

June 24, 2003

LICENSEES: HADDAM NECK AND YANKEE ROWE

FACILITIES: CONNECTICUT YANKEE ATOMIC POWER COMPANY (CYAPC) AND  
YANKEE ATOMIC ELECTRIC COMPANY (YAEC)

DOCKET NOS.: 50-213 and 50-29

SUBJECT: SUMMARY OF JUNE 23, 2003, MEETING WITH CYAPC AND YAEC TO  
DISCUSS STATUS OF DECOMMISSIONING ACTIVITIES

On June 23, 2003, at 1:30 p.m., a meeting was held in the NRC Region I office between the NRC, CYAPC, and YAEC. The meeting was open for public observation. The purpose of this meeting was for CYAPC and YAEC to discuss the status of decommissioning activities at Haddam Neck and at Yankee Rowe, respectively.

Dr. Ronald Bellamy, Chief, Decommissioning and Laboratory Branch, Division of Nuclear Materials Safety, Region I, opened the meeting, and, after introductions, turned the meeting over to CYAPC and YAEC for their presentations.

YAEC Management presented overall safety performance achievements, status of the Interim Spent Fuel Storage Installation (ISFSI) Project, status of demolition preparations and schedule, and update of the License Termination Plan (LTP). Details of the Notice of Violation and Civil Penalty (\$1000) issued by the South Carolina Department of Health and Environmental Control (DHEC) regarding a recent radioactive waste shipment to the Barnwell site were also discussed.

CYAPC Management discussed the status of the Demolition and Decommissioning (D&D) contract and related transition schedule, decommissioning activities, upcoming preparations to transfer fuel to dry storage, reactor vessel removal, ground water monitoring and soil removal activities, and implementation of the LTP as it relates to the Final Status Survey Program.

Four members of the public and two members of the media participated in the meeting by telephone. At the end of the meeting, members of the public were offered the opportunity to ask questions of NRC, CYAPC, and YAEC officials. The following issues were discussed regarding Haddam Neck: D&D contract and related transition schedule, permit to dredge the canal for Reactor Pressure Vessel removal, groundwater and sediment sampling program, and fuel transfer activities. The issue regarding the violation and civil penalty was discussed with Yankee Rowe. Please refer to Accession No. MLXXXXXXXXX for the presentation slides and attendance list for this meeting located in the Agency Documents Access and Management Systems (ADAMS).

