Oregon Hanford Cleanup Board

Cannery Pier Hotel Astoria, Oregon

Monday, November 4, 2019

Members In Attendance:ODOE Staff:Steve March, ChairMark ReeseDan Solitz, Vice-ChairTom SiciliaLori BrogoittiSara LovtangBryan WolfeJeff BurrightJürgen HessErica Euen

John Howieson

Erica Elliott <u>Tri-Party Agencies:</u>

Tom Roberts Alicia Boyd, Washington Department of Ecology

Marylou Schnoes Kim Welsch, Washington Department of

Laura Feldman Ecology

Justin Iverson, Oregon Water Resources

Ken Niles, Oregon Department of Energy Public

Aaron Ashley, Confederated Tribes of the Sharon Monteiro Umatilla Indian Reservation (CTUIR) Greg Acker

Representative Anna Williams Jeanna Deforeit, Hanford Challenge

Representative Tawna Sanchez Nicole Bales

Senator Bill Hansell

Link to meeting materials:

https://www.oregon.gov/energy/safety-resiliency/Pages/OHCB-Meetings.aspx

Administrative

Chair Steve March opened the meeting at 1 p.m.

After introductions, the minutes from the July 2019 meeting were approved.

Link to opening of meeting: : Board opening and discussion 1

Public Comment Opportunity

Chair March offered the public an opportunity to make comments or ask questions. There were none.

¹ https://soundcloud.com/odoe/monday11042019ohcb-meeting2mp3#t=0:43

Hanford's River Corridor

Ken Niles, Oregon Department of Energy (ODOE), provided the Board with a history of Hanford operations along the Columbia River, which included initial construction and operations during World War II; the addition of six additional plutonium production reactors from 1949 through 1963; the types of contamination created by operation of the reactors and the laboratory and fuel fabrication activities in the 300 Area; the shutdown of eight of the reactors from 1964 through 1971; and the end of production operations in 1987. Ken then highlighted much of the cleanup that occurred along the River Corridor, including the cocooning of six reactors; excavation of millions of tons of contaminated soil, including several excavations to groundwater; demolition of hundreds of buildings; the cleanup of dozens of burial grounds; and efforts to contain Hanford's contaminated groundwater.

Ken then explained the cleanup that remains to be done along the river, including more work on groundwater; excavation of highly contaminated soil from beneath the 324 Building and demolition of the building; eventual excavation of the 618-11 burial ground – which will likely have to wait until shutdown of the Columbia Generating Station nuclear power plant (located adjacent to the burial ground); demolition and excavation within the K Area, and eventual cocooning of the two reactors; and excavation of a few miscellaneous waste sites in the B/C area and possibly the N Area.

Niles²

River Corridor Groundwater

Tom Sicilia, ODOE, gave the Board a presentation on how groundwater plumes have changed between 2010 and 2017. The presentation focused on the river corridor and included remedial successes and current challenges. The most dramatic success has been the reduction in Hexavalent Chromium plume sizes. Tom discussed what steps DOE took to make these changes happen (excavation, pump and treat) and how they are periodically re-evaluating remedial strategies to make sure they are working (100-K soil flushing, 200-W carbon tetrachloride).

The persistent and problematic contamination in the river corridor remains those compounds which are hardest to treat (strontium 90, carbon 14, tritium, uranium, nitrate). The strategy for these compounds is to either bind them to the soil (apatite barrier in 100-N, polyphosphate in the 300 Area) or allow time to reduce the concentrations in the plume through Monitored Natural Attenuation.

Tom Sicilia³

²https://soundcloud.com/odoe/monday11042019ohcb-meeting2mp3#t=2:49

³ https://soundcloud.com/odoe/monday11042019ohcb-meeting2mp3#t=36:21

Natural Resource Damage Assessment and Restoration on the River Corridor

Sara Lovtang, ODOE, represents Oregon on the Hanford Natural Resource Trustee Council. She gave the Board an overview of her work on the Trustee Council and the Natural Resource Damage Assessment that is commonly referred to as NRDA.

The Trustee Council consists of three Native American Tribes (the Umatilla, the Nez Pierce and the Yakama); the States of Washington and Oregon; and three federal agencies – U.S. DOE, U.S. Fish and Wildlife and the National Oceanic and Atmospheric Administration. Sara explained that Natural Resource Damage claims are brought by governments on behalf of their public for harm to natural resources. Restoration of those injured natural resources is the goal – to ensure that habitat and resources are restored to a pre-spill state.

Sara said the process is lengthy but has been making progress. Most of the environmental studies that were necessary to estimate injury have now been completed.

Sara Lovtang4

Importance of the River Corridor to Area Tribes

Mason Murphy, CTUIR, presented the CTUIR's perspective of Hanford's River Corridor.

