



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

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October 3, 2019

Laura Shira
Yakama Nation Fisheries
P.O. Box 151
Toppenish, WA 98948

RE: Response to June 6, 2019 Letter for the following site:

- **Site Name:** Interstate 82 Exit 33A Yakima City Landfill
- **Site Address:** 805 North 7th Street, Yakima
- **Agreed Order:** DE 15861
- **Facility/Site ID No.:** 1927
- **Cleanup Site ID No.:** 3853

Dear Laura Shira:

The Department of Ecology (Ecology) has received your comment letter dated June 6, 2019, regarding the "*Final Interim Action Work Plan – Roadway Project, Closed City of Yakima Landfill Site,*" dated May 2, 2019.

Ecology appreciates the Yakama Nation's interest and input on this project. Enclosed please find Ecology's responses to your June 6, 2019 comment letter.

Please feel free to call me at (509) 454-7835 or email me at frank.winslow@ecy.wa.gov anytime with any questions or concerns.

Sincerely,

Frank P. Winslow, P.G.
Site Manager
Toxics Cleanup Program
Central Regional Office

Enclosure: (1)

cc: Piper Roelen, Landau Associates
Joan Davenport, City of Yakima
Jeff Cutter, City of Yakima



Comment #1

We understand that Ecology has allowed this interim action to move forward based primarily on the City of Yakima's desire to build connector roads to a proposed highway interchange. This interim action will address a portion of the landfill contents limited to the area under the proposed roadway footprint. We do not agree that this interim action approach is an efficient use of public funding, nor is piece-mealing a cleanup project an ideal way to ensure the most protective cleanup.

Response

Ecology would also prefer to see a permanent remedy for the entire area to be implemented as soon as possible. However, we understand the need for an interim action that addresses a significant portion of the area associated with the proposed roadway project prior to completion of the feasibility study (FS) process. The proposed Interim Action is anticipated to result in improvement in the groundwater quality in the area by removing a significant portion of the source of organic carbon that has created the reducing conditions in groundwater resulting in cleanup level exceedances for several site constituents.

Comment #2

The Yakama Nation has not conducted a detailed review of relevant site documentation. Therefore we are relying on the Department of Ecology to ensure the immediate and long-term protectiveness of the interim action and to maintain progress on the larger site-wide cleanup as required by the multiple Agreed Orders that apply to the Yakima Landfill sub-site that is encompassed by the former Boise Cascade Mill cleanup site.

Response

Ecology has determined that the proposed interim action is protective of public health and the environment, both in the immediate and long-term. The final remedial actions for the site will be developed during the Feasibility Study (FS) and Corrective Action Plan (CAP). Ecology has also requested to the City that the interim action work be done with a focus on health and safety to ensure that cleanup workers are protected.

Comment #3

A feasibility study (FS) and draft cleanup plan (DCAP) for the entire Yakima Landfill sub-site is required by Agreed Order. What is the timeline for the site-wide FS and DCAP deliverable due dates for the Yakima Landfill sub-site?

Response

The project schedule is presented in Section VII of the Agreed Order. The draft Feasibility Study (FS) Report is due to Ecology following Ecology approval of other submittals including Groundwater/Surface Water Interaction Memo; Mill Site Draft Remedial Investigation Report; Updated Conceptual Site Model, and Interim Action Report. The Draft Cleanup Plan (DCAP) will be due following the Ecology approval of the FS Report.

The exact timeframe for completion of the Interim Action is contingent on the roadway project schedule, which is still under development.

Comment #4

Section 5.5 (last bullet), Section 7.2.3, and SAP Section 1.0. According to Yakama Nation's Cultural Program, investigation into cultural resources has been inadequate. The Yakama Nation must be consulted in all steps of methodology development. Please have the Washington State Historic Preservation Officer (SHPO) contact Yakama Nation's cultural resources program about this interim action.

Response

Ecology's comment #3 in our July 2, 2019 letter has requested that the City obtain concurrence from all stakeholders regarding cultural resources reports and plans. It is Ecology's understanding that the County has submitted cultural resources documents to the Yakama Nation and have been working with the Yakama Nation toward reaching concurrence regarding cultural resources requirements.

