

WM2015 Conference Panel Report

PANEL SESSION 058: **US Nuclear Power Plant Waste Management – LLW Disposal Issues**

Session Co-Chairs: **Lisa Edwards, EPRI**
Clint Miller, PG&E

Panel Reporter: **Clint Miller, PG&E**

Panelists:

- **Chad Hyslop**, *Director Sales & Marketing, US Ecology*
- **Dan Shrum**, *EnergySolutions*
- **Dan Burns**, *VP Business Development, Waste Control Specialists LLC*

Following introductions by the Co-chair Lisa Edwards or EPRI, **Dan Burns** opened the proceedings providing an update on the Waste Control Specialists (WCS) Andrews, Texas Compact disposal site. This cell is located between 30 and 100 ft below grade. Waste containers are placed and grouted into modular concrete canisters. The cell has disposed primarily Class B/C waste from Nuclear power plants. One set of steam generators have been placed into the cell. WCS has opened an exempt cell for low activity bulk waste. Several commercial generators have shipped waste to this cell, but no operating power plants to date. WCS has submitted a proposal to the Texas State regulator for GTCC disposal. This submittal is under review by the State and the NRC. WCS has also discussed a possible spent fuel storage site and the county is supportive. WCS currently plans to make a submittal 2q16.

Chad Hyslop described two US Ecology sites. The Richland, Washington site is open for Class A and Class B/C waste but only for the Northwest and Rocky Mountain Compacts (1 NPP- Columbia). The US Ecology Idaho RCRA site has disposed of a large quantity of low activity waste (45%) versus chemical hazardous waste. The RCRA permit includes radionuclides. US Ecology believes the use of RCRA sites for low activity disposal is an asset that can serve the USA and lower NPP decommissioning costs. About 90% of the waste volume from Humbolt Bay power plant decommissioning has gone to US Ecology Idaho.

Dan Shrum gave a status report on the EnergySolutions disposal sites in Barnwell, South Carolina and Clive, Utah. Barnwell is accepting A, B and C waste from the Atlantic Compact. The Clive site has a bulk waste facility (BWF) and a containerized waste facility (CWF). The BWF is getting about 3 to 4 million ft³/yr and has about 30 years of space left. In June of 2011 EnergySolutions made a submittal for disposal of depleted Uranium. It is expected that the State of Utah will issue their review 2q15 for public comment.

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Two questions were posed to the panel.

Question 1- When a manifest lists an LLD value for a nuclide, how does the disposal site record and track that figure?

Answer 1- At Barnwell and Clive, LLDs are entered as zero because the Performance Assessments have already taken those nuclides into account. At US Ecology Richland, H-3 will be entered as 1 mCi (the lowest value the site tracking system will accept). This has affected the Performance Assessment. WCS Texas was not able to answer.

Question 2- How is waste attribution dealt with when processors declare thermally treated waste to be theirs?

Answer 2 – No foreign waste is allowed at LLRW disposal sites in the USA. The NW compact and the State of Utah require a list of all clients waste in thermal residue disposed of at Clive, but it does not have to be manifested (no 542 Form). Texas is requiring a similar list. Richland and Barnwell are not typically receiving thermal residue.