E-02

Table 4
Summary of Radiological
Analytical Results for Soil
Yankee Nuclear Power Station
Rowe, MA

Radionuclide	Activity	Critical Level	MDC
Sb-125	1.100E-01	6.124E-02	9.082E-02
OOL-12-01-013-F			
Ag-108m	ND	3.489E-02	5.348E-02
Am-241	ND	4.735E-01	6.835E-01
Co-60	ND	4.769E-02	6.710E-02
Cs-134	ND	2.867E-02	4.231E-02
Cs-137	ND	3.921E-02	5.803E-02
Eu-152	ND	1.162E-01	1.581E-01
Eu-154	ND	8.565E-02	1.144E-01
Eu-155	ND	1.828E-01	2.613E-01
Nb-94	ND	3.286E-02	5.116E-02
Sb-125	8.890E-02	6.963E-02	1.314E-01
OOL-12-01-014-F			
Ag-108m	ND	2.513E-02	3.542E-02
Am-241	ND	1.311E-01	1.870E-01
Co-60	ND	5.325E-02	2.943E-02
Cs-134	1.385E-02	1.034E-02	5.500E-02
Cs-137	6.355E-02	2.605E-02	
Eu-152	ND	6.615E-02	9.496E-02
Eu-154	ND	4.557E-02	6.561E-02
Eu-155	ND	8.623E-02	1.214E-01
Nb-94	ND	1.952E-02	2.778E-02
Sb-125	4.594E-02	3.140E-02	7.963E-02
OOL-12-01-015-F			
Ag-108m	ND	4.292E-02	6.385E-02
Am-241	ND	2.311E-01	2.956E-01
Co-60	ND	3.807E-02	5.182E-02
Cs-134	ND	2.877E-02	4.280E-02
Cs-137	3.544E-02	3.368E-02	4.540E-02
Eu-152	ND	1.173E-01	1.393E-01
Eu-154	ND	7.800E-02	9.918E-02
Eu-155	ND	7.986E-02	1.155E-01
Nb-94	ND	3.387E-02	4.834E-02
Sb-125	5.348E-02	5.065E-02	1.255E-01
OOL-12-01-016-F			
Ag-108m	ND	3.419E-02	4.898E-02
Am-241	ND	7.962E-01	1.146E+00
Co-60	ND	3.320E-01	3.922E-02
Cs-134	1.616E-02	1.264E-02	3.699E-02
Cs-137	ND	3.172E-02	4.436E-02
Eu-152	ND	1.088E-01	1.559E-01
Eu-154	ND	7.691E-02	1.104E-01
Eu-155	ND	1.691E-01	2.382E-01
Nb-94	ND	1.798E-02	2.750E-02
Sb-125	1.153E-01	6.380E-02	9.934E-02
OOL-12-01-017-F			
Ag-108m	1.024E-02	9.724E-03	9.122E-02
Am-241	ND	2.029E-01	2.540E-01
Co-60	ND	3.101E-02	4.937E-02
Cs-134	1.837E-02	1.295E-02	5.983E-02
Cs-137	ND	1.245E-01	5.740E-02
Eu-152	ND	1.292E-01	1.450E-01
Eu-154	ND	1.229E-01	1.016E-01
Eu-155	1.585E-01	1.195E-01	1.661E-01
Nb-94	ND	3.382E-02	4.740E-02
Sb-125	1.064E-01	6.917E-02	1.441E-01
OOL-12-01-018-F			
Ag-108m	ND	3.438E-02	4.843E-02
Am-241	ND	7.535E-01	1.080E+00
Co-60	ND	9.140E-02	4.380E-02
Cs-134	1.621E-02	1.337E-02	5.765E-02
Cs-137	9.470E-02	4.989E-02	
Eu-152	1.159E-01	9.093E-02	1.397E-01
Eu-154	ND	6.529E-02	9.348E-02
Eu-155	ND	1.442E-01	2.075E-01
Nb-94	ND	1.956E-02	2.905E-02
Sb-125	7.749E-02	5.374E-02	9.168E-02
OOL-12-01-019-F			
Ag-108m	ND	3.900E-02	5.918E-02
Am-241	ND	4.579E-01	6.617E-01
Co-60	ND	3.681E-02	5.241E-02
Cs-134	2.098E-02	2.034E-02	4.569E-02
Cs-137	4.550E-02	4.392E-02	5.970E-02

Table 4
Summary of Radiological
Analytical Results for Soil
Yankee Nuclear Power Station
Rowe, MA

Radionuclide	Activity	Critical Level	MDC
Eu-152	ND	1.173E-01	1.561E-01
Eu-154	ND	8.772E-02	1.230E-01
Eu-155	ND	1.587E-01	2.275E-01
Nb-94	ND	3.161E-02	4.867E-02
Sb-125	4.987E-02	4.764E-02	1.650E-01
OOL-12-01-020-F			
Ag-108m	ND	3.379E-02	5.142E-02
Am-241	ND	4.979E-01	7.197E-01
Co-60	ND	4.653E-02	6.190E-02
Cs-134	ND	3.746E-02	5.473E-02
Cs-137	ND	4.861E-02	7.134E-02
Eu-152	ND	1.243E-01	1.786E-01
Eu-154	ND	9.177E-02	1.285E-01
Eu-155	ND	7.749E-01	2.677E-01
Nb-94	ND	4.042E-02	6.207E-02
Sb-125	1.425E-01	7.624E-02	1.435E-01
OOL-12-01-023-F			
Ag-108m	ND	2.537E-02	3.663E-02
Am-241	ND	1.500E-01	2.157E-01
Co-60	2.543E-02	2.266E-02	3.092E-02
Cs-134	2.831E-02	1.192E-02	6.533E-02
Cs-137	1.049E-01	2.416E-02	
Eu-152	ND	1.594E+00	1.085E-01
Eu-154	ND	6.654E-02	6.854E-02
Eu-155	1.456E-01	9.536E-02	1.324E-01
Nb-94	ND	1.937E-02	2.776E-02
Sb-125	7.126E-02	3.667E-02	8.902E-02

Table 5-1
Summary of OHM Analytical Results for Soil
2006 Background
Yankee Nuclear Power Station
Rowe, MA

Station Sample ID Date Sampled	RCS-1 Standard	SB170-006I SB170-006I 7/6/2006	SB171-006I SB171-006I 7/6/2006	SB172-006I SB172-006I 7/6/2006	SB173-006I SB173-006I 7/6/2006	SB174-006I SB174-006I 7/5/2006	SB175-006I SB175-006I 7/5/2006	SB176-006I SB176-006I 7/5/2006	SB177-006I SB177-006I 7/5/2006
Extractable Petroleum Hydrocarbons (EPH) (mg/Kg)									
C11-C22 Aromatics	200	33.9 U	56.6 U	54.3 U	65.9 U	50.3 U	155 U	53.5 U	54.7 U
C19-C36 Aliphatics	2,500	33.9 U	56.6 U	54.3 U	65.9 U	50.3 U	155 U	53.5 U	54.7 U
C9-C18 Aliphatics	1,000	33.9 U	56.6 U	54.3 U	65.9 U	50.3 U	155 U	53.5 U	54.7 U
Acenaphthylene	100	0.169 U	0.282 U	0.136 J	0.328 U	0.251 U	0.77 U	0.267 U	0.273 U
Benzo(b)fluoranthene	70	0.169 U	0.0339 J	0.0298 J	0.328 U	0.251 U	0.77 U	0.267 U	0.273 U
Chrysene	7	0.169 U	0.0255 J	0.0298 J	0.0461 J	0.251 U	0.77 U	0.267 U	0.273 U
Fluoranthene	1,000	0.169 U	0.0537 J	0.0461 J	0.0823 J	0.0302 J	0.77 U	0.0348 J	0.0519 J
Volatile Petroleum Hydrocarbons (VPH) (mg/Kg)									
C5-C8 Aliphatics	100	1.81 J	2.84 J	2.32 J	3.13 J	2.57 J	4.95 J	3.01 J	2.51 J
C9-C10 Aromatics	100	3.12	3.89	89	0.66 J	11.8	16.6	5.52	0.996
C9-C12 Aliphatics	1,000	5.72	6.39	124	1.02 J	17.9	27	8.9	2.45
Toluene	30	0.157 U	0.271 U	0.337 U	0.839	0.228 U	0.654 U	0.223 U	0.199 U
Semi-Volatile Organic Compounds (SVOC) (µg/Kg)									
Acenaphthylene	100,000	96.5 J	429 U	342 U	410 U	171 U	575 U	199 U	100 U
Anthracene	1,000,000	48 J	429 U	342 U	410 U	171 U	575 U	199 U	100 U
Benzo(a)anthracene	7,000	232	429 U	342 U	410 U	171 U	575 U	199 U	100 U
Benzo(a)pyrene	2,000	219	132 J	342 U	410 U	171 U	575 U	199 U	100 U
Benzo(b)fluoranthene	7,000	384	533	342 U	410 U	171 U	575 U	199 U	100 U
Benzo(g,h,i)perylene	1,000,000	105 J	71.8 J	342 U	410 U	171 U	575 U	199 U	100 U
Benzo(k)fluoranthene	70,000	217	133 J	342 U	410 U	171 U	575 U	199 U	100 U
Benzoic acid	1,000,000	211 U	429 U	342 U	410 U	2290	575 U	199 U	100 U
Chrysene	7,000	337	199 J	342 U	76.9 J	171 U	575 U	199 U	100 U
Fluoranthene	1,000,000	552	330 J	342 U	118 J	59.7 J	575 U	47.8 J	79.3 J
Indeno(1,2,3-cd)pyrene	7,000	119 J	429 U	342 U	410 U	171 U	575 U	199 U	100 U
Phenanthrene	100,000	357	290 J	342 U	410 U	83.6 J	575 U	199 U	74.2 J
Pyrene	1,000,000	773	418 J	342 U	410 U	64.8 J	575 U	199 U	85.3 J
Herbicides (µg/Kg)		-	-	-	-	-	-	-	-
Inorganics (mg/Kg)									
Antimony	20	2.31	4.75	2.83 U	2.88 J	2.39	2.99 J	1.62 J	2.63 J
Arsenic	20	3.85	4.38	2.83 U	4.78	5.61	3.35 J	4.03	4.39
Beryllium	0.7	0.194 J	0.413	0.377 U	0.434 J	0.332 J	0.482 J	0.194 J	0.249 J
Cadmium	2	0.293	0.421	0.245 J	0.79	0.692	0.582 J	0.317 J	0.383 J
Chromium	1,000	12.5	15.9	1.94	18.6	13.4	5.58	14.3	12.8
Copper	1,000	10.7	8.55	5.09	15.6	12.6	18.7	11.6	13.3
Lead	300	17	19.3	31.2	24.4	25.4	101	27.2	49.9
Mercury	20	0.0581 J	0.0719 J	0.157	0.106 J	0.155	0.318	0.144	0.107
Nickel	20	8.4	7.11	4.93	10.6	6.67	7.29	6.51	8.56
Selenium	400	1.66 U	2.53 U	2.83 U	3.34 U	1.57 J	2.45 J	1.42 J	1.41 J
Silver	100	1.64	3.22	1.88 U	2 J	1.36 J	4.02 U	1.76 U	1.91 U
Thallium	8	1.66 U	2.53 U	0.49 J	3.34 U	0.411 J	6.02 U	2.64 U	2.87 U
Zinc	2,500	41	53.8	30.8	75.8	33.8	34.3	44	48.3

Notes:
Summary of detections only
Blank cells were not analyzed
- = All constituents below the detection limit
J = Estimated value
U = Below method detection limit
RCS-1 = Reportable Concentration
mg/Kg = milligram per kilogram
µg/Kg = microgram per kilogram
Bold, shaded values exceed Standard

Table 5-2
Summary of OHM Analytical Results for Soil
Baffle Tank Area
Yankee Nuclear Power Station
Rowe, MA

Station		SB-725	SB-726	SB-726
Sample Designation		SB7250608F	SB7260810F	DUP 01
Date Sampled	RCS-1	4/12/2006	4/12/2006	4/12/2006
Depth Interval	Standard	6-8'	8-10'	8-10'
Comment				Duplicate
Extractable Petroleum Hydrocarbons (EPH) (mg/Kg)		-		
Benzo(a)anthracene	7		0.0451 J	0.146 U
Benzo(a)pyrene	2		0.0382 J	0.146 U
Benzo(b)fluoranthene	7		0.0273 J	0.0146 J
Benzo(k)fluoranthene	70		0.0546 J	0.146 U
C11-C22 Aromatics	200		27.4 U	29.3 U
C19-C36 Aliphatics	2,500		27.4 U	29.3 U
C9-C18 Aliphatics	1,000		27.4 U	29.3 U
Chrysene	7		0.0533 J	0.0219 J
Fluoranthene	1,000		0.1130 J	0.0409 J
Pyrene	1,000		0.1110 J	0.146 U
Volatile Organic Compounds (VOC) (µg/Kg)				
Acetone	3,000	93.8 U	67.5 J	98.2 U
Carbon disulfide	100,000	2.2 J	13.5 J	24.6 U
Tetrachloroethene	1,000	0.8 J	0.5 J	0.9 J

Notes:
Summary of detections only
Blank cells were not analyzed
- = All constituents below the detection limit
J = Estimated value
U = Below method detection limit
RCS-1 = Reportable Concentration
mg/Kg = milligram per kilogram
µg/Kg = microgram per kilogram
Bold, shaded values exceed Standard

Table 5-3
Summary of OHM Analytical Results for Soil
Bulldozer Spill Area
Yankee Nuclear Power Station
Rowe, MA

Station **Sample ID** **Date Sampled**	**RCS-1** **Standard**	**CAT-B6-SPILL** **CAT-B6-SPILL** **6/27/2006**
Extractable Petroleum Hydrocarbons (EPH) (mg/Kg)		
C11-C22 Aromatics	200	28 U
C19-C36 Aliphatics	2,500	145
C9-C18 Aliphatics	1,000	28 U
Semi-Volatile Organic Compounds (SVOC) (µg/Kg)		-

Notes:
Summary of detections only
Blank cells were not analyzed
- = All constituents below the detection limit
J = Estimated value
U = Below method detection limit
RCS-1 = Reportable Concentration
mg/Kg = milligram per kilogram
µg/Kg = microgram per kilogram
Bold, shaded values exceed Standard

Table 5-4
Summary of OHM Analytical Results for Soil
Dioxin Area
Yankee Nuclear Power Station
Rowe, MA

Sample ID	Date Sampled	Dioxin Concentration
RCS-1 Standard		**20**
EX-3-021	9/21/2005	2.1
EX-3-022	9/14/2005	1.6
EX-3-023	9/14/2005	2.8
EX-3-024	9/21/2005	3.3
EX-3-025	9/21/2005	4.0

Notes:
Results in equivalent 2,3,7,8-TCDD concentration
Units in nanogram per Kilogram (ng/Kg)
RCS-1 = Reportable Concentration
Bold, shaded values exceed Standard

Table 5-5
Summary of OHM Analytical Results for Soil
Firewater Pumphouse Drywell Area
Yankee Nuclear Power Station
Rowe, MA

Station Sample ID Date Sampled	RCS-1 Standard	Drywell-EW-01 Drywell-EW-01 4/27/2006	Drywell-FI-01 Drywell-FI-01 4/27/2006	Drywell-NW-01 Drywell-NW-01 4/27/2006	Drywell-SW-01 Drywell-SW-01 4/27/2006	Drywell-WW-01 Drywell-WW-01 4/27/2006
Extractable Petroleum Hydrocarbons (EPH) (mg/Kg)						
2-Methylnaphthalene	4	0.151 U	0.149 U	0.149 U	0.166 U	0.0198 J
Acenaphthene	20	0.151 U	0.149 U	0.149 U	0.166 U	0.114 J
Anthracene	1,000	0.151 U	0.149 U	0.149 U	0.166 U	0.155
Benzo(a)anthracene	7	0.151 U	0.149 U	0.149 U	0.166 U	0.364
Benzo(a)pyrene	2	0.151 U	0.149 U	0.0389 J	0.166 U	0.334
Benzo(b)fluoranthene	7	0.151 U	0.015 J	0.03 J	0.166 U	0.222
Benzo(g,h,i)perylene	1,000	0.151 U	0.149 U	0.0315 J	0.166 U	0.219
Benzo(k)fluoranthene	70	0.151 U	0.149 U	0.0344 J	0.166 U	0.404
C11-C22 Aromatics	200	30.2 U	30 U	30 U	33.4 U	30.5 U
C19-C36 Aliphatics	2,500	30.2 U	30 U	30 U	33.4 U	30.5 U
C9-C18 Aliphatics	1,000	30.2 U	30 U	30 U	33.4 U	30.5 U
Chrysene	7	0.151 U	0.0344 J	0.0659 J	0.166 U	0.468
Fluoranthene	1,000	0.151 U	0.0569 J	0.121 J	0.166 U	1
Fluorene	400	0.151 U	0.149 U	0.149 U	0.166 U	0.0686 J
Indeno(1,2,3-cd)pyrene	7	0.151 U	0.149 U	0.149 U	0.166 U	0.184
Naphthalene	4	0.151 U	0.149 U	0.149 U	0.166 U	0.0945 J
Phenanthrene	100	0.151 U	0.149 U	0.0389 J	0.166 U	0.559
Pyrene	1,000	0.151 U	0.149 U	0.102 J	0.166 U	0.802
Volatile Petroleum Hydrocarbons (VPH) (mg/Kg)						
C5-C8 Aliphatics	100	0.728 J	0.655 J	0.786 J	0.684 J	0.351 J
C9-C10 Aromatics	100	0.149 J	0.152 J	0.155 J	0.205 J	0.228 J
C9-C12 Aliphatics	1,000	0.245 J	0.205 J	0.2 J	0.232 J	0.247 J
m+p-Xylenes	1,000	0.104 U	0.0372 J	0.105 U	0.115 U	0.111 U
Toluene	30	0.221	0.0515 U	0.0526 U	0.107	0.0553 U
Volatile Organic Compounds (VOC) (µg/Kg)						
2-Butanone	300	45.5 U	44.7 U	3.7 J	72.8 U	46.1 U
Acetone	3,000	90.9 U	89.5 U	44.2 J	146 U	92.3 U
Carbon disulfide	100,000	0.5 J	22.4 U	22.3 U	36.4 U	23.1 U
Toluene	30,000	9.2	2.3 J	2.5 J	5.5 J	1.7 J
Trichlorofluoromethane	1,000,000	4.5 U	4.5 U	0.8 J	7.3 U	0.8 J

Notes:
Summary of detections only
J = Estimated value
U = Below method detection limit
RCS-1 = Reportable Concentration
mg/Kg = milligram per kilogram
µg/Kg = microgram per kilogram
Bold, shaded values exceed Standard

Table 5-6
Summary of OHM Analytical Results for Soil
Firewater Tank (Tank 55) Area
Yankee Nuclear Power Station
Rowe, MA

Station Sample ID Date Sampled	RCS-1 Standard	TK-55-004 TK-55-004 9/14/2005	TK-55-005 TK-55-005 9/14/2005	TK-55-006 TK-55-006 9/14/2005	TK-55-007 TK-55-007 9/14/2005	TK-55-008 TK-55-008 9/14/2005	TK-55-009 TK-55-009 9/14/2005	TK-55-010 TK-55-010 9/14/2005	TK-55-011 TK-55-011 11/8/2005	TK-55-012 TK-55-012 11/8/2005	TK-55-013 TK-55-013 11/8/2005
Extractable Petroleum Hydrocarbons (EPH) (mg/Kg)											
C11-C22 Aromatics	200				**693**	**335**	32.6 U	69.1	42.8	29.8 U	55.5
C19-C36 Aliphatics	2,500				139	74.6	32.6 U	30.8 U	30.6 U	29.8 U	37.3
C9-C18 Aliphatics	1,000				643	313	32.6 U	68.2	30.6 U	29.8 U	33.7 U
2-Methylnaphthalene	4				**8.54**	**3.08**	0.163 U	0.153 U	0.0673 J	0.149 U	0.168 U
Acenaphthene	20				0.742	0.304	0.163 U	0.0415 J	0.153 U	0.149 U	0.168 U
Anthracene	1,000				0.439	0.221	0.163 U	0.0338 J	0.0245 J	0.149 U	0.168 U
Benzo(b)fluoranthene	7				0.00486 J	0.172 U	0.163 U	0.153 U	0.153 UJ	0.149 UJ	0.168 UJ
Chrysene	7				0.0761 J	0.0276 J	0.163 U	0.153 U	0.153 U	0.149 U	0.168 U
Fluoranthene	1,000				0.0777 J	0.0467 J	0.163 U	0.153 U	0.153 U	0.149 U	0.168 U
Fluorene	400				1.55	0.684	0.163 U	0.0907 J	0.153 U	0.149 U	0.168 U
Naphthalene	4				1.83	0.548	0.163 U	0.153 U	0.153 U	0.149 U	0.168 U
Phenanthrene	100				2.84	1.32	0.163 U	0.177	0.153 UJ	0.149 UJ	0.168 UJ
Pyrene	1,000				0.693	0.323	0.163 U	0.0722 J	0.153 U	0.149 U	0.168 U
Volatile Petroleum Hydrocarbons (VPH) (mg/Kg)											
C5-C8 Aliphatics	100	0.728 U	0.752 J								
C9-C10 Aromatics	100	0.376	12.5								
C9-C12 Aliphatics	1,000	1.1	27.2								
Naphthalene	4	0.0485 U	0.987								
Polychlorinated Biphenyls (PCBs) (µg/Kg)	1,000			-							

Notes:
Summary of detections only
Blank cells were not analyzed
- = All constituents below the detection limit
J = Estimated value
U = Below method detection limit
RCS-1 = Reportable Concentration
* Site clean-up goal for PCBs = 1,000 ug/Kg
mg/Kg = milligram per kilogram
µg/Kg = microgram per kilogram
Bold, shaded values exceed Standard
TK-55-007 and 008 were subsequently removed and resampled
resample results represented by TK-55-011, 012, 013

Table 5-7
Summary of OHM Analytical Results for Soil
Fuel Oil Tank Area
Yankee Nuclear Power Station
Rowe, MA

Station **Sample ID** **Location** **Date Sampled**	**RCS-1*** **Standard**	**EX-201** **EX-201-0020F** **fuel berm** **8/5/2005**	**EX-202** **EX-202-0020F** **fuel berm** **8/5/2005**	**EX-203** **EX-203-0020F** **fuel berm** **8/5/2005**	**EX-204** **EX-204-0020F** **fuel berm** **8/5/2005**	**EX-205** **EX-205-0020F** **fuel berm** **8/5/2005**	**EX-206** **EX-206-0003F** **pumphouse** **8/11/2005**	**EX-207** **EX-207-0003F** **fuel line** **10/6/2005**	**EX-208** **EX-208-0004F** **fuel line** **10/11/2005**	**EX-209** **EX-209-0004F** **fuel line** **10/11/2005**	**SB-553A** **SB-553A** **fuel line** **12/1/2005**
Field Screening (ppm)											
PID Headspace Reading		46	37	NS	NS	NS	NS	NS	NS	NS	80
Total Petroleum Hydrocarbons (TPH) (mg/Kg)	200	526	994	1,210	358	85	35.4				
Extractable Petroleum Hydrocarbons (EPH) (mg/Kg)											
C11-C22 Aromatics	200	150	**497**	**436**	97.4	26.6 J	29.2 U	28.2 U	29.5 U	34.5	**270**
C19-C36 Aliphatics	2,500	77.5	91.8	151	47.8	29.6 U	32.7	28.2 U	29.5 U	28.8 U	70.8
C9-C18 Aliphatics	1,000	299	409	628	220	45.4	29.2 U	28.2 U	29.5 U	28.8 U	352
2-Methylnaphthalene	4	0.143 U	0.0926 J	0.145 U	0.15	0.147 U	0.145 U	0.0267	0.147 U	0.143 U	0.165 U
Acenaphthene	20	0.143 U	0.559	0.296	0.167	0.0281 J	0.145 U	0.14 U	0.147 U	0.143 U	0.165 U
Anthracene	1000	0.0443 J	0.343	0.354	0.395	0.037 J	0.145 U	0.14 U	0.147 U	0.143 U	0.444
Benzo(a)anthracene	7	0.143 U	0.142 U	0.145 U	0.6	0.147 U	0.145 U	0.0478	0.147 U	0.143 U	0.165 U
Benzo(a)pyrene	2	0.143 U	0.142 U	0.145 U	0.381	0.147 U	0.145 U	0.0521	0.147 U	0.143 U	0.165 U
Benzo(b)fluoranthene	7	0.143 U	0.142 U	0.145 U	0.381	0.0251 J	0.145 U	0.0394	0.028	0.143 U	0.165 U
Benzo(g,h,i)perylene	1,000	0.143 U	0.142 U	0.145 U	0.148	0.147 U	0.145 U	0.0281	0.147 U	0.143 U	0.165 U
Benzo(k)fluoranthene	70	0.143 U	0.142 U	0.145 U	0.275	0.147 U	0.145 U	0.0577	0.147 U	0.143 U	0.165 U
Chrysene	7	0.143 U	0.142 U	0.0304 J	0.546	0.0296 J	0.145 U	0.0605	0.147 U	0.143 U	0.165 U
Fluoranthene	1,000	0.143 U	0.0912 J	0.0507 J	1.14	0.037 J	0.145 U	0.125	0.0722	0.0633	0.106 J
Fluorene	400	0.143 U	0.772	0.635	0.251	0.0458 J	0.145 U	0.14 U	0.147 U	0.143 U	0.165 U
Indeno(1,2,3-cd)pyrene	7	0.143 U	0.142 U	0.145 U	0.138 J	0.147 U	0.145 U	0.14 U	0.147 U	0.143 U	0.165 U
Naphthalene	4	0.143 U	0.114 J	0.145 U	0.145 U	0.147 U	0.145 U	0.14 U	0.147 U	0.143 U	0.165 U
Phenanthrene	100	0.0458 J	2.41	1.84	1.3	0.114 J	0.145 U	0.0422	0.147 U	0.143 U	0.246
Pyrene	1000	0.0772 J	0.15	0.135 J	1.01	0.147 U	0.145 U	0.11	0.0604	0.0589	0.115 J
Volatile Petroleum Hydrocarbons (VPH) (mg/Kg)											
C5-C8 Aliphatics	100	0.3 J	2.45	0.0995 J	0.105 J	0.403 J	0.0249	0.152	0.302	0.219	6.68 J
C9-C10 Aromatics	100	5.57	69.4	11.6	6.59	1.85	0.0607	0.264	0.083	0.094	42.5
C9-C12 Aliphatics	1,000	12	143	24.6	13.5	3.98	0.0273	0.461	0.0282	0.138 U	52.5
Naphthalene	4	0.0293 U	0.117 U	0.029 U	0.0346 U	0.0378 U	0.028 U	0.0378	0.028	0.0276 U	0.471 U
Toluene	30	0.0293 U	0.117 U	0.0201 J	0.0346 U	0.0378 U	0.028 U	0.029 U	0.028	0.0276 U	0.471 U
Polychlorinated Biphenyls (PCBs) (µg/Kg)											
Aroclor-1254		19.8 U	19.8 U	9.8 U	9.98 U	9.91 U	112	165			
Aroclor-1260		19.8 U	19.8 U	9.8 U	9.98 U	9.91 U	19.8	33.8			
Total PCBs	1,000	-	-	-	-	-	132	199			

Notes:
Summary of detections only
Blank cells were not analyzed
- = All constituents below the detection limit
J = Estimated value
U = Below method detection limit
RCS-1 = Reportable Concentration
* Site clean-up goal for PCBs = 1,000 ug/Kg
mg/Kg = milligram per kilogram
µg/Kg = microgram per kilogram
ppm = parts per million
NS = Not sampled
Bold, shaded values exceed Standard

Table 5-8
Summary of OHM Analytical Results for Soil
Fuel Spill 164 Area
Yankee Nuclear Power Station
Rowe, MA

Station **Sample ID** **Date Sampled**	**RCS-1** **Standard**	**EX-164** **EX-164** **2/9/2006**	**EX-164** **EX-164A** **3/9/2006**
Extractable Petroleum Hydrocarbons (EPH) (mg/Kg)			
C11-C22 Aromatics	200		87.6
C19-C36 Aliphatics	2,500		36.5
C9-C18 Aliphatics	1,000		110
Volatile Petroleum Hydrocarbons (VPH) (mg/Kg)			
C5-C8 Aliphatics	100	2.09	
C9-C12 Aliphatics	1,000	17.1	
C9-C10 Aromatics	100	18.2	
Volatile Organic Compounds (VOC) (µg/Kg)			
Ethylbenzene	80,000	24.2 J	
Naphthalene	4,000	1,590	
m+p-Xylenes	1,000,000	130	
o-Xylene	500,000	78.4	
Semi-Volatile Organic Compounds (SVOC) (µg/Kg)			
2-Methylnaphthalene	4,000		196
Acenaphthene	20,000		219
Fluorene	400,000		227
Phenanthrene	100,000		1,190
Anthracene	1,000,000		346
Fluoranthene	1,000,000		1,440
Pyrene	1,000,000		1,140
Benzo(a)anthracene	7,000		555
Chrysene	7,000		713
Benzo(b)fluoranthene	7,000		324
Benzo(k)fluoranthene	70,000		530
Benzo(a)pyrene	2,000		518
Indeno(1,2,3-cd)pyrene	7,000		197
Benzo(g,h,i)perylene	1,000,000		216

Notes:
Summary of detections only
Blank cells were not analyzed
- = All constituents below the detection limit
J = Estimated value
U = Below method detection limit
RCS-1 = Reportable Concentration
mg/Kg = milligram per kilogram
µg/Kg = microgram per kilogram
Bold, shaded values exceed Standard

Table 5-9
Summary of OHM Analytical Results for Soil
Old Shooting Range
Yankee Atomic Electric Company
Rowe, MA

Sample ID		EX-401-0003I	EX-402-0003I	EX-403-0003I	EX-404-0003I	EX-405-0003I	FD001	EX-406-0003I	EX-407-0003I	EX-408-0003I	EX-409-0003I	EX-410-0003I	EX-411-0003I	EX-412-0003I
Sample Depth	**RCS-1***	**0-3"**	**0-3"**	**0-3"**	**0-3"**	**0-3"**	**0-3"**	**0-3"**	**0-3"**	**0-3"**	**0-3"**	**0-3"**	**0-3"**	**0-3"**
Date Sampled	**Standard**	**8-Jul-05**	**8-Jul-05**	**8-Jul-05**	**8-Jul-05**	**8-Jul-05**	**8-Jul-05**	**8-Jul-05**	**8-Jul-05**	**8-Jul-05**	**14-Jul-05**	**14-Jul-05**	**14-Jul-05**	**14-Jul-05**
Comment		**N. Wall**	**E. Wall**	**S. Wall**	**W. Wall**	**N. Floor**	**DUP of 405**	**Deep Target**	**Stockpile**	**S. Floor**	**Floor**	**S. Wall**	**N. Wall**	**Stockpile**
Status		**Removed**	**Removed**	**Present**	**Removed**	**Removed**	**Removed**	**Removed**	**Removed**	**Removed**	**Present**	**Present**	**Present**	**Removed**
Polychlorinated Biphenyls (PCBs) (ug/Kg)														
Aroclor 1254		156	498	211		314	1,120	1,540	935	310	29	71	19	157
Aroclor 1260		178	738	439		311	574	2,500	1,210	665	47	93	31	152
Total Aroclors	1,000	334	**1,236**	650		625	**1,694**	**4,040**	**2,145**	975	76	164	49	309
Inorganics (mg/kg)														
Lead	300	13.1	23.6	48.0	**366**	34.0	49.1	59.3		81.9	67.7	122	141	

Notes:
Summary of detections only
Blank cells were not analyzed
- = All constituents below the detection limit
J = Estimated value
U = Below method detection limit
RCS-1 = Reportable Concentration
* Site clean-up goal for PCBs = 1,000 ug/Kg
mg/Kg = milligram per kilogram
Bold, shaded values exceed Standard

Table 5-10
Summary of OHM Analytical Results for Soil
Peninsula Sand Blast Grit Area
Yankee Nuclear Power Station
Rowe, MA

Station	Sample ID	Date Sampled	Lead Concentration	Status
RCS-1 Standard			300	
EX-SBG-001	EX-SBG-001	11/21/2005	178	**Removed**
EX-SBG-002	EX-SBG-002	11/21/2005	98.4	**Removed**
EX-SBG-003	EX-SBG-003	11/21/2005	**549**	**Removed**
EX-SBG-004	EX-SBG-004	11/21/2005	13.1	**Removed**
EX-SBG-005	EX-SBG-005	11/21/2005	16.9	**Removed**
EX-SBG-006	EX-SBG-006	11/21/2005	**399**	**Removed**
EX-SBG-007	EX-SBG-007	11/21/2005	11.4	**Removed**
EX-SBG-008	EX-SBG-008	11/21/2005	**495**	**Removed**
EX-SBG-009	EX-SBG-009	11/21/2005	131	**Removed**
EX-SBG-009	FD001-112105	11/21/2005	10.1	**Removed**
EX-SBG-010	EX-SBG-010	11/21/2005	**532**	**Removed**
EX-SBG-011	EX-SBG-011	11/21/2005	**582**	**Removed**
EX-SBG-012	EX-SBG-012	11/21/2005	181	**Removed**
EX-SBG-013	EX-SBG-013	11/21/2005	15.3	Remaining
EX-SBG-014	EX-SBG-014	11/21/2005	63.9	Remaining
EX-SBG-015	EX-SBG-015	11/21/2005	57	Remaining
EX-SBG-016	EX-SBG-016	11/21/2005	31.5	Remaining
EX-SBG-017	EX-SBG-017	11/21/2005	11.6	Remaining
EX-SBG-018	EX-SBG-018	11/21/2005	144	Remaining
EX-SBG-019	EX-SBG-019	11/21/2005	6.96	Remaining
EX-SBG-020	EX-SBG-020	11/23/2005	**717**	**Removed**
EX-SBG-021	EX-SBG-021	11/23/2005	8.92	**Removed**
EX-SBG-022	EX-SBG-022	11/23/2005	65	**Removed**
EX-SBG-023	EX-SBG-023	11/29/2005	**315**	**Removed**
EX-SBG-024	EX-SBG-024	11/29/2005	94.2	**Removed**
EX-SBG-025	EX-SBG-025	11/29/2005	206	**Removed**
EX-SBG-026	EX-SBG-026	11/29/2005	234	**Removed**
EX-SBG-026	FD002-112905	11/29/2005	**883**	**Removed**
EX-SBG-027	EX-SBG-027	11/29/2005	**599**	**Removed**
EX-SBG-028	EX-SBG-028	11/29/2005	258	**Removed**
EX-SBG-029	EX-SBG-029	11/29/2005	**309**	**Removed**
EX-SBG-030	EX-SBG-030	11/29/2005	**322**	**Removed**
EX-SBG-031	EX-SBG-031	11/29/2005	254	**Removed**
EX-SBG-032	EX-SBG-032	11/29/2005	267	**Removed**
EX-SBG-033	EX-SBG-033	11/29/2005	62.4	Remaining
EX-SBG-034	EX-SBG-034	11/29/2005	**660**	**Removed**
EX-SBG-101	EX-SBG-101	6/13/2006	5.84	Remaining
EX-SBG-102	EX-SBG-102	6/13/2006	50.1	Remaining
EX-SBG-103	EX-SBG-103	6/13/2006	195	Remaining
EX-SBG-104	EX-SBG-104	6/13/2006	199	Remaining
EX-SBG-105	EX-SBG-105	6/13/2006	94.6	**Removed**
EX-SBG-105	FD001-061306	6/13/2006	**341**	**Removed**
SBG 105R	SBG 105R	6/27/2006	3.57	Remaining
EX-SBG-106	EX-SBG-106	6/13/2006	42.6	Remaining
EX-SBG-107	EX-SBG-107	6/13/2006	**411**	**Removed**
EX-SBG-107R	EX-SBG-107R	6/29/2006	6.25	Remaining
EX-SBG-107R	FD002-062906	6/29/2006	11.1	Remaining
EX-SBG-108	EX-SBG-108	6/13/2006	6.9	Remaining
EX-SBG-109	EX-SBG-109	6/13/2006	**313**	**Removed**

Table 5-10
Summary of OHM Analytical Results for Soil
Peninsula Sand Blast Grit Area
Yankee Nuclear Power Station
Rowe, MA

Station	Sample ID	Date Sampled	Lead Concentration	Status
RCS-1 Standard			**300**	
EX-SBG-109R	EX-SBG-109R	6/29/2006	4.05	Remaining
EX-SBG-109R	FD003-062906	6/29/2006	2.96	Remaining
EX-SBG-110	EX-SBG-110	6/13/2006	**328**	**Removed**
EX-SBG-110R	EX-SBG-110R	6/29/2006	**370**	**Removed**
EX-SBG-110R	FD004-062906	6/29/2006	143	**Removed**
EX-SBG-110R2	EX-SBG-110R2	7/18/2006	4.81	Remaining
EX-SBG-111	EX-SBG-111	6/13/2006	8.83	Remaining
EX-SBG-112	EX-SBG-112	6/13/2006	173	Remaining
EX-SBG-113	EX-SBG-113	6/13/2006	9.55	Remaining
EX-SBG-114	EX-SBG-114	6/13/2006	53.1	Remaining
EX-SBG-115	EX-SBG-115	6/13/2006	278	Remaining
EX-SBG-116	EX-SBG-116	6/13/2006	**312**	**Removed**
EX-SBG-116R	EX-SBG-116R	6/29/2006	79.7	Remaining
EX-SBG-117	EX-SBG-117	6/13/2006	**418**	**Removed**
EX-SBG-117R	EX-SBG-117R	6/29/2006	121	Remaining
EX-SBG-118	EX-SBG-118	6/13/2006	32.4	Remaining
EX-SBG-119	EX-SBG-119	6/13/2006	186	Remaining
EX-SBG-120	EX-SBG-120	6/13/2006	**359**	**Removed**
EX-SBG-121	EX-SBG-121	6/13/2006	**1310**	**Removed**
EX-SBG-122	EX-SBG-122	6/13/2006	27	Remaining
EX-SBG-123	EX-SBG-123	6/13/2006	105	Remaining
EX-SBG-124	EX-SBG-124	6/13/2006	148	Remaining
EX-SBG-125	EX-SBG-125	6/13/2006	35.5	Remaining
EX-SBG-126	EX-SBG-126	6/13/2006	5.79	Remaining
EX-SBG-127	EX-SBG-127	6/13/2006	**357**	**Removed**
SBG 127R	SBG 127R	6/27/2006	1.23	Remaining
EX-SBG-128	EX-SBG-128	6/13/2006	299	Remaining
EX-SBG-129	EX-SBG-129	6/13/2006	194	Remaining
EX-SBG-130	EX-SBG-130	6/13/2006	29.9	Remaining
EX-SBG-131	EX-SBG-131	6/13/2006	92.8	Remaining
EX-SBG-132	EX-SBG-132	6/13/2006	102	Remaining
EX-SBG-133	EX-SBG-133	6/13/2006	37.9	Remaining
EX-SBG-134	EX-SBG-134	6/13/2006	**343**	**Removed**
EX-SBG-134R	EX-SBG-134R	6/29/2006	7	Remaining
EX-SBG-135	EX-SBG-135	6/13/2006	11.8	Remaining
EX-SBG-136	EX-SBG-136	6/13/2006	**1410**	**Removed**
EX-SBG-136A	EX-SBG-136A	6/13/2006	**571**	**Removed**
EX-SBG-137	EX-SBG-137	6/13/2006	**988**	**Removed**
EX-SBG-137A	EX-SBG-137A	6/13/2006	122	**Removed**
SBG 238	SBG 238	6/27/2006	19.7	Remaining
SBG 239	SBG 239	6/27/2006	6.15	Remaining
SBG 240	SBG 240	6/27/2006	73	Remaining
SBG 241	SBG 241	6/27/2006	176	Remaining
SBG 242	SBG 242	6/27/2006	14.8	Remaining
SBG 243	SBG 243	6/27/2006	**381**	**Removed**
EX-SBG-243R	EX-SBG-243R	7/18/2006	62.1	Remaining
SBG 244	SBG 244	6/27/2006	44.6	Remaining
SBG 245	SBG 245	6/27/2006	5.29	Remaining
SBG 246	SBG 246	6/27/2006	**368**	**Removed**
EX-SBG-246R	EX-SBG-246R	7/18/2006	168	Remaining
SBG 247	SBG 247	6/27/2006	181	Remaining

Table 5-10
Summary of OHM Analytical Results for Soil
Peninsula Sand Blast Grit Area
Yankee Nuclear Power Station
Rowe, MA

Station	Sample ID	Date Sampled	Lead Concentration	Status
RCS-1 Standard			**300**	
SBG 248	SBG 248	6/27/2006	64.4	Remaining
SBG 249	SBG 249	6/27/2006	140	Remaining
SBG 250	SBG 250	6/27/2006	**467**	**Removed**
EX-SBG-250R	EX-SBG-250R	7/18/2006	**648**	**Removed**
EX-SBG-250R2	EX-SBG-250R2	7/26/2006	24.3	Remaining
SBG 251	SBG 251	6/27/2006	34.7	Remaining
SBG 252	SBG 252	6/27/2006	66.8	Remaining
SBG 253	SBG 253	6/27/2006	296	Remaining
SBG 254	SBG 254	6/27/2006	57.6	Remaining
SBG 255	SBG 255	6/27/2006	120	Remaining
SBG 256	SBG 256	6/27/2006	**361**	**Removed**
EX-SBG-256R	EX-SBG-256R	7/18/2006	28.6	Remaining
SBG 257	SBG 257	6/27/2006	**700**	**Removed**
EX-SBG-257R	EX-SBG-257R	7/18/2006	47.2	Remaining
SBG 258	SBG 258	6/27/2006	77	Remaining
SBG 259	SBG 259	6/27/2006	**427**	**Removed**
EX-SBG-259R	EX-SBG-259R	7/18/2006	191	Remaining
EX-SBG-260	EX-SBG-260	6/29/2006	6.98	Remaining
EX-SBG-261	EX-SBG-261	6/29/2006	90	Remaining
EX-SBG-262	EX-SBG-262	6/29/2006	41.6	Remaining
EX-SBG-263	EX-SBG-263	6/29/2006	85.3	Remaining
EX-SBG-264	EX-SBG-264	6/29/2006	64.4	Remaining
EX-SBG-265	EX-SBG-265	6/29/2006	171	Remaining
EX-SBG-266	EX-SBG-266	6/29/2006	40	Remaining
EX-SBG-267	EX-SBG-267	6/29/2006	47.7	Remaining
EX-SBG-268	EX-SBG-268	6/29/2006	5.79	Remaining
FD005-062906	FD005-062906	6/29/2006	48.3	Remaining

Notes:
RCS-1 = Reportable Concentration
Units in milligram per kilogram
Bold, shaded values exceed Standard

Table 5-11
Summary of OHM Analytical Results for Soil
Potable Water Tank Area
Yankee Nuclear Power Station
Rowe, MA

Station Depth (inches) Date Sampled	RCS-1 Standard	Potable Water Tank 0-6 5/17/2006	Potable Water Tank 0-18 5/17/2006	Potable Water Tank 6-12 5/17/2006	Potable Water Tank 12-18 5/17/2006
Extractable Petroleum Hydrocarbons (EPH) (mg/Kg)					
C11-C22 Aromatics	200	26.8 U		26.3 U	28.5 U
C19-C36 Aliphatics	2,500	26.8 U		26.3 U	28.5 U
C9-C18 Aliphatics	1,000	26.8 U		26.3 U	28.5 U
Volatile Petroleum Hydrocarbons (VPH) (mg/Kg)					
C5-C8 Aliphatics	100	0.34 J		0.252 J	0.167 J
C9-C10 Aromatics	100	0.0556 J		0.288 U	0.197 J
C9-C12 Aliphatics	1,000	0.24 J		0.246 J	0.311 J
m+p-Xylenes	1,000	0.0275 J		0.115 U	0.145 U
Toluene	30	0.0871		0.0575 U	0.0724 U
Polychlorinated Biphenyls (PCBs) (µg/Kg)					
Aroclor-1254			10 U		
Aroclor-1260			10 U		
Total PCBs	1,000		-		

Notes:
Summary of detections only
Blank cells were not analyzed
- = All constituents below the detection limit
J = Estimated value
U = Below method detection limit
RCS-1 = Reportable Concentration
* Site clean-up goal for PCBs = 1,000 ug/Kg
mg/Kg = milligram per kilogram
µg/Kg = microgram per kilogram
Bold, shaded values exceed Standard