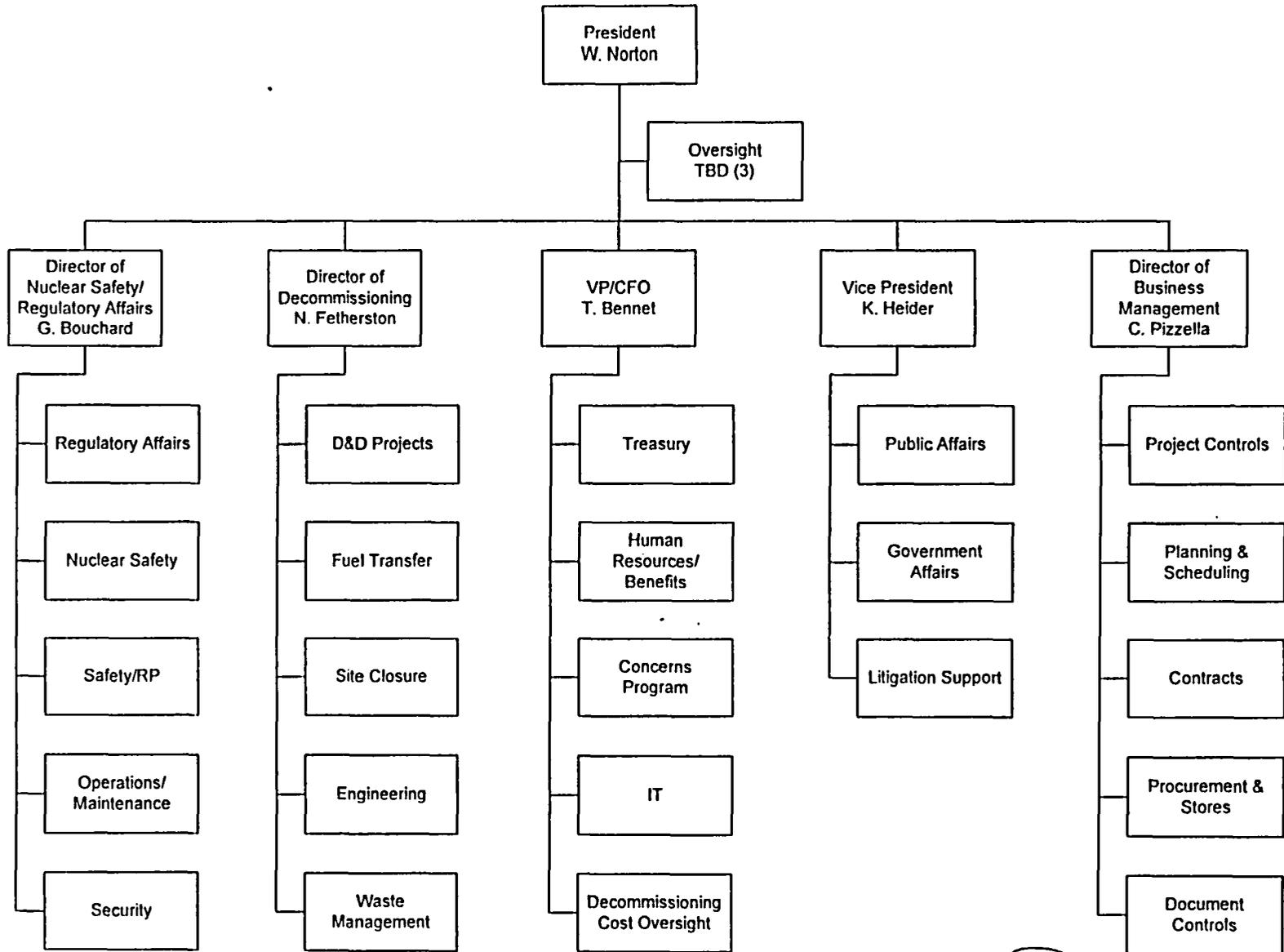
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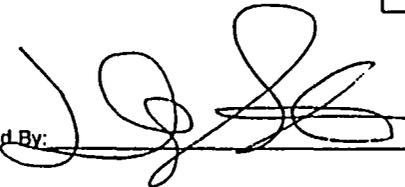
Prepared by: \_\_\_\_\_  
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Decommissioning & Laboratory Branch  
*/J. Kottan Acting for/*

Approved by: \_\_\_\_\_  
Ronald R. Bellamy, Chief  
Decommissioning and Laboratory Branch

