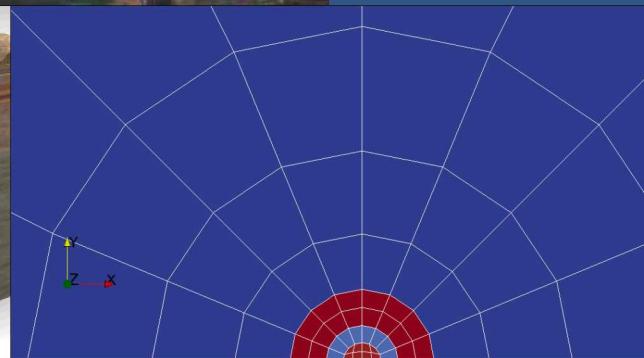
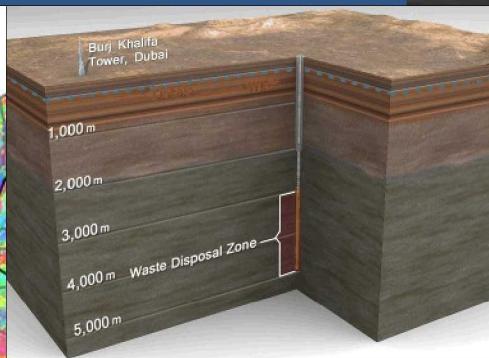
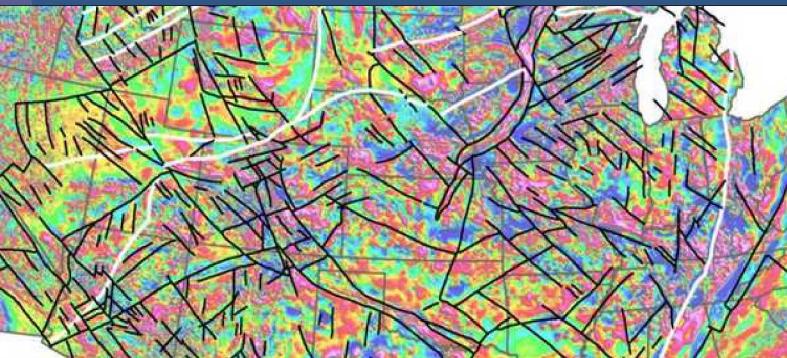


Area V: Waste Management & Subsurface Science



PRESENTED BY

Robert J. MacKinnon

NNSA/IAEC 2018 Workshop
Los Alamos National Laboratory
December 4-5, 2018



SAND2018-13544PE



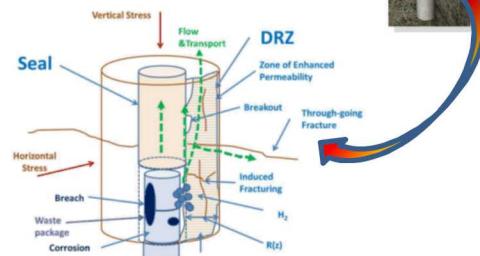
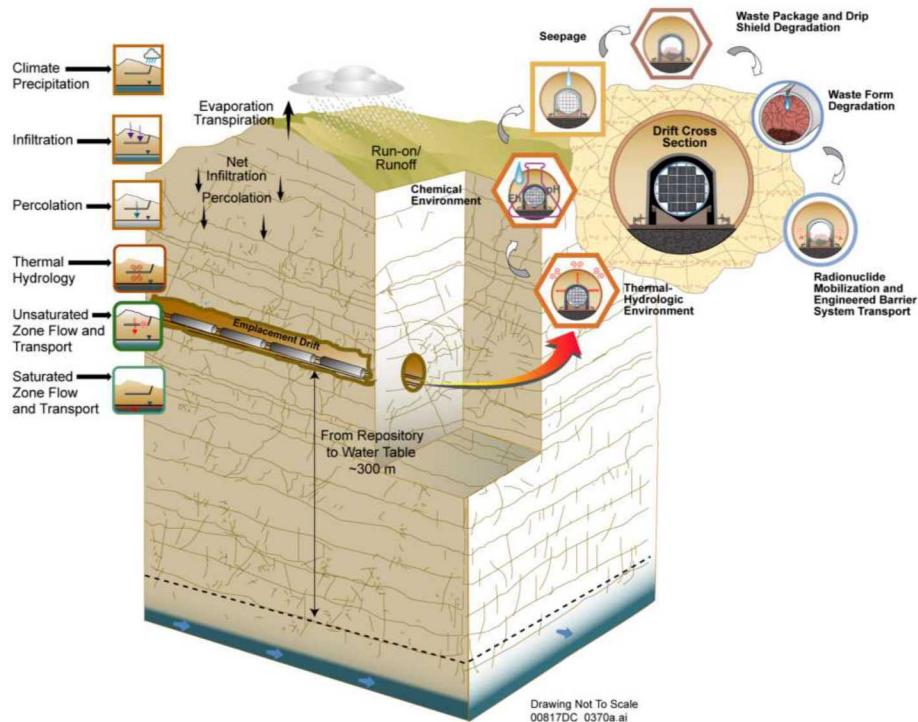
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Topic Area V: Waste Management & Subsurface Science Research Projects