Table 5-12
Summary of OHM Analytical Results for Soil
Railroad Ties Area
Yankee Nuclear Power Station
Rowe, MA

Station		EX-RR001		EX-RR002		EX-RR-0003		EX-RR-0003		EX-RR-0004		EX-RR-0005		EX-RR-0006		EX-RR-0007	
Sample Designation	**RCS-1**	**EX-RR001**		**EX-RR002**		**EX-RR-0003**		**FD001**		**EX-RR-0004**		**EX-RR-0005**		**EX-RR-0006**		**EX-RR-0007**	
Date Sampled	**Standard**	**6/30/2005**		**7/8/2005**		**9/13/2005**		**9/13/2005**		**9/13/2005**		**9/13/2005**		**9/13/2005**		**9/13/2005**	
Semi-Volatile Organic Compounds (SVOC) (µg/Kg)																	
Acenaphthene	20,000	190	U	482		270	U	270	U	254	U	124	J	117	J	263	U
Acenaphthylene	100,000	158		822		540		693		557		309		318		255	J
Anthracene	1,000,000	128		962		372		377		745		482		503		208	J
Benzo(a)anthracene	7,000	329		1,110		1,940		2,000		2,210		1,120		891		971	
Benzo(a)pyrene	2,000	258		745		1,870		**2,580**		**2,830**		1,150		1,050		1,150	
Benzo(b)fluoranthene	7,000	234		703		2,390		2,940		3,210		1,460		1,490		1,550	
Benzo(g,h,i)perylene	1,000,000	190		689		837		730		811		251	J	417		503	
Benzo(k)fluoranthene	70,000	230		686		2,160		2,480		2,850		1,230		1,200		1,300	
Carbazole	NV	190	U	230		113	J	270	U	254	U	276	U	261	U	263	U
Chrysene	7,000	308		1,150		2,460		2,490		2,840		1,730		1,320		1,330	
Dibenzo(a,h)anthracene	700	190	U	210		151	J	261	J	254	U	276	U	261	U	263	U
Dibenzofuran	100,000	190	U	419		270	U	270	U	254	U	276	U	261	U	263	U
Fluoranthene	1,000,000	535		2,620		3,730		3,810		4,090		3,110		1,760		1,640	
Fluorene	400,000	190	U	537		270	U	270	U	254	U	276	U	261	U	263	U
Indeno(1,2,3-cd)pyrene	7,000	183		790		839		819		892		284		451		487	
Naphthalene	4,000	190	U	420		270	U	270	U	254	U	276	U	261	U	263	U
Phenanthrene	100,000	55		2,000		310		337		727		430		492		253	J
Pyrene	1,000,000	527		1,930		3,460		4,000		4,990		3,170		1,970		1,750	

Notes:
Summary of detections only
Blank cells were not analyzed
- = All constituents below the detection limit
J = Estimated value
U = Below method detection limit
RCS-1 = Reportable Concentration
NV = No Value
µg/Kg = microgram per kilogram
Bold, shaded values exceed Standard

Table 5-13
Summary of OHM Analytical Results for Soil
Railroad Tracks Area
Yankee Nuclear Power Station
Rowe, MA

Station Sample Designation Date Sampled Comment	RCS-1 Standard	SB-105-T SB-105-T 01F 1/5/2005	SB-105-T SB-105-T 02F 1/5/2005	SB-105-T SB-105-T 03F 1/5/2005	SB-105-T SB-105-T 04F 1/5/2005	SB-105-T SB-105-T 05F 1/5/2005	SB-105-U SB-105-U 01F 1/5/2005	SB-105-U SB-105-U 02F 1/5/2005	SB-105-U SB-105-U 03F 1/5/2005	SB-105-U SB-105-U 04F 1/5/2005	SB-105-U SB-105-U 05F 1/5/2005	SB105M SB105M-0608F 1/12/2005	SB105M SB105M-0709F 1/12/2005	FD001-011205 FD001-011205 1/12/2005 Duplicate	SB105M SB105M-0810F 1/12/2005	SB105M* SB105M-0203F 4/25/2005	SB105M* SB105M-0304F 4/25/2005
Extractable Petroleum Carbons (mg/Kg)																	
C11-C22 Aromatics	200											7.09 U	**382**	6.8 U	7.41 U	30.6 U	**647**
C19-C36 Aliphatics	2500											7.09 U	37.9 U	6.8 U	7.41 U	30.6 U	66.1 U
C9-C18 Aliphatics	1000											7.09 U	37.9 U	6.8 U	7.41 U	30.6 U	180
Semi-Volatile Organic Compounds (SVOC) (µg/Kg)																	
1-Methylnaphthalene	NV																
2-Methylnaphthalene	4,000	380 U	370 U	370 U	350 U	360 U	370 U	350 U	350 U	370 U	360 U	370 U	2,000	**10,000**	550	379 U	3,010
Acenaphthene	20,000	380 U	370 U	370 U	350 U	360 U	370 U	350 U	350 U	370 U	360 U	370 U	2,600	11,000	620	379 U	3,850
Acenaphthylene	100,000	380 U	370 U	370 U	350 U	360 U	370 U	350 U	350 U	370 U	360 U	370 U	640 J	3,000 J	200 J	379 U	817 U
Anthracene	1,000,000	380 U	370 U	370 U	350 U	360 U	370 U	350 U	350 U	370 U	360 U	370 U	4,900	23,000	1,600	379 U	3,670
Benzo(a)anthracene	7,000	380 U	370 U	370 U	350 U	360 U	370 U	350 U	350 U	370 U	360 U	370 U	4,000	**16,000**	1,100	379 U	**17,300**
Benzo(a)pyrene	2,000	380 U	370 U	370 U	350 U	360 U	370 U	350 U	350 U	370 U	360 U	370 U	**2,100**	**8,400**	620	379 U	**11,200**
Benzo(b)fluoranthene	7,000	380 U	370 U	370 U	350 U	360 U	370 U	350 U	350 U	370 U	360 U	370 U	2,000	**8,600**	730	379 U	**30,000**
Benzo(g,h,i)perylene	1,000,000	380 U	370 U	370 U	350 U	360 U	370 U	350 U	350 U	370 U	360 U	370 U	940 J	3,600 J	270 J	379 U	6,800
Benzo(k)fluoranthene	70,000	380 U	370 U	370 U	350 U	360 U	370 U	350 U	350 U	370 U	360 U	370 U	2,100	8,100	620	379 U	11,600
Carbazole	NV	380 U	370 U	370 U	350 U	360 U	370 U	350 U	350 U	370 U	360 U	370 U	960 J	4,600	420		
Chrysene	7,000	380 U	370 U	370 U	350 U	360 U	370 U	350 U	350 U	370 U	360 U	370 U	4,000	**18,000**	1,400	379 U	**23,700**
Dibenzo(a,h)anthracene	700	380 U	370 U	370 U	350 U	360 U	370 U	350 U	350 U	370 U	360 U	370 U	**1,900** U	**2,000** J	360 U	379 U	**817** U
Fluoranthene	1,000,000	380 U	370 U	87 J	350 U	360 U	370 U	350 U	350 U	370 U	360 U	370 U	13,000	47,000	3,800	379 U	34,900
Fluorene	400,000	380 U	370 U	370 U	350 U	360 U	370 U	350 U	350 U	370 U	360 U	370 U	3,800	16,000	970	379 U	3,770
Indeno(1,2,3-cd)pyrene	7,000	380 U	370 U	370 U	350 U	360 U	370 U	350 U	350 U	370 U	360 U	370 U	1,900 U	4,300	320 J	379 U	**7,460**
Naphthalene	4,000	380 U	370 U	370 U	350 U	360 U	370 U	350 U	350 U	370 U	360 U	370 U	2,700	**17,000**	580	379 U	**9,850**
Phenanthrene	100,000	380 U	370 U	370 U	350 U	360 U	370 U	350 U	350 U	370 U	360 U	370 U	16,000	58,000	3,700	379 U	14,500
Pyrene	1,000,000	380 U	370 U	370 U	350 U	360 U	370 U	350 U	350 U	370 U	360 U	370 U	9,500	39,000	2,300	379 U	20,100

Notes:
Summary of detections only
Blank cells were not analyzed
J = Estimated value
U = Below method detection limit
RCS-1 = Reportable Concentration
NV = No Value
* = SB105M samples in Jan and April 2005 were in close proximity
µg/Kg = microgram per kilogram
Bold, shaded values exceed Standard

Table 5-13
Summary of OHM Analytical Results for Soil
Railroad Tracks Area
Yankee Nuclear Power Station
Rowe, MA

Station Sample Designation Date Sampled Comment	RCS-1 Standard	SB105M* SB105M-0405F 4/25/2005	SB105 SB105-R2-0203F 6/22/2005	SB105 SB105-R2-0305F 6/22/2005	SB105-002 SB105-002-0203F 6/23/2005	SB105-002 SB105-002-0305F 6/23/2005	SB105-I SB105-I2-0103F 6/23/2005	SB105-J SB105-J2-0103F 6/22/2005	SB-RRBED-01 SB-RRBed-01-0003F 6/6/2006	SB-RRBED-01 SB-RRBed-01-0407F 6/6/2006	SB-RRBED-01 SB-RRBed-01-0708F 6/6/2006	SB-RRBED-105 SB-RRBed-105-0003F 6/6/2006	SB-RRBED-105 SB-RRBed-105-0710F 6/6/2006	TP-RRBED TP-RRBed-0809F 6/6/2006
Extractable Petroleum Carbons (mg/Kg)														
C11-C22 Aromatics	200	53.7							31.6 U	31.3 U	32.1 U	28.4 U	29.9 U	41.1 U
C19-C36 Aliphatics	2500	30.3 U							31.6 U	31.3 U	32.1 U	28.4 U	29.9 U	41.1 U
C9-C18 Aliphatics	1000	30.3 U							31.6 U	31.3 U	32.1 U	28.4 U	29.9 U	41.1 U
Semi-Volatile Organic Compounds (SVOC) (µg/Kg)														
1-Methylnaphthalene	NV		171	139 U	1580	153 U	153 U	138 U						
2-Methylnaphthalene	4,000	375 U	247	139 U	2,700	153 U	153 U	138 U	157 U	153 J	160 U	141 U	149 U	205 U
Acenaphthene	20,000	375 U	258	139 U	4,560	153 U	153 U	138 U	157 U	155 J	160 U	141 U	149 U	205 U
Acenaphthylene	100,000	375 U	3,830	386	3,110	510	79 J	138 U	157 U	28 J	160 U	141 U	149 U	205 U
Anthracene	1,000,000	375 U	9,150	177	7,420	374	153 U	138 U	157 U	100 J	160 U	141 U	149 U	205 U
Benzo(a)anthracene	7,000	2,260	**7,350**	504	**10,200**	733	125 J	138 U	157 U	345	160 U	141 U	149 U	205 U
Benzo(a)pyrene	2,000	1,520	**4,740**	470	**4,930**	627	96 J	138 U	157 U	330	160 U	141 U	149 U	205 U
Benzo(b)fluoranthene	7,000	2,560	**10,100**	498	6,170	763	93 J	138 U	157 U	544	160 U	141 U	149 U	205 U
Benzo(g,h,i)perylene	1,000,000	945	1,720	525	3,780	410	69 J	108 J	157 U	219	160 U	141 U	149 U	205 U
Benzo(k)fluoranthene	70,000	824	6,010	591	5,520	610	100 J	138 U	157 U	786	160 U	141 U	149 U	205 U
Carbazole	NV													
Chrysene	7,000	1,990	**13,300**	717	**10,800**	952	143 J	138 U	157 U	758	160 U	141 U	149 U	205 U
Dibenzo(a,h)anthracene	700	375 U	478	139 U	**885**	83 J	153 U	138 U	157 U	156 U	160 U	141 U	149 U	205 U
Fluoranthene	1,000,000	4,510	22,400	865	29,100	2,010	293	138 U	157 U	933	160 U	141 U	149 U	205 U
Fluorene	400,000	375 U	84 J	139 U	4,550	153 U	153 U	138 U	157 U	133 J	160 U	141 U	149 U	205 U
Indeno(1,2,3-cd)pyrene	7,000	934	2,320	487	4,730	556	100 J	138 U	157 U	228	160 U	141 U	149 U	205 U
Naphthalene	4,000	375 U	1,220	139 U	**4,080**	153 U	153 U	138 U	157 U	652	160 U	141 U	149 U	205 U
Phenanthrene	100,000	1,340	794	135 J	18,100	479	106 J	138 U	157 U	278	160 U	141 U	149 U	205 U
Pyrene	1,000,000	3,540	17,900	804	19,300	1,260	204	138 U	157 U	1,110	160 U	141 U	149 U	205 U

Notes:
Summary of detections only
Blank cells were not analyzed
J = Estimated value
U = Below method detection limit
RCS-1 = Reportable Concentration
NV = No Value
* = SB105M samples in Jan and April 2005 were in close proximity
µg/Kg = microgram per kilogram
Bold, shaded values exceed Standard

Table 5-14
Summary of OHM Analytical Results for Soil
South Yard Sand Blast Grit Area
Yankee Nuclear Power Station
Rowe, MA

Station Sample ID Date Sampled	RCS-1* Standard	SY-SBG-001 SY-SBG-001 6/20/2006	SY-SBG-002 SY-SBG-002 6/20/2006	SY-SBG-003 SY-SBG-003 6/20/2006	SY-SBG-004 SY-SBG-004 6/20/2006	SY-SBG-TP2-0012I SY-SBG-TP2-0012I 7/10/2006	SY-SBG-TP3-0012I SY-SBG-TP3-0012I 7/10/2006	SY-SBG-TP4-0012I SY-SBG-TP4-0012I 7/10/2006	SY-SBG-TP5-0012I SY-SBG-TP5-0012I 7/10/2006	SY-SBG-TP12-18I SY-SBG-TP12-18I 7/11/2006	SY-EX001 SY-EX001 7/12/2006	SY-EX002 SY-EX002 7/12/2006	SY-EX003 SY-EX003 7/12/2006	SY-EX004 SY-EX004 7/12/2006	SY-EX005 SY-EX005 7/12/2006	SY-EX006 SY-EX006 7/12/2006
Extractable Petroleum Hydrocarbons (EPH) (mg/Kg)																
C11-C22 Aromatics	200									35.7 U						
C19-C36 Aliphatics	2,500									35.7 U						
C9-C18 Aliphatics	1,000									35.7 U						
2-Methylnaphthalene	4									0.178 U						
Acenaphthene	20									0.178 U						
Acenaphthylene	100									0.178 U						
Anthracene	1,000									0.178 U						
Benzo(a)anthracene	7									0.178 U						
Benzo(a)pyrene	2									0.178 U						
Benzo(b)fluoranthene	7									0.178 U						
Benzo(g,h,i)perylene	1,000									0.178 U						
Benzo(k)fluoranthene	70									0.178 U						
Chrysene	7									0.178 U						
Dibenzo(a,h)anthracene	0.7									0.178 U						
Fluoranthene	1,000									0.178 U						
Fluorene	400									0.178 U						
Indeno(1,2,3-cd)pyrene	7									0.178 U						
Phenanthrene	100									0.178 U						
Pyrene	1,000									0.178 U						
Polychlorinated Biphenyls (PCBs) (µg/Kg)																
Aroclor-1254			28.1 U		28 U											
Aroclor-1260			56.3		165											
Total PCBs	1,000		56.3		165											
Inorganics (mg/Kg)																
Barium	1,000	312		430												
Cadmium	2	1.72		**2.26**												
Chromium	1,000	336		448												
Lead	300	**805**		**1250**		5.27	10.6	12.2	17.4		79.2	39.1	24	17.8	18.3	41
Selenium	400	4.54		6.98												
Silver	100	1.89		3.07												

Notes:
Summary of detections only
Blank cells were not analyzed
J = Estimated value
U = Below method detection limit
RCS-1 = Reportable Concentration
mg/Kg = milligram per kilogram
* Site clean-up goal for PCBs = 1,000 ug/Kg
Bold, shaded values exceed Standard

Table 5-14
Summary of OHM Analytical Results for Soil
South Yard Sand Blast Grit Area
Yankee Nuclear Power Station
Rowe, MA

Station Sample ID Date Sampled	RCS-1* Standard	SY-EX007 SY-EX007 7/12/2006	SY-EX008 SY-EX008 7/12/2006	SY-EX009 SY-EX009 7/12/2006	SY-EX009 FD007-071206 7/12/2006	SY-EX010 SY-EX010 7/12/2006	SY-EX011 SY-EX011 7/12/2006	SY-EX012 SY-EX012 7/12/2006	SY-EX013 SY-EX013 7/12/2006	SY-EX014 SY-EX014 7/12/2006	SY-EX015 SY-EX015 7/12/2006	SY-EX016 SY-EX016 7/12/2006	SY-EX017 SY-EX017 7/12/2006	SY-EX018 SY-EX018 7/12/2006	SY-EX019 SY-EX019 7/12/2006	SY-EX020 SY-EX020 7/13/2006	SY-EX021 SY-EX021 7/13/2006	SY-EX022 SY-EX022 7/13/2006	SY-EX023 SY-EX023 7/13/2006
Extractable Petroleum Hydrocarbons (EPH) (mg/Kg)																			
C11-C22 Aromatics	200												28.7 U	32.2	**392**				101
C19-C36 Aliphatics	2,500												28.7 U	30.7 U	128				73.6
C9-C18 Aliphatics	1,000												28.7 U	30.7 U	562				31.6 U
2-Methylnaphthalene	4												0.143 U	0.153 U	0.13 J				0.157 U
Acenaphthene	20												0.143 U	0.242	0.52				0.157 U
Acenaphthylene	100												0.143 U	0.153 U	0.0613 J				0.157 U
Anthracene	1,000												0.143 U	0.754	0.242				0.157 U
Benzo(a)anthracene	7												0.143 U	1.73	0.0613 J				0.157 U
Benzo(a)pyrene	2												0.143 U	1.52	0.142 U				0.0725 J
Benzo(b)fluoranthene	7												0.143 U	0.783	0.0242 J				0.0442 J
Benzo(g,h,i)perylene	1,000												0.143 U	0.735	0.142 U				0.0442 J
Benzo(k)fluoranthene	70												0.143 U	1.43	0.0328 J				0.0347 J
Chrysene	7												0.143 U	1.75	0.0271 J				0.0647 J
Dibenzo(a,h)anthracene	0.7												0.143 U	0.292	0.142 U				0.157 U
Fluoranthene	1,000												0.143 U	4	0.201				0.0473 J
Fluorene	400												0.143 U	0.284	0.539				0.157 U
Indeno(1,2,3-cd)pyrene	7												0.143 U	0.599	0.142 U				0.157 U
Phenanthrene	100												0.143 U	2.39	1.01				0.157 U
Pyrene	1,000												0.143 U	3.21	0.362				0.0915 J
Polychlorinated Biphenyls (PCBs) (µg/Kg)																			
Aroclor-1254																			
Aroclor-1260																			
Total PCBs	1,000																		
Inorganics (mg/Kg)																			
Barium	1,000																		
Cadmium	2																		
Chromium	1,000																		
Lead	300	9.33	3.55	45	9.91	2.08	9.04	2.51	20.6	15	6.05	3.51	3.96	2.3		3.56	6.75	14.6	10.7
Selenium	400																		
Silver	100																		

Notes:
Summary of detections only
Blank cells were not analyzed
J = Estimated value
U = Below method detection limit
RCS-1 = Reportable Concentration
mg/Kg = milligram per kilogram
* Site clean-up goal for PCBs = 1,000 ug/Kg
Bold, shaded values exceed Standard

Table 5-14
Summary of OHM Analytical Results for Soil
South Yard Sand Blast Grit Area
Yankee Nuclear Power Station
Rowe, MA

Station Sample ID Date Sampled	RCS-1* Standard	SY-EX024 SY-EX024 7/13/2006	SY-EX025 SY-EX025 7/13/2006	SY-EX026 SY-EX026 7/13/2006	SY-EX027 SY-EX027 7/13/2006	SY-EX027 FD008-071306 7/13/2006	SY-EX028 SY-EX028 7/13/2006	SY-EX-029 SY-EX-029 7/19/2006	SY-EX-030 SY-EX-030 7/19/2006	SY-EX-031 SY-EX-031 7/19/2006	SY-EX-032 SY-EX-032 7/19/2006	SY-EX-033 SY-EX-033 7/19/2006	SY-EX-034 SY-EX-034 7/19/2006	SY-EX-035 SY-EX-035 7/19/2006	SY-EX-036 SY-EX-036 7/19/2006	SY-EX-037 SY-EX-037 7/19/2006	SY-EX-038 SY-EX-038 7/19/2006
Extractable Petroleum Hydrocarbons (EPH) (mg/Kg)																	
C11-C22 Aromatics	200	32.5 U		29.2 U			31.9 U							27.5 U	29 U		
C19-C36 Aliphatics	2,500	32.5 U		29.2 U			31.9 U							27.5 U	29 U		
C9-C18 Aliphatics	1,000	32.5 U		26.4 J			31.9 U							27.5 U	29 U		
2-Methylnaphthalene	4	0.162 U		0.145 U			0.159 U							0.137 U	0.145 U		
Acenaphthene	20	0.162 U		0.0626 J			0.159 U							0.0247 J	0.145 U		
Acenaphthylene	100	0.162 U		0.145 U			0.159 U							0.137 U	0.145 U		
Anthracene	1,000	0.162 U		0.13 J			0.159 U							0.0495 J	0.145 U		
Benzo(a)anthracene	7	0.162 U		0.172			0.159 U							0.088 J	0.145 U		
Benzo(a)pyrene	2	0.162 U		0.189			0.159 U							0.117 J	0.0363 J		
Benzo(b)fluoranthene	7	0.162 U		0.0845 J			0.159 U							0.0564 J	0.0203 J		
Benzo(g,h,i)perylene	1,000	0.162 U		0.128 J			0.159 U							0.137 U	0.0232 J		
Benzo(k)fluoranthene	70	0.162 U		0.178			0.159 U							0.129 J	0.0421 J		
Chrysene	7	0.162 U		0.326			0.159 U							0.151	0.0479 J		
Dibenzo(a,h)anthracene	0.7	0.162 U		0.145 U			0.159 U							0.137 U	0.145 U		
Fluoranthene	1,000	0.162 U		0.471			0.0573 J							0.245	0.0798 J		
Fluorene	400	0.162 U		0.0495 J			0.159 U							0.0206 J	0.145 U		
Indeno(1,2,3-cd)pyrene	7	0.162 U		0.0801 J			0.159 U							0.137 U	0.145 U		
Phenanthrene	100	0.162 U		0.262			0.159 U							0.128 J	0.0537 J		
Pyrene	1,000	0.162 U		0.382			0.0557 J							0.206	0.0682 J		
Polychlorinated Biphenyls (PCBs) (µg/Kg)																	
Aroclor-1254																	
Aroclor-1260																	
Total PCBs	1,000																
Inorganics (mg/Kg)																	
Barium	1,000																
Cadmium	2																
Chromium	1,000																
Lead	300	4.61	21.6	54.8	10.1	10.5	12.9	40.8	64.8	35.5	3.4	4.03	7.83	83.2	22.1	53	2.65
Selenium	400																
Silver	100																

Notes:
Summary of detections only
Blank cells were not analyzed
J = Estimated value
U = Below method detection limit
RCS-1 = Reportable Concentration
mg/Kg = milligram per kilogram
* Site clean-up goal for PCBs = 1,000 ug/Kg
Bold, shaded values exceed Standard

Table 5-14
Summary of OHM Analytical Results for Soil
South Yard Sand Blast Grit Area
Yankee Nuclear Power Station
Rowe, MA

Station **Sample ID** **Date Sampled**	**RCS-1* Standard**	**SY-EX-039** **SY-EX-039** **7/19/2006**	**SY-EX-040** **SY-EX-040** **7/19/2006**	**SY-EX-041** **SY-EX-041** **7/19/2006**	**SY-EX-041** **FD009-071906** **7/19/2006**	**SY-EX-042** **SY-EX-042** **7/19/2006**
Extractable Petroleum Hydrocarbons (EPH) (mg/Kg)						
C11-C22 Aromatics	200		28.5 U	29.5 U	29.1 U	28.2 U
C19-C36 Aliphatics	2,500		28.5 U	29.5 U	29.1 U	28.2 U
C9-C18 Aliphatics	1,000		28.5 U	29.5 U	29.1 U	28.2 U
2-Methylnaphthalene	4		0.142 U	0.147 U	0.145 U	0.14 U
Acenaphthene	20		0.142 U	0.147 U	0.145 U	0.14 U
Acenaphthylene	100		0.142 U	0.147 U	0.145 U	0.14 U
Anthracene	1,000		0.0427 J	0.147 U	0.145 U	0.14 U
Benzo(a)anthracene	7		0.142 U	0.147 U	0.145 U	0.14 U
Benzo(a)pyrene	2		0.0299 J	0.147 U	0.145 U	0.14 U
Benzo(b)fluoranthene	7		0.0214 J	0.147 U	0.145 U	0.14 U
Benzo(g,h,i)perylene	1,000		0.142 U	0.147 U	0.145 U	0.14 U
Benzo(k)fluoranthene	70		0.0484 J	0.147 U	0.145 U	0.14 U
Chrysene	7		0.0456 J	0.147 U	0.145 U	0.14 U
Dibenzo(a,h)anthracene	0.7		0.142 U	0.147 U	0.145 U	0.14 U
Fluoranthene	1,000		0.0669 J	0.147 U	0.145 U	0.14 U
Fluorene	400		0.142 U	0.147 U	0.145 U	0.14 U
Indeno(1,2,3-cd)pyrene	7		0.142 U	0.147 U	0.145 U	0.14 U
Phenanthrene	100		0.0498 J	0.147 U	0.145 U	0.14 U
Pyrene	1,000		0.0569 J	0.147 U	0.145 U	0.14 U
Polychlorinated Biphenyls (PCBs) (µg/Kg)						
Aroclor-1254						
Aroclor-1260						
Total PCBs	1,000					
Inorganics (mg/Kg)						
Barium	1,000					
Cadmium	2					
Chromium	1,000					
Lead	300	3.32	9.31	2.36	2.26	6.79
Selenium	400					
Silver	100					

Notes:
Summary of detections only
Blank cells were not analyzed
J = Estimated value
U = Below method detection limit
RCS-1 = Reportable Concentration
mg/Kg = milligram per kilogram
* Site clean-up goal for PCBs = 1,000 ug/Kg
Bold, shaded values exceed Standard

Table 5-15
Summary of OHM Analytical Results for Soil
Turbine Building Office Area
Yankee Nuclear Power Station
Rowe, MA

Station Sample ID Date Sampled	RCS-1 Standard	TBO-EX-001 TBO-EX-001 8/9/2006	TBO-EX-002 TBO-EX-002 8/9/2006	TBO-EX-003 TBO-EX-003 8/9/2006	TBO-EX-004 TBO-EX-004 8/9/2006	TBO-EX-005 TBO-EX-005 8/9/2006	TBO-EX-006 TBO-EX-006 8/9/2006	TBO-EX-007 TBO-EX-007 8/9/2006	TBO-EX-008 TBO-EX-008 8/9/2006	TBO-EX-009 TBO-EX-009 8/9/2006	TBO-EX-010 TBO-EX-010 8/9/2006
Extractable Petroleum Hydrocarbons (EPH) (mg/Kg)											
C11-C22 Aromatics	200	28.4 U	29.2 U	27.6 U	28.6 U	28.3 U	28.2 U	28.4 U	29.1 U	29.3 U	37.7 U
C19-C36 Aliphatics	2,500	28.4 U	29.2 U	27.6 U	28.6 U	28.3 U	28.2 U	28.4 U	29.1 U	29.3 U	37.7 U
C9-C18 Aliphatics	1,000	28.4 U	29.2 U	27.6 U	28.6 U	28.3 U	28.2 U	28.4 U	29.1 U	29.3 U	37.7 U

Notes:
Summary of detections only
U = Below method detection limit
RCS-1 = Reportable Concentration
mg/Kg = milligram per kilogram
Bold, shaded values exceed Standard

Table 5-16
Summary of OHM Analytical Results for Soil
Warehouse Garage Area
Yankee Nuclear Power Station
Rowe, MA

Station Sample Designation Date Sampled Comment	RCS-1* Standard	SB612 SB612-0103F 4/28/2005	SB613 SB613-0103F 4/28/2005	SB613 FD001 4/28/2005 DUP SB613	SB614 SB614-0103F 4/28/2005
Extractable Petroleum Hydrocarbons (EPH) (mg/Kg)		-	-	-	-
C11-C22 Aromatics	200				
C19-C36 Aliphatics	2,500				
C9-C18 Aliphatics	1,000				
Volatile Petroleum Hydrocarbons (VPH) (mg/Kg)					-
C5-C8 Aliphatics	100	5.5	1.77 U	3.99	
C9-C10 Aromatics	100	0.703 U	0.589 U	0.616 U	
C9-C12 Aliphatics	1,000	0.703 U	0.589 U	0.616 U	
Toluene	30	4.84	0.137	3.28	
Volatile Organic Compounds (VOC) (µg/Kg)					
Toluene	30,000	5,740	197	3,960	114
Semi-Volatile Organic Compounds (SVOC) (µg/Kg)		-	-	-	-
Polychlorinated Biphenyls (PCBs) (µg/Kg)					
Aroclor-1254				369	85.3
Aroclor-1260				65.1	45.8
Total PCBs	1,000	-	-	434	131
Inorganics (mg/Kg)					
Beryllium	0.7	0.415 U	0.609	0.443 U	0.428 U
Chromium	1,000	15.1	13.2	8.08	14
Copper	1,000	20.7	19.4	13.5	15.2
Lead	300	2.22	1.65	1.66 U	35.2
Nickel	20	15.9	13.7	9.05	14.9
Zinc	2,500	270	169	216	128

Notes:
Summary of detections only
Blank cells were not analyzed
- = All constituents below the detection limit
J = Estimated value
U = Below method detection limit
RCS-1 = Reportable Concentration
* Site clean-up goal for PCBs = 1,000 ug/Kg
mg/Kg = milligram per kilogram
µg/Kg = microgram per kilogram
Bold, shaded values exceed Standard

Table 5-17
Summary of OHM Analytical Results for Soil
ABC Lot Concrete Blocks Area
Yankee Nuclear Power Station
Rowe, MA

Station Sample ID Date Sampled Comment	Cleanup Goal	EX-ABC-001 EX-ABC-001 10/28/2005	EX-ABC-002 EX-ABC-002 10/28/2005	EX-ABC-002 FD001-102805 10/28/2005 DUP ABC-002	EX-ABC-003 EX-ABC-003 10/28/2005	EX-ABC-004 EX-ABC-004 10/28/2005	EX-ABC-005 EX-ABC-005 10/31/2005	EX-ABC-006 EX-ABC-006 10/31/2005
Polychlorinated Biphenyls (PCBs)								
Aroclor-1254		172	73.1	54.3	9.85	182	76.9	20.2
Aroclor-1260		61.7	30.1	19.9	25.1	58.5	30.4	7.88
Total PCBs	1,000	234	103	74	35	241	107	28

Notes:
Summary of detections only
Blank cells were not analyzed
- = All constituents below the detection limit
J = Estimated value
U = Below method detection limit
RCS-1 = Reportable Concentration
Units in microgram per kilogram
Bold, shaded values exceed Standard

Table 5-18
Summary of OHM Analytical Results for Soil
Concrete Block Forming Area
Yankee Nuclear Power Station
Rowe, MA

Station	Sample ID	Date Sampled	Total PCBs	Lead
RCS-1* Standard			**1,000 (ug/Kg)**	**300 (mg/Kg)**
SB-555	SB-555-0002	1/8/2005	-	6.8
SB-555	SB-555-0204	1/8/2005	-	3.9
SB-555	SB-555-0406	1/8/2005	-	4.4
SB-555	SB-555-0608	1/8/2005	-	5.2
SB-555	SB-555-0810	1/8/2005	-	3.4
SB-556	SB-556-0002	1/8/2005	-	6.3
SB-556	SB-556-0204	1/8/2005	-	7.3
SB-556	SB-556-0406	1/8/2005	-	2 U
SB-556	FD-001-010805 (0406)	1/8/2005	-	4.2
SB-556	SB-556-0608	1/8/2005	-	4.6
SB-556	SB-556-0810	1/8/2005	-	2 U
SB-557	SB-557-0002	1/8/2005	-	4.8
SB-557	SB-557-0204	1/8/2005	-	5.9
SB-557	SB-557-0406	1/8/2005	-	2 U
SB-557	SB-557-0608	1/8/2005	-	3.8
SB-557	SB-557-0810	1/8/2005	-	2.1
SB-558	SB-558-0002	1/8/2005	-	2.6
SB-558	SB-558-0204	1/8/2005	-	2 U
SB-558	SB-558-0406	1/8/2005	-	4.6
SB-558	SB-558-0608	1/8/2005	-	5.2
SB-558	SB-558-0810	1/8/2005	-	2.4
SB-559	SB-559-0002	1/8/2005	-	4
SB-559	SB-559-0204	1/8/2005	-	6.4
SB-559	SB-559-0406	1/8/2005	-	7.4
SB-559	SB-559-0608	1/8/2005	-	5
SB-559	SB-559-0810	1/8/2005	-	4.2
SB-560	SB-560-0002	1/8/2005	-	7.8
SB-560	SB-560-0204	1/8/2005	-	2 U
SB-560	SB-560-0406	1/8/2005	-	4.3
SB-560	SB-560-0608	1/8/2005	-	4.3
SB-560	SB-560-0810	1/8/2005	-	4.1
SB-561	SB-561-0002	1/8/2005	-	10
SB-561	FD002-010805 (0002)	1/8/2005	-	4.1
SB-561	SB-561-0204	1/8/2005	-	12
SB-561	SB-561-0406	1/8/2005	-	3.1
SB-561	SB-561-0608	1/8/2005	-	4.5
SB-561	SB-561-0810	1/8/2005	-	3.7
SB-562	SB-562-0002	1/8/2005	-	6.2
SB-562	SB-562-0204	1/8/2005	-	5
SB-562	SB-562-0406	1/8/2005	-	3
SB-562	SB-562-0608	1/8/2005	-	10
SB-562	SB-562-0810	1/8/2005	-	3.2

Notes:
Summary of detections only
PCBs = Polychlorinated Biphenyls
- = All constituents below the detection limit
U = Below method detection limit
RCS-1 = Reportable Concentration
* Site clean-up goal for PCBs = 1,000 ug/Kg
mg/Kg = milligram per kilogram
µg/Kg = microgram per kilogram
Bold, shaded values exceed Standard

Table 5-19
Summary of OHM Analytical Results for Soil
Drum in Woods
Yankee Nuclear Power Station
Rowe, MA

Station Sample ID Date Sampled Comment	RCS-1* Standard	DRM-001 DRM-001 11/17/2004 Pre-excavation	DRM-001 DM001-0003I 5/20/2005 Post-excavation	FD001-052005-2 FD001-052005-2 5/20/2005 Post-excavation Duplicate	DRM-002 DM002-0003I 5/20/2005 Post-excavation
Extractable Petroleum Hydrocarbons (EPH) (mg/Kg)					
C11-C22 Aromatics	200	10.1 U			
C19-C36 Aliphatics	2,500	10.1 U			
C9-C18 Aliphatics	1,000	10.1 U			
Volatile Petroleum Hydrocarbons (VPH) (mg/Kg)					
C5-C8 Aliphatics	100	11.7 U	1.97 U	1.48 U	1.96 U
C9-C10 Aromatics	100	**225**	0.656 U	0.494 U	0.781
C9-C12 Aliphatics	1,000	413	0.656 U	0.494 U	1.29
Toluene	30		0.131 U	0.111	0.131 U
Semi-Volatile Organic Compounds (SVOC) (µg/Kg)		-			
Volatile Organic Compounds (VOC) (µg/Kg)					
Acetone	3,000	24			
Dichlorodifluoromethane	1,000,000	7.1			
Toluene	30,000	3.2 J			
Polychlorinated Biphenyls (PCBs) (µg/Kg)					
Aroclor-1254		88			
Aroclor-1260		33 U			
Total PCBs	1,000	88			

Notes:
Summary of detections only
Blank cells were not analyzed
- = All constituents below the detection limit
J = Estimated value
U = Below method detection limit
RCS-1 = Reportable Concentration
* Site clean-up goal for PCBs = 1,000 ug/Kg
mg/Kg = milligram per kilogram
µg/Kg = microgram per kilogram
Bold, shaded values exceed Standard

Table 5-20
Summary of OHM Analytical Results for Soil
Furlon House Basement
Yankee Nuclear Power Station
Rowe, MA

Station		FLH-01-003I	FLH-01-01-02F	FLH-02-003I	FLH-02-01-02F	FLH-03-003I	FLH-03-01-02F	FLH-04-003I	FLH-04-01-02F	FLH-05-003I	FLH-05-01-02F	FLH-06-003I	FLH-06-01-02F	FLH-07-003I	FLH-07-01-02F
Sample ID	**RCS-1**	**FLH-01-003I**	**FLH-01-01-02F**	**FLH-02-003I**	**FLH-02-01-02F**	**FLH-03-003I**	**FLH-03-01-02F**	**FLH-04-003I**	**FLH-04-01-02F**	**FLH-05-003I**	**FLH-05-01-02F**	**FLH-06-003I**	**FLH-06-01-02F**	**FLH-07-003I**	**FLH-07-01-02F**
Date Sampled	**Standard**	**7/6/2006**	**7/6/2006**	**7/6/2006**	**7/6/2006**	**7/6/2006**	**7/6/2006**	**7/6/2006**	**7/6/2006**	**7/7/2006**	**7/7/2006**	**7/7/2006**	**7/7/2006**	**7/7/2006**	**7/7/2006**
Units	**mg/Kg**	**mg/Kg**	**mg/Kg**	**mg/Kg**	**mg/Kg**	**mg/Kg**	**mg/Kg**	**mg/Kg**	**mg/Kg**	**mg/Kg**	**mg/Kg**	**mg/Kg**	**mg/Kg**	**mg/Kg**	**mg/Kg**
Extractable Petroleum Hydrocarbons (EPH) (mg/Kg)															
C11-C22 Aromatics	200	29.9 J	30.5 U	30.4 U	33.2 U	30.3 U	29.4 U	29.8 U	31.1 U	31.4 U	30.8 U	32.1 U	29.3 U	30.4 U	30.6 U
C19-C36 Aliphatics	2,500	30 U	30.5 U	30.4 U	33.2 U	30.3 U	29.4 U	29.8 U	31.1 U	31.4 U	30.8 U	32.1 U	29.3 U	30.4 U	30.6 U
C9-C18 Aliphatics	1,000	37.4	28 J	30.4 U	33.2 U	30.3 U	29.4 U	29.8 U	31.1 U	31.4 U	30.8 U	32.1 U	29.3 U	30.4 U	30.6 U
2-Methylnaphthalene	4	0.149 U	0.152 U	0.152 U	0.166 U	0.151 U	0.146 U	0.148 U	0.155 U	0.156 U	0.153 U	0.16 U	0.146 U	0.088 J	0.0214 J
Anthracene	1,000	0.0344 J	0.152 U	0.152 U	0.166 U	0.151 U	0.146 U	0.148 U	0.155 U	0.156 U	0.153 U	0.16 U	0.146 U	0.151 U	0.152 U
Fluoranthene	1,000	0.021 J	0.152 U	0.152 U	0.166 U	0.151 U	0.146 U	0.148 U	0.155 U	0.156 U	0.153 U	0.16 U	0.146 U	0.0273 J	0.152 U
Phenanthrene	100	0.115 J	0.152 U	0.152 U	0.166 U	0.151 U	0.146 U	0.148 U	0.155 U	0.156 U	0.153 U	0.16 U	0.146 U	0.0925 J	0.0443 J
Volatile Petroleum Hydrocarbons (VPH) (mg/Kg)															
C5-C8 Aliphatics	100	1.15	0.772	1.66	0.984	0.417 J	0.891	0.43 J	0.552 J	0.76 J	0.767 J	0.985 J	0.757 J	0.914 J	0.766 J
C9-C10 Aromatics	100	8.6	2.44	0.104 J	0.0507 J	0.0598 J	0.0876 J	0.0704 J	0.0582 J	0.144 J	0.189 J	0.216 J	0.122 J	2.05	0.347
C9-C12 Aliphatics	1,000	16	4.5	0.172 J	0.128 J	0.157 J	0.142 J	0.146 J	0.127 J	0.263 J	0.209 J	0.317 J	0.273 J	4.03	0.901
m+p-Xylenes	1000	0.0251 J	0.0767 U	0.0835 U	0.0715 U	0.0704 U	0.0649 U	0.0602 U	0.077 U	0.12 U	0.104 U	0.136 U	0.111 U	0.059 J	0.126 U
Naphthalene	4	0.55	0.122	0.0417 U	0.0357 U	0.0352 U	0.0324 U	0.0301 U	0.0385 U	0.0598 U	0.0518 U	0.0682 U	0.0555 U	0.151	0.0759
o-Xylene	500	0.0264 J	0.0384 U	0.0417 U	0.0357 U	0.0352 U	0.0324 U	0.0301 U	0.0385 U	0.0598 U	0.0518 U	0.0682 U	0.0555 U	0.0318 J	0.063 U
Toluene	30	0.0319 U	0.0384 U	0.294	0.158	0.0193 J	0.161	0.0301 U	0.051	0.0598 U	0.0518 U	0.0682 U	0.0555 U	0.0618 U	0.063 U

Notes:
Summary of detections only
Blank cells were not analyzed
J = Estimated value
U = Below method detection limit
RCS-1 = Reportable Concentration
mg/Kg = milligram per kilogram
µg/Kg = microgram per kilogram
Bold, shaded values exceed Standard

Table 5-21
Summary of OHM Analytical Results for Soil
Furlon House Parking Area
Yankee Nuclear Power Station
Rowe, MA

