

143s Low Temperature Stabilization of High Level Calcined Waste

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About 4400 m³ of mixed hazardous calcined waste is stored in the Calcined Solids Storage Facilities (CSSF) at the Idaho National Laboratory (INL). A study on the feasibility of low-temperature stabilization of the CSSF waste, directed by the The Idaho Completion Project – Subproject 3 (ICP-SP3), is being conducted at the Diagnostic Instrumentation and Analysis Laboratory (DIAL) of Mississippi State University (MSU), in collaboration with the Chemical Engineering Department of MSU. The stabilizers selected were Fe-P ceramic, Hydroceramic Cement, and Grout Cement. After an initial scoping phase, the stabilizers were downselected to the Grout Cement. The success of these stabilizers were selected using the TCLP, PCT, and SET tests.