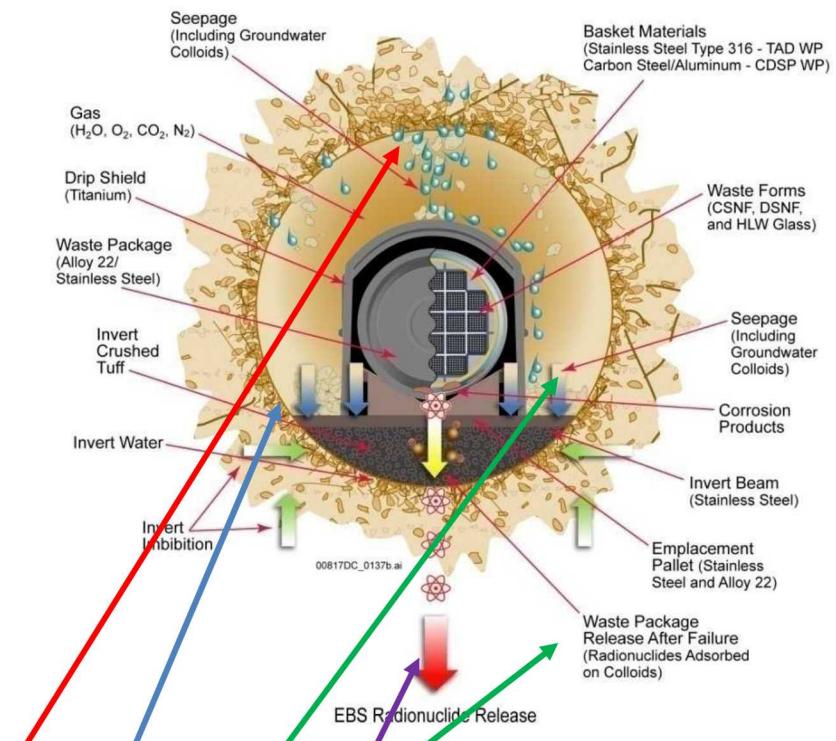
1. Mechanisms of subsurface flow and radionuclide transport (LANL, NRCN, GSI, SNL)
2. Colloid-facilitated radionuclide transport in fractured carbonate rock: an integrated laboratory, field & numerical modeling study (LLNL, BGU, NRCN, LANL,)
3. Damage Induced by Excavation and Heat Release of a Radioactive Waste Repository (SNL, GSI, NRCN, LLNL)
4. Nuclear Wasteform Interactions with Geologic Strata (VU, NRCN, SNL)
5. Borehole Disposal (NRCN, GSI, LANL, LLNL, SNL)

Coupled Processes Determine Disposal Facility Long-Term Performance



Area V Research Projects

4



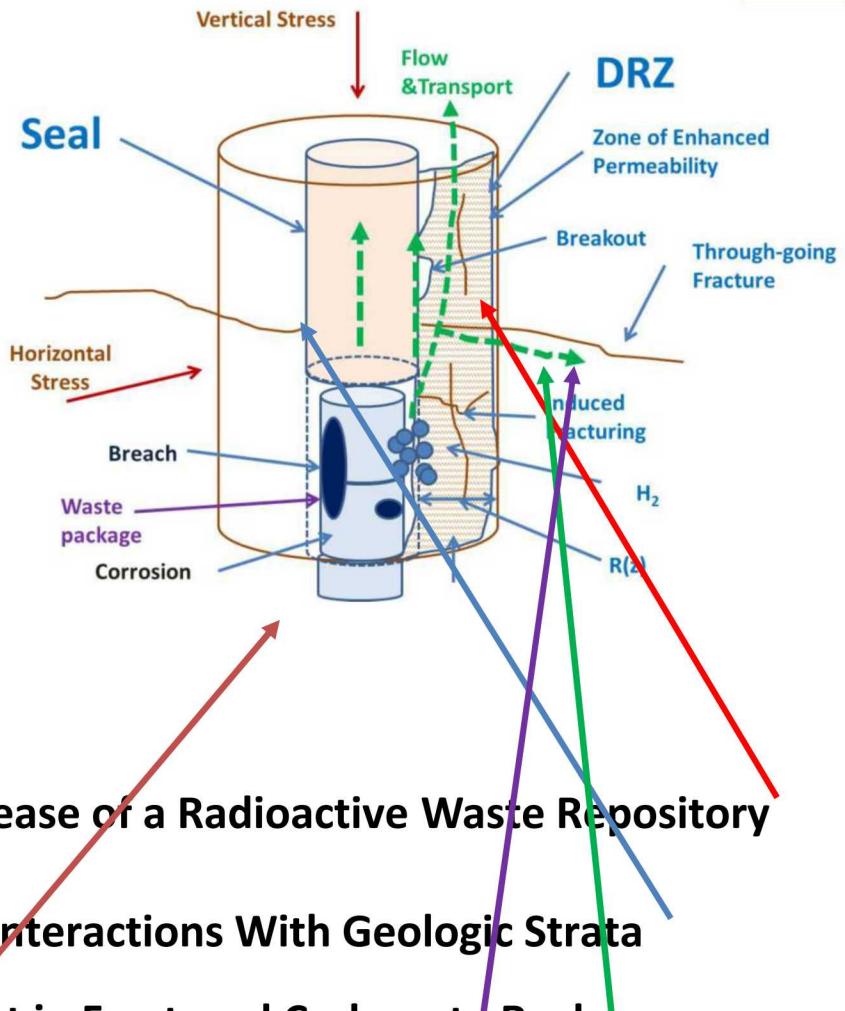
Damage Induced by Excavation and Heat Release of a Radioactive Waste Repository

Nuclear Wasteform and Barrier Matrixes Interactions With Geologic Strata

Colloid-Facilitated Radionuclide Transport in Fractured Carbonate Rock

Mechanisms of subsurface flow and radionuclide transport

Deep Borehole Disposal



4