Station **Sample Designation** **Date Sampled** **Applicable MCP Soil Standard** **Comment**	**RCS-1 Standard**	**SB156** **SB-156R-0203F** **1/14/2005** **RCS-1**	**SB156** **SB-156R-0506F** **1/14/2005** **RCS-1**	**SB156** **SB-156R-1011F** **1/14/2005** **RCS-1**	**SB157** **SB-157R-0203F** **1/14/2005** **RCS-1**	**SB157** **FD001-011405** **1/14/2005** **RCS-1** **DUP SB157**	**SB157** **SB-157R-0708F** **1/14/2005** **RCS-1**	**SB158** **SB-158R-0203F** **1/14/2005** **RCS-1**	**SB158** **SB-158R-0506F** **1/14/2005** **RCS-1**	**SB-517** **SB-517-0506F** **1/14/2005** **RCS-1**	**SB-517** **SB-517-0607F** **1/14/2005** **RCS-1**
Total Petroleum Hydrocarbons (TPH) (mg/Kg)											
TPH-DRO	200										
TPH-GRO	200										
Extractable Petroleum Hydrocarbons (EPH) (mg/Kg)											
C11-C22 Aromatics	200	7.17 U	36.2 U	22.3	7.41 U	7.17 U	7.94 U	7.58 U	22.7	8.03 U	7.84 U
C19-C36 Aliphatics	2,500	7.17 U	36.2 U	11.7 U	7.41 U	7.17 U	7.94 U	7.58 U	25.5	8.03 U	7.84 U
C9-C18 Aliphatics	1,000	7.17 U	36.2 U	11.7 U	7.41 U	7.17 U	7.94 U	7.58 U	9.98	8.03 U	7.84 U
Acenaphthylene	100	0.358 U	1.81 U	0.585 U	0.37 U	0.358 U	0.397 U	0.379 U	0.366 U	0.402 U	0.392 U
Anthracene	1,000	0.358 U	1.81 U	0.585 U	0.37 U	0.358 U	0.397 U	0.379 U	0.366 U	0.402 U	0.392 U
Benzo(a)anthracene	7	0.358 U	1.81 U	0.585 U	0.37 U	0.358 U	0.397 U	0.379 U	0.366 U	0.402 U	0.392 U
Benzo(a)pyrene	2	0.358 U	1.81 U	0.585 U	0.37 U	0.358 U	0.397 U	0.379 U	0.366 U	0.402 U	0.392 U
Benzo(b)fluoranthene	7	0.358 U	1.81 U	0.585 U	0.37 U	0.358 U	0.397 U	0.379 U	0.366 U	0.402 U	0.392 U
Benzo(g,h,i)perylene	1,000	0.358 U	1.81 U	0.585 U	0.37 U	0.358 U	0.397 U	0.379 U	0.366 U	0.402 U	0.392 U
Benzo(k)fluoranthene	70	0.358 U	1.81 U	0.585 U	0.37 U	0.358 U	0.397 U	0.379 U	0.366 U	0.402 U	0.392 U
Chrysene	7	0.358 U	1.81 U	0.668	0.37 U	0.358 U	0.397 U	0.379 U	0.366 U	0.402 U	0.392 U
Fluoranthene	1,000	0.358 U	1.81 U	1.1	0.37 U	0.358 U	0.397 U	0.379 U	0.366 U	0.402 U	0.392 U
Indeno(1,2,3-cd)pyrene	7	0.358 U	1.81 U	0.585 U	0.37 U	0.358 U	0.397 U	0.379 U	0.366 U	0.402 U	0.392 U
Phenanthrene	100	0.358 U	1.81 U	0.617	0.37 U	0.358 U	0.397 U	0.379 U	0.366 U	0.402 U	0.392 U
Pyrene	1,000	0.358 U	1.81 U	0.973	0.37 U	0.358 U	0.397 U	0.379 U	0.366 U	0.402 U	0.392 U
Volatile Petroleum Hydrocarbons (VPH) (mg/Kg)											
C5-C8 Aliphatics	100	8.96 U	7.98 U	14.4 U	9.73 U	7.12 U	9.63 U	8.6 U	6.11 U	7.02 U	7.07 U
C9-C10 Aromatics	100	8.96 U	7.98 U	14.4 U	9.73 U	7.12 U	9.63 U	8.6 U	6.11 U	7.02 U	7.07 U
C9-C12 Aliphatics	1,000	8.96 U	7.98 U	14.4 U	9.73 U	7.12 U	9.63 U	8.6 U	6.11 U	7.02 U	7.07 U
Ethylbenzene	80	0.359 U	0.319 U	0.577 U	0.389 U	0.285 U	0.385 U	0.344 U	0.244 U	0.281 U	0.283 U
m+p-Xylenes	1,000	0.359 U	0.319 U	0.577 U	0.389 U	0.285 U	0.385 U	0.344 U	0.244 U	0.281 U	0.283 U
Naphthalene	4	1.79 U	1.6 U	2.88 U	1.95 U	1.42 U	1.93 U	1.72 U	1.22 U	1.4 U	1.41 U
o-Xylene	500	0.359 U	0.319 U	0.577 U	0.389 U	0.285 U	0.385 J	0.344 U	0.244 U	0.281 U	0.283 U
Toluene	30	0.359 U	0.319 U	0.577 U	0.389 U	0.285 U	0.385 U	0.344 U	0.244 J	0.281 U	0.283 U

Notes:
Summary of detections only
Blank cells were not analyzed
J = Estimated value
U = Below method detection limit
UJ = Estimated below method detection limit
RCS-1 = Reportable Concentration
mg/Kg = milligram per kilogram
Bold, shaded values exceed Standard

Table 5-22
Summary of OHM Analytical Results for Soil
Hair Pin Turn Area
Yankee Nuclear Power Station
Rowe, MA

Station **Sample Designation** **Date Sampled** **Comment**	**RCS-1** **Standard**	**TP4** **TP4 0002F** **6/5/2006**	**TP4** **Dup 1** **6/5/2006** **Duplicate**	**SB116-TP** **SB116C-0203F** **6/5/2006**	**SB116-TP** **SB116CD-0203F** **6/5/2006** **Duplicate**	**SB116-TP** **SB116N-0203F** **6/5/2006**	**SB116-TP** **SB116S-0203F** **6/5/2006**	**SB116-TP** **SB116W-0203F** **6/5/2006**	**SB116-TP** **SB116E-0203F** **6/5/2006**
Extractable Petroleum Hydrocarbons (EPH) (mg/Kg)									
C11-C22 Aromatics	200	32.1 U	31.5 U						
C19-C36 Aliphatics	2,500	32.1 U	31.5 U						
C9-C18 Aliphatics	1,000	32.1 U	31.5 U						
Fluorene	400	0.0225 J	0.022 J						
Phenanthrene	100	0.154 J	0.19						
Anthracene	1,000	0.0594 J	0.0598 J						
Fluoranthene	1,000	0.318	0.395						
Pyrene	1,000	0.284	0.359						
Benzo(a)anthracene	7	0.136 J	0.181						
Chrysene	7	0.186	0.249						
Benzo(b)fluoranthene	7	0.178	0.145 J						
Benzo(k)fluoranthene	70	0.125 J	0.22						
Benzo(a)pyrene	2	0.17	0.192						
Indeno(1,2,3-cd)pyrene	7	0.104 J	0.0976 J						
Benzo(g,h,i)perylene	1,000	0.104 J	0.112 J						
Volatile Petroleum Hydrocarbons (VPH) (mg/Kg)									
C5-C8 Aliphatics	100			2.17 J	1.41 J				
C9-C10 Aromatics	100			0.538 J	0.32 J				
C9-C12 Aliphatics	1,000			0.412 J	0.16 J				
Volatile Organic Compounds (VOC) (µg/Kg)									
2-Butanone	300			8.4 U	38.4 J				
Benzene	2,000			11.8 U	6.3 J				
Bromomethane	3,000			5 J	20.8 U				
Naphthalene	4,000			11.8 U	3.8 J				
Toluene	30, 000			11.8 U	2.1 J				
Inorganics (mg/Kg)									
Lead	300			162	171	120	98.5	110	110

Notes:
Summary of detections only
Blank cells were not analyzed
J = Estimated value
U = Below method detection limit
RCS-1 = Reportable Concentration
mg/Kg = milligram per kilogram
µg/Kg = microgram per kilogram
Bold, shaded values exceed Standard

Table 5-23
Summary of OHM Analytical Results for Soil
Mid-Lot West Debris Pile Area
Yankee Nuclear Power Station
Rowe, MA

Station Sample ID Date Sampled	Clean-up Goal	EX-Westmidlot-01 EX-Westmidlot-01 5/24/2006	EX-Westmidlot-02 EX-Westmidlot-02 5/24/2006	EX-Westmidlot-03 EX-Westmidlot-03 5/24/2006	EX-Westmidlot-04 EX-Westmidlot-04 5/24/2006
Polychlorinated Biphenyls (PCBs) (µg/Kg)					
Aroclor-1254		164	174	118	52.9
Aroclor-1260		84.5	46.6	37.5	18.5
Total PCBs	1,000	248.5	220.6	155.5	71.4

Notes:
Summary of detections only
mg/Kg = milligram per kilogram
µg/Kg = microgram per kilogram
Bold, shaded values exceed Clean-up Goal

Table 5-24
Summary of OHM Analytical Results for Soil
Painted Blocks along Deerfield River
Yankee Nuclear Power Station
Rowe, MA

Station Sample ID Date Sampled	Clean-up Goal	SB-BLK01-A SB-BLK01-A 11/30/2005	SB-BLK01-A FD001 11/30/2005	SB-BLK02-A SB-BLK02-A 11/30/2005	SB-BLK03-A SB-BLK03-A 11/30/2005	BLKPT-106 BLKPT-106 8/17/2006	BLKPT-107 BLKPT-107 8/17/2006	BLKPT-108 BLKPT-108 8/17/2006	BLKPT-109 BLKPT-109 8/17/2006
Polychlorinated Biphenyls (PCBs) (µg/Kg)									
Aroclor-1248		11.1 U	10.9 U	10.4 U	11.3 U	10.1 U	10.8 U	13.7 U	9.36 J
Aroclor-1254		11.1 U	10.9 U	10.4 U	11.3 U	55.5	96.7	41.5	96.9
Aroclor-1260		11.1 U	10.9 U	10.4 U	11.3 U	13.1	24	10.8 J	24
Total PCBs	1,000	-	-	-	-	68.6	120.7	52.3	130

Notes:
Summary of detections only
J = Estimated value
U = Below method detection limit
µg/Kg = microgram per kilogram
Bold, shaded values exceed Clean-up Goal

Table 5-25
Summary of OHM Analytical Results for Soil
Relic Dumps
Yankee Nuclear Power Station
Rowe, MA

Station Sample ID Date Sampled	RCS-1* Standard	Relic-log-001 Relic-log-001 7/19/2006	Relic-log-002 Relic-log-002 7/19/2006	RELIC3-Drum1-003I RELIC3-Drum1-003I 7/6/2006	RELIC3-Drum2-003I RELIC3-Drum2-003I 7/6/2006
Extractable Petroleum Hydrocarbons (EPH) (mg/Kg)					
C11-C22 Aromatics	200	75.7 U		37.9 U	37.3 U
C19-C36 Aliphatics	2,500	75.7 U		37.9 U	37.3 U
C9-C18 Aliphatics	1,000	75.7 U		37.9 U	37.3 U
Benzo(a)pyrene	2	0.0718 J		0.189 U	0.186 U
Benzo(b)fluoranthene	7	0.0529 J		0.189 U	0.186 U
Benzo(k)fluoranthene	70	0.11 J		0.189 U	0.186 U
Chrysene	7	0.117 J		0.189 U	0.186 U
Fluoranthene	1,000	0.0907 J		0.189 U	0.186 U
Volatile Organic Compounds (VOC) (µg/Kg)			-		
Polychlorinated Biphenyls (PCBs) (µg/Kg)					
Aroclor-1254				11.1 U	11 U
Aroclor-1260				28.9	18.6
Total PCBs	1,000			28.9	18.6
Inorganics (mg/Kg)					
Arsenic	20	3.27		18.9	18.4
Barium	1,000	67.7		29.3	35.9
Cadmium	2	0.938		1.17	1.39
Chromium	1,000	7.27		43.9	39
Lead	300	24.6		55.1	57.7
Mercury	20	0.13		0.1	0.137

Notes:
Summary of detections only
Blank cells were not analyzed
- = All constituents below the detection limit
J = Estimated value
U = Below method detection limit
RCS-1 = Reportable Concentration
* Site clean-up goal for PCBs = 1,000 ug/Kg
mg/Kg = milligram per kilogram
µg/Kg = microgram per kilogram
Bold, shaded values exceed Standard

Table 5-26
Summary of OHM Analytical Results for Soil
Septic System
Yankee Nuclear Power Station
Rowe, MA

Station		SB-501	SB-502	SB-502	SB-503	SB-504	SB-505	SB-505	SB-506	SB-506	SB 507	SB 540	SB540	SB540R	SB540A	SB540B	SB540B	SB540B	SB540C	SB540D	SB540D
Sample Designation	**RCS-1***	**SB-501-0305F**	**SB-502-0507F**	**FD 001-011305**	**SB-503-0507F**	**SB-504-0507F**	**SB-505-0810F**	**SB-505-1012F**	**SB-506-1012F**	**SB-506-1315F**	**SB 507-0006I**	**SB 540-0006I**	**SB540-0006I**	**SB540R-0006I**	**SB540A-0006I**	**SB540B-0006I**	**FD001**	**SB540B-0712I**	**SB540C-0006I**	**SB540D-0006I**	**SB540D-1218I**
Date Sampled	**Standard**	**1/20/2005**	**1/13/2005**	**1/13/2005**	**1/13/2005**	**1/13/2005**	**1/24/2005**	**1/24/2005**	**1/20/2005**	**1/20/2005**	**2/2/2005**	**2/2/2005**	**2/2/2005**	**7/19/2005**	**7/19/2005**	**7/19/2005**	**7/19/2005**	**7/19/2005**	**7/19/2005**	**7/19/2005**	**7/19/2005**
Comment				**DUP SB502**													**SB540B DUP**				
Extractable Petroleum Hydrocarbons (EPH) (mg/Kg)																					
C11-C22 Aromatics	200	3.6 U	3.6 U	3.6 U	5.5	6.5	7.58 U	7.33 U	3.6 U	3.4 U	40.2 U	25.8									
C19-C36 Aliphatics	2,500	3.6 U	3.6 U	3.6 U	7.5	3.7 U	7.58 U	7.33 U	3.6 U	3.4 U	40.2 U	12.6 U									
C9-C18 Aliphatics	1,000	3.6 U	3.6 U	3.6 U	3.5 U	3.7 U	7.58 U	7.33 U	3.6 U	3.4 U	40.2 U	12.6 U									
Volatile Petroleum Hydrocarbons (VPH) (mg/Kg)																					
C5-C8 Aliphatics	100	16	13 U	9.8 U	7.8 U	9.2 U	13.3 U	10.7 U	11 U	28	9.44 U	17 U									
C9-C10 Aromatics	100	23	13 U	9.8 U	7.8 U	9.2 U	13.3 U	10.7 U	11 U	8.9 U	9.44 U	17 U									
C9-C12 Aliphatics	1,000	43	13 U	9.8 U	7.8 U	9.2 U	13.3 U	10.7 U	11 U	8.9 U	9.44 U	17 U									
Volatile Organic Compounds (VOC) (µg/Kg)																					
1,2,3-Trichlorobenzene	NA	6 U	6 U	7 U	5 U	8 U	8 U	7 U	5 U	6 U	1.4 J,B	9 U									
2-Butanone	300	3.6 J	12 U	14 U	1.8 J	3.3 J	16 U	14 U	2.6 J	12 U	5 J	6.4 J									
Acetone	3,000	100	12 U	14 U	35	48	16 U	42	49	12 U	17	14 J									
Carbon disulfide	100,000	23	6 U	7 U	2.8 J	1.8 J	8 U	2.4 J	1.2 J	6 U	7 U	9 U									
Diethyl Ether	100,000	1.3 J	12 U	14 U	10 U	16 U	16 U	14 U	10 U	12 U	14 U	18 U									
Methylene chloride	100	5.1 J,B	18 U	21 U	15 U	24 U	24 U	21 U	15 U	18 U	21 U	27 U									
Toluene	30,000	71	7.1	7 U	0.49 J	2.3 J	230	90	85	22	19	46									
Semi-Volatile Organic Compounds (SVOC) (µg/Kg)																					
Acenaphthene	20,000	380 U	350 U	350 U	370 U	360 U	370 U	360 U	360 U	350 U	390 U	240 J	240	359	312 U	138 U	163 U	138-U	192 U	209 U	171 U
Acenaphthylene	100,000	380 U	350 U	350 U	370 U	360 U	370 U	360 U	360 U	350 U	390 U	220 J	220	339	356	230	266	187	118	209 U	171 U
Anthracene	1,000,000	380 U	350 U	350 U	370 U	360 U	370 U	360 U	360 U	350 U	390 U	610	610	791	136	134	106	68.3	75.7	209 U	171 U
Benzo(a)anthracene	7,000	380 U	350 U	350 U	370 U	360 U	370 U	360 U	360 U	350 U	390 U	1900	1900	2790	492	439	368	217	442	209 U	171 U
Benzo(a)pyrene	2,000	380 U	350 U	350 U	370 U	360 U	370 U	360 U	360 U	350 U	390 U	1200	1200	**2570**	218	240	173	113	171	209 U	171 U
Benzo(b)fluoranthene	7,000	380 U	350 U	350 U	370 U	360 U	370 U	360 U	360 U	350 U	390 U	2100	2100	2370	265	260	249	146	194	209 U	171 U
Benzo(g,h,i)perylene	1,000,000	380 U	350 U	350 U	370 U	360 U	370 U	360 U	360 U	350 U	390 U	980	980	1230	136	280	99.1	66.9	87.3	209 U	171 U
Benzo(k)fluoranthene	70,000	380 U	350 U	350 U	370 U	360 U	370 U	360 U	360 U	350 U	390 U	1400	1400	2430	202	314	208	144	175	209 U	171 U
Benzoic acid	1,000,000	1900 U	1700 U	1700 U	1800 U	1800 U	1800 U	1700 U	1700 U	1700 U	150 J	2800 U									
Carbazole	NA	380 U	350 U	350 U	370 U	360 U	370 U	360 U	360 U	350 U	390 U	350 J									
Chrysene	7,000	380 U	350 U	350 U	370 U	360 U	370 U	360 U	360 U	350 U	390 U	1900	1900	2850	514	486	393	224	423	209 U	171 U
Dibenzo(a,h)anthracene	700	380 U	350 U	350 U	370 U	360 U	370 U	360 U	360 U	350 U	390 U	400 J	400	658 U	312 U	66.2	163 U	138 U	192 U	209 U	171 U
Fluoranthene	1,000,000	380 U	350 U	350 U	370 U	360 U	370 U	360 U	360 U	350 U	390 U	3400	3400	5860	1020	782	722	436	869	209 U	171 U
Fluorene	400,000	380 U	350 U	350 U	370 U	360 U	370 U	360 U	360 U	350 U	390 U	150 J	150	658 U	312 U	138 U	163 U	138 U	192 U	209 U	171 U
Indeno(1,2,3-cd)pyrene	7,000	380 U	350 U	350 U	370 U	360 U	370 U	360 U	360 U	350 U	390 U	750	750	1440	312 U	327	163 U	76.6	111	209 U	171 U
N-Nitrosodimethylamine	50,000	770 U	710 U	700 U	72	730 U	740 U	720 U	710 U	710 U	780 U	1200 U									
Phenanthrene	100,000	380 U	350 U	350 U	370 U	360 U	370 U	360 U	360 U	350 U	390 U	1600	1600	2430	91.4	67.9	64.4	33.4	105	209 U	171 U
Pyrene	1,000,000	380 U	350 U	350 U	370 U	360 U	370 U	360 U	360 U	350 U	390 U	3200	3200	5200	773	758	456	223	658	209 U	171 U
Polychlorinated Biphenyls (PCBs) (µg/Kg)																					
Aroclor-1254		33 U	33 U	33 U	33 U	33 U	33 U	33 U	120	33 U	40	43									
Aroclor-1260		33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U									
Total PCBs	1,000	-	-	-	-	-	-	-	120	-	40	43									
Inorganics (mg/Kg)																					
Arsenic	20	1.3	3.7	2.7	2.1	1.7	1 U	2.4	1 U	1 U	4.6	4.1									
Cadmium	2	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	6.2									
Chromium	1,000	7.3	5.8	5	5.6	5 U	5 U	12	10	14	11	5 U									
Copper	1,000	6.4	6.5	7.1	11	13	5 U	14	15	16	8	28									
Lead	300	4.1	3.6	3.2	3.2	3.5	2 U	7.1	2 U	2.1	11	19									
Mercury	20	0.72	0.5 U	0.5 U	0.5 U	2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U									
Nickel	300	10 U	10 U	10 U	10 U	10 U	10 U	12	10 U	11	11	98									
Zinc	2,500	150 U	150 U	150 U	150 U	150 U	150 U	150 U	150 U	150 U	250	150 U									

Notes:
Summary of detections only
Blank cells were not analyzed
- = All constituents below the detection limit
J = Estimated value
U = Below method detection limit
B = Detected in laboratory blank
RCS-1 = Reportable Concentration
* Site clean-up goal for PCBs = 1,000 ug/Kg
mg/Kg = milligram per kilogram
µg/Kg = microgram per kilogram
Bold, shaded values exceed Standard

Table 5-27
Summary of OHM Analytical Results for Soil
Snow Pile Areas
Yankee Nuclear Power Station
Rowe, MA

Sample Location Clean-up Goal (ug/Kg)	Sample ID	Date	Depth	Aroclor-1254	Aroclor-1260	Total PCBs 1,000
Polychlorinated Biphenyls (PCBs) (ug/Kg)						
ABC Lot - Embankment	SB575-003I	6/9/2005	0-3"	6	11 U	6
	SB576-003I	6/9/2005	0-3"	10 U	10 U	-
	SB577-003I	6/9/2005	0-3"	11 U	11 U	-
	SB578-003I	6/9/2005	0-3"	11 U	11 U	-
	SB579-003I	6/9/2005	0-3"	10 U	10 U	-
	SB580-003I	6/9/2005	0-3"	68	15	83
	SB581-003I	6/9/2005	0-3"	10 U	10 U	-
	SB583-003I	6/9/2005	0-3"	65	22	86
	FD001	6/9/2005	0-3"	74	21	95
	SB584-1720I	6/15/2005	17-20"	14	4	18
	SB585-1417I	6/15/2005	14-17"	16	5	21
	SB586-1215I	6/15/2005	12-15"	239	50	289
	SB587-1215I	6/15/2005	12-15"	10 U	10 U	-
	SB588-2023I	6/15/2005	20-23"	166	28	194
Furlon House Parking Area	SB589-0912I	6/15/2005	9-12"	91	13	104
	SB590-1316I	6/15/2005	13-16"	20	3	23
	SB591-1013I	6/15/2005	10-13"	10 U	10 U	-
	SB592-1215I	6/15/2005	12-15"	13	4	17
	SB593-1518I	6/15/2005	15-18"	9	4	13
	SB594-1417I	6/15/2005	14-17"	10 U	10 U	-
Railroad Tracks North of Yankee Road	SB595-003I	6/8/2005	0-3"	22	6	28
	SB596-003I	6/8/2005	0-3"	5	10 U	5
	SB597-003I	6/8/2005	0-3"	13	11 U	13
	SB598-003I	6/8/2005	0-3"	8	3	11
Mid Parking Lot	SB599-003I	6/8/2005	0-3"	17	7	24
	SB600-003I	6/8/2005	0-3"	15	7	22
	SB601-003I	6/8/2005	0-3"	40	15	55
	SB602-003I	6/8/2005	0-3"	9	10	19
	SB603-003I	6/8/2005	0-3"	9	3	12
	SB604-003I	6/8/2005	0-3"	20	5	26
	SB605-003I	6/8/2005	0-3"	23	6	29
	SB606-003I	6/8/2005	0-3"	9	4	13
Railroad Tracks Near Gate 5	SB607-003I	6/8/2005	0-3"	6	10 U	6
	SB608-003I	6/8/2005	0-3"	166	59	225
	FD001	6/8/2005	0-3"	186	78	264
	SB609-003I	6/8/2005	0-3"	10 U	10 U	-
	SB610-003I	6/8/2005	0-3"	34	78	112
	SB611-003I	6/8/2005	0-3"	97	36	133
Lower Parking Lot	SB719-0003I	7/27/2005	0-3"	10 U	10 U	-
	SB720-0003I	7/27/2005	0-3"	10 U	10 U	-
	SB721-0003I	7/27/2005	0-3"	10 U	10 U	-
	FD001	7/27/2005	0-3"	10 U	10 U	-
	SB722-0003I	7/27/2005	0-3"	10 U	10 U	-
	SB723-0003I	7/27/2005	0-3"	10 U	10 U	-
	SB724-0003I	7/27/2005	0-3"	10 U	10 U	-

Notes:
- = All constituents below the detection limit
U = Below method detection limit
mg/Kg = milligram per kilogram
Bold, shaded values exceed Clean-up Goal

Table 6
Summary of Radiological Analytical Results for Groundwater
Yankee Nuclear Power Station
Rowe, MA

Monitoring Well	Nov-05	Jan-06	Feb-06	Apr-06	May-06	Jul-06	Aug-06
CB-3				ND		ND	
CB-4	3.34E+03	ND	ND	ND	ND	ND	
CB-6	9.74E+03	1.47E+04	1.21E+04	7.68E+03	4.30E+03	1.91E+03	2.09E+03
CB-8					ND	ND	
CFW-1				3.32E+02		ND	
CWF-5				ND			
CWF-6				3.00E+02		1.18E+03	
CW-2				ND			
CW-10				ND		ND	
DW001	ND			ND		ND	
DW002	ND			ND		ND	
MW-100A				ND		ND	
MW-100B				ND		ND	
MW-101A				1.69E+04		8.52E+03	7.72E+03
MW-101B				ND	ND	ND	
MW-101C							
MW-102A				4.49E+03	4.63E+03	4.26E+03	
MW-102B				ND		ND	
MW-102C				4.61E+03	3.92E+03	4.98E+03	
MW-102D	5.56E+03			1.61E+04	6.89E+03	8.81E+03	
MW-103A	ND			ND		4.16E+02	
MW-103B	ND			ND		ND	
MW-103C	ND			ND		ND	
MW-104A			3.32E+03	4.58E+03	2.96E+03	7.98E+02	
MW-104B	ND			ND		ND	
MW-104C	ND			ND		ND	
MW-105A				ND		ND	ND
MW-105B				3.97E+03	4.78E+03	3.86E+03	
MW-105C				1.99E+03		1.03E+03	
MW-106A	7.00E+03	1.13E+04	1.31E+04	ND	9.81E+03	7.17E+03	6.74E+03
MW-106B	ND			ND		ND	
MW-106C	ND			ND		ND	
MW-106D	ND			ND		ND	
MW-107A				4.91E+03	5.05E+03	5.91E+03	5.60E+03

Table 6
Summary of Radiological Analytical Results for Groundwater
Yankee Nuclear Power Station
Rowe, MA

Monitoring Well	Nov-05	Jan-06	Feb-06	Apr-06	May-06	Jul-06	Aug-06
MW-107B				ND	ND	ND	
MW-107C				4.13E+04	3.72E+04	3.60E+04	3.47E+04
MW-107D				1.19E+04	1.20E+04	1.18E+04	1.16E+04
MW-107E					8.13E+03	7.90E+03	7.84E+03
MW-170F						1.09E+04	
MW-108A	ND			ND		ND	
MW-108B	ND			ND		ND	
MW-108C	ND			ND		ND	
MW-109A				ND		ND	
MW-109B				ND		ND	
MW-109C				ND		ND	
MW-109D				ND		ND	
MW-110A		7.72E+03		2.93E+03	2.77E+03	2.99E+03	2.81E+03
MW-110B		2.00E+03		ND		ND	
MW-110C				1.16E+03		1.98E+03	
MW-110D				ND		ND	
MW-111A				4.44E+03	3.94E+03	3.05E+03	3.64E+03
MW-111B				ND		ND	
MW-111C				ND		5.16E+03	
MW-113A					ND	ND	ND
MW-113C						6.01E+02	8.26E+02
SP-1	6.37E+03	4.34E+03	4.61E+03	4.67E+03	2.65E+03	1.42E+03	1.51E+03

Notes:
All values presented in pCi/L
ND = Non detect

Table 7
Summary of OHM Analytical Results for Groundwater
Yankee Nuclear Power Station
Rowe, MA

Station	MCP	CB-2	CB-3	CB-3	CB-4	CB-4	CB-6	CFW-1	CFW-1	CFW-5	CFW-5	CFW-6	CFW-6	CFW-6	CFW-6	CW-10	CW-6	CW-7	CW-7	MW-5	MW-5	MW-5
Sample ID	RCGW-1	CB-2-031805	CB-3-050306	FD003-050306	CB-4-110905	CB-4-042506	CB-6-031405	CFW-1-031505	CFW-1-081905	CFW-5-031505	CFW-5-081705	CFW-6-032205	CFW-6-082405	FD001-082405	CFW-6-042006	CW-10-042506	CW-6-031605	CW-7-032005	FD005-032005	MW-5-111404	FD002-111404	MW-5-111404-F
Date Sampled		3/18/2005	5/3/2006	5/3/2006	11/9/2005	4/25/2006	3/14/2005	3/15/2005	8/19/2005	3/15/2005	8/17/2005	3/22/2005	8/24/2005	8/24/2005	4/19/2006	4/25/2006	3/16/2005	3/20/2005	3/20/2005	11/14/2004	11/14/2004	11/14/2004
EPH (µg/L)																						
Benzo(a)anthracene	1		1 U	1 U		1 U									1 U							
Benzo(k)fluoranthene	1		1 U	1 U		1 U									1 U							
C11-C22 Aromatics	200		200 U	200 U		200 U									200 U							
C19-C36 Aliphatics	5000		200 U	200 U		200 U									200 U							
Chrysene	2		0.0879 J	1 U		1 U									1 U							
Fluoranthene	90		1 U	1 U		1 U									1 U							
Naphthalene	140		1 U	1 U		1 U									1 U							
VPH (µg/L)																						
C5-C8 Aliphatics	400		75 U	75 U		6.1 J									75 U							
C9-C10 Aromatics	200		25 U	25 U		15.9 J									25 U							
C9-C12 Aliphatics	1000		25 U	25 U		22.2 J									25 U							
Methyl-t-butyl ether	70		5 U	5 U		5 U									5 U							
SVOC (µg/L)																						
Benzo(b)fluoranthene	1															0.2 U						
Benzo(g,h,i)perylene	300															0.2 U						
Benzo(k)fluoranthene	1															0.2 U						
Hexachlorobenzene	1															1 U						
Pentachlorophenol	1															1 U						
VOC (µg/L)																						
1,1-Dichloroethane	70		1 U	1 U		1 U			1 U		1 U		1 U	1 U	1 U	1 U		1.7	1.8			
1,1-Dichloroethene	7		1 U	1 U		1 U			1 U		1 U		1 U	1 U	1 U	1 U		1 U	1 U			
1,2,4-Trimethylbenzene	10000		1 U	1 U		1 U			1 U		1 U		1 U	1 U	1 U	1 U		1 U	1 U			
1,4-Dioxane	1000		20 U	20 U		20 U			R		R		R	R	20 U	20 U		R	R			
2-Butanone	400		10 U	10 U		10 U			10 U		10 U		10 UJ	10 UJ	10 U	10 U		10 UJ	10 UJ			
2-Hexanone	1000		10 U	10 U		10 U			10 UJ		10 UJ		10 UJ	10 UJ	10 U	10 U		10 UJ	10 UJ			
4-Methyl-2-pentanone	350		10 U	10 U		10 U			1.4 J		0.6 J		0.8 J	0.9 J	10 U	10 U		10 UJ	10 UJ			
Acetone	3000		3.7 J	10 U		10 U			10 U		10 U		8 J	10 U	2.6 J	2.6 J		R	R			
Benzene	5		1 U	1 U		1 U			1 U		1 U		1 U	1 U	1 U	1 U		1 U	1 U			
Carbon disulfide	1000		5 U	5 U		5 U			5 U		5 U		5 U	5 U	5 U	5 U		5 U	5 U			
Chloromethane	1000		2 U	2 U		2 U			0.7 J		0.9 J		2 U	2 U	2 U	2 U		2 U	2 U			
Dichlorodifluoromethane	10000		2 U	2 U		2 U			2 U		2 UJ		2 U	2 U	2 U	1.6 J		2 U	2 U			
Ethylbenzene	700		1 U	1 U		1 U			1 U		1 U		1 U	1 U	1 U	1 U		1 U	1 U			
m+p-Xylenes	6000		2 U	2 U		2 U			2 U		2 U		2 U	2 U	2 U	2 U		2 U	2 U			
Methyl-t-butyl ether	70		1 U	1 U		1 U			1 U		1 U		1 U	1 U	1 U	1 U		2	2			
Naphthalene	140		1 U	1 U		1 U			1 U		1 U		1 U	1 U	1 U			1 U	1 U			
o-Xylene	6000		1 U	1 U		1 U			1 U		1 U		1 U	1 U	1 U	1 U		1 U	1 U			
Tetrahydrofuran	5000		1.3 J	1 J		10 U			R		R		R	R	10 U	2.2 J		R	R			
Toluene	1000		1 U	1 U		1 U			1 U		1 U		1 U	1 U	1 U	1 U		1 U	1 U			
Alcohols (mg/L)																						
iso-Propyl Alcohol	NA																					
Herbicides (µg/L)																						
PCBs (µg/L)																						
Aroclor-1254	0.3																			**2.4** J	**2.8**	R
Inorganics (mg/L)																						
Antimony	0.006		**0.0062**	0.0026 J	0.005 U	0.006 U			0.0027 U		0.006 U		0.006 U	0.006 U	0.006 U	0.006 U						
Arsenic	0.01		0.004 U	0.004 U	0.0021 U	0.004 U			0.004 UJ		0.004 U		0.004 U	0.004 U	0.004 U	0.004 U						
Barium	2								0.012		0.0612		0.0629	0.0641								
Beryllium	0.004		0.0006 J	0.0001 J	0.0002 U	0.0002 J			0.001 U		0.001 U		0.001 U	0.001 U	0.002 U	0.0006 J						
Boron	NA	0.248	0.0067 J	0.0036 J	0.079	0.0166	0.148	0.015 U		0.01 U		0.01 U			0.013	0.213	0.0973	0.0828				
Cadmium	0.004		0.0004 J	0.0025 U	0.0001 U	0.0025 U			0.0012 U		0.0012 U		0.0004 U	0.0005 U	0.0006 J	0.0025 U						
Chromium	0.1		0.005 U	0.005 U	0.0025 U	0.005 U			0.0025 U		0.0025 U		0.0031 U	0.0032 U	0.005 U	0.005 U						
Copper	10		0.008	0.0098	0.0014 U	0.005 U			0.001 U		0.0012 U		0.0025 U	0.001 U	0.0032 J	0.0036 J						
Iron	NA								0.706 J		89.2		71	71.5								
Lead	0.01		0.0075 U	0.0075 U	0.0038 U	0.0075 U			0.0028 UJ		0.0048 UJ		0.0035 U	0.0036 U	0.0075 U	0.0075 U						
Lithium	1																					
Manganese	NA								0.0533		4.16 J		7.54	7.65								
Mercury	0.002		0.00011 J	0.00013 J	0.00008 U	0.0002 U			0.00004 UJ		0.00022 UJ		0.00014 UJ	0.00015 UJ	0.0002 U	0.0002 U						
Nickel	0.1		0.0032 J	0.0037 J	0.0025 U	0.005 U			0.0013 U		0.0037 U		0.0015 U	0.0012 U	0.005 U	0.0022 J						
Selenium	0.05		0.015 U	0.015 U	0.0033 U	0.015 U			0.0075 U		0.0075 U		0.0075 U	0.0075 U	0.015 U	0.015 U						
Silver	0.007		0.007 U	0.007 U	0.005 U	0.007 U			0.005 U		0.005 U		0.005 U	0.005 U	0.007 U	0.007 U						
Thallium	0.002		0.00005 J	0.00005 J	0.005 U	0.000009 J			0.005 U		0.005 U		0.005 U	0.005 U	0.0002 U	0.00002 J						
Zinc	0.9		0.0336 J	0.0352 J	0.0063 U	0.0062 J			0.0146 U		0.0043 U		0.0042 U	0.0067 U	0.0132 J	0.0221 J						

Notes:
Summary of detected compounds only
NA= Not Available
Blank cells were not analyzed
Shaded cells exceeded screening values
J= Estimated result
R= Rejected result, unusable for decisions
U= Not detected, value is the reporting limit
UJ= Not detected, estimated reporting limit

Table 7
Summary of OHM Analytical Results for Groundwater
Yankee Nuclear Power Station
Rowe, MA

Station	MCP	MW-5	MW-101A	MW-101A	MW-101B	MW-101C	MW-101C	MW-102C	MW-102C	MW-102D	MW-102D	MW-103A	MW-103B	MW-103B	MW-103B	MW-103C	MW-103C
Sample ID	RCGW-1	FD002-111404-F	208/MW101A-062806	208/MW101A-062806-RE	MW-101B-050106	MW-101C-1114(	FD001-111404	MW-102C-111404	MW-102C-042406	MW-102D-042506	FD001-042506	MW-103A-031505	MW-103B-032205	MW-103B-112105	MW-103B-050306	MW-103C-032405	MW-103C-111905
Date Sampled		11/14/2004	6/28/2006	6/28/2006	5/1/2006	11/14/2004	11/14/2004	11/14/2004	4/24/2006	4/25/2006	4/25/2006	3/15/2005	3/22/2005	11/21/2005	5/3/2006	3/24/2005	11/19/2005
EPH (µg/L)																	
Benzo(a)anthracene	1				1 U												
Benzo(k)fluoranthene	1				1 U												
C11-C22 Aromatics	200				200 U												
C19-C36 Aliphatics	5000				200 U												
Chrysene	2				0.147 J												
Fluoranthene	90				0.211 J												
Naphthalene	140				1 U												
VPH (µg/L)																	
C5-C8 Aliphatics	400					R	R	50 U									
C9-C10 Aromatics	200					250 U	250 U	50 U									
C9-C12 Aliphatics	1000					250 U	250 U	50 U									
Methyl-t-butyl ether	70																
SVOC (µg/L)																	
Benzo(b)fluoranthene	1													0.2 U	0.2 U		0.2 U
Benzo(g,h,i)perylene	300													0.2 U	0.2 U		0.2 U
Benzo(k)fluoranthene	1													0.2 U	0.2 U		0.2 U
Hexachlorobenzene	1													1 U	1 U		1 U
Pentachlorophenol	1													0.095 J	1 U		1 U
VOC (µg/L)																	
1,1-Dichloroethane	70		1 U	5 U	1 U	75 U	75 U	0.75	0.6 J	1 U	1 U				1 U		1 U
1,1-Dichloroethene	7		1 U	5 U	1 U	50 U	50 U	0.5 U	1 U	1 U	1 U				1 U		1 U
1,2,4-Trimethylbenzene	10000		1 U	5 U	1 U	250 U	250 U	2.5 U	1 U	1 U	1 U				1 U		1 U
1,4-Dioxane	1000		36.6	100 U	20 U				20 U	25.8	22.2				20 U		R
2-Butanone	400		41.6	46.9 J	10 U	500 U	500 U	5 U	10 U	3 J	3.3 J				10 U		5.9 J
2-Hexanone	1000		10 U	50 U	10 U	500 U	500 U	5 U	10 U	10 U	10 U				10 U		10 U
4-Methyl-2-pentanone	350		1.4 J	50 U	10 U	500 U	500 U	5 U	10 U	10 U	10 U				10 U		10 U
Acetone	3000		229 E	232	15	2900	**3400**	5 U	10 U	7.2 J	7 J				3.1 J		378 J
Benzene	5		1.3	5 U	1 U	50 U	50 U	0.5 U	1 U	0.6 J	0.6 J				1 U		1 U
Carbon disulfide	1000		5 U	25 U	5 U	500 U	500 U	5 U	5 U	5 U	5 U				5 U		0.8 J
Chloromethane	1000		2 U	10 U	2 U	250 U	250 U	2.5 U	2 U	2 U	2 U				2 U		2 U
Dichlorodifluoromethane	10000		2 U	10 U	2 U	500 U	500 U	5 U	2 U	9.9	9.7				2 U		2 UJ
Ethylbenzene	700		1 U	5 U	1 U	50 U	50 U	0.5 U	1 U	1 U	1 U				1 U		1 U
m+p-Xylenes	6000		2 U	10 U	2 U	50 U	50 U	0.5 U	2 U	2 U	2 U				2 U		2 U
Methyl-t-butyl ether	70		1 U	5 U	1 U	100 U	100 U	1 U	1 U	1 U	1 U				1 U		1 U
Naphthalene	140		1 U	5 U	1 U				1 U	1.1	1						
o-Xylene	6000		1 U	5 U	1 U	50 U	50 U	0.5 U	1 U	1 U	1 U				1 U		1 U
Tetrahydrofuran	5000		1.2 J	50 U	15	1000 U	1000 U	10 U	10 U	14.8	14.4				10 U		R
Toluene	1000		0.6 J	5 U	1 U	75 U	75 U	0.75 U	1 U	1 U	1 U				1 U		1 U
Alcohols (mg/L)																	
iso-Propyl Alcohol	NA					140	140	2 U									1 U
Herbicides (µg/L)																	
PCBs (µg/L)																	
Aroclor-1254	0.3	R															
Inorganics (mg/L)																	
Antimony	0.006		0.004 J		0.006 U				0.006 U	0.006 U	0.006 U			0.006 U	0.006 U		0.006 U
Arsenic	0.01		**0.0141**		0.004 U				0.004 U	0.0054	0.0062			0.0107 U	0.004 U		0.004 U
Barium	2																
Beryllium	0.004		0.002 U		0.0002 J				0.002 U	0.0002 J	0.0004 J			0.001 U	0.0008 J		0.00008 U
Boron	NA		0.0688		0.05 U				0.0604	0.166	0.159	0.0147	0.0377	0.0056 U	0.05 U	0.0646	0.0039 U
Cadmium	0.004		0.0025 U		0.0025 U				0.0025 U	0.0025 U	0.0025 U			0.0012 U	0.0004 J		0.0012 U
Chromium	0.1		0.005 U		0.0028 J				0.005 U	0.003 J	0.005 U			0.0025 U	0.005 U		0.003 U
Copper	10		0.093		0.0093				0.005 U	0.0108	0.0067			0.0025 U	0.003 J		0.0025 U
Iron	NA																
Lead	0.01		0.0075 U		0.0042 J				0.0075 U	0.0075 U	0.0075 U			0.0038 U	0.0075 U		0.0038 U
Lithium	1																
Manganese	NA																
Mercury	0.002		0.00008 J		0.0002 U				0.0002 U	0.00013 J	0.0002 U			0.0002 U	0.00022		0.0002 U
Nickel	0.1		0.0178		0.005 U				0.0018 J	0.009	0.0088			0.001 U	0.005 U		0.0016 U
Selenium	0.05		0.015 U		0.015 U				0.015 U	0.015 U	0.015 U			0.0075 UJ	0.015 U		0.0075 UJ
Silver	0.007		0.0046 J		0.005 U				0.007 U	0.007 U	0.007 U			0.005 U	0.007 U		0.005 U
Thallium	0.002		0.00003		0.00002 J				0.00002 J	0.00003 J	0.00003 J			0.005 U	0.00003 J		0.005 U
Zinc	0.9		0.0153 J		0.0572				0.0408 J	0.011 J	0.0106 J			0.0062 U	0.0145 J		0.0036 U

Notes:
Summary of detected compounds only
NA= Not Available
Blank cells were not analyzed
Shaded cells exceeded screening values
J= Estimated result
R= Rejected result, unusable for decisions
U= Not detected, value is the reporting limit
UJ= Not detected, estimated reporting limit

Table 7
Summary of OHM Analytical Results for Groundwater
Yankee Nuclear Power Station
Rowe, MA