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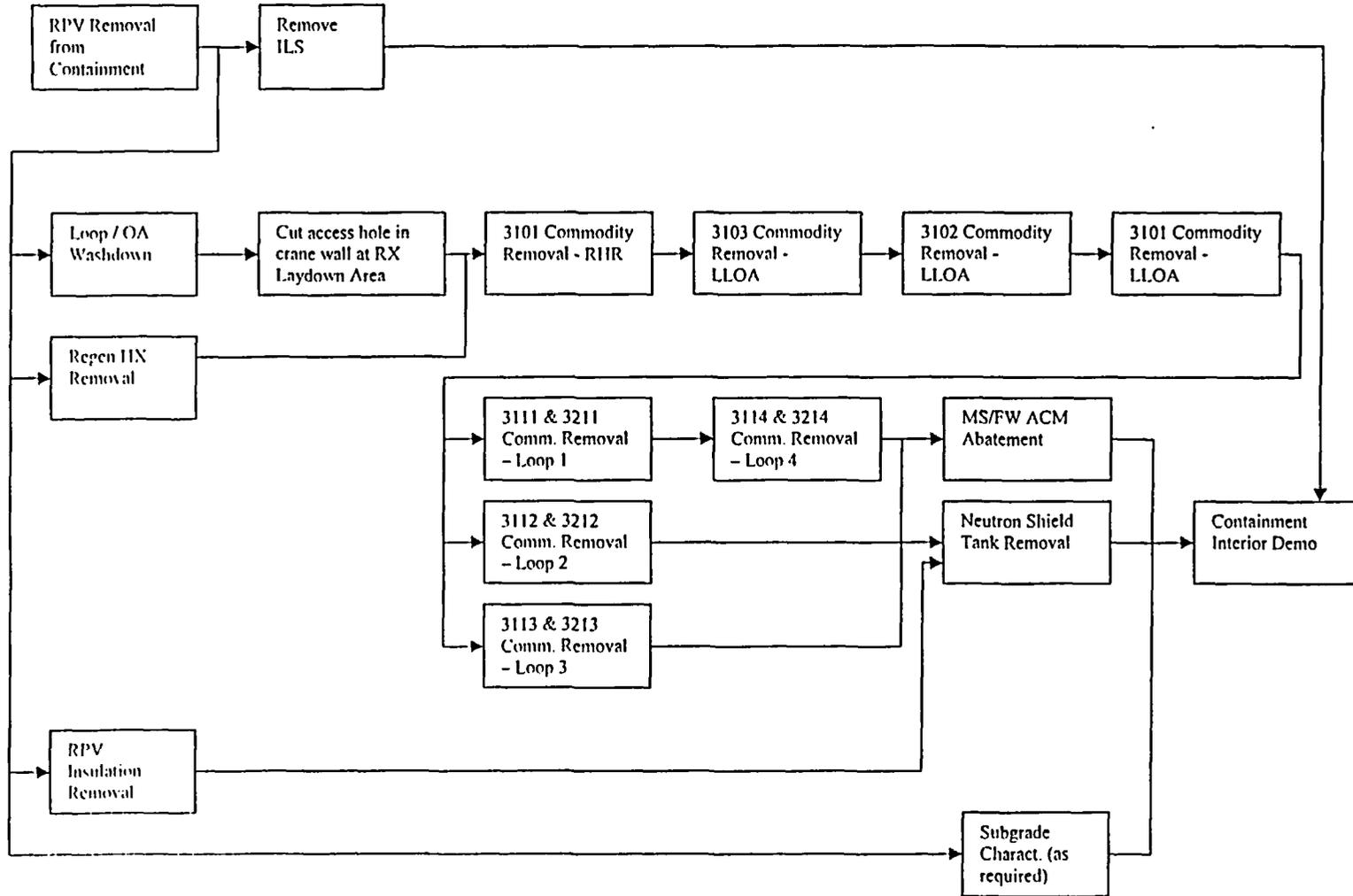
# Connecticut Yankee Organization



Approved By:  Date: 10/1/03

# CONNECTICUT YANKEE DECOMMISSIONING

## Containment Commodity Removal Logic Diagram



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# Connecticut Yankee Decommissioning

Meeting with the Connecticut Department  
of Environmental Protection

October 1, 2003



# Discussion Topics

- Introduction
- Decommissioning Update
- Groundwater Update
- Site Remediation and Release
- Final Property Disposition
- Next Steps

# Current Project Status

- Bechtel Contract Terminated Effective 7/13/03
  - Bechtel Work Transitioned to CY
  - Most Workers Returned to Project
- Current Work Focus Areas:
  - Reactor Vessel Removal and Transport
  - Preparation for Spent Fuel Transfer
  - Groundwater Investigation
  - Removal of Contaminated Soil
  - Planning & Scheduling

## Two D&D Approaches Under Consideration

- Conventional Decontamination and Demolition
  - Entire Structures Decontaminated Before Demolition
  - Above-Grade Concrete Used as Backfill
- Wholesale Structure Removal
  - Above-Grade Structures Disposed Offsite
  - Sub-Grade Structures Decontaminated
- Both Approaches Meet Regulatory Requirements
- Decision to Consider Impacts on Cost, Schedule, and Project Risk

