Webinar Invite

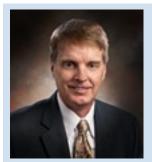
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Education and Training Working Group

Join us on February 25, 2021, 8:30 am EST (UTC-5)

Overview of Waste Treatment Plant, Hanford Site

Currently, the U.S. Department of Energy (DOE) stores ~90 million gallons of radioactive and hazardous waste in ~230 underground tanks at Hanford and Savannah River. At Hanford, approximately 20 million gallons of that waste is in a liquid form (supernatant), approximately 10 million gallons is in the form of insoluble sludge materials, and the remainder is in a partially soluble solid form referred to as saltcake. Treatment and immobilization of the tank waste into a glass waste form is planned with the Hanford Waste Treatment and Immobilization Plant (WTP) being the principal plant where this will be accomplished. This webinar focuses on the integrated flowsheet that encompasses storage, retrieval, pretreatment, immobilization, and disposal. The major emphasis or focal point will be the vitrification with respect to: 1) Troublesome components waste and their impact on glass formulation/operations; 2) Critical process and product performance properties (why and how they are measured); 3) Process control strategies and use/impact of glass models/algorithms; 4) Relationship between acceptable glass compositional regions and operation flexibility; 5) Significant advancements in glass formulation and the impact on the flowsheet/operations; 6) Operational lessons learned.



Dr. David Peeler received his Ph.D in Ceramic Engineering from Clemson University. Over the past 25 vears. Dr. Peeler has focused on glass formulation development and developing alternative processing strategies to improve operational flexibility and waste throughput for the Defense Waste Processing Facility in Aiken. South Carolina and for the Waste Treatment Plant in Hanford, Washington. He currently serves as the EM Deputy Sector Manager at Pacific Northwest National Laboratory (PNNL) in which over \$45M of R&D is annually performed focused on waste processing and environmental remediation. Dr. Peeler serves on the External Advisory Board for Clemson University's Material Science and Engineering Department and is and Adjunct Professor at Clemson. He is a fellow of the American Ceramic Society and has over 85 external peer reviewed publications, over 300 internal technical reports, and has issued three patent disclosures with one international patent awarded.

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Who should attend: policymakers, managers, regulators, students, general public

Upcoming Webinars

25 March 2021 Introducing new Plant Systems Design (PSD) Code, Prof. Nawal Prinja, Jacobs, UK

22 April 2021 Experience of HTTR licensing for Japan's New Nuclear Regulation, Mr. Etsuo Ishitsuka, JAEA Japan

19 May 2021 Advanced Manufacturing for Gen IV Reactors, Dr. Isabella Van Rooyen, INL, USA