Station	MCP	MW-103C	MW-103C	MW-104A	MW-104B	MW-104C	MW-105A	MW-105A	MW-105B	MW-105B	MW-105B	MW-105C	MW-105C	MW-105C	MW-105C	MW-105C
Sample ID	RCGW-1	FD001L-111905	MW-103C-050106	MW-104A-042606	MW-104B-032305	MW-104C-032405	MW-105A-041906	MW-105A-071206	MW-105B-032705	MW-105B-FD002-032705	MW-105B-042006	MW-105C-112104	MW-105C-032705	FD 002-032705	MW-105C-041906	MW-105C-041906-RE
Date Sampled		11/19/2005	5/1/2006	4/26/2006	3/23/2005	3/24/2005	4/19/2006	7/12/2006	3/27/2005	3/27/2005	4/20/2006	11/21/2004	3/27/2005	3/27/2005	4/19/2006	4/19/2006
EPH (µg/L)																
Benzo(a)anthracene	1										1 U				1 U	
Benzo(k)fluoranthene	1										1 U				1 U	
C11-C22 Aromatics	200										200 U				200 U	
C19-C36 Aliphatics	5000										200 U				200 U	
Chrysene	2										1 U				1 U	
Fluoranthene	90										1 U				1 U	
Naphthalene	140										1 U				0.884 J	
VPH (µg/L)																
C5-C8 Aliphatics	400										41.2 J				71.4 J	
C9-C10 Aromatics	200										25 U				25 U	
C9-C12 Aliphatics	1000										25 U				25 U	
Methyl-t-butyl ether	70										5 U				2.5 J	
SVOC (µg/L)																
Benzo(b)fluoranthene	1	0.2 U	0.2 U								0.2 U					
Benzo(g,h,i)perylene	300	0.2 U	0.2 U								0.2 U					
Benzo(k)fluoranthene	1	0.2 U	0.2 U								0.2 U					
Hexachlorobenzene	1	1 U	1 U								1 U					
Pentachlorophenol	1	1 U	1 U								1 U					
VOC (µg/L)																
1,1-Dichloroethane	70	1 U	1 U	1 U			1 U	1 U			2.7	7.4	6.2	5.8	2.1	5 U
1,1-Dichloroethene	7	1 U	1 U	1 U			1 U	1 U			1 U	2.6	1.5	1.5	0.7 J	5 U
1,2,4-Trimethylbenzene	10000	1 U	1 U	1 U			1 U	1 U			1 U	5 U	1 U	1 U	1 U	5 U
1,4-Dioxane	1000	R	20 U	20 U			20 U	20 U			9.3 J		R	R	10.7 J	100 U
2-Butanone	400	6.6 J	10 U	10 U			2.4 J	17.6			10 U	10 U	17.3 J	14.5 J	2.6 J	50 U
2-Hexanone	1000	10 U	10 U	10 U			10 U	10 U			10 U	5 U	10 UJ	10 UJ	10 U	50 U
4-Methyl-2-pentanone	350	10 U	10 U	10 U			10 U	10 U			10 U	5 U	10 UJ	10 UJ	10 U	50 U
Acetone	3000	407 J	10 U	3.2 J			10 U	5.5 J			15.4	10 UJ	R	R	37.7	40.7 J
Benzene	5	1 U	1 U	1 U			1 U	1 U			1 U	1 U	1 U	1 U	1 U	5 U
Carbon disulfide	1000	0.7 J	0.9 J	5 U			5 U	5 U			5 U	5 U	5 U	5 U	5 U	25 U
Chloromethane	1000	1 J	2 U	2 U			2 U	2 U			2 U	0.93 J	2 U	2 U	2 U	10 U
Dichlorodifluoromethane	10000	2 UJ	2 U	2 U			2 U	2 U			2 U	5 U	2 U	2 U	2 U	10 U
Ethylbenzene	700	1 U	1 U	1 U			1 U	1 U			1 U	5 U	1 U	1 U	1 U	5 U
m+p-Xylenes	6000	2 U	2 U	2 U			2 U	2 U			2 U	5 U	2 U	2 U	2 U	10 U
Methyl-t-butyl ether	70	1 U	1 U	1 U			1 U	1 U			0.9 J	1.4 J	1	0.9 J	3.2	2.7 J
Naphthalene	140			1 U			1 U	1 U					1 U	1 U	1 U	5 U
o-Xylene	6000	1 U	1 U	1 U			1 U	1 U			1 U	5 U	1 U	1 U	1 U	5 U
Tetrahydrofuran	5000	R	10 U	10 U			7.1 J	27.5			242	R	R	R	512 E	470
Toluene	1000	1 U	1 U	1 U			1 U	1 U			1 U	5 U	43.3 J	55.2 J	1 U	5 U
Alcohols (mg/L)																
iso-Propyl Alcohol	NA	1 U	1 U				1 U	1 U							1 U	
Herbicides (µg/L)																
PCBs (µg/L)																
Aroclor-1254	0.3															
Inorganics (mg/L)																
Antimony	0.006	0.0013 U	0.006 U	0.0032 J			0.006 U	0.0008 J			0.006 U				0.006 U	
Arsenic	0.01	0.0047 U	0.004 U	0.008 U			0.004 U	0.004 U			0.004 U				0.004 U	
Barium	2															
Beryllium	0.004	0.0004 U	0.002 U	0.0007 J			0.002 U	0.002 U			0.002 U				0.002 U	
Boron	NA	0.0046 U	0.0646	0.091	0.037	0.0502	0.0362	0.0444 J	0.0716	0.0725	0.041		0.0336		0.0428	
Cadmium	0.004	0.0004 U	0.0025 U	0.001 J			0.0025 U	0.0004 J			0.0025 U				0.0025 U	
Chromium	0.1	0.0029 U	0.0038 J	0.005 U			0.005 U	0.002 J			0.005 U				0.0024 J	
Copper	10	0.0025 U	0.005 U	0.0017 J			0.0084	0.0472			0.0034 J				0.0029 J	
Iron	NA															
Lead	0.01	0.0038 U	0.0075 U	0.0075 U			0.0075 U	0.0025 J			0.0075 U				0.0075 U	
Lithium	1															
Manganese	NA															
Mercury	0.002	0.00014 U	0.0002 U	0.0002 U			0.00006 J	0.00009 J			0.0002 U				0.0002 U	
Nickel	0.1	0.0023 U	0.0038 J	0.005 U			0.005 U	0.0026 J			0.005 U				0.005 U	
Selenium	0.05	0.0075 UJ	0.015 U	0.015 U			0.015 U	0.015 U			0.0062 J				0.0065 J	
Silver	0.007	0.005 U	0.005 U	0.01 U			0.007 U	0.005 U			0.007 U				0.007 U	
Thallium	0.002	0.005 U	0.00002 J	0.0001 J			0.00006 J	0.00007 J			0.00004 J				0.00002 J	
Zinc	0.9	0.0045 U	0.0594	0.0052			0.0114 J	0.0548 J			0.0102 J				0.0182 J	

Notes:
Summary of detected compounds only
NA= Not Available
Blank cells were not analyzed
Shaded cells exceeded screening values
J= Estimated result
R= Rejected result, unusable for decisions
U= Not detected, value is the reporting limit
UJ= Not detected, estimated reporting limit

Table 7
Summary of OHM Analytical Results for Groundwater
Yankee Nuclear Power Station
Rowe, MA

Station	MCP	MW-106A	MW-106A	MW-106A	MW-106B	MW-106B	MW-106B	MW-106C	MW-106C	MW-106D	MW-106D	MW-106D	MW-106D	MW-107A	MW-107A	MW-107B	MW-107B
Sample ID	RCGW-1	MW-106A-110304	MW-106A-110304-F	MW-106A-031405	MW-106B-111604	FD003-111604	MW-106B-031505	MW-106C-111704	MW-106C-031405	MW-106D-110304	MW-106D-110304-F	MW-106D-031505	FD-001-031505	MW-107A-042506	MW-107A-070506	MW-107B-111904	MW-107B-042606
Date Sampled		11/3/2004	11/3/2004	3/14/2005	11/16/2004	11/16/2004	3/15/2005	11/17/2004	3/14/2005	11/3/2004	11/3/2004	3/15/2005	3/15/2005	4/25/2006	7/5/2006	11/19/2004	4/26/2006
EPH (µg/L)																	
Benzo(a)anthracene	1																
Benzo(k)fluoranthene	1																
C11-C22 Aromatics	200	100 U			95.2 U	95.2 U		95.2 U		100 U							
C19-C36 Aliphatics	5000	100 U			95.2 U	95.2 U		95.2 U		100 U							
Chrysene	2																
Fluoranthene	90																
Naphthalene	140																
VPH (µg/L)																	
C5-C8 Aliphatics	400	50 U			50 U	50 U		50 U		50 U							
C9-C10 Aromatics	200	50 U			50 U	50 U		50 U		50 U							
C9-C12 Aliphatics	1000	50 U			50 UJ	50 U		50 U		50 U							
Methyl-t-butyl ether	70																
SVOC (µg/L)																	
Benzo(b)fluoranthene	1	0.2 UJ			0.2 UJ	0.2 U		0.2 U		0.2 UJ							
Benzo(g,h,i)perylene	300	0.2 UJ			0.2 U	0.2 U		0.41 U		0.2 UJ							
Benzo(k)fluoranthene	1	0.2 UJ			0.2 UJ	0.2 UJ		0.21 UJ		0.2 UJ							
Hexachlorobenzene	1	10 U			10 U	10 U		10 U		10 U							
Pentachlorophenol	1	R			R	R		R		R							
VOC (µg/L)																	
1,1-Dichloroethane	70	5 U			5 UJ	5 U		5 UJ		5 U				1 U			1 U
1,1-Dichloroethene	7	2 U			2 UJ	2 U		2 UJ		2 U				1 U			1 U
1,2,4-Trimethylbenzene	10000	5 U			5 UJ	5 U		5 UJ		5 U				0.8 J			1 U
1,4-Dioxane	1000													9.5 J			20 U
2-Butanone	400	10 U			10 UJ	10 U		10 UJ		10 U				24.8			10 U
2-Hexanone	1000	5 U			5 UJ	5 UJ		5 UJ		5 U				10 U			10 U
4-Methyl-2-pentanone	350	5 U			5 UJ	5 U		5 UJ		5 U				0.7 J			10 U
Acetone	3000	10 UJ			10 UJ	10 UJ		2.4 J		10 UJ				78.4			10 U
Benzene	5	1 U			1 UJ	1 U		1 UJ		1 U				1 U			1 U
Carbon disulfide	1000	5 U			0.4 J	5 U		0.3 J		5 U				5 U			5 U
Chloromethane	1000	5 U			2.4 J	5 U		4.9 J		5 U				2 U			2 U
Dichlorodifluoromethane	10000	5 U			5 UJ	5 U		5 UJ		5 U				0.6 J			2 U
Ethylbenzene	700	5 U			5 UJ	5 U		5 UJ		5 U				2.4			1 U
m+p-Xylenes	6000	5 U			5 UJ	5 U		5 UJ		5 U				7.9			2 U
Methyl-t-butyl ether	70	5 U			5 UJ	5 U		5 UJ		5 U				1 U			1 U
Naphthalene	140													1 U			1 U
o-Xylene	6000	5 U			5 UJ	5 U		5 UJ		5 U				2.1			1 U
Tetrahydrofuran	5000	5 U			R	5 U		R		5 U				17.3			16.6
Toluene	1000	0.21 J			2.8 J	5 U		5 UJ		0.35 J				4.8			1 U
Alcohols (mg/L)																	
iso-Propyl Alcohol	NA																
Herbicides (µg/L)		-			-	-		-		-							
PCBs (µg/L)																	
Aroclor-1254	0.3	0.25 U	0.25 U		0.25 U			0.25 U		0.25 U	0.25 U					0.25 U	0.211 U
Inorganics (mg/L)																	
Antimony	0.006	0.005 U			0.005 U	0.005 U		0.005 U		0.005 U				0.0051 J	0.0056 J		0.012 U
Arsenic	0.01	0.01 U			0.01 U	0.01 U		0.01 U		0.01 U				**0.0126**	**0.0144**		0.008 U
Barium	2																
Beryllium	0.004	0.002 U			0.002 U	0.002 U		0.002 U		0.002 U				0.002 U	0.002 U		0.0004 J
Boron	NA	0.1 U		0.0945	0.1 U	0.1 U	0.0106	0.1 U	0.0184	0.1 U		0.0144	0.0136	0.115	0.107		0.0138
Cadmium	0.004	0.003 U			0.003 U	0.003 U		0.003 U		0.003 U				0.0025 U	0.0002 J		0.0025 U
Chromium	0.1	0.01 U			0.01 U	0.01 U		0.015		0.01 U				0.0082	0.005 U		0.005 U
Copper	10	0.01 U			0.01 U	0.01 U		0.01 U		0.01 U				0.0418	0.0191		0.005 U
Iron	NA																
Lead	0.01	0.005 U			0.005 U	0.005 U		0.005 U		0.005 U				0.0024 J	0.0075 U		0.0075 U
Lithium	1	0.5 U			0.5 U	0.5 U		0.5 U		0.5 U							
Manganese	NA																
Mercury	0.002	0.00021 J			0.0002 U	0.0002 U		0.0002 U		0.0002 UJ				0.0002 U	0.00011 J		0.00018 J
Nickel	0.1	0.01 U			0.01 U	0.01 U		0.01 U		0.01 U				0.0098	0.0102		0.005 U
Selenium	0.05	0.05 U			0.05 U	0.05 U		0.05 U		0.05 U				0.015 U	0.015 U		0.015 U
Silver	0.007	0.005 U			0.005 U	0.005 U		0.005 U		0.005 U				**0.0078**	0.005 U		0.01 U
Thallium	0.002	0.00125 U			0.00125 U	0.00125 U		0.00125 U		0.00125 U				0.00002 J	0.00003 J		0.00004 J
Zinc	0.9	0.07 J			0.05 U	0.05		0.05 U		0.06 J				0.0104 J	0.0123		0.0056

Notes:
Summary of detected compounds only
NA= Not Available
Blank cells were not analyzed
Shaded cells exceeded screening values
J= Estimated result
R= Rejected result, unusable for decisions
U= Not detected, value is the reporting limit
UJ= Not detected, estimated reporting limit

Table 7
Summary of OHM Analytical Results for Groundwater
Yankee Nuclear Power Station
Rowe, MA

Station	MCP	MW-107B	MW-107C	MW-107C	MW-107D	MW-107D	MW-107D	MW-107E	MW-108A	MW-108A	MW-108B	MW-108B	MW-108B	MW-108B	MW-108C	MW-108C	MW-109A	MW-109B
Sample ID	RCGW-1	MW-107BF-042606	MW-107C-111904	MW-107C-042606	MW-107D-111904	MW-107D-042506	MW-107DF-042506	MW-107E-071006	MW-108A-112104	MW-108A-031705	MW-108B-031705	FD004-031705	MW-108 B-111105	MW-108B-050106	MW-108C-112104	MW-108C-031605	MW-109A-041906	MW-109B-031605
Date Sampled		4/26/2006	11/19/2004	4/26/2006	11/19/2004	4/25/2006	4/25/2006	7/10/2006	11/21/2004	3/17/2005	3/17/2005	3/17/2005	11/11/2005	5/1/2006	11/21/2004	3/16/2005	4/19/2006	3/16/2005
EPH (µg/L)																		
Benzo(a)anthracene	1			1 U														
Benzo(k)fluoranthene	1			1 U														
C11-C22 Aromatics	200			200 U														
C19-C36 Aliphatics	5000			200 U														
Chrysene	2			1 U														
Fluoranthene	90			1 U														
Naphthalene	140			1 U														
VPH (µg/L)																		
C5-C8 Aliphatics	400		50 U		50 U													
C9-C10 Aromatics	200		50 U		50 U													
C9-C12 Aliphatics	1000		50 U		50 U													
Methyl-t-butyl ether	70																	
SVOC (µg/L)																		
Benzo(b)fluoranthene	1			0.126 J							0.2 U	0.2 U	0.2 U	0.2 U				
Benzo(g,h,i)perylene	300			0.126 J							0.2 U	0.2 U	0.2 U	0.2 U				
Benzo(k)fluoranthene	1			0.147 J							0.2 U	0.2 U	0.2 U	0.2 U				
Hexachlorobenzene	1			1 U							1 U	1 U	0.022 J	1 U				
Pentachlorophenol	1			1 U							**1.46** J	1 UJ	1 U	1 U				
VOC (µg/L)																		
1,1-Dichloroethane	70		1.7	1.9	1.3	1.5		0.9 J	0.45 J					1 U	8		1 U	
1,1-Dichloroethene	7		0.5 U	1 U	0.5 U	1 U		1 U	2 U					1 U	5 U		1 U	
1,2,4-Trimethylbenzene	10000		2.5 U	1 U	2.5 U	1 U		1 U	5 U					1 U	5 U		1 U	
1,4-Dioxane	1000			9 J		20 U		20 U						20 U			20 U	
2-Butanone	400		5 U	36.5	5 U	191		10 U	10 U					10 U	10 U		121	
2-Hexanone	1000		5 U	10 U	5 U	10 U		10 U	5 U					10 U	5 U		10 U	
4-Methyl-2-pentanone	350		5 U	10 U	5 U	10 U		10 U	5 U					10 U	5 U		10 U	
Acetone	3000		5 U	13.1	5 U	72		10 U	10 UJ					10 U	10 UJ		24.1	
Benzene	5		0.5 U	1 U	0.5 U	1 U		1 U	1 U					1 U	1 U		1 U	
Carbon disulfide	1000		5 U	5 U	5 U	5 U		5 U	5 U					5 U	5 U		5 U	
Chloromethane	1000		2.5 U	2 U	2.5 U	2 U		2 U	5 U					2 U	5 U		2 U	
Dichlorodifluoromethane	10000		5 U	2 U	5 U	2 U		2 U	5 U					2 U	5 U		2 U	
Ethylbenzene	700		0.5 U	1 U	0.5 U	1 U		1 U	5 U					1 U	5 U		1 U	
m+p-Xylenes	6000		0.5 U	2 U	0.5 U	2 U		2 U	0.25 J					2 U	0.25 J		2 U	
Methyl-t-butyl ether	70		1 U	0.6 J	1 U	1 U		1 U	5 U					1 U	5 U		1 U	
Naphthalene	140					1 U		1 U									1 U	
o-Xylene	6000		0.5 U	1 U	0.5 U	1 U		1 U	5 U					1 U	5 U		1 U	
Tetrahydrofuran	5000		10 U	101	10 U	456		10 U	R					10 U	R		185	
Toluene	1000		0.75 U	1 U	0.75 U	1 U		1 U	5 U					1 U	5 U		1 U	
Alcohols (mg/L)																		
iso-Propyl Alcohol	NA		2 U		2 U													
Herbicides (µg/L)																		
PCBs (µg/L)																		
Aroclor-1254	0.3	0.211 U			0.25 U	0.2 U	0.2 U											
Inorganics (mg/L)																		
Antimony	0.006			0.012 U		0.006 U		0.0051 J						0.006 U			0.006 U	
Arsenic	0.01			0.008 U		0.004 U		0.004 U						0.004 U			0.004 U	
Barium	2																	
Beryllium	0.004			0.0006 J		0.0004 J		0.002 U						0.0002 J			0.002 U	
Boron	NA			0.214		0.157		0.014		0.0326	0.0232			0.05 U		0.0362	0.012	0.0157
Cadmium	0.004			0.0025 U		0.0025 U		0.0025 U						0.0025 U			0.0025 U	
Chromium	0.1			0.005 U		0.005 U		0.005 U						0.005 U			0.005 U	
Copper	10			0.0019 J		0.005 U		0.0018 J						0.005 U			0.006	
Iron	NA																	
Lead	0.01			0.0075 U		0.0075 U		0.0025 J						0.0075 U			0.0075 U	
Lithium	1																	
Manganese	NA																	
Mercury	0.002			0.0002 U		0.0002 U		0.0002 U						0.0002 U			0.0002 U	
Nickel	0.1			0.0018 J		0.005 U		0.005 U						0.005 U			0.005 U	
Selenium	0.05			0.015 U		0.015 U		0.015 U						0.015 U			0.0074 J	
Silver	0.007			0.01 U		0.007 U		0.005 U						0.005 U			0.007 U	
Thallium	0.002			0.0001 J		0.000009 J		0.0001						0.00003			0.0002 U	
Zinc	0.9			0.0108		0.0092 J		0.0078						0.021			0.009 J	

Notes:
Summary of detected compounds only
NA= Not Available
Blank cells were not analyzed
Shaded cells exceeded screening values
J= Estimated result
R= Rejected result, unusable for decisions
U= Not detected, value is the reporting limit
UJ= Not detected, estimated reporting limit

Table 7
Summary of OHM Analytical Results for Groundwater
Yankee Nuclear Power Station
Rowe, MA

Station	MCP	MW-109B	MW-109C	MW-109C	MW-109C	MW-109D	MW-109D	MW-109D	MW-110A	MW-110A	MW-110B	MW-110C	MW-110C	MW-110C	MW-110D	MW-110D	MW-111A	MW-111B
Sample ID	**RCGW-1**	**MW-109B-050306**	**MW-109C-110204**	**MW-109C-031605**	**MW-109C-042406**	**MW-109D-110304**	**MW-109D-031605**	**MW-109D-042606**	**MW-110A-042506**	**MW-110AF-042506**	**MW-110B-050206**	**MW-110C-042506**	**MW-110C-042506-RE**	**MW-110C-071106**	**MW-110D-050206**	**FD002-050206**	**MW-111A-042606**	**MW-111B-042706**
Date Sampled		**5/3/2006**	**11/2/2004**	**3/16/2005**	**4/24/2006**	**11/3/2004**	**3/16/2005**	**4/26/2006**	**4/25/2006**	**4/25/2006**	**5/2/2006**	**4/25/2006**	**4/25/2006**	**7/11/2006**	**5/2/2006**	**5/2/2006**	**4/26/2006**	**4/27/2006**
EPH (µg/L)																		
Benzo(a)anthracene	1																	
Benzo(k)fluoranthene	1																	
C11-C22 Aromatics	200																	
C19-C36 Aliphatics	5000																	
Chrysene	2																	
Fluoranthene	90																	
Naphthalene	140																	
VPH (µg/L)																		
C5-C8 Aliphatics	400		50 U			50 U												
C9-C10 Aromatics	200		50 U			50 U												
C9-C12 Aliphatics	1000		50 U			50 U												
Methyl-t-butyl ether	70																	
SVOC (µg/L)																		
Benzo(b)fluoranthene	1	0.2 U			0.2 U			0.2 U										
Benzo(g,h,i)perylene	300	0.2 U			0.2 U			0.2 U										
Benzo(k)fluoranthene	1	0.2 U			0.2 U			0.2 U										
Hexachlorobenzene	1	1 U			1 U			1 U										
Pentachlorophenol	1	1 U			1 U			1 U										
VOC (µg/L)																		
1,1-Dichloroethane	70	1 U	0.75 U		1 U	0.75 U		1 U	1 U		1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	7	1 U	0.5 U		1 U	0.5 U		1 U	1 U		1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U
1,2,4-Trimethylbenzene	10000	1 U	2.5 U		1 U	2.5 U		1 U	1 U		1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U
1,4-Dioxane	1000	20 U			20 U			20 U	20 U		20 U	20 U	200 U	20 U	20 U	20 U	8.4 J	20 U
2-Butanone	400	10 U	5 U		10 U	5 U		22	12.7		85.2	**1310** E	**1160**	3.8 J	35.1	33.3	383	**2320**
2-Hexanone	1000	10 U	5 U		10 U	5 U		10 U	10 U		10 U	10 U	100 U	10 U	10 U	0.5 J	10 U	10 U
4-Methyl-2-pentanone	350	10 U	5 U		10 U	5 U		10 U	10 U		10 U	10 U	100 U	10 U	10 U	0.6 J	10 U	10 U
Acetone	3000	10 U	5 U		10 U	5 U		17.7	19.2		39.2	560 E	507	10 U	23	20.4	275	1000
Benzene	5	1 U	0.5 U		1 U	0.5 U		1 U	1 U		1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U
Carbon disulfide	1000	5 U	5 U		5 U	5 U		5 U	5 U		5 U	5 U	50 U	5 U	5 U	5 U	5 U	5 U
Chloromethane	1000	2 U	2.5 U		2 U	2.5 U		2 U	2 U		2 U	2 U	20 U	2 U	2 U	2 U	2 U	2 U
Dichlorodifluoromethane	10000	2 U	5 U		2 U	5 U		2 U	2 U		2 U	2 U	20 U	2 U	2 U	2 U	2 U	2 U
Ethylbenzene	700	1 U	0.5 U		1 U	0.5 U		1 U	1 U		1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U
m+p-Xylenes	6000	2 U	0.5 U		2 U	0.5 U		2 U	2 U		2 U	2 U	20 U	2 U	2 U	2 U	2 U	2 U
Methyl-t-butyl ether	70	1 U	1 U		1 U	1 U		1 U	1 U		1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U
Naphthalene	140								1 U		1 U	1 U	10 U	1 U	1 U	1 U	3.9	1 U
o-Xylene	6000	1 U	0.5 U		1 U	0.5 U		1 U	1 U		1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U
Tetrahydrofuran	5000	51.5	10 U		40.2	10 U		66.8	23.9		175	2160 E	1890	14.3	86	84.5	444	4470
Toluene	1000	1 U	0.75 U		1 U	0.75 U		1 U	1 U		1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U
Alcohols (mg/L)																		
iso-Propyl Alcohol	NA		2 U			2 U												
Herbicides (µg/L)																		
PCBs (µg/L)																		
Aroclor-1254	0.3								0.205 U	0.205 U								
Inorganics (mg/L)																		
Antimony	0.006	0.0027 J			0.006 U			0.012 U	0.006 U		0.006 U	0.006 U			0.006 U	0.004 J	0.012 U	0.006 U
Arsenic	0.01	0.004 U			0.004 U			0.008 U	0.0042		0.004 U	0.004 U			0.004 U	0.004 U	0.0043 J	0.004 U
Barium	2																	
Beryllium	0.004	0.0006 J			0.002 U			0.0005 J	0.0003 J		0.0002 J	0.0006 J			0.0001 J	0.0004 J	0.002 U	0.0001 J
Boron	NA	0.05 U		0.0256	0.0012 J		0.0364	0.01 U	0.049		0.05 U	0.0066 J			0.05 U	0.05 U	0.0242	0.05 U
Cadmium	0.004	0.0025 U			0.0025 U			0.0025 U	0.0025 U		0.0025 U	0.0025 U			0.0025 U	0.0004 J	0.0025 U	0.0025 U
Chromium	0.1	0.005 U			0.005 U			0.005 U	0.005 U		0.005 U	0.005 U			0.005 U	0.005 U	0.005 U	0.005 U
Copper	10	0.0114			0.005 U			0.0048 J	0.005		0.005 U	0.005 U			0.005 U	0.005 U	0.0542	0.005 U
Iron	NA																	
Lead	0.01	0.0075 U			0.0075 U			0.0075 U	0.0075 U		0.0075 U	0.0075 U			0.0075 U	0.0075 U	0.0075 U	0.0075 U
Lithium	1																	
Manganese	NA																	
Mercury	0.002	0.0002 U			0.0002 U			0.00005 J	0.0002 U		0.0002 U	0.0002 U			0.0002 U	0.0002 U	0.0002 U	0.0002 U
Nickel	0.1	0.005 U			0.0018 J			0.005 U	0.0092		0.005 U	0.005 U			0.005 U	0.005 U	0.0184	0.0023 J
Selenium	0.05	0.015 U			0.015 U			0.015 U	0.015 U		0.015 U	0.015 U			0.015 U	0.015 U	0.015 U	0.015 U
Silver	0.007	0.007 U			0.007 U			0.01 U	0.007 U		0.005 U	0.007 U			0.005 U	0.005 U	0.01 U	0.005 U
Thallium	0.002	0.00003 J			0.00002 J			0.00009 J	0.000007 J		0.00004	0.00002 J			0.00001 J	0.00003	0.00004 J	0.00001 J
Zinc	0.9	0.0169 J			0.0108 J			0.0108	0.0082 J		0.022	0.0118 J			0.0106	0.013	0.0065	0.0189

Notes:
Summary of detected compounds only
NA= Not Available
Blank cells were not analyzed
Shaded cells exceeded screening values
J= Estimated result
R= Rejected result, unusable for decisions
U= Not detected, value is the reporting limit
UJ= Not detected, estimated reporting limit

Table 7
Summary of OHM Analytical Results for Groundwater
Yankee Nuclear Power Station
Rowe, MA

Station	MCP	MW-111B	MW-111C	MW-113A	MW-113C-062806	MW-113C	Sherman Spring	DW001	DW001	DW001	DW002
Sample ID	RCGW-1	MW111B-062906	MW-111C-042606	MW-113A-062706	MW-113C-062806	FD002-062806	SP-1-032205	DW-1-031505	DW001-042606	DW001F-042606	DW-2-032205
Date Sampled		6/29/2006	4/26/2006	6/27/2006	6/28/2006	6/28/2006	3/22/2005	3/15/2005	4/26/2006	4/26/2006	3/22/2005
EPH (µg/L)											
Benzo(a)anthracene	1			1 U	1 U	0.383 J			1 U		
Benzo(k)fluoranthene	1			1 U	1 U	0.468 J			1 U		
C11-C22 Aromatics	200			200 U	200 U	200 U			200 U		
C19-C36 Aliphatics	5000			200 U	200 U	200 U			200 U		
Chrysene	2			1 U	1 U	0.489 J			1 U		
Fluoranthene	90			1 U	1 U	0.298 J			1 U		
Naphthalene	140			1 U	1 U	1 U			1 U		
VPH (µg/L)											
C5-C8 Aliphatics	400			11.3 J	71 J	62.1 J			75 U		
C9-C10 Aromatics	200			25 U	5.96 J	11.9 J			14.3 J		
C9-C12 Aliphatics	1000			25 U	24.4 J	18.2 J			25 U		
Methyl-t-butyl ether	70			5 U	5 U	5 U			5 U		
SVOC (µg/L)											
Benzo(b)fluoranthene	1			0.2 U	0.2 U	0.2 U			0.2 U		
Benzo(g,h,i)perylene	300			0.2 U	0.2 U	0.2 U			0.2 U		
Benzo(k)fluoranthene	1			0.2 U	0.2 U	0.2 U			0.2 U		
Hexachlorobenzene	1			1 U	1 U	1 U			1 U		
Pentachlorophenol	1			1 U	1 U	1 U			1 U		
VOC (µg/L)											
1,1-Dichloroethane	70	1 U	1 U	1 U	0.6 J	0.6 J			1 U		
1,1-Dichloroethene	7	1 U	1 U	1 U	1 U	1 U			1 U		
1,2,4-Trimethylbenzene	10000	1 U	1 U	1 U	1 U	1 U			1 U		
1,4-Dioxane	1000	20 U	20 U	20 U	20 U	20 U			20 U		
2-Butanone	400	14	40.6	10 U	10 U	10 U			10 U		
2-Hexanone	1000	10 U	1 J	10 U	10 U	10 U			10 U		
4-Methyl-2-pentanone	350	10 U	1.5 J	10 U	10 U	10 U			10 U		
Acetone	3000	5.8 J	76.2	10 U	10 U	10 U			10 U		
Benzene	5	1 U	1 U	1 U	1 U	1 U			1 U		
Carbon disulfide	1000	5 U	5 U	5 U	5 U	0.5 J			5 U		
Chloromethane	1000	2 U	2 U	2 U	2 U	2 U			2 U		
Dichlorodifluoromethane	10000	2 U	2 U	2 U	2 U	2 U			2 U		
Ethylbenzene	700	1 U	1 U	1 U	1 U	1 U			1 U		
m+p-Xylenes	6000	2 U	2 U	2 U	0.9 J	1.1 J			2 U		
Methyl-t-butyl ether	70	1 U	1 U	1 U	1 U	1 U			1 U		
Naphthalene	140	1 U	1 U								
o-Xylene	6000	1 U	1 U	1 U	1 U	1 U			1 U		
Tetrahydrofuran	5000	31.1	51.9	10 U	10 U	10 U			10 U		
Toluene	1000	1 U	1 U	1 U	1.4	1.7			1 U		
Alcohols (mg/L)											
iso-Propyl Alcohol	NA										
Herbicides (µg/L)											
PCBs (µg/L)											
Aroclor-1254	0.3			0.32 U	0.222 U	0.229 U			0.211 U	0.211 U	
Inorganics (mg/L)											
Antimony	0.006		0.006 U	0.0042 J	0.0024 J	0.0042 J			0.012 U		
Arsenic	0.01		0.004	0.004 U	0.004 U	0.004 U			0.008 U		
Barium	2										
Beryllium	0.004		0.0002 J	0.002 U	0.002 U	0.002 U			0.0003 J		
Boron	NA		0.0488	0.0078 J	0.01 U	0.01 U	0.0761	0.0296	0.01 U		0.0336
Cadmium	0.004		0.0025 U	0.0025 U	0.0025 U	0.0025 U			0.0025 U		
Chromium	0.1		0.004 J	0.005 U	0.005 U	0.005 U			0.005 U		
Copper	10		0.016	0.0027 J	0.0036 J	0.0028 J			0.002 J		
Iron	NA										
Lead	0.01		0.0032 J	0.0075 U	0.0075 U	0.0075 U			0.0075 U		
Lithium	1										
Manganese	NA										
Mercury	0.002		0.0002 U	0.0002 U	0.00008 J	0.00004 J			0.0002 U		
Nickel	0.1		0.028	0.005 U	0.005 U	0.005 U			0.005 U		
Selenium	0.05		0.015 U	0.015 U	0.015 U	0.015 U			0.015 U		
Silver	0.007		0.005 U	0.0018 J	0.0018 J	0.005 U			0.01 U		
Thallium	0.002		0.00006	0.00004	0.00005	0.00005			0.00006 J		
Zinc	0.9		0.0196	0.0234 J	0.0092	0.0077			0.005 U		

Notes:
Summary of detected compounds only
NA= Not Available
Blank cells were not analyzed
Shaded cells exceeded screening values
J= Estimated result
R= Rejected result, unusable for decisions
U= Not detected, value is the reporting limit
UJ= Not detected, estimated reporting limit

Table 8-1
Summary of Radiological Analytical Results for Upstream Sediment
Yankee Nuclear Power Station
Rowe, MA

Radionuclide	MDC Requested	SD-407			SD-408			SD-409			SD-410			SD-411			SD-412		
		Activity	Crit. Level	MDC	Activity	Crit. Level	MDC	Activity	Crit. Level	MDC	Activity	Crit. Level	MDC	Activity	Crit. Level	MDC	Activity	Crit. Level	MDC
Tritium and HTDs																			
H-3	1.30E+01	ND	5.52E+00	8.73E+00	NA			ND	6.41E+00	9.82E+00	NA			NA			NA		
C-14	1.90E-01	ND	1.17E-01	1.68E-01	NA			ND	1.13E-01	1.64E-01	NA			NA			NA		
Fe-55	1.00E+03	3.23E+02	2.33E+01	1.47E+01	NA			ND	1.06E+01	1.46E+01	NA			NA			NA		
Ni-63	2.80E+01	ND	5.36E+00	7.99E+00	NA			ND	5.78E+00	8.77E+00	NA			NA			NA		
Sr-90	5.90E-02	ND	2.55E-02	4.60E-02	NA			ND	2.28E-02	4.42E-02	NA			NA			NA		
Tc-99	4.80E-01	ND	2.36E-01	3.54E-01	NA			ND	2.55E-01	3.82E-01	NA			NA			NA		
Pu-241	3.40E+01	ND	1.18E+01	1.72E+01	NA			ND	1.30E+01	1.88E+01	NA			NA			NA		
Pu-238	1.10E+00	ND	1.74E-01	1.60E-01	NA			6.11E-01	3.54E-01	2.25E-01	NA			NA			NA		
Pu-239/240	1.00E+00	ND	1.03E-01	8.68E-02	NA			ND	9.12E-02	2.24E-01	NA			NA			NA		
Am-241	1.00E+00	ND	1.99E-01	2.31E-01	NA			ND	1.20E-01	2.48E-01	NA			NA			NA		
Cm-242	1.10E+00	ND	1.21E-01	2.57E-01	NA			ND	1.06E-01	1.26E-01	NA			NA			NA		
Cm-243/244	1.10E+00	ND	1.12E-01	2.75E-01	NA			ND	1.04E-01	2.79E-01	NA			NA			NA		
Be-7		ND	3.12E-01	5.07E-01	ND	2.70E-01	4.26E-01	ND	0.234165	0.327	ND	2.84E-01	4.53E-01	ND	3.39E-01	3.98E-01	ND	2.46E-01	4.03E-01
Na-22		ND	3.90E-02	6.11E-02	ND	3.63E-02	4.64E-02	ND	0.0294745	0.0471	ND	3.97E-02	5.72E-02	ND	3.22E-02	5.32E-02	ND	3.73E-02	5.04E-02
K-40		1.52E+01	1.82E+00	4.74E-01	1.36E+01	1.57E+00	3.20E-01	1.56E+01	1.631	0.351	1.70E+01	1.33E+00	5.01E-01	1.48E+01	1.32E+00	3.23E-01	1.61E+01	1.25E+00	3.81E-01
Cr-51		ND	3.76E-01	6.29E-01	ND	3.24E-01	5.43E-01	ND	0.30057	0.509	ND	3.44E-01	5.51E-01	ND	3.01E-01	4.93E-01	ND	3.33E-01	5.27E-01
Mn-54		ND	3.84E-02	5.84E-02	ND	3.24E-02	4.94E-02	ND	0.030057	0.0502	3.81E-02	2.67E-02	5.58E-02	ND	2.90E-02	4.36E-02	ND	2.83E-02	4.72E-02
Gammas																			
Fe-59		ND	9.63E-02	1.33E-01	ND	7.61E-02	1.19E-01	ND	0.0674535	0.115	ND	9.46E-02	1.55E-01	ND	6.98E-02	1.26E-01	ND	7.28E-02	1.10E-01
Co-56		ND	3.44E-02	5.41E-02	ND	3.25E-02	5.29E-02	ND	0.0315715	0.0519	4.72E-02	4.36E-02	5.79E-02	ND	3.44E-02	5.46E-02	ND	3.16E-02	5.37E-02
Co-57		ND	2.18E-02	3.66E-02	ND	1.98E-02	2.99E-02	ND	0.017941	0.0265	ND	1.95E-02	3.18E-02	ND	1.77E-02	2.95E-02	ND	1.63E-02	3.20E-02
Co-58		ND	4.16E-02	5.68E-02	ND	3.04E-02	4.86E-02	ND	0.0287755	0.045	ND	3.74E-02	5.56E-02	ND	3.09E-02	5.37E-02	ND	3.04E-02	4.83E-02
Co-60	1.40E-01	ND	3.10E-02	5.41E-02	ND	3.32E-02	5.84E-02	ND	0.0271445	0.0388	ND	3.08E-02	5.02E-02	ND	3.29E-02	4.14E-02	ND	2.98E-02	4.74E-02
Zn-65		ND	8.67E-02	1.14E-01	ND	9.12E-02	1.20E-01	ND	0.060813	0.0813	ND	1.03E-01	1.34E-01	ND	6.78E-02	1.01E-01	ND	8.12E-02	1.07E-01
Y-88		ND	3.37E-02	5.78E-02	ND	2.39E-02	4.59E-02	ND	0.019572	0.0389	ND	2.75E-02	4.92E-02	ND	2.46E-02	4.68E-02	ND	1.86E-02	3.74E-02
Zr-95		ND	6.84E-02	1.12E-01	ND	6.15E-02	9.86E-02	ND	0.0609295	0.097	9.55E-02	6.22E-02	1.15E-01	ND	5.63E-02	9.00E-02	ND	6.10E-02	1.04E-01
Nb-94	2.50E-01	ND	3.25E-02	5.46E-02	ND	2.63E-02	4.13E-02	ND	0.024232	0.034	ND	2.68E-02	4.05E-02	ND	2.55E-02	3.92E-02	ND	2.52E-02	3.89E-02
Nb-95		ND	6.21E-02	8.16E-02	ND	4.52E-02	7.73E-02	ND	0.042639	0.0653	6.17E-02	4.23E-02	7.75E-02	ND	4.40E-02	6.78E-02	ND	4.40E-02	5.78E-02
Ru-106		ND	2.91E-01	4.56E-01	ND	2.59E-01	3.89E-01	ND	0.21203	0.364	ND	2.41E-01	4.29E-01	ND	2.02E-01	3.29E-01	ND	2.40E-01	4.03E-01
Ag-108m	2.50E-01	ND	2.55E-02	4.27E-02	ND	2.81E-02	3.90E-02	ND	0.0241155	0.0373	ND	2.67E-02	4.30E-02	ND	2.30E-02	3.89E-02	ND	2.48E-02	3.89E-02
Ag-110M		ND	3.91E-02	5.30E-02	ND	2.95E-02	4.54E-02	ND	0.026562	0.0405	ND	3.06E-02	4.42E-02	ND	2.77E-02	4.02E-02	ND	2.98E-02	4.45E-02
Sn-113		ND	4.21E-02	6.38E-02	ND	3.47E-02	5.70E-02	ND	0.034717	0.0529	ND	3.74E-02	6.11E-02	ND	6.29E-02	4.95E-02	ND	3.52E-02	5.70E-02
Sb-124		ND	7.18E-02	1.14E-01	ND	5.14E-02	1.07E-01	ND	0.0597645	0.104	ND	5.96E-02	8.15E-02	ND	5.49E-02	1.02E-01	ND	4.75E-02	7.49E-02
Sb-125	1.10E+00	ND	7.98E-02	1.31E-01	ND	6.73E-02	1.06E-01	ND	0.068502	0.112	ND	7.32E-02	1.13E-01	ND	6.10E-02	1.03E-01	ND	6.79E-02	1.10E-01
Cs-134	1.70E-01	ND	4.85E-02	7.86E-02	3.60E-02	3.31E-02	5.39E-02	ND	0.048231	0.0545	ND	5.55E-02	6.55E-02	ND	3.06E-02	5.35E-02	ND	5.37E-02	5.59E-02
Cs-136		ND	1.33E-01	2.20E-01	ND	1.18E-01	2.03E-01	ND	0.107413	0.179	ND	1.33E-01	2.22E-01	ND	1.02E-01	1.58E-01	ND	1.65E-01	2.02E-01
Cs-137	3.00E-01	7.52E-02	6.99E-02	5.81E-02	1.03E-01	4.82E-02	5.74E-02	1.22E-01	0.062444	0.0377	4.30E-02	3.37E-02	4.98E-02	9.72E-02	4.85E-02	4.17E-02	8.19E-02	6.30E-02	3.97E-02
Ba-133		ND	4.26E-02	5.93E-02	ND	4.10E-02	4.78E-02	ND	0.0304065	0.0492	ND	3.67E-02	5.35E-02	ND	3.20E-02	4.56E-02	ND	3.75E-02	5.19E-02

Table 8-1
Summary of Radiological Analytical Results for Upstream Sediment
Yankee Nuclear Power Station
Rowe, MA

Radionuclide	MDC Requested	SD-407			SD-408			SD-409			SD-410			SD-411			SD-412		
		Activity	Crit. Level	MDC	Activity	Crit. Level	MDC	Activity	Crit. Level	MDC	Activity	Crit. Level	MDC	Activity	Crit. Level	MDC	Activity	Crit. Level	MDC
Ba-140		ND	3.53E-01	5.77E-01	ND	2.87E-01	4.86E-01	ND	0.28193	0.444	ND	3.10E-01	5.29E-01	ND	2.40E-01	3.65E-01	ND	2.84E-01	4.71E-01
Ce-139		ND	2.76E-02	4.50E-02	ND	2.97E-02	3.80E-02	ND	0.0196885	0.0337	ND	2.74E-02	3.63E-02	ND	2.10E-02	3.30E-02	ND	2.33E-02	3.85E-02
Ce-141		ND	6.70E-02	1.07E-01	ND	5.46E-02	8.65E-02	ND	0.0448525	0.0758	ND	5.77E-02	9.23E-02	ND	4.92E-02	7.96E-02	ND	5.65E-02	9.36E-02
Ce-144		ND	1.77E-01	2.95E-01	ND	1.53E-01	2.40E-01	ND	0.14679	0.205	ND	1.62E-01	2.56E-01	ND	1.40E-01	2.28E-01	ND	1.63E-01	2.66E-01
Nd-147		ND	7.96E-01	1.32E+00	ND	6.20E-01	9.62E-01	ND	0.6058	0.944	ND	6.68E-01	1.10E+00	ND	5.67E-01	9.08E-01	ND	6.09E-01	9.55E-01
Pm-144		ND	3.33E-02	5.38E-02	ND	2.62E-02	4.29E-02	ND	0.0255135	0.0364	ND	2.87E-02	4.97E-02	ND	2.47E-02	3.80E-02	ND	2.57E-02	4.17E-02
Pm-146		ND	3.45E-02	5.95E-02	ND	3.25E-02	5.24E-02	ND	0.0315715	0.049	ND	3.52E-02	5.94E-02	ND	2.90E-02	5.05E-02	ND	3.30E-02	5.36E-02
Eu-152	3.50E-01	ND	8.27E-02	1.24E-01	ND	7.85E-02	1.10E-01	ND	0.0672205	0.109	ND	7.76E-02	1.17E-01	ND	6.26E-02	1.01E-01	ND	7.20E-02	1.14E-01
Eu-154	3.30E-01	ND	1.06E-01	1.80E-01	ND	1.01E-01	1.29E-01	ND	0.0818995	0.131	ND	1.11E-01	1.60E-01	ND	8.94E-02	1.48E-01	ND	1.04E-01	1.41E-01
Eu-155	1.40E+01	ND	1.48E-01	1.51E-01	ND	7.77E-02	1.27E-01	ND	0.0700165	0.115	ND	8.05E-02	1.37E-01	ND	7.23E-02	1.23E-01	ND	8.06E-02	1.38E-01
Ir-192		ND	3.48E-02	5.30E-02	ND	2.73E-02	4.08E-02	ND	0.0250475	0.0407	ND	2.80E-02	4.68E-02	ND	2.53E-02	3.80E-02	ND	2.85E-02	4.49E-02
Hg-203		ND	4.99E-02	6.91E-02	ND	4.73E-02	4.57E-02	ND	0.0618615	0.0469	ND	4.90E-02	6.32E-02	ND	3.50E-02	5.08E-02	ND	3.45E-02	5.78E-02
Tl-208		5.54E-01	8.40E-02	5.46E-02	2.04E-01	6.73E-02	4.65E-02	2.49E-01	0.0618615	0.0428	3.42E-01	6.84E-02	4.69E-02	2.43E-01	5.51E-02	4.10E-02	2.51E-01	6.14E-02	4.35E-02
Pb-210		ND	5.43E+00	8.39E+00	ND	2.81E+00	4.73E+00	2.04E+00	1.8407	1.43	ND	3.59E+00	5.67E+00	ND	2.99E+00	4.82E+00	ND	2.85E+00	4.41E+00
Pb-212		1.67E+00	1.91E-01	7.41E-02	7.91E-01	1.10E-01	6.74E-02	7.23E-01	0.10951	0.0687	1.12E+00	9.47E-02	7.19E-02	8.18E-01	8.11E-02	6.21E-02	9.19E-01	8.41E-02	6.60E-02
Pb-214		8.44E-01	1.55E-01	8.91E-02	4.45E-01	1.11E-01	7.90E-02	5.83E-01	0.116034	0.08	5.59E-01	1.21E-01	8.85E-02	3.69E-01	1.13E-01	7.45E-02	4.40E-01	9.59E-02	8.21E-02
Bi-212		1.12E+00	5.38E-01	4.22E-01	2.77E-01	2.45E-01	4.28E-01	3.88E-01	0.343675	0.357	ND	4.08E-01	4.25E-01	5.21E-01	3.29E-01	3.33E-01	4.86E-01	3.61E-01	3.54E-01
Bi-214		6.43E-01	1.49E-01	7.95E-02	3.44E-01	1.04E-01	8.88E-02	5.10E-01	0.119995	0.0844	5.64E-01	1.28E-01	8.70E-02	4.46E-01	1.06E-01	6.27E-02	5.16E-01	1.04E-01	7.73E-02
Ra-228		1.64E+00	3.79E-01	1.73E-01	9.58E-01	2.70E-01	1.62E-01	9.75E-01	0.23067	0.14	1.23E+00	2.49E-01	1.73E-01	8.94E-01	2.05E-01	1.56E-01	7.98E-01	2.12E-01	1.37E-01
Ac-228		1.64E+00	3.79E-01	1.73E-01	9.58E-01	2.70E-01	1.62E-01	9.75E-01	0.23067	0.14	1.23E+00	2.49E-01	1.73E-01	8.94E-01	2.05E-01	1.56E-01	7.98E-01	2.12E-01	1.37E-01
Th-230		6.43E-01	1.49E-01	7.95E-02	3.44E-01	1.04E-01	8.88E-02	5.10E-01	0.119995	0.0844	5.64E-01	1.28E-01	8.70E-02	4.46E-01	1.06E-01	6.27E-02	5.16E-01	1.04E-01	7.73E-02
Th-234		ND	2.30E+00	2.06E+00	ND	1.48E+00	1.49E+00	ND	0.963455	0.889	ND	1.10E+00	1.71E+00	ND	1.30E+00	1.57E+00	ND	9.84E-01	1.60E+00
U-235		2.09E-01	1.90E-01	3.19E-01	ND	1.61E-01	2.54E-01	ND	0.13048	0.221	ND	1.64E-01	2.71E-01	ND	1.41E-01	2.37E-01	ND	1.61E-01	2.71E-01
U-238		ND	2.30E+00	2.06E+00	ND	1.48E+00	1.49E+00	ND	0.963455	0.889	ND	1.10E+00	1.71E+00	ND	1.30E+00	1.57E+00	ND	9.84E-01	1.60E+00
Np-239		ND	1.63E-01	2.67E-01	ND	1.46E-01	2.35E-01	ND	0.124655	0.197	ND	1.53E-01	2.37E-01	ND	1.28E-01	2.11E-01	ND	1.49E-01	2.46E-01
Am-241		ND	1.79E-01	2.65E-01	ND	1.06E-01	1.77E-01	ND	0.063842	0.105	ND	1.39E-01	2.10E-01	ND	1.18E-01	1.83E-01	ND	1.55E-01	2.09E-01

