United States
Nuclear Waste Technical Review Board

Transcript

Spring, 2024 Board Meeting

Wednesday
May 22, 2024

PUBLIC MEETING
In-Person and Virtual

Knoxville, Tennessee

NWTRB BOARD MEMBERS IN-PERSON
Nathan Siu, Chair
Ronald Ballinger

Tissa Illangasekare
Scott Tyler,Deputy Chair
Brian Woods

NWTRB BOARD MEMBERS VIRTUAL
Allen Croff

NWTRB EXECUTIVE STAFF MEMBERS IN-PERSON
Dan Ogg
Neysa Slater-Chandler

NWTRB PROFESSIONAL STAFF MEMBERS IN-PERSON
Hundal Jung
Yoonjo Lee
Bret Leslie
Chandrika Manepally

NWTRB ADMINISTRATION STAFF MEMBERS IN-PERSON
Davonya Barnes
Jayson Bright
Kimberly Brown

functions, isolation for example and slow transport of solutes and radionuclides out our main barrier is the canister.

So, if you look at the safety concept it has two colors. The figure on the right has two colors and two types of pillars. We have the blue pillars. The blue vertical ones they really talk about the performance of the EBS. The right hand side is proven technical quality of the EBS. That means that we have to use materials that are well characterized and their behavior can be predicted well enough in the future so that, we go to the left vertical column, so that we can prove that we provide, the other EBS provide favorable conditions to the canister. So we want to make sure that the canisters stay alive, stay intact for as long as possible as the canister provides containment. So that is our main safety. That is the safety function for the canister.

So, the three yellowish pillars in the middle they are there because in case we lose containment, we lose the canister breaches in fact, the radionuclides are released slowly from our spent nuclear fuel. I think you will talk about it more today. The ceramic UO_2 is very, very slowly, releases very slowly radionuclides. But then we have also the buffer, the clay buffer