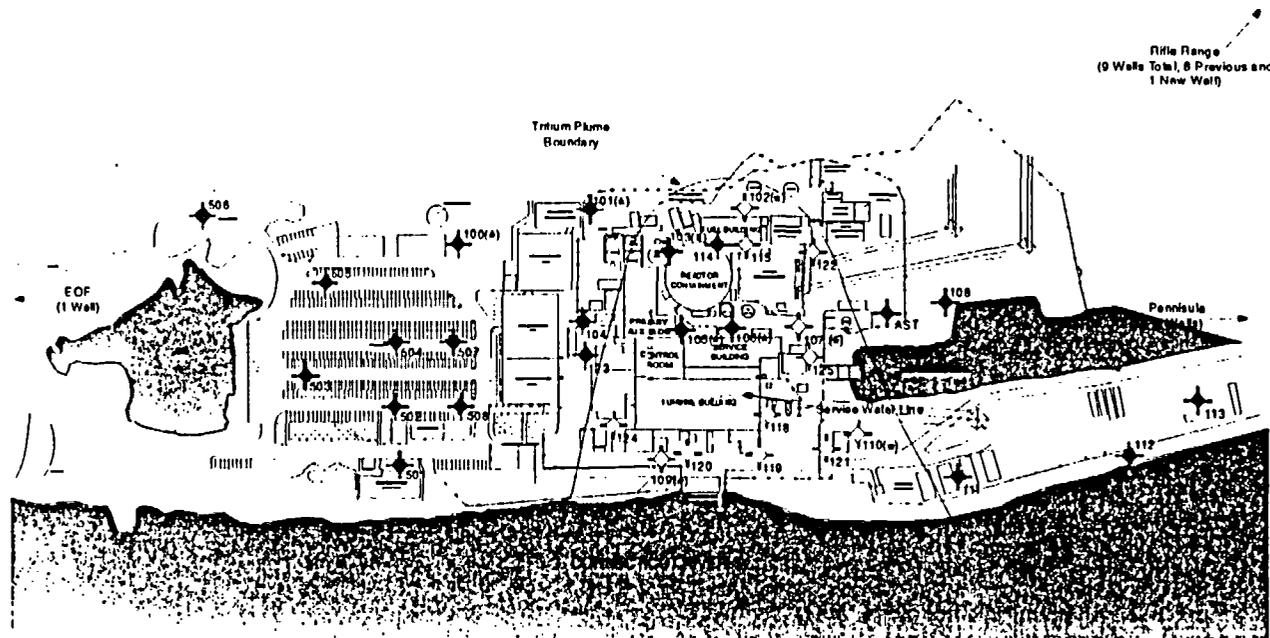
## Groundwater Must Meet Regulatory Limits to Complete Decommissioning

- CY Groundwater Contains Radioactivity From Operational Leakage
  - Refueling Water Storage Tank
  - Other Sources
- Groundwater Radioactivity Considered by Regulators
  - NRC: 25 mrem/yr
  - DEP: 19 mrem/yr + Remediation Standards
  - EPA: RCRA Corrective Action + NRC/EPA MOU