Notes:
All values presented in pCi/g
NA = Not analyzed
ND = Non detect

Table 8-2
Summary of Radiological Analytical Results for Downstream Sediment
Yankee Nuclear Power Station
Rowe, MA

Radionuclide	MDC Requested	SD-220			SD-221			SD-222			SD-223			SD-224		
		Activity	Crit. Level	MDC	Activity	Crit. Level	MDC	Activity	Crit. Level	MDC	Activity	Crit. Level	MDC	Activity	Crit. Level	MDC
Tritium and HTDs																
H-3	1.30E+01	ND	6.00E+00	8.73E+00	ND	6.23E+00	9.28E+00	ND	3.16E+00	9.43E+00	NA			ND	6.52E+00	9.99E+00
C-14	1.90E-01	ND	1.21E-01	1.77E-01	ND	1.17E-01	1.69E-01	ND	5.79E-02	1.66E-01	NA			ND	9.33E-02	1.41E-01
Fe-55	1.00E+03	ND	1.11E+01	1.50E+01	ND	1.05E+01	1.42E+01	6.40E+00	4.97E+00	1.48E+01	NA			ND	1.06E+01	1.57E+01
Ni-63	2.80E+01	ND	5.23E+00	7.89E+00	ND	9.01E+00	1.36E+01	ND	2.45E+00	7.23E+00	NA			ND	5.32E+00	8.20E+00
Sr-90	5.90E-02	ND	2.00E-02	3.80E-02	ND	2.05E-02	5.43E-02	ND	1.76E-02	5.42E-02	NA			1.90E-02	1.82E-02	3.10E-02
Tc-99	4.80E-01	ND	2.63E-01	3.87E-01	ND	2.38E-01	3.50E-01	1.40E-01	1.36E-01	3.96E-01	NA			ND	2.85E-01	4.24E-01
Pu-241	3.40E+01	ND	1.20E+01	1.82E+01	ND	1.01E+01	1.50E+01	ND	6.01E+00	1.78E+01	NA			ND	1.41E+01	2.59E+01
Pu-238	1.10E+00	3.92E-01	2.76E-01	2.09E-01	ND	2.03E-01	2.20E-01	ND	5.21E-01	2.48E-01	NA			ND	6.73E-02	1.66E-01
Pu-239/240	1.00E+00	ND	8.50E-02	2.09E-01	ND	1.33E-01	3.39E-01	2.90E-01	3.01E-02	1.86E-02	NA			ND	6.37E-02	7.57E-02
Am-241	1.00E+00	ND	4.00E-02	8.79E-02	ND	7.67E-02	9.09E-02	1.69E-02	0.00E+00	1.06E-01	NA			ND	1.81E-01	4.59E-01
Cm-242	1.10E+00	ND	8.28E-02	9.83E-02	ND	8.57E-02	1.02E-01	ND	0.00E+00	1.18E-01	NA			ND	1.23E-01	3.32E-01
Cm-243/244	1.10E+00	ND	1.28E-01	8.80E-02	ND	1.10E-01	1.68E-01	3.91E-02	0.00E+00	1.06E-01	NA			ND	3.11E-01	6.84E-01
Gammas																
Co-60	1.40E-01	ND	3.03E-02	4.93E-02	ND	3.03E-02	4.93E-02	ND	1.70E-02	5.41E-02	ND	1.67E-02	5.20E-02	ND	1.04E-02	3.13E-02
Nb-94	2.50E-01	ND	2.66E-02	4.08E-02	ND	2.66E-02	4.08E-02	2.50E-02	1.81E-02	5.46E-02	ND	1.44E-02	4.34E-02	9.82E-03	9.02E-03	2.67E-02
Ag-108m	2.50E-01	ND	2.48E-02	3.72E-02	ND	2.48E-02	3.72E-02	ND	1.41E-02	4.27E-02	ND	1.50E-02	4.48E-02	1.16E-02	8.97E-03	2.64E-02
Sb-125	1.10E+00	ND	6.82E-02	1.04E-01	ND	6.82E-02	1.04E-01	ND	4.37E-02	1.31E-01	4.30E-02	4.21E-02	1.26E-01	2.68E-02	2.60E-02	7.65E-02
Cs-134	1.70E-01	5.95E-02	4.97E-02	5.97E-02	5.95E-02	4.97E-02	5.97E-02	ND	2.62E-02	7.86E-02	ND	2.13E-02	6.38E-02	ND	1.01E-02	3.00E-02
Cs-137	3.00E-01	6.73E-02	4.72E-02	4.52E-02	6.73E-02	4.72E-02	4.52E-02	7.52E-02	1.92E-02	5.81E-02	2.55E-01	1.85E-03	5.54E-02	1.75E-01	9.06E-03	2.70E-02
Eu-152	3.50E-01	ND	7.12E-02	1.10E-01	ND	7.12E-02	1.10E-01	ND	4.12E-02	1.24E-01	ND	4.25E-02	1.26E-01	ND	2.57E-02	7.56E-02
Eu-154	3.30E-01	ND	9.19E-02	1.49E-01	ND	9.19E-02	1.49E-01	ND	5.78E-02	1.80E-01	ND	5.48E-02	1.68E-01	ND	3.20E-02	9.59E-02
Eu-155	1.40E+01	ND	8.83E-02	1.40E-01	ND	8.83E-02	1.40E-01	1.21E-01	5.15E-02	1.51E-01	ND	5.47E-02	1.60E-01	ND	3.32E-02	9.66E-02

Notes:
All values presented in pCi/g
NA = Not analyzed
ND = Non detect

Table 8-2
Summary of Radiological Analytical Results for Downstream Sediment
Yankee Nuclear Power Station
Rowe, MA

Radionuclide	MDC Requested	SD-225			SD-226			SD-227			SD-228			SD-229		
		Activity	Crit. Level	MDC	Activity	Crit. Level	MDC	Activity	Crit. Level	MDC	Activity	Crit. Level	MDC	Activity	Crit. Level	MDC
Tritium and HTDs																
H-3	1.30E+01	ND	2.88E+00	8.86E+00	NA			ND	6.29E+00	9.39E+00	NA			ND	6.54E+00	9.87E+00
C-14	1.90E-01	NA			NA			ND	1.14E-01	1.64E-01	NA			ND	9.42E-02	1.41E-01
Fe-55	1.00E+03	NA			NA			ND	1.05E+00	1.50E+01	NA			ND	1.19E+01	1.72E+01
Ni-63	2.80E+01	NA			NA			ND	5.00E+00	7.58E+00	NA			ND	6.51E+00	9.43E+00
Sr-90	5.90E-02	NA			NA			4.17E-02	2.24E-02	3.49E-02	NA			ND	2.07E-02	4.23E-02
Tc-99	4.80E-01	NA			NA			3.56E-01	2.38E-01	3.34E-01	NA			ND	3.16E-01	4.61E-01
Pu-241	3.40E+01	NA			NA			ND	9.67E+00	1.49E+01	NA			ND	1.33E+01	2.45E+01
Pu-238	1.10E+00	NA			NA			ND	1.60E-02	1.45E-01	NA			ND	6.61E-02	1.62E-01
Pu-239/240	1.00E+00	NA			NA			ND	1.15E-01	7.90E-02	NA			ND	6.77E-02	1.82E-01
Am-241	1.00E+00	NA			NA			ND	8.83E-02	2.22E-01	NA			ND	1.35E-01	5.05E-01
Cm-242	1.10E+00	NA			NA			ND	8.19E-02	9.72E-02	NA			ND	5.36E-02	3.31E-01
Cm-243/244	1.10E+00	NA			NA			ND	9.23E-02	3.06E-01	NA			ND	2.34E-01	5.48E-01
Gammas																
Co-60	1.40E-01	ND	1.58E-02	4.47E-02	ND	3.52E-02	5.42E-02	ND	2.62E-02	4.04E-02	ND	2.53E-02	3.79E-02	2.09E-02	2.05E-02	5.79E-02
Nb-94	2.50E-01	2.03E-02	1.56E-02	4.41E-02	3.69E-02	3.15E-02	5.47E-02	ND	2.31E-02	3.60E-02	ND	2.23E-02	3.41E-02	ND	1.80E-02	5.09E-02
Ag-108m	2.50E-01	ND	1.62E-02	4.59E-02	ND	2.47E-02	4.17E-02	ND	2.09E-02	3.38E-02	ND	2.00E-02	2.76E-02	ND	1.53E-02	4.33E-02
Sb-125	1.10E+00	ND	4.52E-02	1.28E-01	ND	7.61E-02	1.31E-01	8.68E-02	5.86E-02	9.84E-02	ND	5.52E-02	8.11E-02	ND	4.08E-02	1.15E-01
Cs-134	1.70E-01	ND	2.39E-02	6.76E-02	6.81E-02	4.07E-02	6.90E-02	ND	5.71E-02	5.88E-02	ND	4.28E-02	4.61E-02	3.62E-02	2.21E-02	6.24r-2
Cs-137	3.00E-01	2.34E-01	1.70E-02	4.79E-02	1.01E-01	5.70E-02	4.71E-02	4.12E-01	6.69E-02	3.81E-02	8.81E-02	3.69E-02	3.57E-02	2.52E-01	1.87E-02	5.27E-02
Eu-152	3.50E-01	ND	4.66E-02	1.32E-01	ND	7.83E-02	1.17E-01	ND	6.63E-02	9.66E-02	ND	7.04E-02	8.72E-02	ND	4.18E-02	1.18E-01
Eu-154	3.30E-01	ND	4.14E-02	1.17E-01	ND	1.20E-01	1.92E-01	ND	7.77E-02	1.13E-01	ND	7.67E-02	1.01E-01	ND	5.65E-02	1.60E-01
Eu-155	1.40E+01	ND	5.76E-02	1.36E-01	ND	8.78E-02	1.51E-01	ND	1.17E-01	1.09E-01	ND	8.77E-02	9.37E-02	ND	6.61E-02	1.02E-01

Notes:
All values presented in pCi/g
NA = Not analyzed
ND = Non detect

Table 8-2
Summary of Radiological Analytical Results for Downstream Sediment
Yankee Nuclear Power Station
Rowe, MA

Radionuclide	MDC Requested	SD-230			SD-231			SD-232			SD-233			SD-234		
		Activity	Crit. Level	MDC	Activity	Crit. Level	MDC	Activity	Crit. Level	MDC	Activity	Crit. Level	MDC	Activity	Crit. Level	MDC
Tritium and HTDs																
H-3	1.30E+01	NA			NA			ND	7.53E+00	1.08E+01	NA			NA		
C-14	1.90E-01	NA			NA			ND	9.58E-02	1.41E-01	NA			NA		
Fe-55	1.00E+03	NA			NA			ND	1.08E+01	1.56E+01	NA			NA		
Ni-63	2.80E+01	NA			NA			ND	5.69E+00	8.42E+00	NA			NA		
Sr-90	5.90E-02	NA			NA			ND	1.82E-02	3.63E-02	NA			NA		
Tc-99	4.80E-01	NA			NA			ND	2.85E-01	4.19E-01	NA			NA		
Pu-241	3.40E+01	NA			NA			ND	1.68E+01	2.93E+01	NA			NA		
Pu-238	1.10E+00	NA			NA			ND	7.05E-02	1.50E-01	NA			NA		
Pu-239/240	1.00E+00	NA			NA			ND	7.95E-02	2.49E-01	NA			NA		
Am-241	1.00E+00	NA			NA			ND	7.51E-02	3.78E-01	NA			NA		
Cm-242	1.10E+00	NA			NA			ND	8.27E-02	9.82E-02	NA			NA		
Cm-243/244	1.10E+00	NA			NA			ND	1.50E-01	3.78E-01	NA			NA		
Gammas																
Co-60	1.40E-01	ND	2.59E-02	4.19E-02	ND	2.83E-02	4.13E-02	ND	2.35E-02	7.45E-02	1.76E-01	5.44E-02	4.18E-02	ND	3.63E-02	4.70E-02
Nb-94	2.50E-01	ND	2.24E-02	3.37E-02	ND	2.24E-02	3.36E-02	ND	1.54E-02	4.78E-02	ND	3.03E-02	4.21E-02	ND	2.56E-02	3.97E-02
Ag-108m	2.50E-01	ND	2.10E-02	3.27E-02	ND	2.61E-02	3.38E-02	ND	1.59E-02	4.85E-02	ND	2.82E-02	4.11E-02	ND	2.69E-02	4.01E-02
Sb-125	1.10E+00	ND	6.06E-02	9.44E-02	ND	6.54E-02	9.80E-02	ND	5.23E-02	1.58E-01	ND	7.71E-02	1.10E-01	ND	7.58E-02	1.19E-01
Cs-134	1.70E-01	ND	4.05E-02	5.01E-02	ND	3.93E-02	4.72E-02	7.29E-02	2.79E-02	8.43E-02	ND	5.96E-02	6.66E-02	4.79E-02	3.47E-02	5.71E-02
Cs-137	3.00E-01	2.05E-01	4.51E-02	3.72E-02	3.75E-01	6.55E-02	3.82E-02	4.56E-01	2.01E-02	6.16E-02	4.18E-01	8.38E-02	4.57E-02	3.07E-01	5.69E-02	4.37E-02
Eu-152	3.50E-01	ND	6.55E-02	9.61E-02	ND	7.42E-02	9.10E-02	ND	5.22E-02	1.57E-01	ND	9.38E-02	1.17E-01	ND	7.60E-02	1.12E-01
Eu-154	3.30E-01	ND	7.82E-02	1.09E-01	ND	9.51E-02	1.14E-01	ND	6.81E-02	2.14E-01	ND	1.01E-01	1.43E-01	ND	1.07E-01	1.55E-01
Eu-155	1.40E+01	ND	7.29E-02	1.17E-01	ND	6.87E-02	1.04E-01	1.24E-01	5.24E-02	1.60E-01	ND	1.07E-01	1.27E-01	ND	8.21E-02	1.22E-01

Notes:
All values presented in pCi/g
NA = Not analyzed
ND = Non detect

Table 8-2
Summary of Radiological Analytical Results for Downstream Sediment
Yankee Nuclear Power Station
Rowe, MA

Radionuclide	MDC Requested	SD-235			SD-236			SD-237			SD-238			SD-239		
		Activity	Crit. Level	MDC	Activity	Crit. Level	MDC	Activity	Crit. Level	MDC	Activity	Crit. Level	MDC	Activity	Crit. Level	MDC
Tritium and HTDs																
H-3	1.30E+01	ND	6.61E+00	1.02E+01	NA			NA			ND	6.86E+00	1.01E+01	NA		
C-14	1.90E-01	ND	9.38E-02	1.38E-01	NA			NA			ND	9.22E-02	1.37E-01	NA		
Fe-55	1.00E+03	ND	1.18E+01	1.67E+01	NA			NA			ND	1.68E+01	2.36E+01	NA		
Ni-63	2.80E+01	ND	5.83E+00	8.86E+00	NA			NA			ND	3.63E+00	5.35E+00	NA		
Sr-90	5.90E-02	NA	0.00E+00		NA			NA			ND	1.30E-02	2.21E-02	NA		
Tc-99	4.80E-01	ND	2.06E-02	4.18E-02	NA			NA			ND	2.26E-01	3.32E-01	NA		
Pu-241	3.40E+01	ND	2.99E-01	4.47E-01	NA			NA			ND	1.06E+01	1.55E+01	NA		
Pu-238	1.10E+00	ND	1.57E+01	2.74E+01	NA			NA			ND	2.85E-02	2.18E-01	NA		
Pu-239/240	1.00E+00	ND	7.14E-02	1.76E-01	NA			NA			ND	4.03E-02	2.67E-01	NA		
Am-241	1.00E+00	ND	1.20E-01	1.97E-01	NA			NA			ND	8.25E-02	1.67E-01	NA		
Cm-242	1.10E+00	ND	6.62E-02	2.29E-01	NA			NA			ND	8.03E-02	9.53E-02	NA		
Cm-243/244	1.10E+00	ND	5.30E-02	4.45E-02	NA			NA			ND	7.64E-02	9.07E-02	NA		
Gammas																
Co-60	1.40E-01	ND	2.25E-02	7.17E-02	ND	2.00E-02	3.19E-02	ND	2.34E-02	3.44E-02	ND	2.34E-02	3.69E-02	ND	1.69E-02	2.56E-02
Nb-94	2.50E-01	ND	1.91E-02	5.84E-02	ND	1.69E-02	2.69E-02	ND	2.13E-02	3.29E-02	ND	2.33E-02	3.49E-02	ND	1.44E-02	2.08E-02
Ag-108m	2.50E-01	ND	1.69E-02	5.15E-02	ND	1.49E-02	2.39E-02	ND	1.88E-02	2.94E-02	ND	2.24E-02	3.03E-02	ND	1.32E-02	2.04E-02
Sb-125	1.10E+00	5.70E-02	5.51E-02	1.66E-01	ND	4.01E-02	6.49E-02	ND	5.29E-02	8.06E-02	ND	5.52E-02	8.62E-02	4.91E-02	3.91E-02	6.54E-02
Cs-134	1.70E-01	2.58E-02	2.24E-02	6.94E-02	ND	3.55E-02	3.57E-02	ND	3.84E-02	4.73E-02	ND	4.11E-02	5.20E-02	ND	3.25E-02	3.25E-02
Cs-137	3.00E-01	1.81E-01	1.85E-02	5.73E-02	6.78E-02	3.59E-02	2.59E-02	ND	2.45E-02	3.88E-02	9.89E-02	4.86E-02	3.71E-02	4.12E-02	2.12E-02	2.37E-02
Eu-152	3.50E-01	7.10E-02	5.38E-02	1.62E-01	ND	5.03E-02	7.57E-02	ND	5.27E-02	8.60E-02	ND	6.16E-02	9.62E-02	ND	4.09E-02	6.45E-02
Eu-154	3.30E-01	ND	6.56E-02	2.08E-01	ND	5.84E-02	8.96E-02	ND	7.89E-02	1.20E-01	ND	7.90E-02	1.27E-01	ND	6.16E-02	8.10E-02
Eu-155	1.40E+01	6.02E-02	4.69E-02	1.40E-01	ND	6.85E-02	8.47E-02	ND	8.92E-02	1.01E-01	ND	9.25E-02	1.13E-01	ND	6.47E-02	8.21E-02

Notes:
All values presented in pCi/g
NA = Not analyzed
ND = Non detect

Table 8-2
Summary of Radiological Analytical Results for Downstream Sediment
Yankee Nuclear Power Station
Rowe, MA

Radionuclide	MDC Requested	SD-240			SD-241			SD-242			SD-243			SD-244		
		Activity	Crit. Level	MDC	Activity	Crit. Level	MDC	Activity	Crit. Level	MDC	Activity	Crit. Level	MDC	Activity	Crit. Level	MDC
Tritium and HTDs																
H-3	1.30E+01	NA			ND	6.21E+00	8.96E+00	NA			NA			ND	3.55E+00	5.36E+00
C-14	1.90E-01	NA			ND	1.20E-01	1.75E-01	NA			NA			ND	1.13E-01	1.66E-01
Fe-55	1.00E+03	NA			ND	1.17E+01	1.70E+01	NA			NA			ND	1.02E+01	1.51E+01
Ni-63	2.80E+01	NA			ND	1.15E+01	1.74E+01	NA			NA			ND	3.62E+00	5.54E+00
Sr-90	5.90E-02	NA			ND	1.71E-02	3.55E-02	NA			NA			ND	1.78E-02	3.54E-02
Tc-99	4.80E-01	NA			ND	1.97E-01	2.92E-01	NA			NA			ND	1.74E-01	2.56E-01
Pu-241	3.40E+01	NA			ND	1.05E+01	1.55E+01	NA			NA			ND	9.81E+00	1.47E+01
Pu-238	1.10E+00	NA			ND	7.40E-02	8.78E-02	NA			NA			ND	7.43E-02	8.82E-02
Pu-239/240	1.00E+00	NA			ND	7.82E-02	1.92E-01	NA			NA			ND	7.43E-02	8.82E-02
Am-241	1.00E+00	NA			ND	2.66E-02	8.49E-02	NA			NA			ND	9.87E-02	2.19E-01
Cm-242	1.10E+00	NA			ND	7.65E-02	9.08E-02	NA			NA			ND	9.03E-02	1.07E-01
Cm-243/244	1.10E+00	NA			ND	7.16E-02	8.50E-02	NA			NA			ND	8.46E-02	1.00E-01
Gammas																
Co-60	1.40E-01	ND	2.19E-02	3.07E-02	ND	2.03E-02	3.45E-02	ND	3.03E-02	2.74E-02	ND	2.19E-02	2.21E-02	ND	2.24E-02	3.22E-02
Nb-94	2.50E-01	ND	2.20E-02	3.26E-02	ND	1.68E-02	2.64E-02	ND	1.71E-02	2.31E-02	ND	1.22E-02	1.92E-02	ND	1.84E-02	2.83E-02
Ag-108m	2.50E-01	ND	2.07E-02	3.01E-02	ND	1.63E-02	2.56E-02	ND	1.56E-02	2.42E-02	ND	1.14E-02	1.69E-02	ND	1.89E-02	2.86E-02
Sb-125	1.10E+00	ND	5.70E-02	8.74E-02	ND	4.54E-02	7.15E-02	ND	4.24E-02	6.50E-02	ND	3.33E-02	5.04E-02	ND	5.46E-02	8.55E-02
Cs-134	1.70E-01	ND	3.24E-02	4.64E-02	3.07E-02	2.12E-02	3.54E-02	ND	3.75E-02	3.53E-02	ND	2.19E-02	2.51E-02	ND	2.31E-02	3.91E-02
Cs-137	3.00E-01	1.53E-01	4.53E-02	3.53E-02	9.87E-02	4.11E-02	2.80E-02	7.32E-02	2.56E-02	2.67E-02	2.15E-01	3.43E-02	2.17E-02	ND	3.44E-02	3.06E-02
Eu-152	3.50E-01	ND	7.86E-02	9.13E-02	ND	5.22E-02	7.02E-02	ND	4.23E-02	6.69E-02	ND	3.37E-02	5.28E-02	ND	5.59E-02	8.16E-02
Eu-154	3.30E-01	ND	7.42E-02	1.06E-01	ND	5.87E-02	9.80E-02	ND	5.30E-02	8.06E-02	ND	4.28E-02	6.25E-02	ND	6.63E-02	1.01E-01
Eu-155	1.40E+01	ND	8.88E-02	9.96E-02	ND	5.36E-02	8.02E-02	ND	6.38E-02	6.85E-02	ND	4.28E-02	6.84E-02	ND	5.95E-02	9.47E-02

Notes:
All values presented in pCi/g
NA = Not analyzed
ND = Non detect

Table 8-2
Summary of Radiological Analytical Results for Downstream Sediment
Yankee Nuclear Power Station
Rowe, MA

Radionuclide	MDC Requested	SD-245			SD-246			SD-247			SD-248			SD-249		
		Activity	Crit. Level	MDC	Activity	Crit. Level	MDC	Activity	Crit. Level	MDC	Activity	Crit. Level	MDC	Activity	Crit. Level	MDC
Tritium and HTDs																
H-3	1.30E+01	NA			NA			ND	3.84E+00	5.89E+00	ND	3.32E+00	5.16E+00	ND	4.33E+00	6.41E+00
C-14	1.90E-01	NA			NA			NA			NA			NA		
Fe-55	1.00E+03	NA			NA			NA			NA			NA		
Ni-63	2.80E+01	NA			NA			NA			NA			NA		
Sr-90	5.90E-02	NA			NA			NA			NA			NA		
Tc-99	4.80E-01	NA			NA			NA			NA			NA		
Pu-241	3.40E+01	NA			NA			NA			NA			NA		
Pu-238	1.10E+00	NA			NA			NA			NA			NA		
Pu-239/240	1.00E+00	NA			NA			NA			NA			NA		
Am-241	1.00E+00	NA			NA			NA			NA			NA		
Cm-242	1.10E+00	NA			NA			NA			NA			NA		
Cm-243/244	1.10E+00	NA			NA			NA			NA			NA		
Gammas																
Co-60	1.40E-01	ND	3.23E-02	2.70E-02	ND	4.03E-02	4.01E-02	ND	3.16E-02	4.88E-02	NA			NA		
Nb-94	2.50E-01	ND	1.71E-02	2.84E-02	ND	2.56E-02	3.65E-02	ND	2.77E-02	4.63E-02	NA			NA		
Ag-108m	2.50E-01	ND	1.71E-02	2.55E-02	ND	2.12E-02	2.99E-02	ND	2.68E-02	4.19E-02	NA			NA		
Sb-125	1.10E+00	ND	4.37E-02	7.08E-02	ND	5.88E-02	8.84E-02	ND	7.53E-02	1.18E-01	NA			NA		
Cs-134	1.70E-01	ND	2.77E-02	3.63E-02	ND	4.44E-02	4.55E-02	ND	5.93E-02	6.89E-02	NA			NA		
Cs-137	3.00E-01	5.31E-02	3.13E-02	2.79E-02	6.92E-02	4.14E-02	3.92E-02	1.23E-01	5.35E-02	4.99E-02	NA			NA		
Eu-152	3.50E-01	ND	4.53E-02	6.97E-02	ND	8.17E-02	9.66E-02	ND	7.81E-02	1.16E-01	NA			NA		
Eu-154	3.30E-01	ND	5.78E-02	9.01E-02	ND	8.33E-02	1.26E-01	ND	9.26E-02	1.55E-01	NA			NA		
Eu-155	1.40E+01	ND	5.95E-02	8.27E-02	ND	7.43E-02	1.03E-01	ND	1.35E-01	1.23E-01	NA			NA		

Notes:
All values presented in pCi/g
NA = Not analyzed
ND = Non detect

Table 8-2
Summary of Radiological Analytical Results for Downstream Sediment
Yankee Nuclear Power Station
Rowe, MA

Radionuclide	MDC Requested	SD-250				SD-251			SD-252			SD-304R		
		Activity	Crit. Level	MDC	Req'd	Activity	Crit. Level	MDC	Activity	Crit. Level	MDC	Activity	Crit. Level	MDC
Tritium and HTDs														
H-3	1.30E+01	ND	5.73E+00	8.33E+00	1.30E+01	ND	6.22E+00	9.50E+00	ND	5.98E+00	9.36E+00	ND	5.55E+00	8.57E+00
C-14	1.90E-01	NA				NA			NA			ND	1.11E-01	1.62E-01
Fe-55	1.00E+03	NA				NA			NA			ND	9.96E+00	1.37E+01
Ni-63	2.80E+01	NA				NA			NA			ND	6.73E+00	1.03E+01
Sr-90	5.90E-02	NA				NA			NA			ND	2.24E-02	5.55E-02
Tc-99	4.80E-01	NA				NA			NA			ND	2.70E-01	3.96E-01
Pu-241	3.40E+01	NA				NA			NA			ND	1.07E+01	1.66E+01
Pu-238	1.10E+00	NA				NA			NA			3.00E-01	2.57E-01	2.02E-01
Pu-239/240	1.00E+00	NA				NA			NA			ND	1.00E-01	2.70E-01
Am-241	1.00E+00	NA				NA			NA			ND	9.74E-02	1.79E-01
Cm-242	1.10E+00	NA				NA			NA			ND	9.16E-02	1.09E-01
Cm-243/244	1.10E+00	NA				NA			NA			ND	8.43E-02	1.79E-01
Gammas														
Co-60	1.40E-01	ND	5.35E-02	7.97E-02	3.88E-02	NA			NA			8.58E-02	4.07E-02	4.45E-02
Nb-94	2.50E-01	ND	4.86E-02	7.70E-02	3.40E-02	NA			NA			ND	2.30E-02	3.65E-02
Ag-108m	2.50E-01	ND	7.49E-02	7.00E-02	3.73E-02	NA			NA			ND	2.18E-02	3.47E-02
Sb-125	1.10E+00	ND	1.32E-01	1.76E-01	1.12E-01	NA			NA			ND	6.01E-02	9.31E-02
Cs-134	1.70E-01	ND	6.91E-02	1.08E-01	5.45E-02	NA			NA			ND	5.07E-02	5.77E-02
Cs-137	3.00E-01	1.36E-01	7.82E-02	8.23E-02	3.77E-02	NA			NA			1.91E-01	4.43E-02	3.70E-02
Eu-152	3.50E-01	ND	1.30E-01	2.01E-01	1.09E-01	NA			NA			ND	6.35E-02	1.01E-01
Eu-154	3.30E-01	ND	1.47E-01	2.35E-01	1.31E-01	NA			NA			ND	7.39E-02	1.05E-01
Eu-155	1.40E+01	ND	2.11E-01	1.71E-01	1.15E-01	NA			NA			ND	1.05E-01	1.29E-01

Notes:
All values presented in pCi/g
NA = Not analyzed
ND = Non detect

Table 9
Summary of Sediment OHM Analytical Results
Yankee Nuclear Power Station
Rowe, MA

Station	Screening	Maximum	SD-008R	SD-008	SD-008R2	SD-008R3	SD-008N	SD-008S	SD-008E	SD-008W	SD-009R	SD-011R	SD-012R	SD-012R2	SD-012RE	SD-012RN	SD-012RS	SD-012RW	SD-041R	SD-050	SD-051	SD-052	SD-053	SD-054	SD-055	SD-055R
Sample ID	Value	Background	SD-008R	SD-FD-001	SD-008R2	SD-008R3	SD-008N	SD-008S	SD-008E	SD-008W	SD-009R	SD-011R	SD-012R	SD-012R2	SD-012RE	SD-012RN	SD-012RS	SD-012RW	SD-041R	SD-050	SD-051	SD-052	SD-053	SD-054	SD-055	SD-055R
Comment			Sherman	Sherman	Sherman	Sherman	Sherman	Sherman	Sherman	Sherman	Sherman	Sherman	Sherman	Sherman	Sherman	Sherman	Sherman	Sherman	Sherman	Sherman	Sherman	Sherman	Sherman	Sherman	Sherman	Sherman
Date Sampled			6/16/2006	6/16/2006	7/31/2006	8/30/2006	8/30/2006	8/30/2006	8/30/2006	8/30/2006	7/7/2006	6/14/2006	6/22/2006	8/1/2006	8/1/2006	8/1/2006	8/1/2006	8/1/2006	6/12/2006	7/7/2006	7/7/2006	6/14/2006	6/22/2006	7/7/2006	6/16/2006	7/31/2006
Extractable Petroleum Hydrocarbons (EPH) (mg/Kg)																										
C11-C22 Aromatics			212 U	175 U	40.1 U						48.5 U	75.3 U	41.6 U						126 U					41.6 U	240 U	36.6 U
C19-C36 Aliphatics			212 U	175 U	40.1 U						48.5 U	75.3 U	41.6 U						126 U					41.6 U	240 U	36.6 U
C9-C18 Aliphatics			212 U	175 U	40.1 U						48.5 U	75.3 U	41.6 U						126 U					41.6 U	240 U	36.6 U
Acenaphthylene	0.15		1.06 U	0.871 U	0.2 U						0.242 U	0.479 U	0.207 U						0.629 U					0.207 U	1.2 U	0.182 U
Anthracene	0.0572	0.0815	1.06 U	0.871 U	0.2 U						0.242 U	0.0602 J	0.207 U						0.629 U					0.207 U	1.2 U	0.182 U
Benzo(a)anthracene	0.11	0.0845	1.06 U	0.871 U	0.2 U						0.242 U	0.143 J	0.207 U						0.629 U					0.207 U	1.2 U	0.182 U
Benzo(a)pyrene	0.15	0.112	1.06 U	0.871 U	0.2 U						0.242 U	0.0978 J	0.207 U						0.629 U					0.207 U	1.2 U	0.182 U
Benzo(b)fluoranthene	0.037	0.073	1.06 U	0.871 U	0.2 U						0.242 U	0.079 J	0.207 U						0.629 U					0.207 U	0.108 J	0.182 U
Benzo(g,h,i)perylene	0.15		1.06 U	0.871 U	0.2 U						0.242 U	0.479 U	0.207 U						0.629 U					0.207 U	1.2 U	0.182 U
Benzo(k)fluoranthene	0.037	0.13	1.06 U	0.871 U	0.2 U						0.242 U	0.124 J	0.207 U						0.629 U					0.207 U	1.2 U	0.182 U
Chrysene	0.17	0.148	1.06 U	0.148 J	0.0902 J						0.242 U	0.199 J	0.207 U						0.629 U					0.207 U	0.156 J	0.182 U
Fluoranthene	0.423	0.317	1.06 U	0.183 J	0.0762 J						0.242 U	0.444 J	0.0769 J						0.629 U					0.207 U	0.228 J	0.182 U
Indeno(1,2,3-cd)pyrene	0.03		1.06 U	0.871 U	0.2 U						0.242 U	0.479 U	0.207 U						0.629 U					0.207 U	1.2 U	0.182 U
Phenanthrene	0.204	0.0842	1.06 U	0.871 U	0.2 U						0.242 U	0.154 J	0.207 U						0.629 U					0.207 U	1.2 U	0.182 U
Pyrene	0.2	0.265	1.06 U	0.871 U	0.0802 J						0.242 U	0.353 J	0.0748 J						0.629 U					0.207 U	1.2 U	0.182 U
Volatile Petroleum Hydrocarbons (VPH) (mg/Kg)																										
C5-C8 Aliphatics		1.27	3.67 J	3.75 J	0.513 J						0.366 J	0.921 J	0.364 J						2.39 J					0.398 J	6.44 J	0.416 J
C9-C10 Aromatics		0.346	0.77 J	0.721 J	0.157 J						0.068 J	0.235 J	0.121 J						0.492 J					0.0938 J	1.09 J	0.105 J
C9-C12 Aliphatics		0.451	1.58 J	1.05 J	0.167 J						0.159 J	0.356 J	0.136 J						0.914 J					0.114 J	1.98 J	0.162 J
Ethylbenzene			0.358 U	0.304 U	0.0387 U						0.0359 U	0.0732 U	0.0299 U						0.203 U					0.0313 U	0.446 U	0.0367 U
m+p-Xylenes		0.108	0.716 U	0.607 U	0.0774 U						0.0717 U	0.146 U	0.0597 U						0.405 U					0.0626 U	0.33 J	0.0734 U
Methyl-t-butyl ether			0.358 U	0.304 U	0.0387 U						0.0359 U	0.0732 U	0.0299 U						0.203 U					0.0313 U	0.446 U	0.0367 U
Naphthalene	0.176	0.0597	0.358 U	0.214 J	0.0387 U						0.0359 U	0.0732 U	0.0299 U						0.203 U					0.0359	0.362 J	0.0367 U
Toluene	130	0.0559	0.358 U	0.304 U	0.0387 U						0.0359 U	0.0732 U	0.0299 U						0.203 U					0.0313 U	0.446 U	0.0367 U
Volatile Organic Compounds (VOC) (µg/Kg)																										
2-Butanone	27000																									
4-Methyl-2-pentanone																										
Acetone	57.1																									
Dimethyl sulfide																										
Semi-Volatile Organic Compounds (SVOCs) (µg/Kg)																										
1-Methylnaphthalene			1140 U	2090 U	305 U						293 U	406 U	172 U						891 U					301 U	2280 U	293 U
2,6-Dinitrotoluene			1140 U	2090 U	305 U						293 U	25.4 J	172 U						891 U					301 U	2280 U	293 U
2-Methylnaphthalene	150		1140 U	2090 U	305 U						293 U	406 U	172 U						891 U					301 U	2280 U	293 U
3+4-Methylphenol		230	1140 U	2090 U	305 U						293 U	406 U	172 U						891 U					301 U	2280 U	293 U
Acenaphthene	150	21.5	1140 U	2090 U	305 U						293 U	406 U	172 U											301 U	2280 U	25.5 J
Acenaphthylene	150		1140 U	2090 U	305 U						293 U	406 U	172 U											301 U	2280 U	293 U
Anthracene	57.2	124	1140 U	2090 U	305 U						293 U	406 U	36.2 J											301 U	2280 U	293 U
Benzo(a)anthracene	110	200	1140 U	2090 U	305 U						293 U	38.5 J	100 J						891 U					301 U	2280 U	293 U
Benzo(a)pyrene	150	230	1140 U	2090 U	305 U						293 U	25.4 J	80.1 J						891 U					301 U	2280 U	293 U
Benzo(b)fluoranthene	37	268	1140 U	2090 U	305 U						293 U	406 U	104 J						891 U					301 U	2280 U	293 U
Benzo(g,h,i)perylene	150	101	1140 U	2090 U	305 U						293 U	406 U	30.3 J						891 U					301 U	2280 U	293 U
Benzo(k)fluoranthene	37	220	1140 U	2090 U	305 U						293 U	17.2 J	86 J						891 U					301 U	2280 U	293 U
Carbazole			1140 U	2090 U	305 U						293 U	406 U	172 U						891 U					301 U	2280 U	293 U
Chrysene	170	273	1140 U	2090 U	305 U						293 U	27.9 J	112 J						891 U					301 U	2280 U	293 U
Dibenzo(a,h)anthracene	33		1140 U	2090 U	305 U						293 U	406 U	172 U						891 U					301 U	2280 U	293 U
Dibenzofuran	5100		1140 U	2090 U	305 U						293 U	406 U	172 U						891 U					301 U	2280 U	293 U
Di-n-butyl phthalate			1140 U	2090 U	305 U						293 U	406 U	172 U						891 U					301 U	2280 U	293 U
Di-n-octyl phthalate			1140 U	2090 U	305 U						293 U	406 U	172 U						891 U					301 U	2280 U	293 U
Fluoranthene	423	651	1140 U	88.5 J	305 U						293 U	50 J	231						891 U					301 U	2280 U	13.6 J
Fluorene	77.4	48.6	1140 U	2090 U	305 U						293 U	406 U	172 U						891 U					301 U	2280 U	14.8 J
Indeno(1,2,3-cd)pyrene	30	106	1140 U	2090 U	305 U						293 U	406 U	31.7 J						891 U					301 U	2280 U	293 U
Phenanthrene	204	777	1140 U	2090 U	305 U						293 U	23.8 J	95.7 J						891 U					301 U	2280 U	18.4 J
Pyrene	200	592	1140 U	2090 U	305 U						293 U	55.8 J	180						891 U					301 U	2280 U	293 U

Table 9
Summary of Sediment OHM Analytical Results
Yankee Nuclear Power Station
Rowe, MA

Station			SD-008R	SD-008	SD-008R2	SD-008R3	SD-008N	SD-008S	SD-008E	SD-008W	SD-009R	SD-011R	SD-012R	SD-012R2	SD-012RE	SD-012RN	SD-012RS	SD-012RW	SD-041R	SD-050	SD-051	SD-052	SD-053	SD-054	SD-055	SD-055R
Sample ID	Screening	Maximum	SD-008R	SD-FD-001	SD-008R2	SD-008R3	SD-008N	SD-008S	SD-008E	SD-008W	SD-009R	SD-011R	SD-012R	SD-012R2	SD-012RE	SD-012RN	SD-012RS	SD-012RW	SD-041R	SD-050	SD-051	SD-052	SD-053	SD-054	SD-055	SD-055R
Comment	Value	Background	Sherman	Sherman	Sherman	Sherman	Sherman	Sherman	Sherman	Sherman	Sherman	Sherman	Sherman	Sherman	Sherman	Sherman	Sherman	Sherman	Sherman	Sherman	Sherman	Sherman	Sherman	Sherman	Sherman	Sherman
Date Sampled			6/16/2006	6/16/2006	7/31/2006	8/30/2006	8/30/2006	8/30/2006	8/30/2006	8/30/2006	7/7/2006	6/14/2006	6/22/2006	8/1/2006	8/1/2006	8/1/2006	8/1/2006	8/1/2006	6/12/2006	7/7/2006	7/7/2006	6/14/2006	6/22/2006	7/7/2006	6/16/2006	7/31/2006
Polychlorinated Biphenyls (PCBs) (µg/Kg)																										
Aroclor-1248			24.7 U	28.1 U	10.7 U	14.5 U	18.6 U	17.5 U	16.4 U	16.1 U	13.3 U	10.6 U	171	9.98 U	11.4 U	10.4 U	10.6 U	10.3 U	16.6 U					10 U	28.1 U	10.8 U
Aroclor-1254	60		668	28.1 U	1660	14.5 U	18.6 U	17.5 U	16.4 U	16.1 U	13.3 U	52	2200	226	371	449	603	156	16.6 U					10 U	28.1 U	51.7
Aroclor-1260	60	6.97	102	28.1 U	251	14.5 U	18.6 U	17.5 U	16.4 U	16.1 U	13.3 U	10.9	382	25.3	64.7	62.9	60.5	18.5	16.6 U					10 U	28.1 U	6.07 J
Inorganics (mg/Kg)																										
Antimony	64	0.941	2.21 J	6.84 U	0.967 J						1.45 J	0.415 J	0.911 J						2.1 J	2.63	2.85 J	1.51 J	1.07 J	1.81 U	8.04 U	1.32 J
Arsenic	9.79	2.8	4.96 J	4.4 J	4.44						2.76	1.64 J	2.51						3.07 J	3.28	6.38	0.899 J	2.48	3.9	5.68 J	4.02
Beryllium		0.358	1.5	1.37	0.395						0.414	0.806	0.392						0.957	0.569	0.999	1.11	0.185 J	0.428	1.55	0.697
Boron		4.91	39.4 U	34.2 U	0.636 U						1.02 U	7.18 U	7.73						10.9	1.17 J	0.545 J	10.2	0.639 U	0.965 U	40.2 U	3.24
Cadmium	5	0.633	4.31	3.67	1.85						0.325	0.878	0.242 U						1.44	0.531	1.77	0.437	0.102 J	0.983	4.71	0.814
Chromium	110	21	20.8	18	11.3						8.32	11.5	8.58						23.5	8.32	14	10.5	3.97	10.7	19.9	9.76
Copper	150	45	176	152	282						39.4	51.4	58.4						53.4	63.4	182	105	10	193	155	146
Lead	130	19.6	47	38.7	64.9						3.81	34.4	45.3						41.4	20.7	51.2	80.8	3.44	33.4	45.9	58
Lithium		12.1	22.2	18	8.37						10.7	16.2	12.4						25.2	10.9	16.8	9.06	8.52	16.3	21	10.7
Mercury	0.18	0.21	0.249 J	0.243	0.374						0.106	0.0497 J	0.0507 U						0.126 J	0.0776 U	0.0564 J	0.0657 U	0.0659 U	0.489	0.651	0.835
Nickel	49	28	46.9	37.8	19.2						10.7	24.1	27.4						17.8	17.8	30.7	42.7	5.33	18.3	42.6	30.6
Selenium	0.1	4.9	3.23 J	3.33 J	1.91 U						1.91 U	2.39 U	1.45 U						4.95 U	2.24 U	3.4 U	1.85 U	1.92 U	1.81 U	4.45 J	1.94 U
Silver	4.5	0.4	5.25 U	4.56 U	2.22						1.27 U	1.6 U	0.969 U						3 U	1.24 J	2.27 U	1.23 U	1.28 U	1.21 U	5.36 U	1.09 J
Thallium			2.76 J	2.42 J	9.6 U						1.91 U	2.39 U	1.45 U						8.25 U	2.24 U	3.4 U	1.85 U	1.92 U	1.81 U	4.74 J	2 U
Zinc	460	270	398	327	197						59.5	241	231						196	142	315	459	49.6	152	382	223
Total Uranium (mg/Kg)		2.9	3.99 U	7.16 U							1.28 U	2.40	1.16 U						3.04 U	7.18 U	2.08 U	2.50	1.24 U	2.58 U	6.63 U	

