Idaho Chemical Processing Plant
Radioactive Liquid Waste and Calcine
Management Presentation to the Nuclear Waste Technical Review Board

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DOE-ID

Mission:
- Treat and dispose of tank farm and calcine wastes.
- Treat wastes and prepare for final disposal.
- Ship treated wastes to final disposal site when available.

Program History

At the previous NWTRB meeting, the plan was to calcine all HLLW and SBW. This product would then be turned into glass ceramic.

April 1992, DOE stopped reprocessing Spent Nuclear Fuel.

The HLLW resulting from reprocessing is essential to the efficient calcination of SBW.

Calcine Bin Set Volumes
Cubic Feet

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Program History (Continued)

When reprocessing stopped, the HLW Technology Development program started, including decontamination and radioactive scrap metal programs.

The plan called for constructing and operating a Waste Immobilization Facility (WIF) to treat our HLLW, SBW, and calcine. The WIF would come on line in time to cease use of the tank farm by 2009 and 2015.
Program History (Continued)

We were to the point of selecting WIF technologies when DOE realized it could not pay for all the required INEL treatment facilities as individual facilities.

Systems Analysis came up with an EM integration plan. This plan called for the HLW treatment facility to come on line after 2015. Therefore, we needed another method to cease use of the tank farm.

Radioactive Scrap Metal

RSM
R.I.P.

Radioactive Scrap Metal

The program lost EM-30 funding due to a lack of legal drivers.

Prior to the demise of this program in October of 1994, several DOE sites had their RSM inventoried, private industry had shown strong interest, most of the required technologies had been successfully demonstrated, and WINCO/LITCO had shown this program to be cost effective.

Radioactive Scrap Metal

WINCO/LITCO was to the point of producing carbon steel boxes for LLW disposal and turning this into a private enterprise. Nobody else (EM-30, 40, & 50) has shown the inclination to fund this program.

Program History (Continued)

The HLW TD program is now looking at more efficient methods of calcination so we can cease use of the tank farm by 2009 and 2015.

The final treatment schedule for HLLW, SBW, and calcine is being negotiated with the State of Idaho via FFCA negotiations.

Radioactive Scrap Metal

The program started in July of 1992 as a subset of the HLW TD program.

The goal of the RSM program was to make products from contaminated scrap metal that would see a radioactive use.

The program would then be turned into a private enterprise.