



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
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September 21, 2021

Molly Dimick
Environmental Engineer
JR Simplot Co.
P.O. Box 27
Boise, ID 83707

Re: Comments on Engineering Design Report, Performance Testing Plan, revised implementation Compliance Monitoring Plan, and revised Quality Assurance Project Plan

- **Site Name:** Warden City Water Supply Wells No. 4 and 5
- **Site Address:** 1900 Block W 1st St Warden, WA 98857
- **Cleanup Site ID:** 1618
- **Facility/Site ID:** 2802409

Dear Molly Dimick:

Please find enclosed Ecology's comments on the Engineering Design Report (EDR), Performance Testing Plan, the revised CAP implementation Compliance Monitoring Plan (CMP) and the revised Quality Assurance Project Plan (QAPP) that Simplot submitted to Ecology on August 6, 2021.

Cleanup Action Implementation, EDR addendum, SVE Performance Test Plan, Ecology Comments

Section 2, Performance Test Plan

Comment 1, Page 6, Subsection 2.2.1, Pilot Test Performance Field Data Collection, third bullet: Please be aware that field-testing for EDB using a PID may not be adequate to detect EDB because EDB is the only anticipated VOC to occur in the soil gas at concentrations a PID may not detect. It is possible that other methods combining field and laboratory tests, such as colorimetric tubes ("Draeger tubes"), Tedlar bag sampling, Summa canister sampling, charcoal tube sampling, etc., must be implemented to detect the EDB during field tests.

Comment 2, Page 6, Subsection 2.2.2, Full-scale Performance Field Data Collection, last paragraph: Same as Comment 1.

Comment 3, Page 6, Subsection 2.2.2, Full-scale Performance Sample Data Collection, first, second and third bullets: The EDB distribution has been determined to be log-normal in the overall stockpile based on analysis of EDB soil samples collected from the now stockpiled soils. Two samples to determine whether the soils in the individual treatment piles are above or below the EDB cleanup level (CUL) are not adequate. MTCA outlines statistical methods to determine cleanup criteria for lognormal distributions and non-detect analytical results in the samples (left-censored data) in soils.

Cleanup Action Implementation, Compliance Monitoring Plan, Revision 1, August 2021, Ecology Comments

Section 2, Compliance Monitoring

Comment 4. Page 5, Subsection 2.2.3, Ex-situ Soil Vapor Extraction, third bullet: This subsection provides a treatment bed range of 80-150 cubic yards. Subsection 2.2, last paragraph in the SVE performance test plan identifies a test bed to be 230 cubic yards in size. Please clarify the test bed discrepancy in size between the test plan and the compliance monitoring plan (CMP). A treatment cell is defined as 80 cubic yards in Subsection 2.2.3.1 of the CMP.

Please clarify the relationship between treatment bed and treatment cell. If a treatment bed is identical to a treatment cell, additional soil samples may have to be collected where the treatment cells are larger than 80 cubic yards.

Comment 5, Page 7, Subsection 2.2.3.1, Compliance Monitoring, first and second bullets: As discussed in Comment 3, two samples per treatment batch of soil is not adequate to determine whether the soil is above or below the CUL. All soils in the stockpile or stockpiles considered to need treatment must be treated.

Comment 6, Page 7, Subsection 2.2.3.1, Compliance Monitoring, third bullet: Please see Comment 3.

Comment 7, Page 7, Subsection 2.2.3.1, Compliance Monitoring, fourth bullet: Please see Comment 1.

Comment 8, Page 7, Subsection 2.3, Confirmational Monitoring, third paragraph: Please note that the conformational monitoring of groundwater must continue until there are four consecutive sampling events with groundwater concentrations below the groundwater CUL in all thirteen sampled wells.

Comment 9, Page 12, Subsection 3.2.1, Investigation-derived Waste Handling, second bullet: Ecology does not recommend adding any water to the soils to be treated with SVE. Because of the low Henry's Law constant for EDB at room temperature, adding water to the stockpiles to be SVE-treated can be detrimental to the SVE treatment.

Molly Dimick
September 21, 2021
Page 3

If you have any questions, please contact me at (509) 329-3543 or e-mail me at clof461@ecy.wa.gov.

Best regards,



Christer Loftenius, L.G. L.H.G.
Site Manager
Toxics Cleanup Program, Eastern Region

cc by email: Rachel Roskelley, J.R. Simplot Co.
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