Notes:
Summary of detected compounds only
- = All constituents below detection limits
Blank Cells Were Not Analyzed
J= Estimated result
R= Rejected result, unusable for project decisions
U= Not detected, value is the sample detection/reporting limit
UJ= Not detected, value is an estimate of detection/reporting limit
Sherman = Sherman Reservoir Sample
Wheeler = Wheeler Brook Sample
Deerfield = Deerfield River Sample, WSD = West Storm Drain
Background = Deerfield River, above the Harriman Station Outfall
Screening values fromYNPS Environmental Risk
Characterization Work Plan - Final, September 2006
For compounds that exceeded background,
results that exceeded screening values are shaded

Table 9
Summary of Sediment OHM Analytical Results
Yankee Nuclear Power Station
Rowe, MA

Station			SD-056	SD-057	SD-057R	SD-220	SD-221	SD-222	SD-223	SD-224	SD-225	SD-226	SD-227	SD-228	SD-229	SD-230	SD-231	SD-232	SD-232	SD-233	SD-234	SD-235	SD-236	SD-237	SD-238	SD-239
Sample ID	**Screening**	**Maximum**	**SD-056**	**SD-057**	**SD-057R**	**SD-220**	**SD-221**	**SD-222**	**SD-223**	**SD-224**	**SD-225**	**SD-226**	**SD-227**	**SD-228**	**SD-229**	**SD-230**	**SD-231**	**SD-232**	**SD-FD-002**	**SD-233**	**SD-234**	**SD-235**	**SD-236**	**SD-237**	**SD-238**	**SD-239**
Comment	**Value**	**Background**	**Sherman**	**Sherman**	**Sherman**	**Spring**	**Spring**	**Spring**	**Spring**	**Spring**	**Spring**	**Spring**	**Spring**	**Spring**	**Deerfield**	**Deerfield**	**Deerfield**	**Deerfield**	**Deerfield**	**Deerfield**	**Deerfield**	**Deerfield**	**Deerfield**	**Deerfield**	**Deerfield**	**Deerfield**
Date Sampled			**7/7/2006**	**6/16/2006**	**7/31/2006**	**5/24/2006**	**5/24/2006**	**5/24/2006**	**7/24/2006**	**7/24/2006**	**7/24/2006**	**6/14/2006**	**6/14/2006**	**6/14/2006**	**7/24/2006**	**6/20/2006**	**6/20/2006**	**7/24/2006**	**7/24/2006**	**6/19/2006**	**6/19/2006**	**7/24/2006**	**6/15/2006**	**6/19/2006**	**6/19/2006**	**6/15/2006**
Extractable Petroleum Hydrocarbons (EPH) (mg/Kg)																										
C11-C22 Aromatics			96 U	190 U	34.4 U																					
C19-C36 Aliphatics			96 U	190 U	34.4 U																					
C9-C18 Aliphatics			96 U	190 U	34.4 U																					
Acenaphthylene	0.15		0.478 U	0.949 U	0.171 U																					
Anthracene	0.0572	0.0815	0.478 U	0.949 U	0.171 U																					
Benzo(a)anthracene	0.11	0.0845	0.478 U	0.949 U	0.171 U																					
Benzo(a)pyrene	0.15	0.112	0.478 U	0.949 U	0.171 U																					
Benzo(b)fluoranthene	0.037	0.073	0.478 U	0.114 J	0.171 U																					
Benzo(g,h,i)perylene	0.15		0.478 U	0.949 U	0.171 U																					
Benzo(k)fluoranthene	0.037	0.13	0.478 U	0.949 U	0.171 U																					
Chrysene	0.17	0.148	0.478 U	0.171 J	0.171 U																					
Fluoranthene	0.423	0.317	0.163 J	0.2 J	0.171 U																					
Indeno(1,2,3-cd)pyrene	0.03		0.478 U	0.949 U	0.171 U																					
Phenanthrene	0.204	0.0842	0.478 U	0.949 U	0.171 U																					
Pyrene	0.2	0.265	0.478 U	0.949 U	0.171 U																					
Volatile Petroleum Hydrocarbons (VPH) (mg/Kg)																										
C5-C8 Aliphatics		1.27	2.02 J	3.52 J	0.435 J																					
C9-C10 Aromatics		0.346	0.485 J	1.19 J	0.0776 J																					
C9-C12 Aliphatics		0.451	0.565 J	1.16 J	0.142 J																					
Ethylbenzene			0.147 U	0.307 U	0.0322 U																					
m+p-Xylenes		0.108	0.0822 J	0.613 U	0.0644 U																					
Methyl-t-butyl ether			0.119 J	0.307 U	0.0322 U																					
Naphthalene	0.176	0.0597	0.0888 J	0.307 U	0.0322 U																					
Toluene	130	0.0559	0.204	0.307 U	0.0322 U																					
Volatile Organic Compounds (VOC) (µg/Kg)																										
2-Butanone	27000																									
4-Methyl-2-pentanone																										
Acetone	57.1																									
Dimethyl sulfide																										
Semi-Volatile Organic Compounds (SVOCs) (µg/Kg)																										
1-Methylnaphthalene			680 U	1250 U	258 U																					
2,6-Dinitrotoluene			680 U	1250 U	258 U																					
2-Methylnaphthalene	150		680 U	1250 U	258 U																					
3+4-Methylphenol		230	680 U	698 J	258 U																					
Acenaphthene	150	21.5	680 U	1250 U	258 U																					
Acenaphthylene	150		680 U	1250 U	258 U																					
Anthracene	57.2	124	57.7 J	1250 U	258 U																					
Benzo(a)anthracene	110	200	59.1 J	1250 U	258 U																					
Benzo(a)pyrene	150	230	680 U	1250 U	258 U																					
Benzo(b)fluoranthene	37	268	680 U	1250 U	258 U																					
Benzo(g,h,i)perylene	150	101	680 U	1250 U	258 U																					
Benzo(k)fluoranthene	37	220	680 U	1250 U	258 U																					
Carbazole			680 U	1250 U	258 U																					
Chrysene	170	273	48.1 J	65.8 J	258 U																					
Dibenzo(a,h)anthracene	33		680 U	1250 U	258 U																					
Dibenzofuran	5100		680 U	1250 U	258 U																					
Di-n-butyl phthalate			680 U	1250 U	258 U																					
Di-n-octyl phthalate			680 U	1250 U	258 U																					
Fluoranthene	423	651	181 J	75.9 J	258 U																					
Fluorene	77.4	48.6	28.9 J	1250 U	258 U																					
Indeno(1,2,3-cd)pyrene	30	106	680 U	1250 U	258 U																					
Phenanthrene	204	777	158 J	1250 U	258 U																					
Pyrene	200	592	154 J	1250 U	258 U																					

Table 9
Summary of Sediment OHM Analytical Results
Yankee Nuclear Power Station
Rowe, MA

Station	Screening	Maximum	SD-056	SD-057	SD-057R	SD-220	SD-221	SD-222	SD-223	SD-224	SD-225	SD-226	SD-227	SD-228	SD-229	SD-230	SD-231	SD-232	SD-232	SD-233	SD-234	SD-235	SD-236	SD-237	SD-238	SD-239
Sample ID	Value	Background	SD-056	SD-057	SD-057R	SD-220	SD-221	SD-222	SD-223	SD-224	SD-225	SD-226	SD-227	SD-228	SD-229	SD-230	SD-231	SD-232	SD-FD-002	SD-233	SD-234	SD-235	SD-236	SD-237	SD-238	SD-239
Comment			Sherman	Sherman	Sherman	Spring	Spring	Spring	Spring	Spring	Spring	Spring	Spring	Spring	Deerfield	Deerfield	Deerfield	Deerfield	Deerfield	Deerfield	Deerfield	Deerfield	Deerfield	Deerfield	Deerfield	Deerfield
Date Sampled			7/7/2006	6/16/2006	7/31/2006	5/24/2006	5/24/2006	5/24/2006	7/24/2006	7/24/2006	7/24/2006	6/14/2006	6/14/2006	6/14/2006	7/24/2006	6/20/2006	6/20/2006	7/24/2006	7/24/2006	6/19/2006	6/19/2006	7/24/2006	6/15/2006	6/19/2006	6/19/2006	6/15/2006
Polychlorinated Biphenyls (PCBs) (µg/Kg)																										
Aroclor-1248			10.2 U	26.2 U	10.5 U													11.2 U	12.5 U	19.6 U	11.9 U	13 U	10.2 U	10.1 U	10.7 U	10.3 U
Aroclor-1254	60		10.2 U	26.2 U	34.8													11.2 U	12.5 U	19.6 U	11.9 U	13 U	10.2 U	10.1 U	10.7 U	10.3 U
Aroclor-1260	60	6.97	10.2 U	26.2 U	4.62 J													11.2 U	12.5 U	19.6 U	11.9 U	13 U	10.2 U	10.1 U	10.7 U	2.79 J
Inorganics (mg/Kg)																										
Antimony	64	0.941	2.43 J	7.07 U	2.33	9.22 U	2.54 U	1.95 U	2.17	0.751 J	1.11 J	0.824 J	0.961 J	0.881 J	1.42 J	1.53 U	1.87 U	1.22 J	1.4 J	1.95 U	1.74 U	2.16	1.58	0.29 J	1.83 U	0.955 J
Arsenic	9.79	2.8	17.2	5.61 J	2.67	24.5	1.76 J	1.95	2.65	1.57 J	1.86	1.76	2.94	3.2	1.54 J	1.07 J	0.965 J	6.22	2.46 J	1.51 J	1.24 J	2.72	1.55	0.635 J	0.724 J	1.72
Beryllium		0.358	0.982	1.37	0.272	0.491 J	0.288 J	0.298	0.231 J	0.107 J	0.16 J	0.175	0.195	0.193	0.169 J	0.43	0.23 J	0.264 J	0.224 J	0.267	0.296	0.298	0.249	0.28	0.317	0.133 J
Boron		4.91	10.4	35.4 U	0.648 U	5.5	8.47 U	18.2 U	0.643 U	0.564 U	0.571 U	4.28	5.18	4.35	0.806 U	3.58 U	8.72 U	0.85 U	0.322 J	5.2 U	6.1 U	0.678	5.53	7.75 U	8.83 U	3.58
Cadmium	5	0.633	1.96	6.22	0.331	2.21	0.347 J	0.454	0.225 J	0.147 J	0.194 J	0.489	0.589	0.567	0.169 J	0.251 J	0.355	0.315 J	0.295 J	0.566	0.488	0.285 J	0.482	0.4	0.444	0.317
Chromium	110	21	31.3	20.5	10.4	14.1	4.65	4.55	9.36	4.74	6.24	7.87	11.6	9.32	5.88	8.06	6.57	18.4	7.65	7.08	6.16	7.68	9.29	9.76	6.56	5.1
Copper	150	45	206	245	20.3	34.5	6.45	9.32	21	7.21	12.6	9.47	17.2	15.2	8.4	13.5	5.15	19.9	17.1	20.3	10.9	12.2	12.1	10.5	8.24	7.09
Lead	130	19.6	33.6	41.5	1.56	8.23	11.5	7.69	6.76	2.93	3.91	8.78	7.08	7.33	6.34	10.7	6.28	6.44	11.6	10	9.16	14	4.85	4.33	4.77	6.52
Lithium		12.1	29.2	16.7	15.8	19.4	7.56	7.21	13.6	6.46	7.51	9.4	13	11.1	8.68	17.4	10.6	17.2	8.86	8.22	7.53	10.3	12.5	15.5	10.9	5.51
Mercury	0.18	0.21	1.11	0.244	0.231 U	0.2 J	0.0822 U	0.0421 J	0.0615 J	0.061 U	0.0604 U	0.0526 U	0.0386 J	0.0316 J	0.0587 J	0.0544 U	0.0622 U	0.0417 J	0.0913 U	0.128	0.0517 U	0.144	0.0545 U	0.0601 U	0.0613 U	0.0558 U
Nickel	49	28	34	54.1	10.7	19.7	6.29	9.64	8.98	5	5.84	6.82	13.8	10.8	5.87	9.43	7.8	15.2	6.86	10.3	9.83	6.08	6.75	10.1	9.13	2.94
Selenium	0.1	4.9	3.98 U	3.39 J	1.94 U	9.22 U	2.54 U	1.95 U	1.93 U	1.69 U	1.71 U	1.6 U	1.72 U	1.81 U	2.42 U	1.53 U	1.87 U	2.55 U	2.69 U	0.845 J	0.813 J	2.03 U	1.49 U	1.5 U	1.83 U	1.67 U
Silver	4.5	0.4	2.66 U	4.71 U	1.12 J	6.14 U	1.69 U	1.3 U	2.22	1.13 U	1.13 J	1.06 U	1.14 U	1.21 U	1.61 U	1.02 U	1.25 U	1.7 U	1.79 U	1.3 U	1.16 U	1.36	0.994 U	1 U	1.22 U	1.11 U
Thallium			3.98 U	6.06 J	0.972 U	9.22 U	2.54 U	1.95 U	1.93 U	1.69 U	1.71 U	1.6 U	1.72 U	1.81 U	2.42 U	1.53 U	1.87 U	2.55 U	2.69 U	0.436 J	0.366 J	2.03 U	1.49 U	1.5 U	1.83 U	1.67 U
Zinc	460	270	304	479	54	153	29.7	49.7	43.5	22.8	27.6	57.7	94.1	90.9	32.9	25.2	33.1	52.3	51.9	96.6	32.3	41.2	60.6	37.8	35.7	27.1
Total Uranium (mg/Kg)		2.9	2.58 U	4.93 U		3.90	3.00	1.22 U				1.90	1.31 U	1.27 U		1.08 U	1.79 U			1.42 U	1.28 U		1.07 U	1.09 U	1.10 U	1.14 U

Notes:
Summary of detected compounds only
- = All constituents below detection limits
Blank Cells Were Not Analyzed
J= Estimated result
R= Rejected result, unusable for project decisions
U= Not detected, value is the sample detection/reporting limit
UJ= Not detected, value is an estimate of detection/reporting limit
Sherman = Sherman Reservoir Sample
Wheeler = Wheeler Brook Sample
Deerfield = Deerfield River Sample, WSD = West Storm Drain
Background = Deerfield River, above the Harriman Station Outfall
Screening values fromYNPS Environmental Risk
Characterization Work Plan - Final, September 2006
For compounds that exceeded background,
results that exceeded screening values are shaded

Table 9
Summary of Sediment OHM Analytical Results
Yankee Nuclear Power Station
Rowe, MA

Station	Screening	Maximum	SD-240	SD-241	SD-242	SD-243	SD-244	SD-245	SD-246	SD-304R	SD-407	SD-407	SD-408	SD-409	SD-410	SD-411	SD-412
Sample ID	Value	Background	SD-240	SD-241	SD-242	SD-243	SD-244	SD-245	SD-246	SD-304R	SD-407	SD-FD-003	SD-408	SD-409	SD-410	SD-411	SD-412
Comment			Deerfield	Deerfield	Deerfield	Deerfield	Deerfield	Deerfield	Deerfield	WSD	Background	Background	Background	Background	Background	Background	Background
Date Sampled			6/15/2006	6/15/2006	6/15/2006	6/15/2006	6/15/2006	6/15/2006	6/15/2006	5/24/2006	6/2/2006	6/2/2006	6/2/2006	6/2/2006	6/2/2006	6/2/2006	6/2/2006
Extractable Petroleum Hydrocarbons (EPH) (mg/Kg)																	
C11-C22 Aromatics										33.8 U	37.7 U	39 U	45.7 U	43.9 U	39.2 U	54.4 U	32.4 U
C19-C36 Aliphatics										33.8 U	37.7 U	39 U	45.7 U	43.9 U	39.2 U	54.4 U	32.4 U
C9-C18 Aliphatics										33.8 U	37.7 U	39 U	45.7 U	43.9 U	39.2 U	54.4 U	32.4 U
Acenaphthylene	0.15									0.168 U	0.188 U	0.194 U	0.228 U	0.112 J	0.115 J	0.166 J	0.0921 J
Anthracene	0.0572	0.0815								0.168 U	0.188 U	0.194 U	0.0639 J	0.219 U	0.195 U	0.0815 J	0.161 U
Benzo(a)anthracene	0.11	0.0845								0.168 U	0.188 U	0.194 U	0.0845 J	0.219 U	0.195 U	0.271 U	0.161 U
Benzo(a)pyrene	0.15	0.112								0.168 U	0.188 U	0.194 U	0.112 J	0.219 U	0.195 U	0.0625 J	0.161 U
Benzo(b)fluoranthene	0.037	0.073								0.168 U	0.188 U	0.194 U	0.073 J	0.0197 J	0.0254 J	0.057 J	0.161 U
Benzo(g,h,i)perylene	0.15									0.168 U	0.188 U	0.194 U	0.0799 J	0.219 U	0.195 U	0.271 U	0.161 U
Benzo(k)fluoranthene	0.037	0.13								0.168 U	0.188 U	0.194 U	0.13 J	0.219 U	0.195 U	0.271 U	0.161 U
Chrysene	0.17	0.148								0.168 U	0.188 U	0.0136 J	0.148 J	0.219 U	0.0313 J	0.0815 J	0.161 U
Fluoranthene	0.423	0.317								0.168 U	0.188 U	0.194 U	0.317	0.219 U	0.0391 J	0.16 J	0.161 U
Indeno(1,2,3-cd)pyrene	0.03									0.168 U	0.188 U	0.194 U	0.0662 J	0.219 U	0.195 U	0.271 U	0.161 U
Phenanthrene	0.204	0.0842								0.168 U	0.188 U	0.194 U	0.0799 J	0.219 U	0.195 U	0.0842 J	0.161 U
Pyrene	0.2	0.265								0.168 U	0.188 U	0.194 U	0.265	0.219 U	0.195 U	0.16 J	0.161 U
Volatile Petroleum Hydrocarbons (VPH) (mg/Kg)																	
C5-C8 Aliphatics		1.27								0.395 J	0.235 J	0.365 J	0.419 J	0.538 J	0.523 J	1.27 J	
C9-C10 Aromatics		0.346								0.0943 J	0.0721 J	0.0702 J	0.16 J	0.137 J	0.272	0.346 J	
C9-C12 Aliphatics		0.451								0.128 J	0.133 J	0.136 J	0.205 J	0.158 J	0.451	0.367 J	
Ethylbenzene										0.0343 U	0.0285 U	0.0278 U	0.0411 U	0.0388 U	0.0383 U	0.064 J	
m+p-Xylenes		0.108								0.0686 U	0.057 U	0.0555 U	0.0823 U	0.0776 U	0.0766 U	0.108 J	
Methyl-t-butyl ether										0.0343 U	0.0285 U	0.0278 U	0.0411 U	0.0388 U	0.0383 U	0.0908 U	
Naphthalene	0.176	0.0597								0.0191 J	0.0285 U	0.0278 U	0.0411 U	0.0388 U	0.0383 U	0.0597 J	
Toluene	130	0.0559								0.0343 U	0.0285 U	0.0278 U	0.0411 U	0.0388 U	0.0383 U	0.0559 J	
Volatile Organic Compounds (VOC) (µg/Kg)																	
2-Butanone	27000										84.4 U	141 U	205 U	186 U	189 U	330 U	91.3 J
4-Methyl-2-pentanone											2.4 J	6.7 J	7.5 J	9.1 J	12.8 J	14.9 J	12.3 J
Acetone	57.1										169 U	282 U	410 U	371 U	378 U	659 U	943
Dimethyl sulfide																	43.5 TIC, J
Semi-Volatile Organic Compounds (SVOCs) (µg/Kg)																	
1-Methylnaphthalene										259 U	275 U	270 U	35.1 J	293 U	290 U	560 U	305 U
2,6-Dinitrotoluene										259 U	275 U	270 U	305 U	293 U	290 U	560 U	305 U
2-Methylnaphthalene	150									259 U	275 U	270 U	20.9 J	293 U	290 U	560 U	305 U
3+4-Methylphenol		230								259 U	275 U	270 U	305 U	293 U	290 U	560 U	12.3 J
Acenaphthene	150	21.5								259 U	275 U	270 U	21.5 J	293 U	290 U	560 U	305 U
Acenaphthylene	150									259 U	275 U	270 U	59.1 J	293 U	290 U	560 U	305 U
Anthracene	57.2	124								259 U	16.1 J	270 U	124 J	293 U	290 U	28.3 J	305 U
Benzo(a)anthracene	110	200								259 U	32.7 J	270 U	158 J	19.5 J	19.9 J	61.1 J	305 U
Benzo(a)pyrene	150	230								259 U	21.1 J	270 U	197 J	13.6 J	15.2 J	60 J	305 U
Benzo(b)fluoranthene	37	268								259 U	275 U	270 U	268 J	293 U	290 U	560 U	305 U
Benzo(g,h,i)perylene	150	101								259 U	13.9 J	270 U	101 J	293 U	290 U	31.7 J	305 U
Benzo(k)fluoranthene	37	220								13.1 J	22.2 J	270 U	141 J	13.6 J	14.1 J	50.9 J	305 U
Carbazole										259 U	275 U	270 U	80 J	293 U	290 U	560 U	305 U
Chrysene	170	273								13.1 J	36.6 J	270 U	273 J	19.5 J	19.3 J	72.4 J	305 U
Dibenzo(a,h)anthracene	33									259 U	275 U	270 U	24.6 J	293 U	290 U	560 U	305 U
Dibenzofuran	5100									259 U	275 U	270 U	36.3 J	293 U	290 U	560 U	305 U
Di-n-butyl phthalate										259 U	275 U	270 U	20.9 J	293 U	290 U	560 U	305 U
Di-n-octyl phthalate										259 U	275 U	270 U	20.3 J	14.8 J	290 U	37.4 J	305 U
Fluoranthene	423	651								15.7 J	54.9 J	270 U	651	29 J	32.8 J	126 J	15.4 J
Fluorene	77.4	48.6								259 U	275 U	270 U	48.6 J	293 U	290 U	560 U	305 U
Indeno(1,2,3-cd)pyrene	30	106								259 U	13.9 J	270 U	106 J	293 U	290 U	31.7 J	305 U
Phenanthrene	204	777								259 U	36.1 J	270 U	777	20.1 J	16.4 J	75.8 J	305 U
Pyrene	200	592								259 U	50.5 J	270 U	592	28.4 J	32.2 J	128 J	305 U

Table 9
Summary of Sediment OHM Analytical Results
Yankee Nuclear Power Station
Rowe, MA

Station			**SD-240**	**SD-241**	**SD-242**	**SD-243**	**SD-244**	**SD-245**	**SD-246**	**SD-304R**	**SD-407**	**SD-407**	**SD-408**	**SD-409**	**SD-410**	**SD-411**	**SD-412**
Sample ID	**Screening**	**Maximum**	**SD-240**	**SD-241**	**SD-242**	**SD-243**	**SD-244**	**SD-245**	**SD-246**	**SD-304R**	**SD-407**	**SD-FD-003**	**SD-408**	**SD-409**	**SD-410**	**SD-411**	**SD-412**
Comment	**Value**	**Background**	**Deerfield**	**Deerfield**	**Deerfield**	**Deerfield**	**Deerfield**	**Deerfield**	**Deerfield**	**WSD**	**Background**	**Background**	**Background**	**Background**	**Background**	**Background**	**Background**
Date Sampled			**6/15/2006**	**6/15/2006**	**6/15/2006**	**6/15/2006**	**6/15/2006**	**6/15/2006**	**6/15/2006**	**5/24/2006**	**6/2/2006**	**6/2/2006**	**6/2/2006**	**6/2/2006**	**6/2/2006**	**6/2/2006**	**6/2/2006**
Polychlorinated Biphenyls (PCBs) (µg/Kg)																	
Aroclor-1248			10.4 U	10.5 U	10.9 U	11 U	10.6 U	641	10.2 U	9.94 U	9.91 U		10.9 U	11.2 U	11.2 U	11.4 U	10.4 U
Aroclor-1254	60		10.4 U	10.5 U	17.6	11 U	10.6 U	10.2 U	10.2 U	41.7	9.91 U		10.9 U	11.2 U	11.2 U	11.4 U	10.4 U
Aroclor-1260	60	6.97	10.4 U	10.5 U	10.9 U	11 U	10.6 U	3.25 J	10.2 U	16.3	9.91 U		10.9 U	6.97 J	11.2 U	11.4 U	10.4 U
Inorganics (mg/Kg)																	
Antimony	64	0.941	0.81 J	0.824 J	1.45 J	1.22 J	0.925 J	1.05 J	0.722 J	0.318 J	0.337 J	0.749 J	0.841 J	0.53 J	0.603 J	0.941 J	0.457 J
Arsenic	9.79	2.8	1.14 J	1.39 J	4.03	1.92 J	1.09 J	3.64	1.04 J	0.802 J	0.78 J	1.14 J	1.22 J	0.95 J	0.977 J	1.83 J	1.19 J
Beryllium		0.358	0.168 J	0.134 J	0.279	0.302	0.134 J	0.162 J	0.124 J	0.282	0.146 J	0.118 J	0.201 J	0.146 J	0.145 J	0.358	0.163 J
Boron		4.91	3.71	2.84	5.53	4.45	3.44	5.31	2.96	15.3 U	2.54	2.34	2.66	2.76	2.71	4.91	2.3
Cadmium	5	0.633	0.324	0.248 J	0.484	0.327 J	0.273	0.277 J	0.259 J	0.239 J	0.225 J	0.212 J	0.252 J	0.207 J	0.223 J	0.633	0.168 J
Chromium	110	21	8.3	6.28	9.32	9.93	8.66	11.3	8.13	4.6	5.44	4.78	4.47	3.77	4.35	10	4.08
Copper	150	45	9.91	7.65	20.8	12.8	8.28	11.3	8.98	8.59	4.38	4.4	6.58	5.52	5	15.9	6.33
Lead	130	19.6	3.66	3.87	15.3	8.01	4.33	4.29	3.43	3.96	3.68	3.96	6.8	5.89	4.73	19.6	4.9
Lithium		12.1	9.29	7.17	12.4	14.5	11.7	14.6	8.54	9.21	6.36	4.46	5.51	4.71	5.37	12.1	6.26
Mercury	0.18	0.21	0.0581 U	0.0707 U	0.0867 U	0.0837 U	0.0553 U	0.065 U	0.0603 U	0.0641 U	0.0603 U	0.0591 U	0.0673 U	0.0642 U	0.0646 U	0.043 J	0.0545 U
Nickel	49	28	3.64	4.42	8.59	7.5	5.98	11	6	5.03	4.98	6.32	3.93	2.81	3.09	8.51	3.41
Selenium	0.1	4.9	1.8 U	2.01 U	2.46 U	2.52 U	1.6 U	1.73 U	1.62 U	1.84 U	1.68 U	1.77 U	1.94 U	1.83 U	1.81 U	2.5 U	1.58 U
Silver	4.5	0.4	1.2 U	1.34 U	1.64 U	1.68 U	1.07 U	1.15 U	1.08 U	1.22 U	1.12 U	1.18 U	1.29 U	1.22 U	1.21 U	1.67 U	1.05 U
Thallium			1.8 U	2.01 U	2.46 U	2.52 U	1.6 U	1.73 U	1.62 U	1.84 U	1.68 U	1.77 U	1.94 U	1.83 U	1.81 U	2.5 U	1.58 U
Zinc	460	270	40.3	38.2	62.4	60.9	46.1	46.8	42.1	70	33	29.1	35.7	30.7	30.7	78	23.6
Total Uranium (mg/Kg)		2.9	2.10	1.10	1.25 U	1.52 U	1.50	3.10	4.40	3.10	1.30	1.50	1.16 U	2.90	1.90	1.70	1.30

Notes:
Summary of detected compounds only
- = All constituents below detection limits
Blank Cells Were Not Analyzed
J= Estimated result
R= Rejected result, unusable for project decisions
U= Not detected, value is the sample detection/reporting limit
UJ= Not detected, value is an estimate of detection/reporting limit
Sherman = Sherman Reservoir Sample
Wheeler = Wheeler Brook Sample
Deerfield = Deerfield River Sample, WSD = West Storm Drain
Background = Deerfield River, above the Harriman Station Outfall
Screening values fromYNPS Environmental Risk
Characterization Work Plan - Final, September 2006
For compounds that exceeded background,
results that exceeded screening values are shaded

Table 10
Comparison of Sediment OHM Data to Background and Screening Values
Yankee Nuclear Power Station
Rowe, MA

Oil or Hazardous Material	Site						Detected > 5% ?	Background*		Site Exceeds Background?	Screning Value	Site Exceeds Background & Screening Value	Site Exceeds Background/No Screening Value Available
	Number Detected	Number Sampled	Percent Detected	Average	Median	Maximum		Median	Maximum				
Extractable Petroleum Hydrocarbons (mg/Kg)													
Anthracene	1	14	7%	0.239	0.112	0.0602	Yes	0.094	0.0815	No	0.0572		
Benzo(a)anthracene	1	14	7%	0.245	0.132	0.143	Yes	0.097	0.0845	Yes	0.11	X	
Benzo(a)pyrene	1	14	7%	0.241	0.112	0.0978	Yes	0.097	0.112	No	0.15		
Benzo(b)fluoranthene	3	14	21%	0.179	0.106	0.114	Yes	0.073	0.073	Yes	0.037	X	
Benzo(k)fluoranthene	1	14	7%	0.243	0.123	0.124	Yes	0.0975	0.13	No	0.037		
Chrysene	5	14	36%	0.174	0.135	0.199	Yes	0.0815	0.148	Yes	0.17	X	
Fluoranthene	7	14	50%	0.193	0.142	0.444	Yes	0.097	0.317	Yes	0.423	X	
Phenanthrene	1	14	7%	0.245	0.138	0.154	Yes	0.094	0.0842	Yes	0.204		
Pyrene	3	14	21%	0.256	0.180	0.353	Yes	0.0975	0.265	Yes	0.2	X	
Volatile Petroleum Hydrocarbons (mg/Kg)													
C5-C8 Aliphatics	14	14	100%	1.828	0.717	6.44	Yes	0.471	1.27	Yes	NA		X
C9-C10 Aromatics	14	14	100%	0.407	0.196	1.19	Yes	0.1485	0.346	Yes	NA		X
C9-C12 Aliphatics	14	14	100%	0.615	0.262	1.98	Yes	0.1815	0.451	Yes	NA		X
m+p-Xylenes	2	14	14%	0.135	0.056	0.33	Yes	0.03855	0.108	Yes	NA		X
Methyl-t-butyl ether	1	14	7%	0.077	0.028	0.119	Yes	ND	ND	Yes	NA		X
Naphthalene	5	14	36%	0.091	0.036	0.362	Yes	0.019275	0.0597	Yes	0.176	X	
Toluene	1	14	7%	0.084	0.028	0.204	Yes	0.019275	0.0559	Yes	130		
Semivolatile Organic Compounds (ug/Kg)													
2,6-Dinitrotoluene	1	14	7%	366.529	151.500	25.4	Yes	ND	ND	Yes	NA		X
3+4-Methylphenol	1	14	7%	384.429	177.750	698	Yes	215	230	Yes	NA		X
Acenaphthene	1	13	8%	364.808	152.500	25.5	Yes	215	21.5	Yes	150		
Anthracene	2	13	15%	348.569	150.500	57.7	Yes	152.5	124	No	57.2		
Benzo(a)anthracene	3	14	21%	348.400	148.500	100	Yes	158	200	No	110		
Benzo(a)pyrene	2	14	14%	366.107	151.500	80.1	Yes	197	230	No	150		
Benzo(b)fluoranthene	1	14	7%	380.500	177.750	104	Yes	220	268	No	37		
Benzo(g,h,i)perylene	1	14	7%	375.236	177.750	30.3	Yes	152.5	101	No	150		
Benzo(k)fluoranthene	3	14	21%	357.629	151.500	86	Yes	152.5	220	No	37		
Chrysene	5	14	36%	299.457	146.500	112	Yes	170	273	No	170		
Fluoranthene	7	14	50%	242.121	148.500	231	Yes	170	651	No	423		
Fluorene	2	14	14%	347.586	151.500	28.9	Yes	215	48.6	No	77.4		
Indeno(1,2,3-cd)pyren	1	14	7%	375.336	177.750	31.7	Yes	152.5	106	No	30		
Phenanthrene	4	14	29%	344.957	151.500	158	Yes	152.5	777	No	204		
Pyrene	3	14	21%	362.129	153.250	180	Yes	152.5	592	No	200		
Polychlorinated Biphenyls (ug/Kg)													
Aroclor-1248	2	35	6%	29.422	5.350	641	Yes	ND	ND	Yes	NA		X
Aroclor-1254	13	35	37%	190.950	8.300	2200	Yes	ND	ND	Yes	60	X	
Aroclor-1260	14	35	40%	33.099	6.250	382	Yes	5.5	6.97	Yes	60	X	
Inorganics (mg/Kg)													
Antimony	34	46	74%	1.488	1.090	2.85	Yes	0.603	0.941	Yes	64		
Arsenic	46	46	100%	3.380	2.470	24.5	Yes	1.22	2.8	Yes	9.79	X	
Beryllium	46	46	100%	0.454	0.285	1.55	Yes	0.358	0.358	Yes	NA		X
Boron	22	46	48%	4.887	3.650	10.9	Yes	2.66	4.91	Yes	NA		X
Cadmium	45	46	98%	0.923	0.419	6.22	Yes	0.455	0.633	Yes	5	X	
Chromium	46	46	100%	10.402	8.975	31.3	Yes	5.44	21	Yes	110		
Copper	46	46	100%	54.455	16.150	282	Yes	6.58	45	Yes	150	X	
Lead	46	46	100%	18.514	8.120	80.8	Yes	3.96	19.6	Yes	130		
Lithium	46	46	100%	12.693	11.000	29.2	Yes	5.51	12.1	Yes	NA		X
Mercury	21	46	46%	0.134	0.041	1.11	Yes	0.03365	0.21	Yes	0.18	X	
Nickel	46	46	100%	15.436	9.965	54.1	Yes	8.51	28	Yes	49	X	
Selenium	6	46	13%	1.338	0.958	4.45	Yes	1.11	4.9	No	0.1		
Silver	7	46	15%	1.025	0.660	2.22	Yes	0.525	0.4	Yes	4.5		

Table 11
Summary of Radiological Analytical Results for Surface Water
Yankee Nuclear Power Station
Rowe, MA

Radionuclide	MDC	SW-101			SW-102			SW-103			SW-104			
	Requested	Activity	Crit. Level	MDC	Activity	Crit. Level	MDC	Activity	Crit. Level	MDC	Activity	Crit. Level	MDC	Req'd
Tritum														
H-3	5.00E+02	ND	1.48E+02	3.04E+02	ND	1.56E+02	3.33E+02	ND	1.79E+02	3.45E+02	ND	1.88E+02	3.70E+02	5.00E+02
Gammas														
Co-60	2.50E+01	ND	2.18E+00	3.48E+00	ND	2.52E+00	4.16E+00	ND	2.14E+00	3.94E+00	ND	2.27E+00	4.28E+00	2.50E+01
Nb-94	5.00E+01	ND	2.09E+00	3.00E+00	ND	2.59E+00	4.12E+00	ND	2.03E+00	3.22E+00	ND	2.25E+00	3.35E+00	5.00E+01
Ag-108m	5.00E+01	NA	0.00E+00		NA	0.00E+00		NA	0.00E+00		NA	0.00E+00		5.00E+01
Sb-125	5.00E+01	ND	6.62E+00	8.47E+00	ND	7.34E+00	1.11E+01	ND	5.60E+00	9.39E+00	ND	6.00E+00	9.75E+00	5.00E+01
Cs-134	1.40E+01	ND	2.16E+00	3.47E+00	ND	3.13E+00	5.12E+00	ND	2.34E+00	3.96E+00	ND	2.63E+00	4.05E+00	1.40E+01
Cs-137	1.50E+01	ND	2.68E+00	4.29E+00	ND	3.20E+00	5.13E+00	ND	2.26E+00	3.87E+00	ND	2.39E+00	3.42E+00	1.50E+01
Eu-152	5.00E+01	ND	6.64E+00	1.03E+01	ND	7.62E+00	1.19E+01	ND	6.17E+00	9.12E+00	ND	6.08E+00	9.57E+00	5.00E+01
Eu-154	5.00E+01	ND	6.26E+00	1.05E+01	ND	8.35E+00	1.33E+01	ND	4.78E+00	8.24E+00	ND	7.12E+00	1.10E+01	5.00E+01
Eu-155	5.00E+01	ND	8.62E+00	1.32E+01	ND	7.18E+00	1.08E+01	ND	7.96E+00	1.23E+01	ND	6.50E+00	9.61E+00	5.00E+01

Notes:
All values presented in pCi/L
NA = Not analyzed
ND = Non detect

Table 11
Summary of Radiological Analytical Results for Surface Water
Yankee Nuclear Power Station
Rowe, MA

Radionuclide	MDC	SW-105			SW-106			SW-220			SW-221		
	Requested	Activity	Crit. Level	MDC	Activity	Crit. Level	MDC	Activity	Crit. Level	MDC	Activity	Crit. Level	MDC
Tritum													
H-3	5.00E+02	ND	1.92E+02	3.55E+02	ND	1.77E+02	3.66E+02	3.48E+03	4.36E+02	3.56E+02	1.47E+03	2.94E+02	3.20E+02
Gammas													
Co-60	2.50E+01	ND	2.40E+00	3.30E+00	ND	2.32E+00	3.27E+00	ND	2.50E+00	3.53E+00	ND	2.41E+00	4.19E+00
Nb-94	5.00E+01	ND	2.07E+00	3.30E+00	ND	1.88E+00	2.63E+00	ND	2.00E+00	3.13E+00	ND	2.06E+00	3.49E+00
Ag-108m	5.00E+01	NA	0.00E+00		NA	0.00E+00		NA	0.00E+00		NA	0.00E+00	
Sb-125	5.00E+01	ND	7.44E+00	1.10E+01	ND	6.19E+00	9.05E+00	ND	6.10E+00	8.45E+00	ND	7.39E+00	1.02E+01
Cs-134	1.40E+01	ND	2.55E+00	4.14E+00	ND	2.31E+00	3.30E+00	ND	2.21E+00	3.95E+00	ND	2.83E+00	4.73E+00
Cs-137	1.50E+01	ND	2.30E+00	3.82E+00	ND	4.24E+00	2.93E+00	ND	2.38E+00	3.90E+00	ND	2.57E+00	4.03E+00
Eu-152	5.00E+01	ND	8.07E+00	1.27E+01	ND	6.51E+00	8.92E+00	ND	7.32E+00	1.05E+01	ND	7.16E+00	1.11E+01
Eu-154	5.00E+01	ND	6.78E+00	1.13E+01	ND	7.15E+00	9.76E+00	ND	8.77E+00	9.21E+00	ND	6.38E+00	9.37E+00
Eu-155	5.00E+01	ND	9.12E+00	1.43E+01	ND	8.61E+00	1.23E+01	ND	8.48E+00	1.21E+01	ND	9.89E+00	1.48E+01

Notes:
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ND = Non detect

Table 11
Summary of Radiological Analytical Results for Surface Water
Yankee Nuclear Power Station
Rowe, MA

Radionuclide	MDC	SW-222			SW-226			SW-229			SW-232		
	Requested	Activity	Crit. Level	MDC	Activity	Crit. Level	MDC	Activity	Crit. Level	MDC	Activity	Crit. Level	MDC
Tritum													
H-3	5.00E+02	7.48E+02	2.50E+02	3.41E+02	ND	2.74E+02	4.07E+02	ND	1.28E+02	3.73E+02	ND	1.46E+02	4.26E+02
Gammas													
Co-60	2.50E+01	ND	2.04E+00	3.23E+00	ND	1.57E+00	2.51E+00	ND	6.71E-01	2.07E+00	1.04E+00	7.75E-01	2.38E+00
Nb-94	5.00E+01	ND	2.03E+00	3.27E+00	ND	1.34E+00	2.05E+00	ND	5.97E-01	1.79E+00	ND	6.09E-01	1.83E+00
Ag-108m	5.00E+01	NA	0.00E+00		NA	0.00E+00		NA			NA		
Sb-125	5.00E+01	ND	5.91E+00	9.39E+00	ND	3.86E+00	5.63E+00	2.10E+00	2.00E+00	5.91E+00	2.73E+00	2.00E+00	5.93E+00
Cs-134	1.40E+01	ND	2.46E+00	3.87E+00	ND	1.53E+00	2.30E+00	ND	7.71E-01	2.31E+00	ND	6.99E-01	2.12E+00
Cs-137	1.50E+01	ND	1.98E+00	2.91E+00	ND	2.81E+00	2.21E+00	ND	7.01E-01	2.09E+00	ND	6.46E-01	1.95E+00
Eu-152	5.00E+01	ND	6.27E+00	9.87E+00	ND	5.76E+00	6.40E+00	3.04E+00	2.17E+00	6.38E+00	2.67E+00	2.22E+00	6.52E+00
Eu-154	5.00E+01	ND	6.15E+00	9.20E+00	ND	4.31E+00	6.72E+00	ND	1.86E+00	5.73E+00	ND	1.85E+00	5.75E+00
Eu-155	5.00E+01	ND	8.69E+00	1.37E+01	ND	4.95E+00	7.28E+00	ND	2.70E+00	7.82E+00	ND	2.77E+00	8.05E+00

Notes:
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ND = Non detect

Table 11
Summary of Radiological Analytical Results for Surface Water
Yankee Nuclear Power Station
Rowe, MA