# Groundwater Contaminated Under Industrial Area

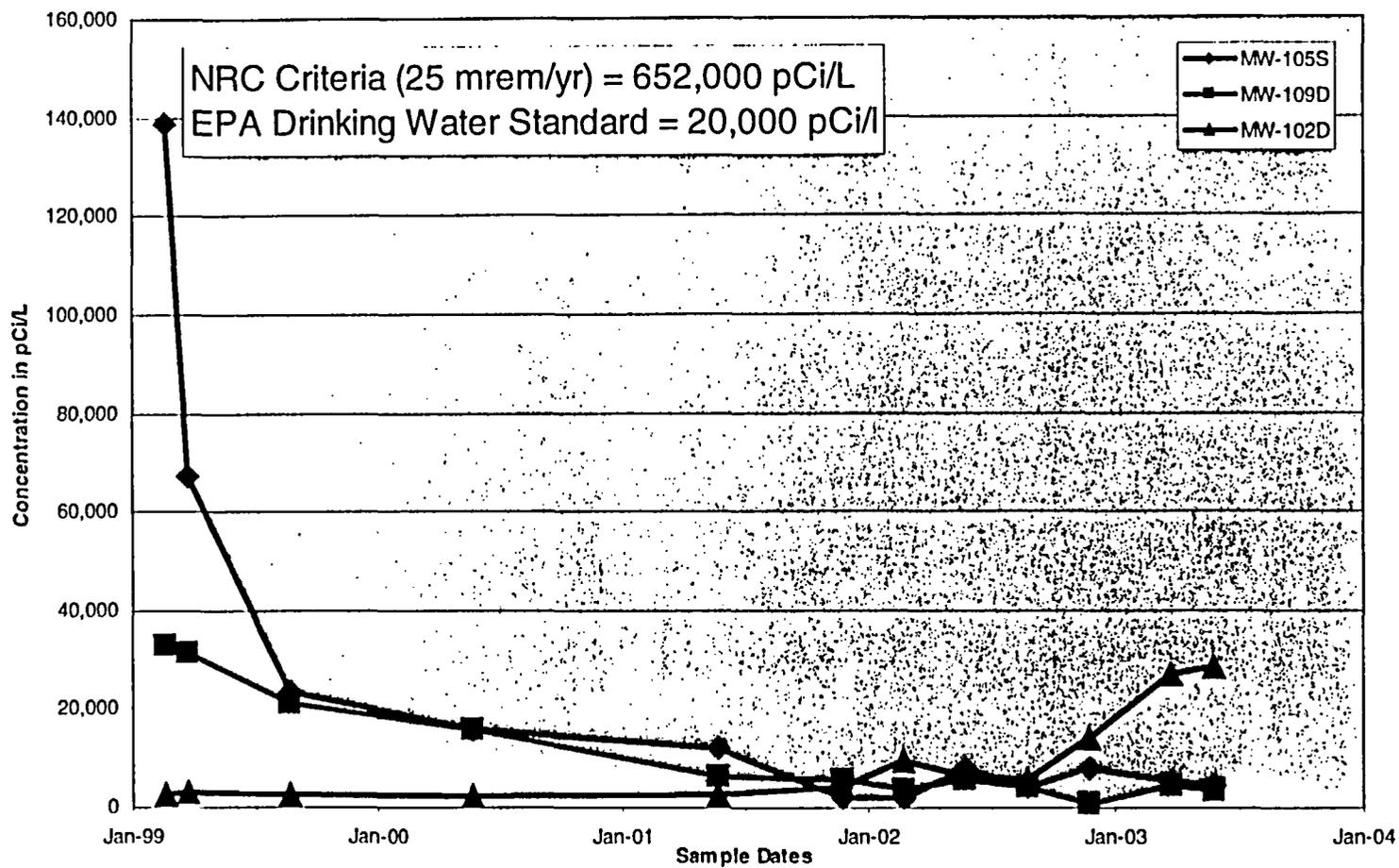
- Extensive Groundwater Evaluations Underway Since 1998
  - 13<sup>th</sup> Round of Sampling Underway (Currently 55 Wells)
  - Modeling of Site Hydrogeology
  - Soil Sampling
- Summary of Groundwater Monitoring Results:
  - Tritium in Groundwater Under Industrial Area
  - Strontium-90 in Groundwater Under RCA Near Containment
  - Strontium-90 in Soil Under PAB Tank Farm
- CT-DEP Sampling Offsite Domestic Wells

