Topics

• License Appeal

• Phase I Closure: Activities and Status

• Ground and Surface Water Update
License Appeal Update

- March 2004 - DHEC renewed the Chem-Nuclear System’s (CNS) License
- April 2004 - DHEC’s Decision was appealed by Sierra Club and Environmentalists, Inc.
- The Administrative Law Court (ALC) dismissed Environmentalists, Inc. based on lack of standing
- October 2005 - ALC found the Sierra Club failed to present evidence warranting the reversal of the License and denied motion for reconsideration
License Appeal Update (cont.)

- Sierra Club appealed the ALC decision to the SC Court of Appeals
- Court of Appeals remanded the case back to the ALC for a ruling on whether CNS is in compliance with certain Sections of R.61-63
- DHEC filed a Petition for Rehearing on the grounds that Sierra Club had not properly preserved issues related to these Sections
- May 3, 2010 - Rehearing denied
SC Supreme Court

- June 2010 - A Petition for Writ of Certiorari was filed by CNS to the SC Supreme Court asking them to review the decision of the lower court
- July 21, 2011 - Petition was denied
- July 22, 2011 - The Remittitur was filed with the Administrative Law Court
- The case is assigned to the Honorable Ralph King Anderson, III, Chief Administrative Law Judge.
- A hearing date has not been set at this time.
Facility Closure
Projected Timeline

- Site opens: 1971
- Atlantic Compact Act signed: 2000
- Open to All States*: 2000
- Begin Compact Operations: July 1, 2008
- Open to Atlantic Compact States only: Sept 30, 2009
- End Waste Disposal Operations: 2038
- State Oversight: > 100 years
- Phase I Closure Activities: 15 months
- Phase II Closure Activities: 12 months

*NC was banned in 1995
Phase I Closure

- Building Decontamination and Dismantling
- Removal of Equipment and Tools
- Enhanced Cap Installation
- Site Grading
- Soil Sampling
- Trench Marker Installation
Aerial View of Enhanced Caps

- 96 acres
- + 24 acres
- ~ 120 acres
Phase I Closure:
Performance Objectives Assessment

- 16 Objectives A through P are found in Condition 98 of the Disposal Facility License
- Some objectives have not been completed; however, Phase I Decommissioning is an interim closure phase.
- Majority of objectives are complete
Reviews in Process

• **A – Certify that burial of waste in accordance with requirements of the license:** Requested CNS to provide trench table and waste burial certification – CNS report is in progress

• **E – Compliance with annual dose limit:** Groundwater Model – CNS working on comment response

• **M – Site stabilization and minimization of monitoring:** Closure Environmental Monitoring Plan will be submitted after the Groundwater Model is finalized

• **O – Eliminate the need for active water management in trenches:** Reviewing information regarding active water management in closed trenches – DHEC provided 2nd set of comments
Groundwater and Surface Water
Monitoring the Tritium Plume

• Chem-Nuclear samples 179 monitoring locations
  • On-site wells
  • Off-site wells
  • Creek
• Sampling performed 4 times per year
• DHEC samples at 31 of those locations
• DHEC splits samples with Chem-Nuclear
Tritium Concentrations in Zone 2 Wells

Highest Concentration

WM-0110
29,800,000 pCi/L

Headwaters of Creek

WC-0002
438,000 pCi/L

Compliance Point

WC-0008
96,300 pCi/L

2nd Quarter 2011

Oldest trenches
Annual Trending Report

- Monitors plume movement
- Looks at data for last 5 years
- 27 locations
- Statistical analysis
- 7 – upward trend
- 11 – downward trend
- 9 - no trend

Tritium levels are closely monitored at the compliance point to be sure they do not exceed regulatory limits

Tritium levels are stable at compliance point

The plume is well defined

There are no receptors of the water