Comment #5

Section 7.3. After year 1 from construction completion, there is no long-term monitoring schedule proposed for landfill gas (LFG) confirmation monitoring. Rather than leaving this open for debate and risk being unaddressed, we recommend developing a default requirement for monitoring at regular intervals. This monitoring frequency could always be reconsidered as needed.

Response

The plan proposes one year of initial landfill gas monitoring in Section 7.3. After that year of monitoring is complete, Ecology will be requesting a plan for continued interim landfill gas monitoring from the City. Ecology considers it appropriate to design the continued monitoring based on consideration of the monitoring data from the first year.

Comment #6

Section 8.0. We recommend that this section also summarize other reporting requirements and their respective timelines including, but not limited to: 10%, 30%, and/or 90% remedial design documentation; well decommissioning work plan; well installation work plan; construction performance monitoring plan; long-term monitoring work plan; stormwater containment, treatment and disposal plans; Health and Safety Plan (HASP); sampling analysis plans (SAPs); Quality Assurance Project Plans (QAPPs); plans related to cultural resources, operation and maintenance plan, and institutional controls plan.

Response

Ecology's requirements within the Agreed Order for the Interim Action include the submittal of the Interim Action Work Plan, and after completion, the Interim Action Report. Other interim deliverables may be generated but are not required under the Agreed Order.

Ecology will work with the City to ensure that replacement monitoring wells are designed and constructed to Ecology's satisfaction, and that long-term landfill gas and groundwater monitoring are performed, as appropriate.

Comment #7

Appendix D, SAP Section 2.1.1. It is unclear whether the table represents discrete or composited samples. For example, for 0-100 cubic yards are 1 composited (3 discrete) or 3 composited (9 discrete) samples required? We recommend the latter.

Response

The July 29, 2019 SAP, Section 2.1.1, was revised in to clarify that composite samples will be collected for non-volatile constituents.

Comment #8

Appendix D, SAP Section 2.1.2, 2.1.4, 2.1.5, and 2.1.6. Municipal landfills tend to be highly heterogeneous, yet analysis of confirmation samples appears to be extremely limited. Although past sampling may not indicate other contaminants of concern (COCs) to be widespread, there is a high probability of other types of COCs being encountered (ex. pesticides and any other COCs typical of 1960s era municipal landfills). For soil, water, stormwater, groundwater, and dewatering water we recommend expanding the list of COCs for laboratory analysis beyond TPH, and VOCs or SVOCs. For the waste stream (2.1.5), it is unclear how field decisions will be made to analyze for the other analytes listed and we suggest adding detail or a decision framework to guide field personnel. In addition, pesticides are not included in the list in section 2.1.5. We recommend requiring analysis for pesticides produced through 1970 where warranted.

Response

The July 29, 2019 SAP, Section 2.0, was revised to clarify the basis for selection of samples for analysis, and to add pesticides to the list of analytes. The SAP also now cross-references the Excavated Material Management Plan, which discusses potential sources of contaminants within the landfill waste.

Comment #9

Appendix D, SAP. The interim action work plan does not discuss analysis or screening levels for acceptance of clean backfill materials. We recommend outlining backfill acceptance chemical concentration criteria and volume-based sampling frequency and analysis requirements.

Response

Ecology has submitted a request to the City to ensure that any fill material brought to the site can be considered "clean fill". This can be done through documentation of the provenance of the fill material, and/or through appropriate analytical data. The City's consultant has replied that they consider ensuring only clean fill is used is of high importance to the City, and will comply with this request.

Comment #10

What groundwater sampling will be required pre- and post-interim action? If this information is not intended to be included in the interim action documentation, where can it be found? We have concerns about the groundwater contaminant plume impacting nearby surface water. In addition, available groundwater delineation and characterization data are not adequate to rule out this human health and ecological exposure pathway.

Response

Groundwater monitoring data collected during the Remedial Investigation (RI) will serve as pre-Interim Action data. Ecology will be working with the City to identify interim groundwater monitoring needs prior to completion of the Corrective Action Plan (CAP).

Dewatering and management of excavation water will be a critical component of the Interim Action. Appropriate dewatering of excavations that extend into the saturated zone will result in a temporarily reversed hydraulic gradient (away from the river), hence mitigating concerns regarding potential mobilization of contamination during excavation below the water table. Ecology will be working with the City in ensuring appropriate design of dewatering and management of the excavation water.