# Groundwater Monitoring Status as of 6/03 Sampling Round

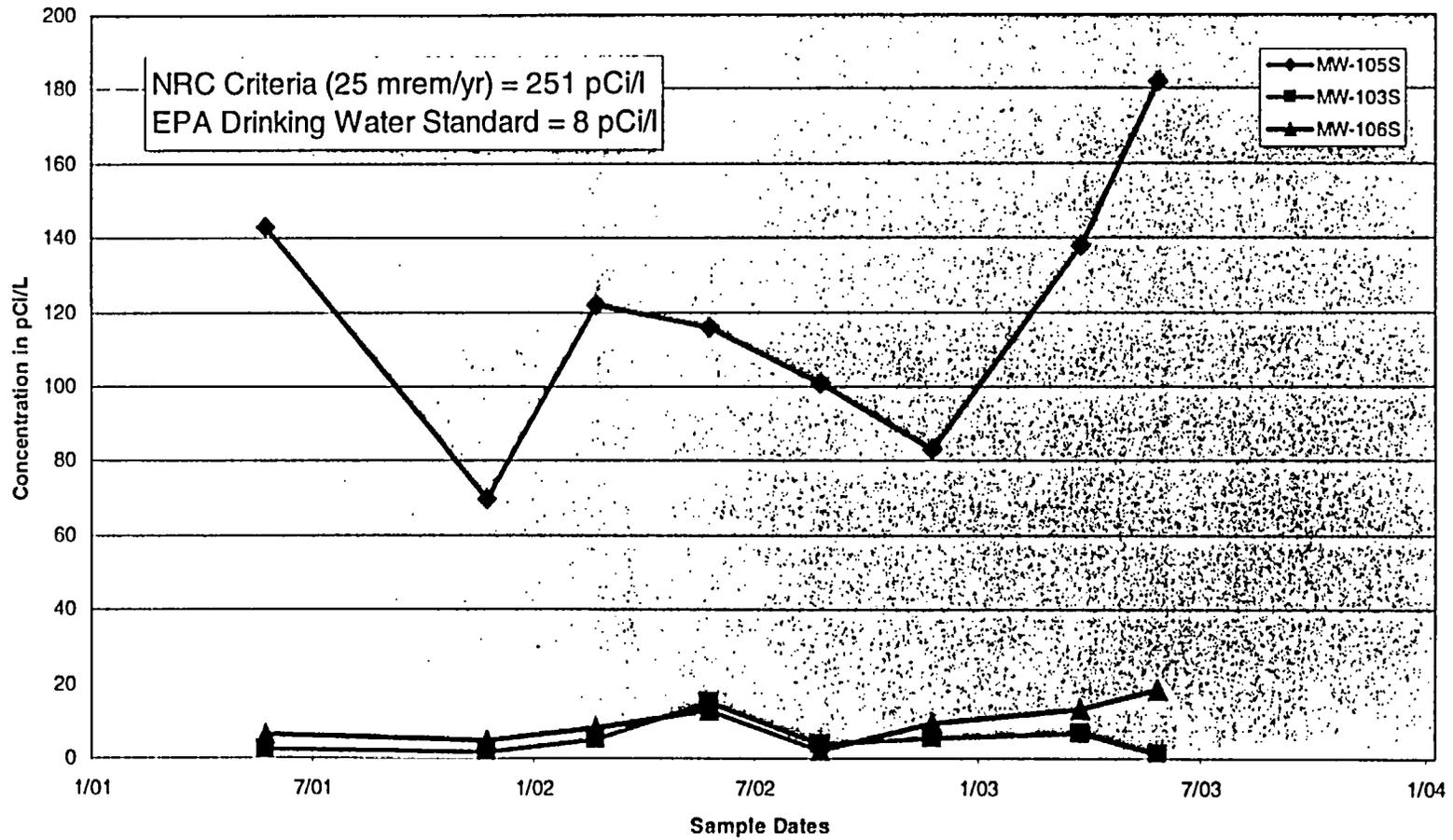


- ◆ = Well Location - No Detectable Plant Related Radioactivity over Required MDC
- ◆ = Well Location - Detectable Tritium over Required MDC (400pCi/L)
- ◆ = Well Location - Detectable Tritium and Strontium over Required MDC (2 pCi/L for Sr-90)  
(Note: Cs-137 in Well #103S is over Required MDC of 15 pCi/L)  
(Note: Sr-90 in Well #104 is at 3.1 pCi/L)
- ◆ = Well Location - New Well
- \* = Shallow and Deep Well Location