Mason explained that portions of the Hanford Site were part of lands ceded through the Treaty of 1855. The Tribes were spiritually and economically connected to the Columbia River. The river provided subsistence use through plentiful clean water for drinking and bathing, while the river water nourished and sustained plentiful "First Foods." Religious gatherings, ceremonies and burials signified their cultural use of the land. The Hanford site was also a gathering place for trading and economic diversification.

Mason said the tribe acknowledges that considerable cleanup has occurred, the CTUIR is not optimistic that institutional controls or caps can be maintained over waste sites for hundreds of years. The CTUIR has a number of Hanford-related activities, including a Field Station which provides native seeds for revegetation; they review and comment on the cleanup processes; they are a member of the Hanford Trustee Council; and restoring their First Foods and protecting their cultural resources are priorities.

Their end state vision is to have Hanford lands be clean, restored, protected, enhanced and accessible to CTUIR members to their traditional uses and resources.

Mason Murphy⁵

⁴ https://soundcloud.com/odoe/monday11042019ohcb-meeting2mp3#t=1:33:53

⁵ https://soundcloud.com/odoe/monday11042019ohcb-meeting2mp3#t=2:35:27

Public Comment / Adjourn for the Day

Sharon Monteiro suggested that prior to any major disturbance of river sediment, that there should be an analyses of the radioactive materials that are present. She also suggested that a health study be initiated to evaluate health impacts on people involved with fish processing in the 1940s, 1950s and 1960s, as those workers would have likely been exposed to radioactive contaminants that were taken up by shellfish and other coastal seafood.

Public comment⁶

Chair March adjourned the meeting for the day at 5:15 p.m.

⁶ https://soundcloud.com/odoe/monday11042019ohcb-meeting2mp3#t=3:28:23

Tuesday, November 5, 2019

Members In Attendance:ODOE Staff:Steve March, ChairMark ReeseDan Solitz, Vice-ChairTom SiciliaLori BrogoittiSara LovtangJurgen HessJeff Burright

Erica Elliott

John Howieson

Tom Roberts <u>Tri-Party Agencies:</u>

Marylou Schnoes Alicia Boyd, Washington Department of Ecology

Laura Feldman Kim Welsch, Washington Department Of

Aaron Ashley, CTUIR Ecology

Justin Iverson, Oregon Water Resources Dept.

Ken Niles, Oregon Department of Energy

Representative Tawna Sanchez

Representative Anna Williams

Senator Bill Hansell

Public

Erica Euen

Sharon Monteiro

State Senator Betsy Johnson

Jeanna Deforeit, Hanford Challenge

Greg Acker Nicole Bales

Administrative

Chair March opened the meeting at 8:30 a.m.

Link to opening of meeting: **Board opening and discussion**⁷

Public Comments / Questions Opportunity

There was no public comment.

Board discussion of Hanford River Corridor

Jeff Burright, ODOE, moderated an open discussion with the Board about their perceptions of the River Corridor cleanup to date, any outstanding issues that Oregon may want to raise with the Tri Party Agencies, and other thoughts about how the cleanup might affect the long-term safety and value of the Columbia River. Specific topics included the acceptable duration of monitored natural attenuation and institutional controls, the potential effects of contaminant plumes entering the river, Native American

⁷ https://soundcloud.com/odoe/tuesday-ohcb-110519mp3#t=0:07

treaty rights and their effect on cleanup end states, and what the Board considers to be the most important risk-based priorities looking forward.

Following the discussion, Ken committed to working with his staff to develop a draft letter for the Board to consider. The letter would incorporate the morning's discussions and past Board statements on the River Corridor, in an attempt to provide a set of "macro comments" to DOE on the River Corridor cleanup.

Jeff Burright⁸

DOE Update

U.S. Department of Energy Richland Office Deputy Manager Joe Franco and DOE Office of River Protection Deputy Manager Ben Harp addressed the Board via phone.

The two walked the Board through a discussion of DOE's proposed Five-Year plan for Hanford cleanup. The plan shows a conclusion during that time of major cleanup projects that have been underway for a number of years, such as the Plutonium Finishing Plant demolition, removal of contaminated soil beneath the 324 Building, and completion of work at the K-West Reactor. The plan also shows progress towards moving cesium and strontium capsules from pool storage to dry storage and progress towards the beginning of tank waste treatment.

DOE 9

Board Business

The Board decided that the next meeting will be March 30 and 31 in Hood River.

Board business¹⁰

Public Comment / Adjourn

Sharon Monteiro advised the Board to ensure that the project to move cesium and strontium capsules to dry storage stay on schedule as it is a concern to Oregonians. ¹¹

The meeting was adjourned at 11:50 a.m.

⁸ https://soundcloud.com/odoe/tuesday-ohcb-110519mp3#t=9:18

⁹ https://soundcloud.com/odoe/tuesday-ohcb-110519mp3#t=1:17:06

¹⁰ https://soundcloud.com/odoe/tuesday-ohcb-110519mp3#t=2:27:07

¹¹ https://soundcloud.com/odoe/tuesday-ohcb-110519mp3#t=3:04:31