Radionuclide	MDC	SW-235			SW-238			SW-241			SW-244		
	Requested	Activity	Crit. Level	MDC	Activity	Crit. Level	MDC	Activity	Crit. Level	MDC	Activity	Crit. Level	MDC
Tritum													
H-3	5.00E+02	ND	1.38E+02	4.03E+02	ND	2.49E+02	3.57E+02	ND	2.48E+02	3.54E+02	ND	2.49E+02	3.68E+02
Gammas													
Co-60	2.50E+01	ND	8.14E-01	2.50E+00	ND	1.28E+00	2.08E+00	ND	1.62E+00	2.52E+00	ND	1.25E+00	2.12E+00
Nb-94	5.00E+01	ND	7.37E-01	2.20E+00	ND	1.33E+00	2.08E+00	ND	1.41E+00	2.16E+00	ND	1.18E+00	1.84E+00
Ag-108m	5.00E+01	NA			NA	0.00E+00		NA	0.00E+00		NA	0.00E+00	
Sb-125	5.00E+01	ND	2.18E+00	6.45E+00	ND	4.21E+00	5.59E+00	ND	4.85E+00	6.51E+00	ND	4.04E+00	5.89E+00
Cs-134	1.40E+01	2.47E+00	9.21E-01	2.75E+00	ND	1.43E+00	2.24E+00	ND	1.76E+00	2.63E+00	ND	1.47E+00	2.29E+00
Cs-137	1.50E+01	ND	7.91E-01	2.36E+00	ND	1.48E+00	2.10E+00	ND	1.75E+00	2.32E+00	ND	3.26E+00	2.02E+00
Eu-152	5.00E+01	ND	2.55E+00	7.47E+00	ND	3.91E+00	6.00E+00	ND	4.54E+00	6.86E+00	ND	4.37E+00	6.31E+00
Eu-154	5.00E+01	ND	2.19E+00	6.71E+00	ND	4.47E+00	6.07E+00	ND	4.22E+00	6.60E+00	ND	3.65E+00	5.44E+00
Eu-155	5.00E+01	ND	3.08E+02	8.93E+00	ND	5.07E+00	7.73E+00	ND	5.84E+00	8.63E+00	ND	5.36E+00	7.98E+00

Notes:
All values presented in pCi/L
NA = Not analyzed
ND = Non detect

Table 11
Summary of Radiological Analytical Results for Surface Water
Yankee Nuclear Power Station
Rowe, MA

Radionuclide	MDC	SW-247			SW-250			SW-304			SW-407		
	Requested	Activity	Crit. Level	MDC	Activity	Crit. Level	MDC	Activity	Crit. Level	MDC	Activity	Crit. Level	MDC
Tritum													
H-3	5.00E+02	ND	2.85E+02	4.12E+02	ND	2.56E+02	3.78E+02	2.81E+02	2.06E+02	3.39E+02	ND	1.64E+02	3.23E+02
Gammas													
Co-60	2.50E+01	ND	1.34E+00	2.15E+00	ND	1.99E+00	2.89E+00	ND		4.50E+00	ND	2.17E+00	3.74E+00
Nb-94	5.00E+01	ND	1.35E+00	1.91E+00	ND	1.62E+00	2.47E+00	ND	2.89E+00	4.25E+00	ND	2.10E+00	3.18E+00
Ag-108m	5.00E+01	NA	0.00E+00		NA			NA	0.00E+00		NA	0.00E+00	
Sb-125	5.00E+01	ND	3.55E+00	5.72E+00	ND	5.03E+00	7.61E+00	ND	7.51E+00	1.24E+01	ND	6.15E+00	9.56E+00
Cs-134	1.40E+01	ND	1.49E+00	2.29E+00	ND	1.84E+00	3.03E+00	ND	3.34E+00	5.12E+00	ND	2.47E+00	3.96E+00
Cs-137	1.50E+01	ND	1.28E+00	2.00E+00	ND	1.79E+00	2.94E+00	ND	3.29E+00	5.09E+00	ND	2.46E+00	3.79E+00
Eu-152	5.00E+01	ND	4.15E+00	6.26E+00	ND	5.62E+00	8.59E+00	ND	8.95E+00	1.19E+01	ND	1.28E+01	1.04E+01
Eu-154	5.00E+01	ND	3.48E+00	5.13E+00	ND	5.43E+00	8.97E+00	ND	9.23E+00	1.42E+01	ND	6.44E+00	9.81E+00
Eu-155	5.00E+01	ND	4.80E+00	7.47E+00	ND	7.06E+00	1.04E+01	ND	7.42E+00	1.11E+01	ND	7.95E+00	1.26E+01

Notes:
All values presented in pCi/L
NA = Not analyzed
ND = Non detect

Table 11
Summary of Radiological Analytical Results for Surface Water
Yankee Nuclear Power Station
Rowe, MA

Radionuclide	MDC	SW-408			SW-409		
	Requested	Activity	Crit. Level	MDC	Activity	Crit. Level	MDC
Tritum							
H-3	5.00E+02	ND	1.84E+02	3.36E+02	ND	1.86E+02	3.38E+02
Gammas							
Co-60	2.50E+01	ND	2.55E+00	3.45E+00	ND	2.60E+00	4.40E+00
Nb-94	5.00E+01	ND	3.27E+00	3.10E+00	ND	2.35E+00	3.90E+00
Ag-108m	5.00E+01	NA	0.00E+00		NA	0.00E+00	
Sb-125	5.00E+01	ND	5.79E+00	8.67E+00	ND	7.58E+00	1.13E+01
Cs-134	1.40E+01	ND	2.36E+00	3.44E+00	ND	2.50E+00	3.88E+00
Cs-137	1.50E+01	ND	2.04E+00	2.97E+00	ND	2.55E+00	3.97E+00
Eu-152	5.00E+01	ND	6.26E+00	9.71E+00	ND	8.19E+00	1.21E+01
Eu-154	5.00E+01	ND	6.48E+00	9.71E+00	ND	6.76E+00	8.97E+00
Eu-155	5.00E+01	ND	7.18E+00	1.04E+01	ND	1.21E+01	1.46E+01

Notes:
All values presented in pCi/L
NA = Not analyzed
ND = Non detect

Table 12
Summary of Surface Water OHM Analytical Results
Yankee Nuclear Power Station
Rowe, MA

Station		SW-008	SW-008	SW-009	SW-011	SW-101	SW-102	SW-103	SW-104	SW-105	SW-106	SW-220	SW-221	SW-222	SW-223	SW-226	SW-229	SW-232	SW-232	SW-235	SW-238	SW-241	SW-244	SW-304	SW-407	SW-408	SW-409
Sample Designation	Screening	SW-008	SW-FD001-051806	SW-009	SW-011	SW-101	SW-102	SW-103	SW-104	SW-105	SW-106	SW-220	SW-221	SW-222	SW-223	SW-226	SW-229	SW-232	SW-FD-002-061906	SW-235	SW-238	SW-241	SW-244	SW-304	SW-407	SW-408	SW-409
Comment	Value	Sherman	Sherman	Sherman	Sherman	Wheeler	Wheeler	Wheeler	Wheeler	Wheeler	Wheeler	Spring	Spring	Spring	Spring	Spring	Deerfield	Deerfield	Deerfield	Deerfield	Deerfield	Deerfield	Deerfield	WSD	Background	Background	Background
Date Sampled		5/18/2006	5/18/2006	5/18/2006	5/18/2006	5/12/2006	5/12/2006	5/12/2006	5/12/2006	5/12/2006	5/12/2006	5/19/2006	5/19/2006	5/19/2006	6/14/2006	6/14/2006	6/19/2006	6/19/2006	6/19/2006	6/19/2006	6/15/2006	6/15/2006	6/15/2006	5/18/2006	5/17/2006	5/17/2006	5/17/2006
Extractable Petroleum Hydrocarbons (EPH) (µg/L)																											
C11-C22 Aromatics		200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U				200 U		200 U	200 U	200 U	200 U	200 U		200 U	200 U	200 U	200 U	200 U
C19-C36 Aliphatics	2100	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U				200 U		200 U	200 U	200 U	200 U	200 U		200 U	200 U	200 U	200 U	200 U
C9-C18 Aliphatics		200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U				200 U		200 U	200 U	200 U	200 U	200 U		200 U	200 U	200 U	200 U	200 U
Anthracene	17	5.32 U	5.43 U	5.32 U	0.202 J	5.38 U	5.21 U	5.1 U	5.43 U	5.32 U	5.49 U				5.32 U		5.26 U	5.32 U	5.26 U	5.26 U	5.26 U		5.32 U	5.32 U	5.32 U	5.56 U	5.43 U
Chrysene	17	5.32 U	5.43 U	5.32 U	5.62 U	5.38 U	5.21 U	5.1 U	5.43 U	5.32 U	5.49 U				5.32 U		0.211 J	0.128 J	0.105 J	0.147 J	5.26 U		5.32 U	5.32 U	5.32 U	5.56 U	5.43 U
Fluoranthene	39.8	5.32 U	5.43 U	5.32 U	5.62 U	5.38 U	5.21 U	5.1 U	5.43 U	5.32 U	5.49 U				5.32 U		0.168 J	0.255 J	0.126 J	5.26 U	5.26 U		5.32 U	5.32 U	5.32 U	5.56 U	5.43 U
Naphthalene	62	5.32 U	5.43 U	5.32 U	5.62 U	5.38 U	5.21 U	5.1 U	5.43 U	5.32 U	5.49 U				5.32 U		5.26 U	5.32 U	5.26 U	5.26 U	5.26 U		0.234 J	5.32 U	5.32 U	5.56 U	5.43 U
Volatile Petroleum Hydrocarbons (VPH) (µg/L)																											
C5-C8 Aliphatics	250	75 U	75 U	75 U	75 U	75 U	75 U	75 U	75 U	75 U	75 U				75 U		75 U	75 U	75 U	75 U	75 U		39.6 J	75 U	75 U	75 U	75 U
C9-C10 Aromatics	540	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U				25 U		25 U	25 U	25 U	25 U	25 U		14.5 J	25 U	25 U	25 U	25 U
C9-C12 Aliphatics		25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U				25 U		25 U	25 U	25 U	25 U	25 U		24.3 J	25 U	25 U	25 U	25 U
m+p-Xylenes		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U				10 U		10 U	10 U	10 U	10 U	10 U		4.4 J	10 U	10 U	10 U	10 U
Methyl-t-butyl ether		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U				5 U		5 U	5 U	5 U	5 U	5 U		11.5	5 U	5 U	5 U	5 U
o-Xylene		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U				5 U		5 U	5 U	5 U	5 U	5 U		1.9 J	5 U	5 U	5 U	5 U
Toluene	175	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U				5 U		5 U	5 U	5 U	5 U	5 U		4.7 J	5 U	5 U	5 U	5 U
Volatile Organic Compounds (VOC) (µg/L)																											
1,2,4-Trimethylbenzene		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U				1 U		1 U	1 U	1 U	1 U	1 U		1.9	1 U	1 U	1 U	1 U
1,3,5-Trimethylbenzene		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U				1 U		1 U	1 U	1 U	1 U	1 U		0.6 J	1 U	1 U	1 U	1 U
Benzene		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U				1 U		1 U	1 U	1 U	1 U	1 U		1.2	1 U	1 U	1 U	1 U
Carbon disulfide		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U				5 U		5 U	5 U	5 U	5 U	5 U		5 U	0.6 J	5 U	5 U	5 U
Ethylbenzene		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U				1 U		1 U	1 U	1 U	1 U	1 U		1.6	1 U	1 U	1 U	1 U
m+p-Xylenes		2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U				2 U		2 U	2 U	2 U	2 U	2 U		4.8	2 U	2 U	2 U	2 U
Methyl-t-butyl ether		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U				1 U		1 U	1 U	1 U	1 U	1 U		15.3	1 U	1 U	1 U	1 U
o-Xylene		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U				1 U		1 U	1 U	1 U	1 U	1 U		2.1	1 U	1 U	1 U	1 U
t-Amyl methyl ether		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U				1 U		1 U	1 U	1 U	1 U	1 U		2.6	1 U	1 U	1 U	1 U
Toluene	175	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U				1 U		1 U	1 U	1 U	1 U	1 U		6.1	0.7 J	1 U	1 U	1 U
Semi-Volatile Organic Compounds (SVOCs) (µg/L)																											
1-Methylnaphthalene		5.26 U	5.26 U	5 U	5.13 U										0.2 U		5 U	5.26 U	5 U	5.13 U	0.2 U		0.578	5 U	5 U	5 U	5.26 U
2-Methylnaphthalene	17	5.26 U	5.26 U	5 U	5.13 U										0.2 U		5 U	5.26 U	5 U	5.13 U	0.2 U		0.478	5 U	5 U	5 U	5.26 U
Benzo(a)anthracene	17	0.2 U	0.2 U	0.2 U	0.2 U										0.2 U		0.2 U	0.2 U	0.13 J	0.2 U	0.2 U		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Benzo(a)pyrene	17	0.2 U	0.2 U	0.2 U	0.2 U										0.2 U		0.2 U	0.2 U	0.05 J	0.2 U	0.2 U		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Benzo(b)fluoranthene	17	0.2 U	0.2 U	0.2 U	0.2 U										0.2 U		0.2 U	0.2 U	0.06 J	0.2 U	0.2 U		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Benzo(g,h,i)perylene	17	0.2 U	0.2 U	0.2 U	0.2 U										0.2 U		0.06 J	0.2 U	0.2 U	0.2 U	0.2 U		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Benzo(k)fluoranthene	17	0.2 U	0.2 U	0.2 U	0.2 U										0.2 U		0.2 U	0.2 U	0.08 J	0.2 U	0.2 U		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chrysene	17	0.2 U	0.2 U	0.2 U	0.2 U										0.2 U		0.2 U	0.2 U	0.1 J	0.2 U	0.2 U		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Fluoranthene	39.8	0.2 U	0.2 U	0.2 U	0.2 U										0.2 U		0.2 U	0.042 J	0.1 J	0.2 U	0.2 U		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Phenanthrene	17	0.2 U	0.2 U	0.2 U	0.2 U										0.2 U		0.2 U	0.042 J	0.04 J	0.2 U	0.2 U		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Pyrene	17	0.2 U	0.2 U	0.2 U	0.2 U										0.2 U		0.02 J	0.032 J	0.07 J	0.2 U	0.2 U		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Polychlorinated Biphenyls (PCBs)(µg/L)																											
Aroclor-1254	0.014	0.2 U	0.2 U	0.205 U	0.205 U	0.211 U	0.211 U	0.205 U	0.211 U	0.208 U	0.211 U				0.222 U		0.215 U	0.215 U	0.213 U	0.215 U	0.213 U	0.222 U	0.22 U	0.222 U	0.2 U	0.211 U	0.2 U
Aroclor-1260	0.014	0.2 U	0.2 U	0.205 U	0.205 U	0.211 U	0.211 U	0.205 U	0.211 U	0.208 U	0.211 U				0.222 U		0.215 U	0.215 U	0.213 U	0.215 U	0.213 U	0.222 U	0.22 U	0.222 U	0.2 U	0.211 U	0.2 U
Inorganics (mg/L)																											
Antimony	0.3	0.006 U	0.006 U	0.006 U	0.006 U	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.0066 J	0.0031 J	0.012 U	0.0036 J	0.015 U	0.015 U	0.006 U	0.006 U	0.0032 J	0.006 U	0.015 U	0.015 U	0.015 U	0.006 U	0.006 U	0.006 U	0.006 U
Arsenic	0.15	0.004 U	0.004 U	0.004 U	0.004 U	0.0075 U	0.0075 U	0.0075 U	0.0075 U	0.0075 U	0.0075 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.0024 J	0.004 U	0.0026 J	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U
Beryllium	0.0073	0.002 U	0.002 U	0.002 U	0.002 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Boron	0.75	0.0033 J	0.0037 J	0.0042 J	0.01 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.0442	0.027	0.0249	0.0032 J	0.0034 J	0.0066 J	0.0058 J	0.0042 J	0.0036 J	0.05 U	0.05 U	0.05 U	0.0094 J	0.004 J	0.0034 J	0.0039 J
Cadmium	0.00025	0.0025 U	0.0025 U	0.0025 U	0.0002 J	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0003 J	0.0002 J	0.0002 J	0.0002 J	0.0009 J	0.001 J	0.0008 J	0.0004 J	0.0002 J	0.0002 J	0.0002 J	0.0002 J	0.0025 U	0.0025 U	0.0025 U
Chromium	0.074	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Copper	0.009	0.005 U	0.005 U	0.0012 J	0.0011 J	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0024 J	0.005 U	0.0045 J	0.006	0.0016 J	0.0013 J	0.0014 J	0.0019 J	0.0068	0.0057	0.008	0.0022 J	0.005 U	0.005 U	0.0014 J
Lead	0.0025	0.0075 U	0.0075 U	0.0075 U	0.0075 U	0.0075 U	0.0075 U	0.0075 U	0.0075 U	0.0075 U	0.0075 U	0.0075 U	0.0075 U	0.0075 U	0.0075 U	0.0075 U	0.0075 U	0.0075 U	0.0075 U	0.0075 U	0.0075 U	0.0075 U	0.0075 U	0.0075 U	0.0075 U	0.0075 U	0.0075 U
Lithium		0.003 J	0.0026 J	0.0018 J	0.0014 J	0.0033 J	0.0044 J	0.0026 J	0.002 J	0.0022 J	0.0018 J	0.0017 J	0.0018 J	0.0026 J	0.0068 J	0.0078 J	0.0026 J	0.002 J	0.05 U	0.0018 J	0.0067 J	0.0053 J	0.0058 J	0.0043 J	0.0036 J	0.0033 J	0.003 J
Mercury	0.00077	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.00011 J	0.00004 J	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Nickel	0.052	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Selenium	0.005	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U
Silver	0.005	0.005 U	0.0022 J	0.0014 J	0.0009 J	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0014 J	0.005 U	0.003 J	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.001 J
Thallium	0.11	0.000009 J	0.0008	0.0002	0.00009	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.00006 J	0.0001 J	0.003	0.01 U	0.01 U	0.0035 U	0.0078	0.0035 U	0.0102	0.01 U	0.01 U	0.01 U	0.00007	0.000008 J	0.000007 J	0.00007
Zinc	0.12	0.0161	0.021	0.0261	0.0224	0.0088	0.009	0.01	0.011	0.0098	0.0118	0.0162 J	0.0204 J	0.0116 J	0.0176 J	0.0168 J	0.0122 J	0.0126 J	0.017 J	0.015 J	0.0131 J	0.0144 J	0.02 J	0.0206	0.0098	0.0099	0.013

Notes:
Summary of detected compounds only
- = All constituents below detection limits
Blank Cells Were Not Analyzed
J= Estimated result, R= Rejected result, unusable for project decisions
U= Not detected, value is the sample detection/reporting limit
UJ= Not detected, value is an estimate of detection/reporting limit
Sherman = Sherman Reservoir Sample, Wheeler = Wheeler Brook Sample
Deerfield = Deerfield River Sample, WSD = West Storm Drain
Background = Deerfield River, above the Harriman Station Outfall
Screening values fromYNPS Environmental Risk Characterization Work Plan - Final, September 2006
Shaded Cells Exceed Screening Values

Table 13
Comparison of Surface Water OHM Data to Background and Screening Values
Yankee Nuclear Power Station
Rowe, MA

Oil or Hazardous Material	Site						Detected > 5% ?	Background		Site Exceeds Background?	Screning Value	Site Exceeds Background & Screening Value	Site Exceeds Background/ No Screening Value Available
	Number Detected	Number Sampled	Percent Detected	Average	Median	Maximum		Median	Maximum				
Extractable Petroleum Hydrocarbons (µg/L)													
Adjusted TPH	1	18	6%	105.556	100.000	200	Yes	ND	ND	Yes	NA		X
Anthracene	1	18	6%	2.520	2.660	0.202	Yes	ND	ND	Yes	17		
Chrysene	4	18	22%	2.112	2.660	0.211	Yes	ND	ND	Yes	17		
Fluoranthene	3	18	17%	2.256	2.660	0.255	Yes	ND	ND	Yes	39.8		
Naphthalene	1	18	6%	2.530	2.660	0.234	Yes	ND	ND	Yes	62		
Unadjusted TPH	1	18	6%	105.556	100.000	200	Yes	ND	ND	Yes	NA		
Volatile Petroleum Hydrocarbons (µg/L)													
C5-C8 Aliphatics	1	18	6%	37.617	37.500	39.6	Yes	ND	ND	Yes	250		
C9-C10 Aromatics	1	18	6%	12.611	12.500	14.5	Yes	ND	ND	Yes	540		
C9-C12 Aliphatics	1	18	6%	13.156	12.500	24.3	Yes	ND	ND	Yes	NA		X
m+p-Xylenes	1	18	6%	4.967	5.000	4.4	Yes	ND	ND	Yes	NA		X
Methyl-t-butyl ether	1	18	6%	3.000	2.500	11.5	Yes	ND	ND	Yes	NA		X
o-Xylene	1	18	6%	2.467	2.500	1.9	Yes	ND	ND	Yes	NA		X
Toluene	1	18	6%	2.622	2.500	4.7	Yes	ND	ND	Yes	175		
Volatile Organic Compounds (ug/L)													
1,2,4-Trimethylbenzene	1	18	6%	0.578	0.500	1.9	Yes	ND	ND	Yes	NA		X
1,3,5-Trimethylbenzene	1	18	6%	0.506	0.500	0.6	Yes	ND	ND	Yes	NA		X
Benzene	1	18	6%	0.539	0.500	1.2	Yes	ND	ND	Yes	NA		X
Carbon disulfide	1	18	6%	2.394	2.500	0.6	Yes	ND	ND	Yes	NA		X
Ethylbenzene	1	18	6%	0.561	0.500	1.6	Yes	ND	ND	Yes	NA		X
m+p-Xylenes	1	18	6%	1.211	1.000	4.8	Yes	ND	ND	Yes	NA		X
Methyl-t-butyl ether	1	18	6%	1.322	0.500	15.3	Yes	ND	ND	Yes	NA		X
o-Xylene	1	18	6%	0.589	0.500	2.1	Yes	ND	ND	Yes	NA		X
t-Amyl methyl ether	1	18	6%	0.617	0.500	2.6	Yes	ND	ND	Yes	NA		X
Toluene	2	18	11%	0.822	0.500	6.1	Yes	ND	ND	Yes	175		
Semivolatile Organic Compounds (ug/L)													
1-Methylnaphthalene	1	12	8%	1.983	2.500	0.578	Yes	ND	ND	Yes	NA		X
2-Methylnaphthalene	1	12	8%	1.975	2.500	0.478	Yes	ND	ND	Yes	17		
Benzo(a)anthracene	1	12	8%	0.103	0.100	0.13	Yes	ND	ND	Yes	17		
Benzo(a)pyrene	1	12	8%	0.096	0.100	0.05	Yes	ND	ND	Yes	17		
Benzo(b)fluoranthene	1	12	8%	0.097	0.100	0.06	Yes	ND	ND	Yes	17		
Benzo(g,h,i)perylene	1	12	8%	0.097	0.100	0.06	Yes	ND	ND	Yes	17		
Benzo(k)fluoranthene	1	12	8%	0.098	0.100	0.08	Yes	ND	ND	Yes	17		
Chrysene	1	12	8%	0.100	0.100	0.1	Yes	ND	ND	Yes	17		
Fluoranthene	2	12	17%	0.095	0.100	0.1	Yes	ND	ND	Yes	39.8		
Phenanthrene	2	12	17%	0.090	0.100	0.042	Yes	ND	ND	Yes	17		
Pyrene	3	12	25%	0.085	0.100	0.07	Yes	ND	ND	Yes	17		
Inorganics (mg/L)													
Antimony	4	23	17%	0.005	0.006	0.0066	Yes	ND	ND	Yes	0.3		
Arsenic	2	23	9%	0.003	0.002	0.0026	Yes	ND	ND	Yes	0.15		
Boron	13	23	57%	0.023	0.025	0.0442	Yes	0.0039	0.004	Yes	0.75		
Cadmium	13	23	57%	0.001	0.001	0.001	Yes	ND	ND	Yes	0.00025	X	
Copper	13	23	57%	0.003	0.003	0.008	Yes	0.0025	0.0014	Yes	0.009		
Lithium	22	23	96%	0.004	0.003	0.0078	Yes	0.0033	0.0036	Yes	NA		X
Mercury	2	23	9%	0.0001	0.0001	0.00011	Yes	ND	ND	Yes	0.00077		
Silver	5	23	22%	0.002	0.003	0.003	Yes	0.0025	0.001	Yes	0.005		
Thallium	10	23	43%	0.004	0.005	0.0102	Yes	0.000008	0.00007	Yes	0.11		
Zinc	23	23	100%	0.015	0.015	0.0261	Yes	0.0099	0.013	Yes	0.12		

Notes
Averages represent the means and medians of those detected and 1/2 the detection limit of those not detected
NA-Not Available

Table 14
Summary of Radiological Analytical Results for Fish
Yankee Nuclear Power Station
Rowe, MA

Radionuclide	Requested MDC	Harriman Reservoir				Sherman Reservoir			Deerfield River		
		Activity	Crit. Level	MDC	Req'd	Activity	Crit. Level	MDC	Activity	Crit. Level	MDC
Trtium											
H-3	1.00E+02	1.73E-01	1.19E-01	1.57E-01	1.00E+02	5.04E-01	1.55E-01	1.69E-01	ND	1.02E-01	1.46E-01
Gammas											
Co-60	1.30E-01	ND	3.03E-02	5.63E-02	1.30E-01	ND	2.85E-02	4.76E-02	ND	5.59E-02	6.74E-02
Nb-94	2.50E-01	ND	2.64E-02	4.82E-02	2.50E-01	ND	2.68E-02	4.11E-02	ND	4.52E-02	6.67E-02
Ag-108m	2.50E-01	ND	2.27E-02	3.73E-02	2.50E-01	ND	2.42E-02	3.76E-02	ND	4.04E-02	5.28E-02
Cs-134	1.50E-01	ND	3.93E-02	6.12E-02	1.50E-01	ND	2.45E-02	3.55E-02	ND	6.78E-02	8.63E-02
Cs-137	1.50E-01	ND	3.19E-02	4.93E-02	1.50E-01	2.93E-02	2.74E-02	4.74E-02	ND	8.67E-02	9.12E-02
Eu-152	3.50E-01	ND	7.63E-02	1.22E-01	3.50E-01	ND	7.18E-02	1.16E-01	ND	1.08E-01	1.58E-01
Eu-154	3.50E-01	ND	8.25E-02	1.56E-01	3.50E-01	ND	7.69E-02	1.19E-01	ND	1.32E-01	2.25E-01
Eu-155	1.40E+01	ND	7.74E-02	1.25E-01	1.40E+01	ND	7.67E-02	1.23E-01	ND	8.36E-02	1.25E-01

Notes:
All values presented in pCi/g
ND = Non detect

Table 15
Summary of PCB Aroclor Results for Fish
Yankee Nuclear Power Station
Rowe, MA

Sample ID	Sample Location	Date Sampled	Species	% Lipids	Aroclor 1254 (ug/Kg)	Aroclor 1260 (ug/Kg)	Aroclor Reporting Limit (ug/Kg)
FAE1	East Storm Drain	11/2/02, 11/3/02	Yellow Perch	0.2	10	ND	10
FAE2	East Storm Drain	11/3/2002	Yellow Perch	0.2	ND	ND	10
FAE3	East Storm Drain	11/3/02, 11/5/02	Yellow Perch	0.3	67	ND	10
FBE2	East Storm Drain	11/2/02, 11/13/02	White Sucker	1.4	37	17	10
FAN1	North Sherman Pond	11/1/02, 11/2/02	Yellow Perch	0.6	ND	ND	10
FAN2	North Sherman Pond	11/2/2002	Yellow Perch	0.4	ND	ND	10
FAN3	North Sherman Pond	11/2/2002	Yellow Perch	0.4	ND	ND	10
FBN1	North Sherman Pond	11/2/2002	White Sucker	1.7	ND	ND	10
FBN2	North Sherman Pond	11/2/2002	White Sucker	1.7	ND	12	10
FBN3	North Sherman Pond	11/3/02, 11/5/02	White Sucker	1.2	ND	ND	10
FAH1	Harriman	11/2/2002	Yellow Perch	1.0	ND	ND	10
FAH2	Harriman	11/2/2002	Yellow Perch	1.0	ND	ND	10
FAH3	Harriman	11/2/2002	Yellow Perch	0.7	ND	ND	10
FBH1	Harriman	11/2/2002	White Sucker	1.5	ND	ND	10
FBH2	Harriman	11/2/2002	White Sucker	1.4	ND	ND	10
FBH3	Harriman	11/2/02, 11/3/02	White Sucker	0.8	ND	ND	10

Notes:
ND = Not Detected

Table 16
Summary of PCB Congener Results for Fish
Yankee Nuclear Power Station
Rowe, MA

Client Sample ID	FAE1 (509194)		FAE2 (509196)		FAE3 (509288)		FBE2 (509294)		FAN1 (509176)		FBN2 (509184)		FAH1 (509186)		FBH1 (509172)	
Sample Location	E. Storm Drain		E. Storm Drain		E. Storm Drain		E. Storm Drain		N. Sherman Pond		N. Sherman Pond		Harriman		Harriman	
Sample Species	Yellow Perch		Yellow Perch		Yellow Perch		White Sucker		Yellow Perch		White Sucker		Yellow Perch		White Sucker	
Wet Weight	5.21		5.49		5.10		5.51		5.16		5.50		5.96		5.58	
Matrix	Tissue		Tissue		Tissue		Tissue		Tissue		Tissue		Tissue		Tissue	
% solid	23.5		19.9		21.3		20.1		19.9		24.4		23.3		21.9	
% Lipid	2.3		2.6		2.6		15.0		4.8		13.7		7.6		14.4	
Reporting Units	ng/g		ng/g		ng/g		ng/g		ng/g		ng/g		ng/g		ng/g	
Calculation Basis (dry/w	Wet		Wet		Wet		Wet		Wet		Wet		Wet		Wet	
Chlorination 3																
PCB 28/31	ND		ND		0.00		0.31		ND		ND		ND		0.39	
Chlorination 4																
PCB 44	ND		0.14	J	0.59		0.35		ND		ND		ND		ND	
PCB 49	0.10	J	0.14	J	0.53		0.43		ND		ND		ND		0.26	
PCB 52	0.29		ND		ND		0.28		ND		ND		ND		ND	
PCB 66 (88/95)*	0.07	J	0.09	J	0.60		ND		ND		ND		ND		ND	
PCB 70	0.27		0.33		1.65		1.78		ND		ND		ND		ND	
PCB 74	ND		0.11	J	0.75		0.66		ND		ND		ND		ND	
PCB 80	ND		ND		ND		ND		ND		ND		ND		ND	
Chlorination 5																
PCB 84/92	ND		0.20		2.20		0.60		ND		ND		ND		ND	
PCB 85	0.15	J	0.19		1.75		0.79		ND		ND		ND		ND	
PCB 87 (81)*	0.38		0.33		2.78		1.37		ND		ND		ND		0.18	
PCB 88/95 (66)*	0.33		0.36		2.91		0.99		ND		ND		ND		0.17	J
PCB 91	ND		0.05	J	0.52		0.27		ND		ND		ND		ND	
PCB 97	0.20		0.18	J	1.98		0.90		ND		ND		ND		0.10	J
PCB 99	0.36		0.36		3.23		1.83		0.26		0.85		0.05	J	0.39	
PCB 101	0.56		0.57		5.79		2.33		ND		ND		0.08	J	0.47	
PCB 105	0.30		0.33		2.91		1.16		0.17	J	ND		ND		0.18	J
PCB 107/123 (149)*	ND		ND		0.82		0.55		ND		ND		ND		ND	
PCB 108	0.32		ND		ND		ND		0.54		0.84		2.75		0.97	
PCB 110 (154)*	0.87		0.95		8.46		3.27		0.49		1.08		ND		0.58	
PCB 118	0.82		0.86		7.64		3.78		0.48		1.57		ND		0.72	
Chlorination 6																
PCB 128	0.27		0.25		2.19		1.01		ND		ND		ND		0.24	
PCB 130	ND		ND		0.53		0.23		ND		ND		ND		ND	
PCB 132/153/168	0.74		0.74		5.85		5.34		0.91		3.45		0.37		1.56	
PCB 134	ND		ND		0.35		0.13	J	ND		ND		ND		ND	
PCB 135	ND		ND		0.80		ND		ND		ND		ND		ND	
PCB 136	ND		ND		0.59		0.31		ND		ND		ND		ND	
PCB 137	ND		ND		0.51		0.31		ND		ND		ND		ND	
PCB 138/158	0.97		0.95		8.27		5.48		0.96		2.97		0.23		1.23	
PCB 141	ND		0.09	J	0.75		0.41		ND		ND		ND		ND	
PCB 144	ND		ND		ND		0.34		ND		ND		ND		ND	
PCB 146	ND		ND		0.80		0.66		ND		ND		ND		ND	
PCB 149 (107/143)*	0.46		0.51		3.70		2.20		0.53		1.08		ND		0.50	
PCB 151	ND		0.15	J	0.93		0.65		0.20		ND		ND		0.15	J
PCB 155	0.37		0.38		0.47		0.41		0.45		ND		0.36		0.35	
PCB 156	ND		0.19		1.50		0.90		ND		ND		ND		0.16	J
PCB 157 (201)*	ND		ND		0.41		ND		ND		ND		ND		ND	
PCB 160	0.33		0.40		2.80		1.86		0.43		1.25		ND		0.52	
PCB 167 (185)*	ND		ND		0.53		0.41		ND		ND		ND		ND	
PCB 169	ND		ND		0.00		ND		ND		ND		ND		ND	
Chlorination 7																
PCB 170/190	ND		0.14	J	1.03		1.26		ND		0.74		ND		0.28	
PCB 171	ND		ND		0.31		0.31		ND		ND		ND		ND	
PCB 174	ND		ND		0.43		0.55		ND		0.50		ND		0.16	J
PCB 175 (166)*	0.12	J	0.14	J	ND		0.24		0.22		ND		0.15	J	0.11	J
PCB 177	ND		ND		0.36		0.52		0.16	J	0.59		ND		0.12	J
PCB 178 (129)*	ND		ND		ND		0.26		ND		ND		ND		ND	
PCB 179	ND		ND		0.39		0.36		ND		ND		ND		0.11	J
PCB 180/193	0.32		0.25		1.17		2.28		0.60		2.41		0.23		0.72	
PCB 182/187	0.27		0.25		0.96		1.71		0.64		1.77		0.12	J	0.50	
PCB 183	ND		ND		0.54		0.57		ND		0.55		ND		0.15	J
PCB 184	ND		0.13	J	ND		ND		ND		ND		ND		0.12	J
PCB 188	ND		ND		ND		ND		ND		ND		ND		ND	
Chlorination 8																
PCB 194	ND		ND		ND		0.61		ND		ND		ND		0.19	
PCB 195 (208)*	ND		ND		ND		0.29		ND		ND		ND		ND	
PCB 196/203	ND		ND		ND		1.23		ND		ND		ND		ND	
Chlorination 9																
PCB 206	ND		ND		ND		0.39		ND		ND		ND		0.17	J
PCB 208	ND		ND		ND		0.16	J	ND		ND		ND		ND	
Total PCBs	8.85		9.76		81.82		53.03		7.03		19.67		4.34		11.77	
PCB Homologs by Chlorination Level	**Conc**		**Conc**		**Conc**		**Conc**		**Conc**		**Conc**		**Conc**		**Conc**	
Chlorination 1	ND		ND		ND		ND		ND		ND		ND		ND	
Chlorination 2	ND		ND		ND		ND		ND		ND		ND		ND	
Chlorination 3	ND		ND		ND		0.31	J	ND		ND		ND		0.39	J
Chlorination 4	0.73	J	0.79	J	4.11		3.51		-0.06	J	ND		ND		0.26	J
Chlorination 5	4.27		4.38		41.32		17.83		1.93	J	4.34		2.88		3.75	
Chlorination 6	3.15		3.67		31.19		20.65		3.47		8.76		0.97	J	4.69	
Chlorination 7	0.70	J	0.91	J	5.20		8.05		1.62	J	6.57		0.50	J	2.26	
Chlorination 8	0.00		ND		ND		2.14		ND		ND		ND		0.19	J
Chlorination 9	ND		ND		ND		0.54	J	ND		ND		ND		0.17	J
Chlorination 10	ND		ND		ND		ND		ND		ND		ND		ND	

Congeners shown in bold italics are considered to be "dioxin-like"
J estimated value
ng/g nanograms per gram
ND not detected
% percent

Figures

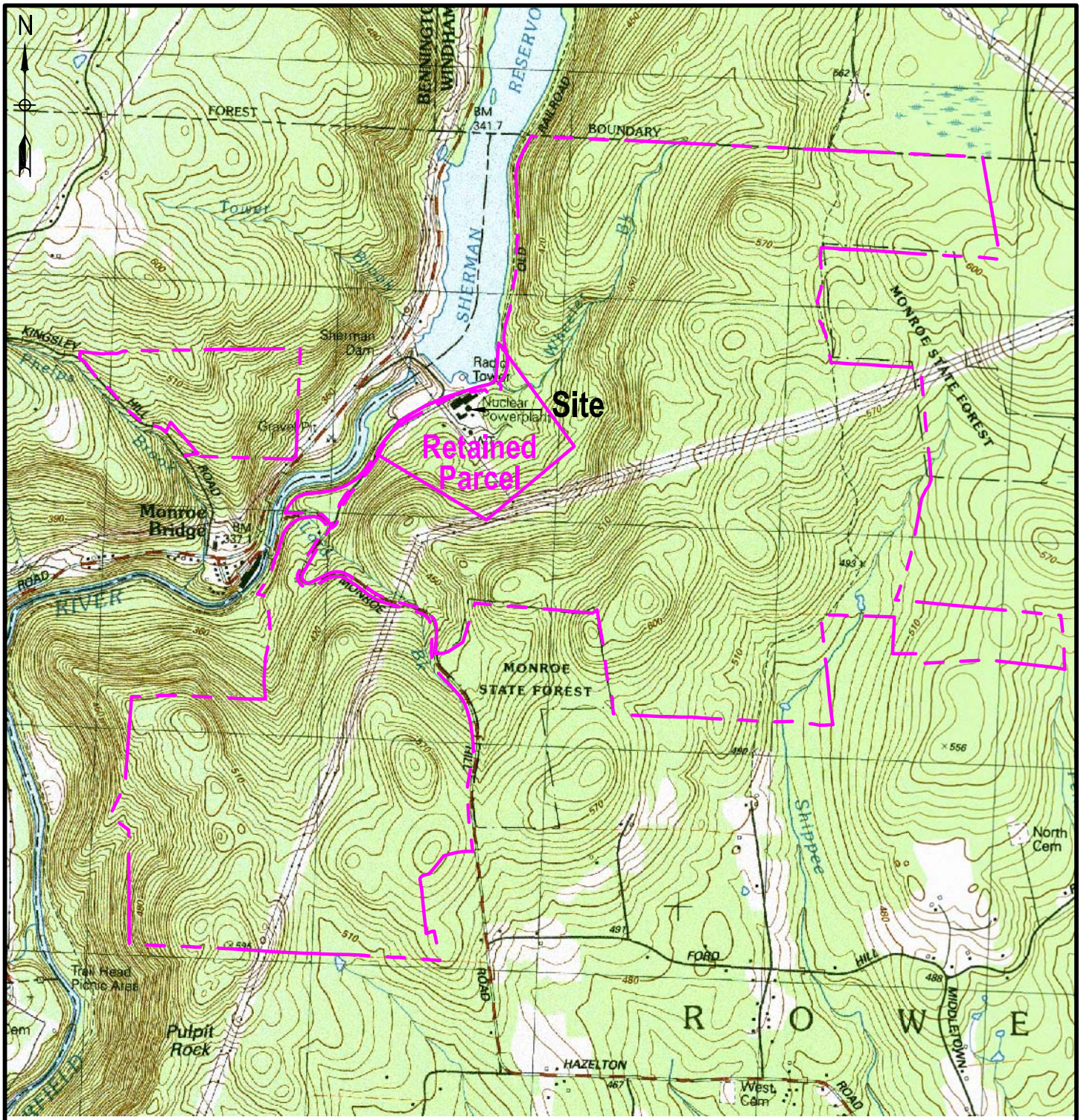

Figure 1 - Locus Map
Yankee Nuclear Power Station - Rowe, MA

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N

Sherman Dam

Sherman Reservoir

Sherman Spring

Sherman Powerhouse

Deerfield River

Discharge Structure

Intake Structure

East Storm Drain Outfall

TransCanada

YAEC

Wheeler Brook

West Storm Drain Outfall

Service Building

Warehouse

Office

Turbine Building

Gatehouse Security

Transformer Yard

Vapor Container (VC)

Fuel Storage

Diesel Generator Building

PAB

Rad Waste Warehouse Complex

Old PCA

New PCA

Fire/wtr Pumphouse

Admin Building

Tributary to Wheeler Brook

Southeast Construction Fill Area

ISFSI

West Storm Drain Ditch

TransCanada

YAEC

Wheeler Brook Divertment

Legend

YAEC Property Boundary

Edge of Water/Stream

Fence

Former Structures

Existing Structures

Scale (1"=160')

160' 0 80' 160' 320'

Figure 2 - Site Layout

Yankee Nuclear Power Station - Rowe, MA

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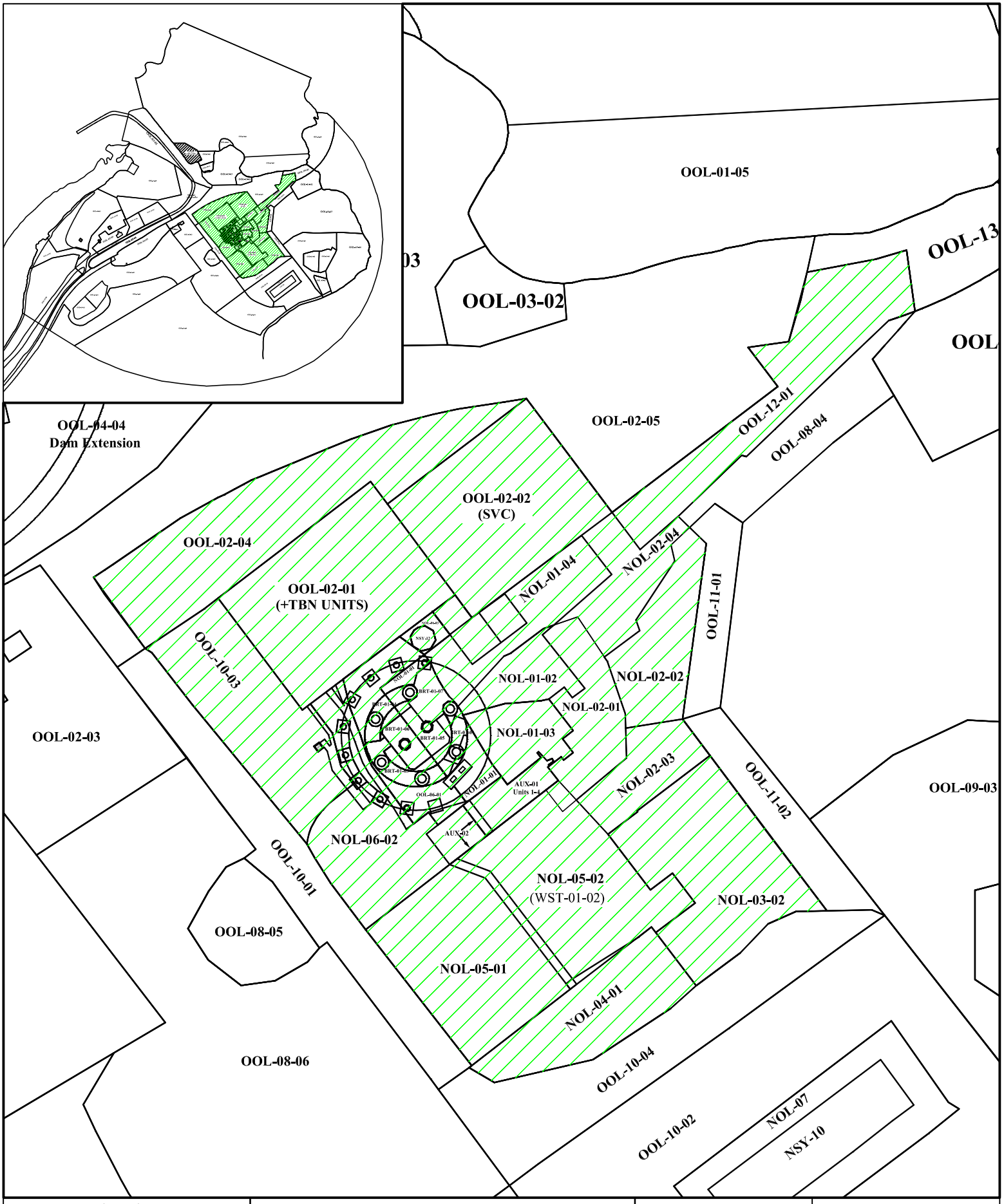
OOL-01-05
OOL-03-02
OOL-13
OOL-04-04
Dam Extension
OOL-02-05
OOL-12-01
OOL-08-04
OOL-02-02
(SVC)
OOL-02-04
OOL-02-01
(+TBN UNITS)
NOL-01-04
NOL-02-04
OOL-11-01
OOL-10-03
NOL-01-02
NOL-02-02
NOL-02-01
OOL-02-03
NOL-01-03
NOL-02-03
OOL-11-02
OOL-09-03
AUX-01
Units 1-4
AUX-02
NOL-06-02
OOL-10-01
NOL-05-02
(WST-01-02)
NOL-03-02
OOL-08-05
NOL-05-01
NOL-04-01
OOL-10-04
OOL-08-06
OOL-10-02
NOL-07
NSY-10
Legend
= Survey Unit Boundary
XXX - ## - ## = Survey Unit Designation
= Area of Interest
FIGURE 3
Radiological Soil Sample Locations
Yankee Atomic Power Company
Prepared by: R. Tozzie
Date: Sept. 19, 2006