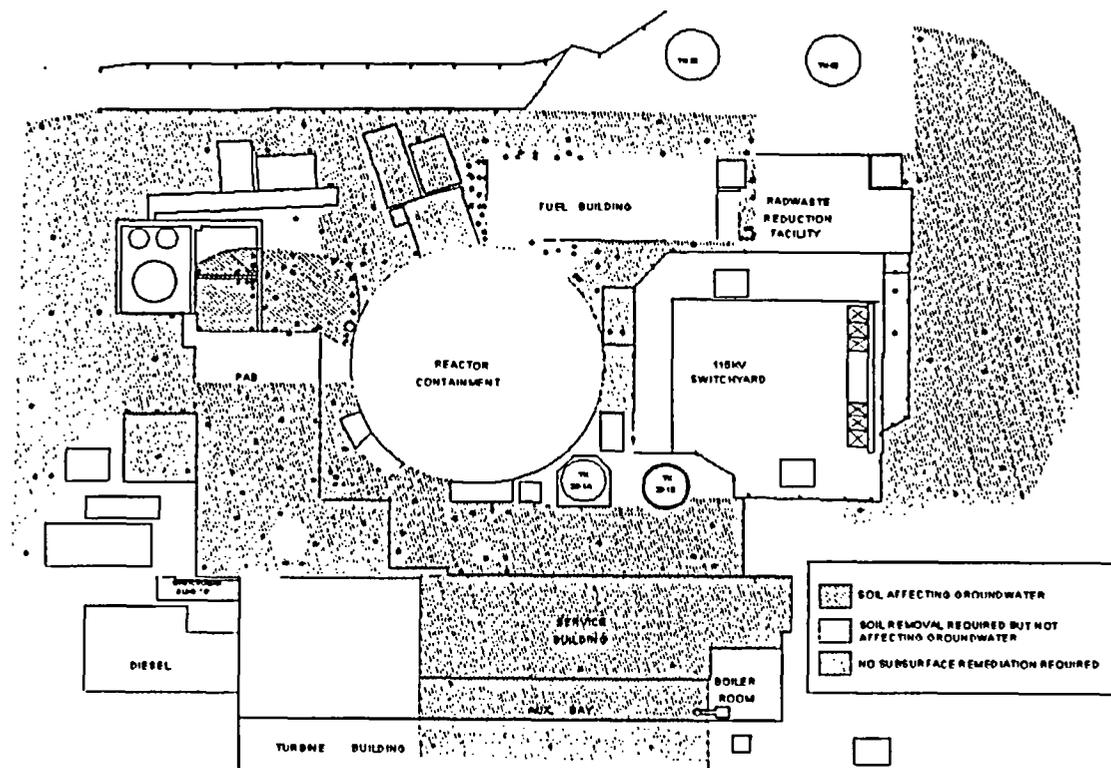
# Tritium Trend



# Strontium-90 Trend



# Subsurface Soil Contaminated Under PAB Tank Farm



# Groundwater Strategy

- Reduce Sources Contributing to Contamination
  - Remove Contaminated Soil at or Below Water Table
  - Consider Additional Groundwater Remediation
- Continue Groundwater Monitoring
  - Determine Effectiveness of Remediation Actions
  - Install and Develop Additional Monitoring Stations
  - Model Site Hydrology
- Continue to Work With Regulators
  - Collect Water Samples From Offsite Locations
  - Gain Consensus on an Approach to Meet CT Regulatory Requirements

# RCRA Corrective Action Program Update

- EPA Groundwater and Human Health Environmental Indicators Attained
- RCRA CAP Quality Assurance Project Plan Approved
  - CT-DEP RSRs Used as Cleanup Criteria
  - Combined Risk Assessment Planned
- Field Work Update
  - LFI Nearing Completion for 22 Areas of Concern
  - Accelerating RFI and Interim Corrective Measures for Areas Near Fuel Storage Facility
  - Balance of RFI scheduled For 2004
  - Closure of 3 Storage Facilities Underway

# Property Disposition

- Desire to Preserve Land Along Rivers
- Using CLF-Ventures to Assist in Determining Long-Term Solution
- Property Disposition Must Consider CY as a Public Utility
- Need to Define Closure Criteria for Future Reuse
  - Preserve Industrial Area for Future Power Generation
  - Restrict Fuel Storage Areas Until Transport Offsite
  - Conserve Remaining Area

# Next Steps

- Propose DEP - CY Technical Meetings
  - Groundwater Management – October 10, 2003
  - Radiation Remediation Planning
  - Intake Structure Permitting
  - Groundwater Remediation Methods
  - Discharge Canal Disposition
- Agree on Comprehensive Site Closure Plan and RSR Closure Criteria