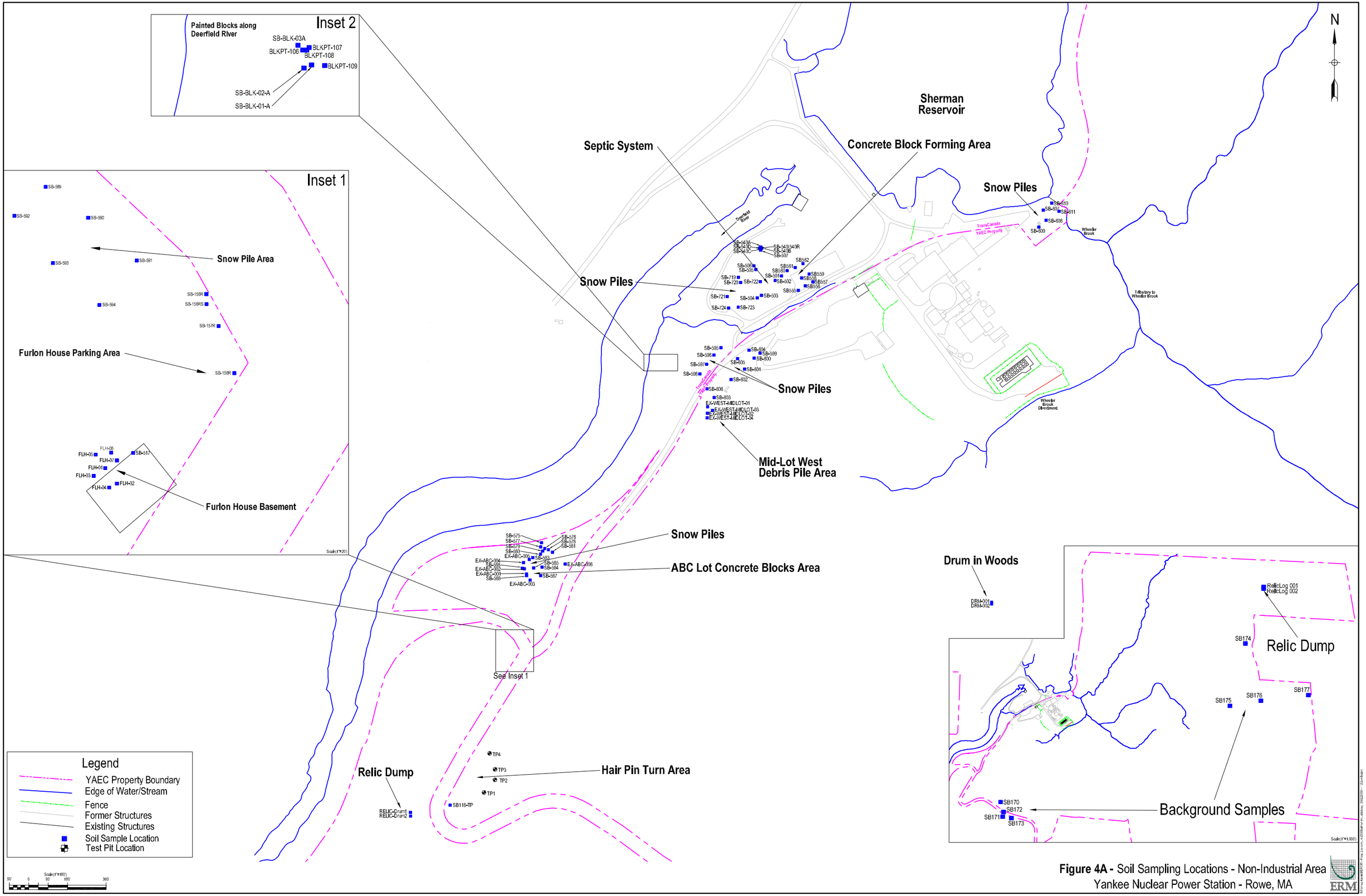

Figure 4A - Soil Sampling Locations - Non-Industrial Area
Yankee Nuclear Power Station - Rowe, MA

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Inset 1

Peninsula

Sand Blast Grit Area

Scale(1"=16')

See Inset 1

Fuel Spill 164 Area

Turbine Building Office Area

Baffle Tank Area

Railroad Ties Area

Warehouse Garage Area

Service Building Soil Gas

Fuel Oil Tank Area

See Inset 3

Inset 3

Railroad Tracks Area

Scale(1"=8')

N

Firewater Pumphouse Drywell Area

Inset 4

Scale(1"=8')

Legend

- YAEC Property Boundary
- Edge of Water/Stream
- Fence
- Former Structures
- Existing Structures
- Soil Sample Location
- Soil Gas Sample Location
- Test Pit Location
- Composited Soil Grab Samples

Dioxin Area

Bulldozer Spill Area

Potable Water Tank Area

Potable Water Tank

See Inset 2

Firewater Tank (Tank55) Area

Inset 2

South Yard Sand Blast Grit Area

Scale(1"=16')

Scale(1"=40')

Old Shooting Range

See Inset 4

Figure 4B - Soil Sampling Locations - Industrial Area
Yankee Nuclear Power Station - Rowe, MA

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N

Legend
- YAEC Property Boundary
- Edge of Water/Stream
- Fence
- Former Structures
- Existing Structures
- Active Monitoring Well Location
- Abandoned Monitoring Well Location

Sherman Dam
Sherman Reservoir
Sherman Spring
Sherman Powerhouse
Deerfield River
MW-106A/B/C/D
MW-108A/B/C
CW-10
TransCanada YAEC
Wheeler Brook
CB-6
West Storm Drain Outfall
CW-7
MW-105A/B/C
MW-104D
MW-104A/B/C
CB-2
MW-112A
CW-5
CW-5R
MW-113A/C
HA-1
CW-8
CFW-6
CB-4
CB-1
B-1
MW-100A/B
MW-103A/B/C
CW-6
MW-111A/B/C
MW-102A/B/C/D
CB-9
MW-107A/B/C/D/E/F
MW-109A/B/C/D
MW-110A/B/C/D
CB-10
MW-5
CW-3
Tributary to Wheeler Brook
MW-101A/B/C
CW-11
CFW-5
MW-6R
MW-6
MW-2
CB-11A
MW-1
CFW-3
CFW-4
CB-12
CB-8
CB-7
CFW-7
CW-2
CW-4
CFW-2
Southeast Construction Fill Area
CB-3
CB-3R
CB-5
OSR-1
ISFSI
CFW-1
Wheeler Brook Divertment
West Storm Drain Ditch
TransCanada YAEC

Scale (1"=160')
160' 0 80' 160' 320'

Figure 5 - Groundwater Monitoring Network
Yankee Nuclear Power Station - Rowe, MA

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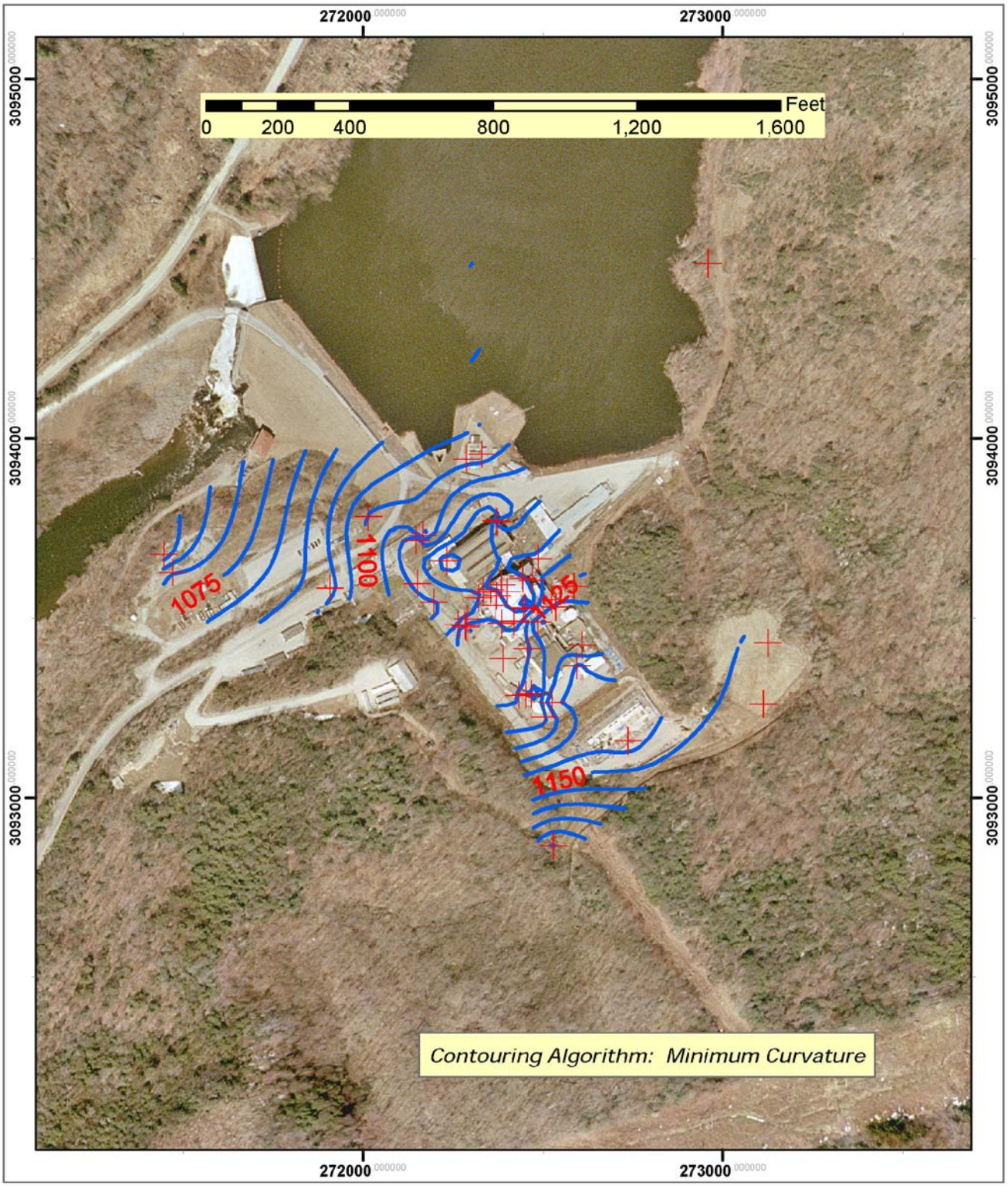
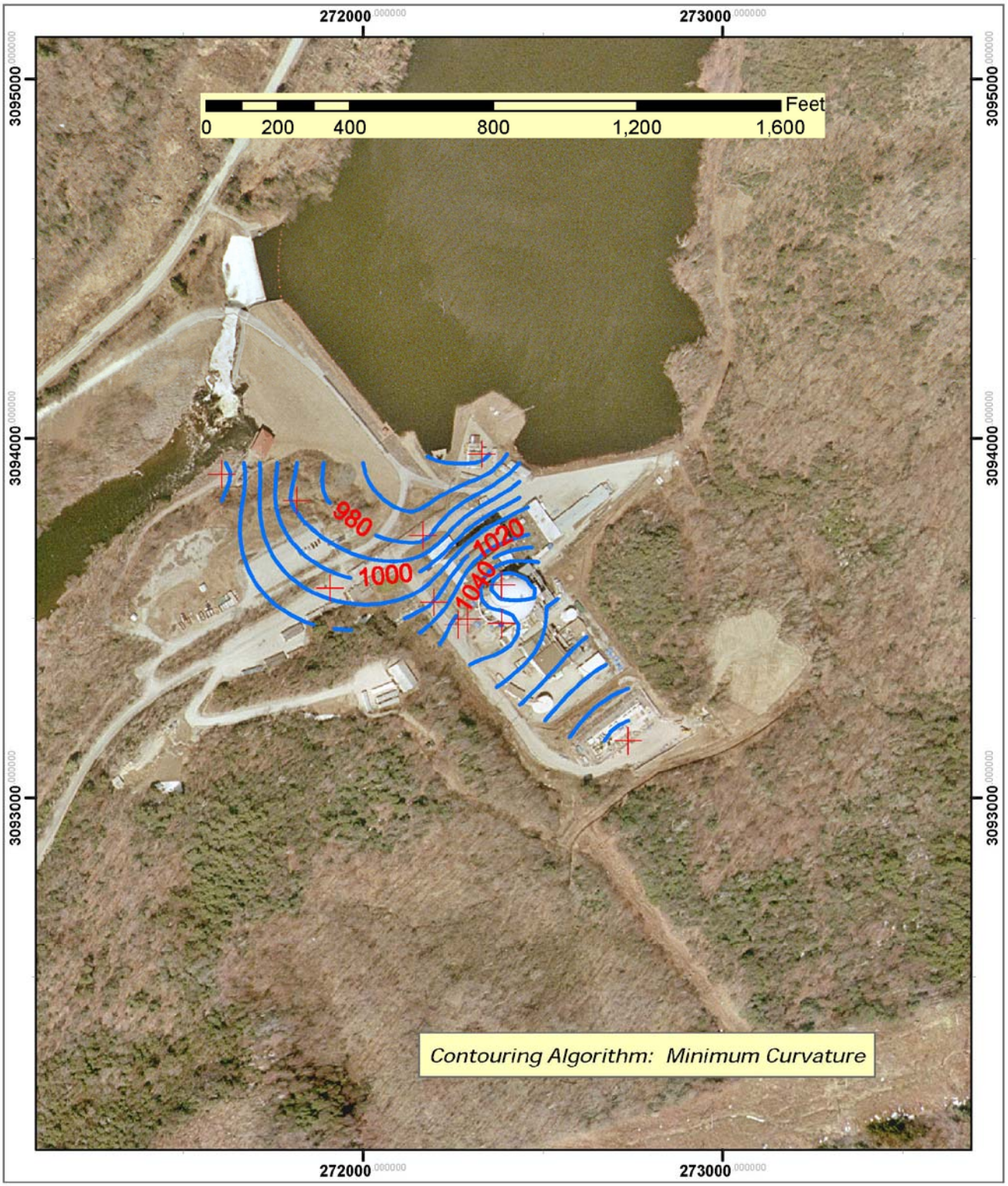
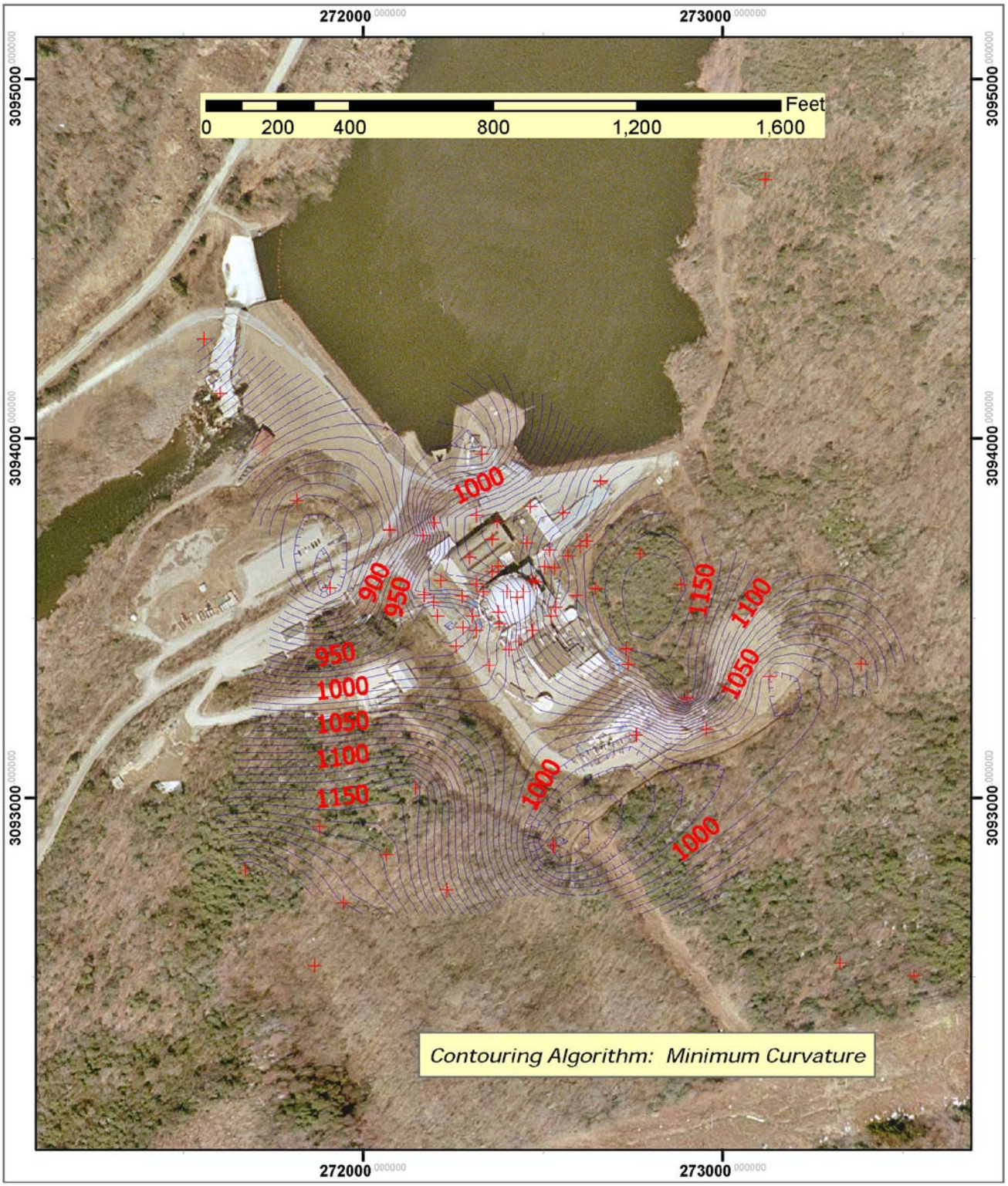


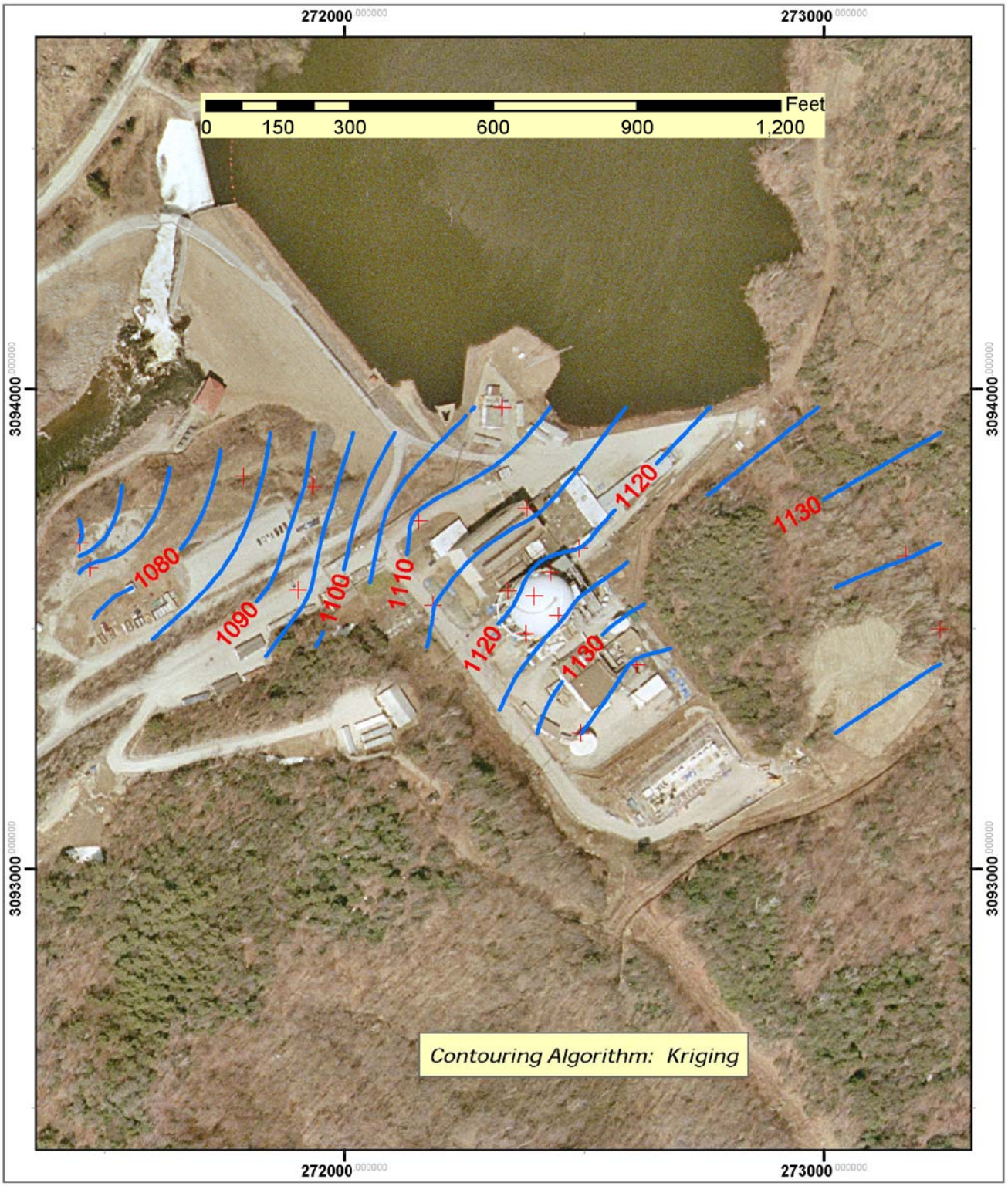
Yankee Nuclear Power Station Rowe, MA	Till Surface Contours and Data Points Contour Interval 5' NAVD88, Ft.	N W E S 8/22/06	6A Figure



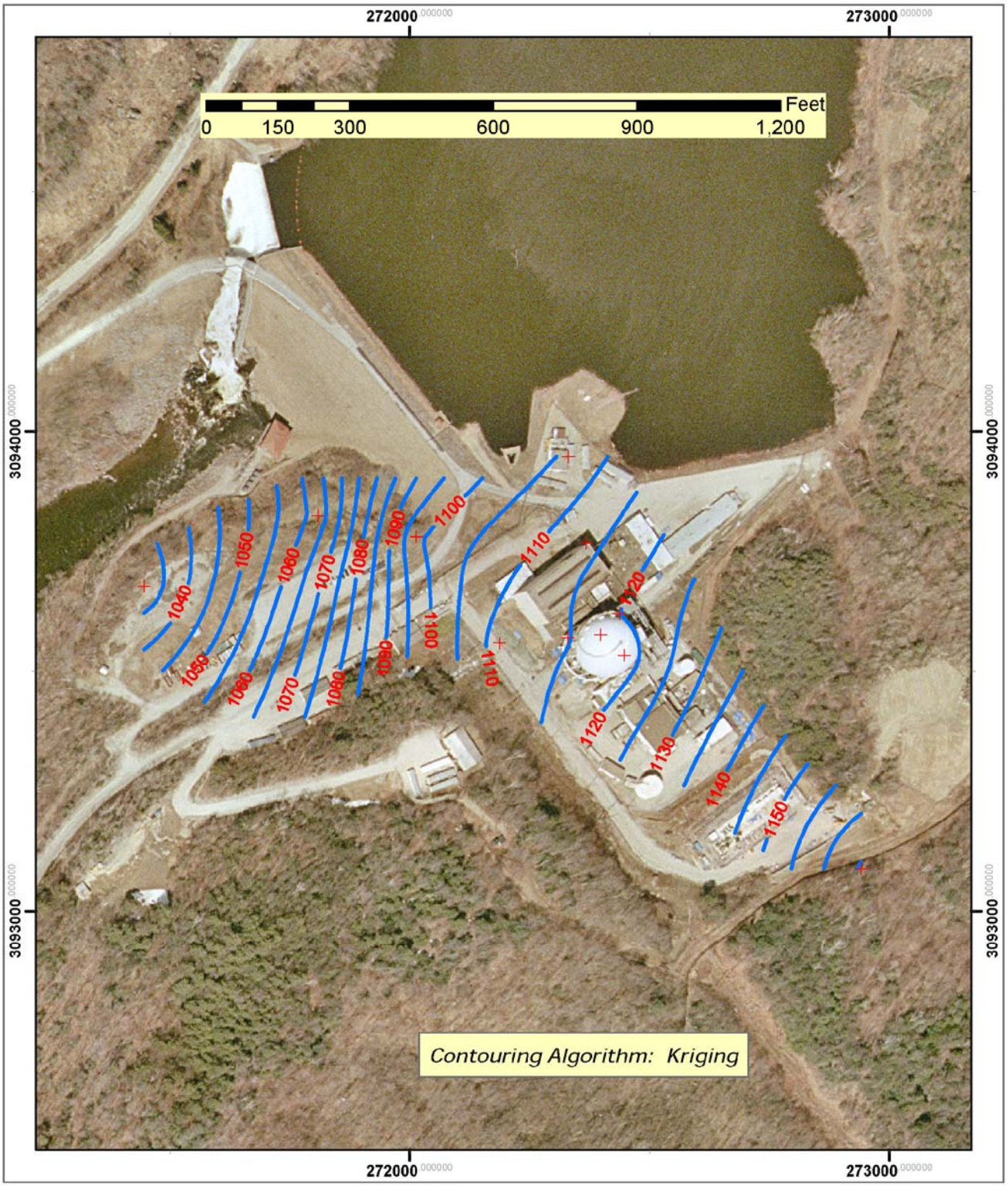
Yankee Nuclear Power Station Rowe, MA	*Glaciolacustrine Surface Contours and Data Points* *Contour Interval 10' NAVD88, Ft.*	N W E S *8/22/06*	6B *Figure*



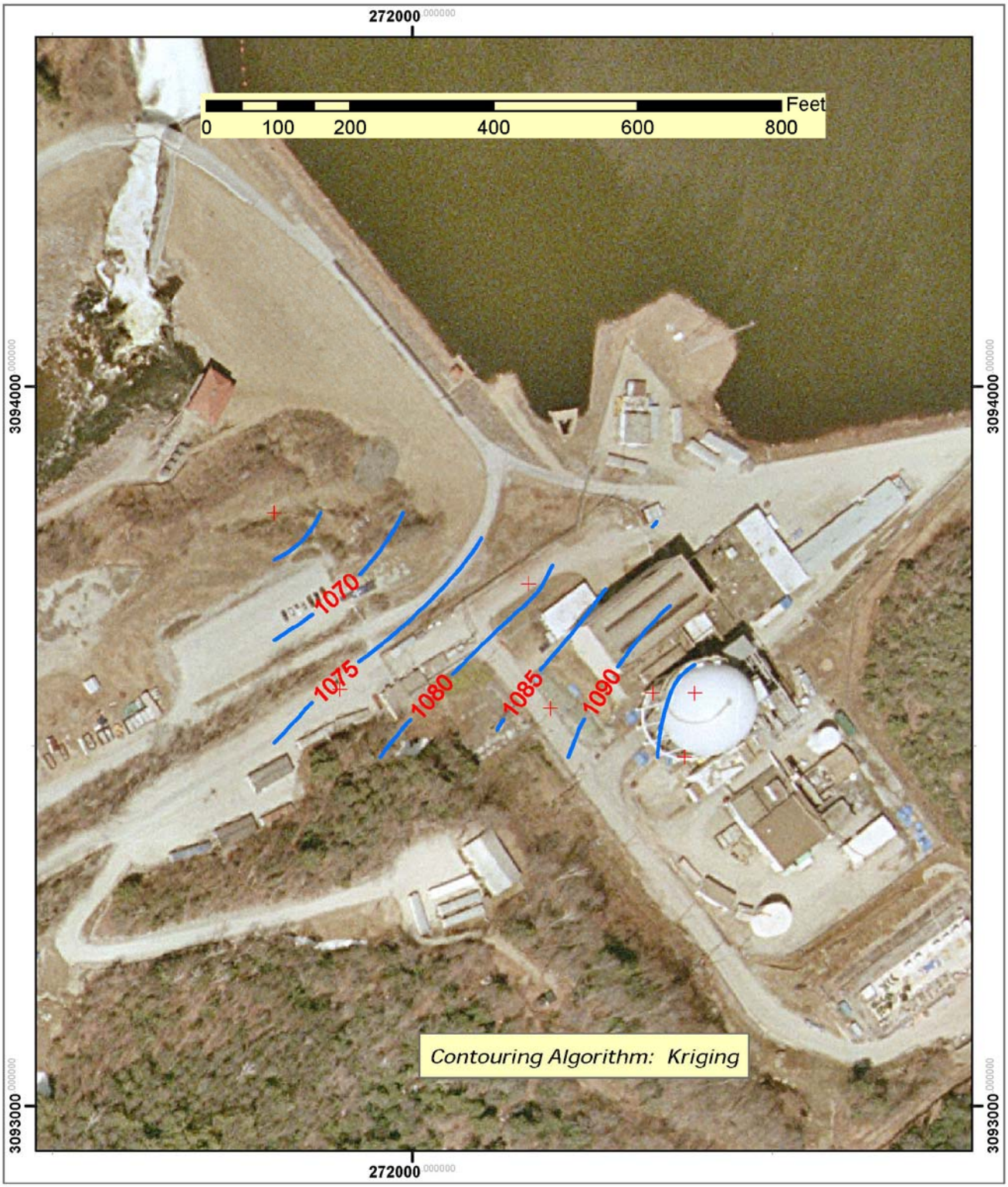
Yankee Nuclear Power Station Rowe, MA	*Bedrock Surface Contours and Data Points* *Contour Interval 10' NAVD88, Ft.*	N W E S *8/22/06*	6C *Figure*



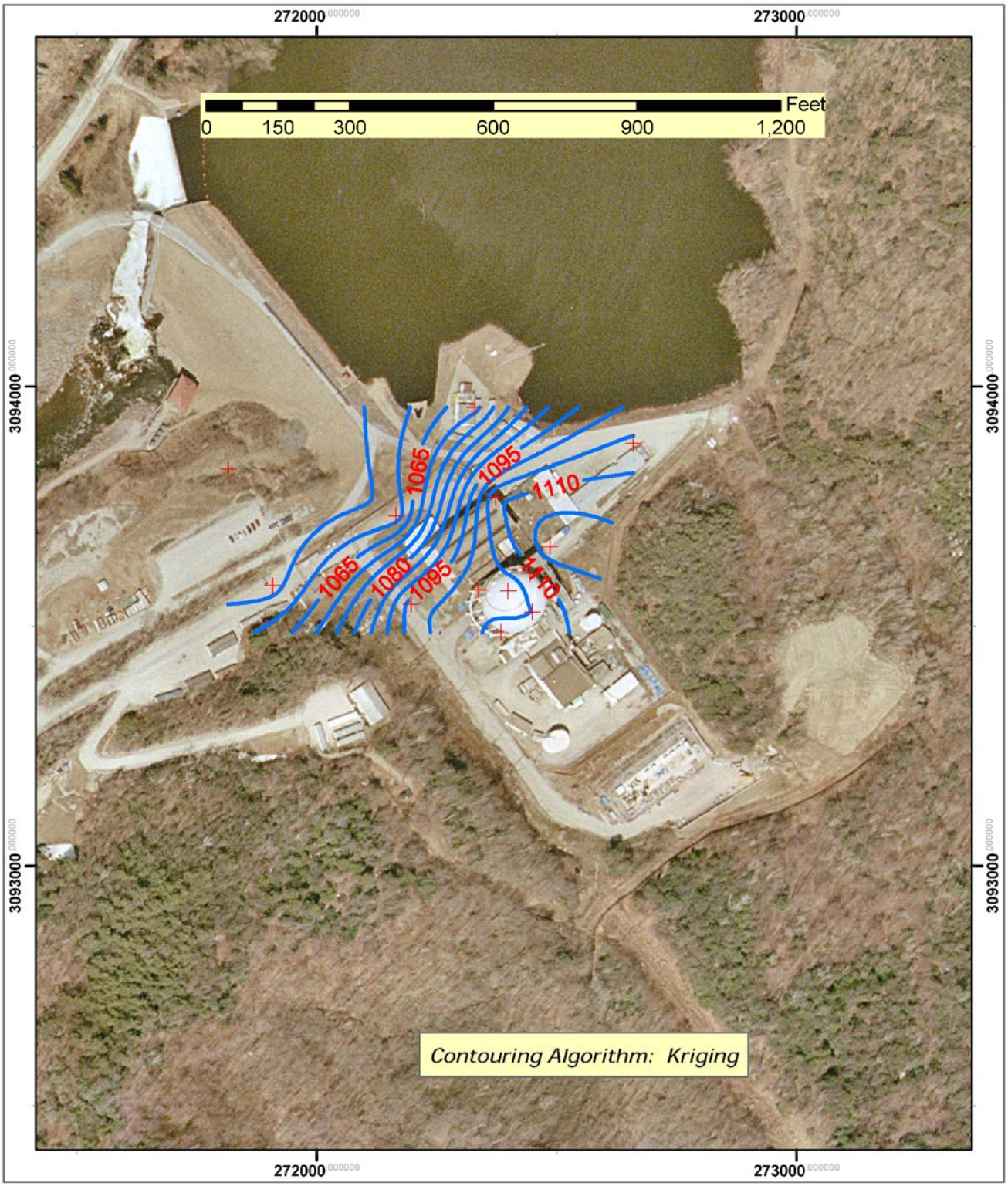
Yankee Nuclear Power Station Rowe, MA	6/26/06 Glaciofluvial Groundwater Contours and Data Points Contour Interval 5' NAVD88, Ft.	N W E S 8/23/06	7A Figure



Yankee Nuclear Power Station Rowe, MA	6/26/06 Groundwater Elevation in Upper Till and Data Points Contour Interval 5' NAVD88, Ft.	N W E S 8/26/06	7B Figure



Yankee Nuclear Power Station Rowe, MA	*6/26/06 Groundwater Elevation in Lower Till & Glaciolacustrine and Data Points* *Contour Interval 5'* *NAVD88, Ft.*	N W E S *8/23/06*	7C *Figure*



Yankee Nuclear Power Station Rowe, MA	*6/26/06 Groundwater Elevation in Bedrock and Data Points* *Contour Interval 5'* *NAVD88, Ft.*	N W E S *8/23/06*	7D *Figure*

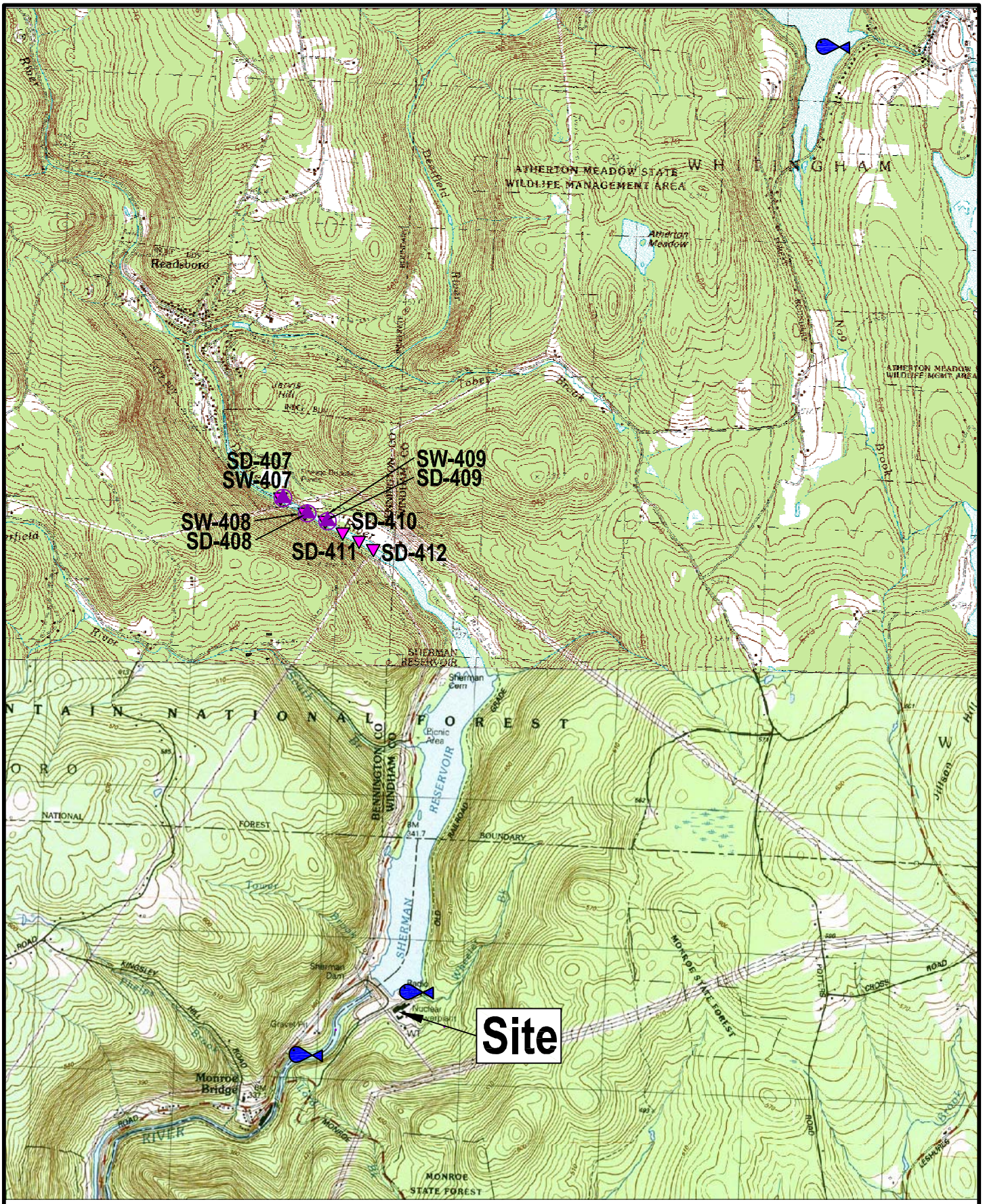


Figure 8A - Sampling Locations - Background Sediment and Surface Water and Fish
Yankee Nuclear Power Plant - Rowe, MA

ERM

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N

Scale (1"=180')

90' 0 90' 180' 360'

Legend

Edge of Water/Stream

Fence

SD-235 Sediment Samples

SD-235 Surface Water Samples

A

SD-012RN

10'

SD-012RW SD-012R SD-012R2 SD-012RE

SD-012RS

B

SD-008N

10'

SD-008W SD-008R SD-008R2 SD-008R3 SD-008E

SD-008S

SD-041R

Sherman Reservoir

SD-011R SW-011 SD-053 SD-012R (see inset A)

SD-052

SD-051

SD-050

SD-054

SD-009R

SD-057 SW-009 SD-055

SD-057R

SD-055R

SD-008R (see inset B) SW-008

SD-056

SD-223 SW-223

SD-224

SD-225

SD-220 SW-220

SD-221 SW-221

Deerfield River

SD-226 SW-226

SD-227

SD-228

SD-222 SW-222

East Storm Drain Outfall

SW-101

Wheeler Brook

SW-102

SW-103

Tributary to Wheeler Brook

SW-104

SW-105

Wheeler Brook Divertment

West Storm Drain Outfall

SD-231 SD-229 SW-229

SD-230

SD-234 SD-232 SW-232

SD-233

Unnamed Tributary to Deerfield River

SD-237 SD-235 SW-235

SD-236

SD-304R SW-304

West Storm Drain Ditch

SD-240 SD-238 SW-238 SD-239

SW-106

Note: Sample Locations are Approximate

Figure 8B - Sampling Locations - Site Sediment and Surface Water
Yankee Nuclear Power Station - Rowe, MA

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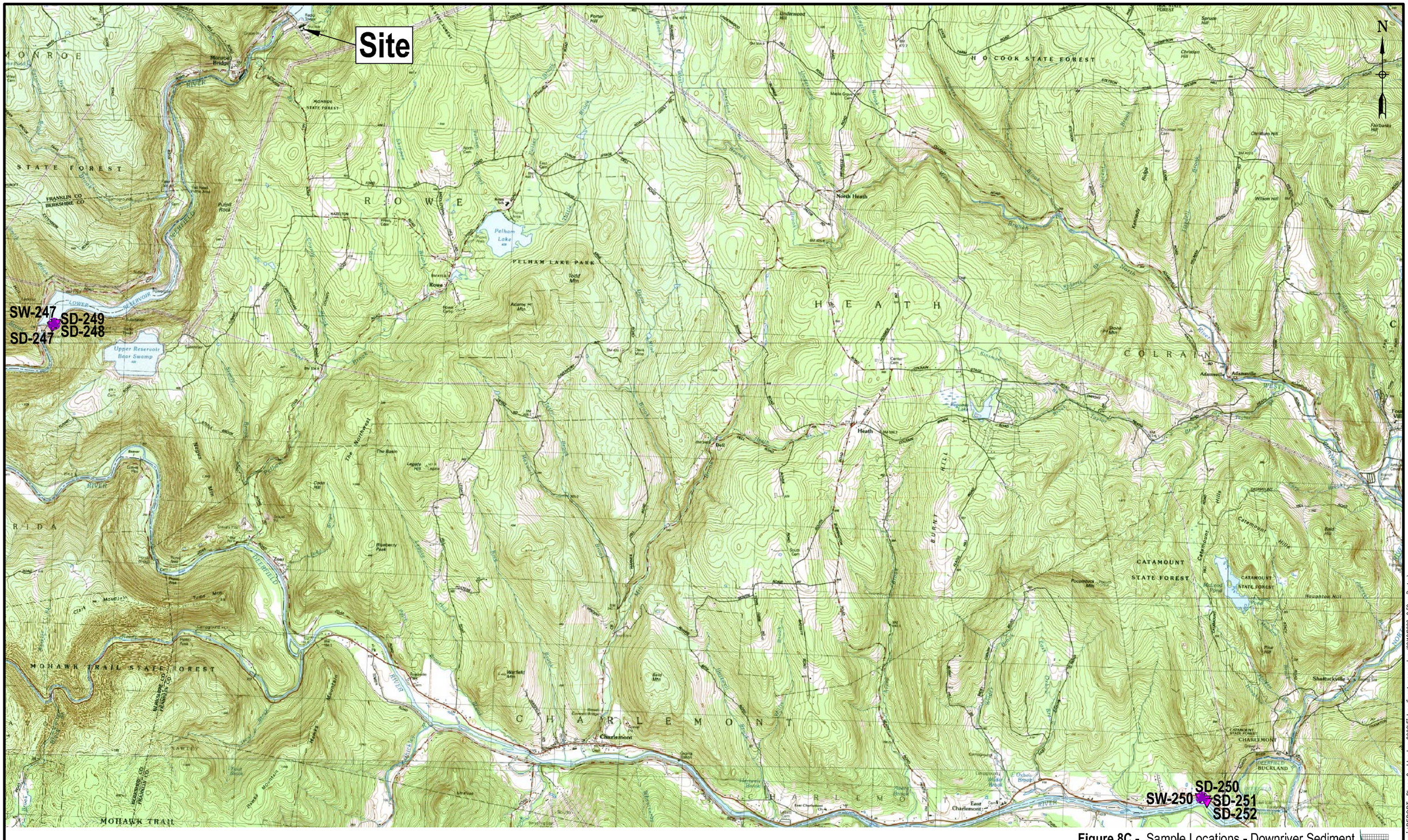

Scale (1:45,000)

Sediment Samples
Surface Water Samples

Figure 8C - Sample Locations - Downriver Sediment and Surface Water
Yankee Nuclear Power Plant - Rowe, MA

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