



STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY

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December 21, 2018

Piper Roelen, PE, CHMM  
Principal – Environmental Engineer  
Landau Associates  
130 2<sup>nd</sup> Avenue South  
Edmonds, WA 98020

**RE: Agency Review Draft Interim Action Work Plan Closed City of Yakima Landfill Site**

**Site Name:** Interstate 82 Exit 33A Yakima City Landfill  
**Site Address:** Interstate 82 Yakima, 98901 Yakima  
**Agreed Order:** Number 15861  
**FSID No.:** 1927  
**Cleanup Site No.:** 3853

Dear Piper Roelen:

Thank you for the submission of the “*Agency Review Draft Interim Action Work Plan Closed City of Yakima Landfill Site, Yakima, Washington*” – dated November 26, 2018, which was received by Ecology on November 28, 2018.

The sections already developed in this document will be useful in preparation of the reports and design documents that will need to be produced as part of this work plan. The overall road construction project includes an interim remedial action. This interim action will allow the City of Yakima to construct a clean, protected corridor for the installation of utilities, roads, and sidewalks.

Essentially, the road construction project consists of two distinct phases:

- 1) The removal of landfill material (municipal solid waste, soil, wood waste, etc.) followed by installation of a landfill gas collection system and final preparation for phase 2.
- 2) Construction of utilities, roads, and sidewalks.

For the project to be successful, phase 1 requires that full construction details and plans be available for the excavation, installation of the barrier, and protection measures for the barrier during phase 2.



Because of the sequencing of the project, please ensure the Interim Action Work Plan includes the following:

- 1) Interim Action Plan and Engineering Design Report (IA/EDR) - this project will need a complete set of excavation plans along with remedy installation and vapor barrier cover plans since it will come first before the utility and road construction.
  - a. Site description and overview
  - b. Site conditions
  - c. Project organization, management, cost and schedule
    - i. Project management should include all deliverables, milestones, critical paths, etc.
    - ii. Project management task should include regular updates to track progress and costs.
  - d. Interim remedial action engineering design report
    - i. Basis of design – e.g. engineering basis and calculations for vapor barrier selection, sizing of collection piping, sizing of vaults, etc.
    - ii. Mobilization and preparation of the site, demobilization
    - iii. Erosion and sediment control
    - iv. Stormwater (will need a permit)
    - v. Excavation and materials management
    - vi. Disposal contracting
    - vii. Landfill gas barrier installation and testing
    - viii. Protection of interim action for handoff to road construction contractor
    - ix. Groundwater management
    - x. Soil gas management
  - e. Cultural resources plan
    - i. GEO-0505 form (<https://dahp.wa.gov/>)
    - ii. Inadvertent discovery plan
  - f. Sample and analysis plan
  - g. Health and safety plan
  - h. Construction plans and specifications detailing work (to facilitate bid document preparation).
- 2) Final inspection report prior to handoff to utility and road construction project
- 3) Interim Action Report
  - a. As-built post construction report that includes
    - i. Full survey
    - ii. Complete set of drawings

- 4) Bid Documents – a detailed bid document to include in an overall bid for the project or as two separate projects (e.g. interim action followed by road and utility construction) or a document with sufficient detail to support bid document preparation by the City of Yakima.

This list is not to be considered comprehensive and any additional deliverables needed to complete this interim action are expected to be in the final version of the work plan. The timing of this project may be tight. Consider the addition of a project management task, where project costs and progress can be tracked.

Ecology also requests you consider the following technical comments to improve the clarity of the forthcoming deliverables:

- 1) How will the barrier be protected during utility and road installation? Will there be a cover layer of fill or other protection measures to limit damage from heavy equipment, materials, and personnel?
- 2) Should the excavation be a vertical cut with backfill for the 2:1 slope? Having the 2:1 slope be MSW or wood waste may lead to subsidence issues potentially compromising the vapor membrane. The vertical cut should be 5 to 10 feet further than the header anchor trench. This will facilitate any future excavations outside the clean area and provide some sacrificial material if recontamination from transport processes occur.
- 3) The excavated materials management plan should include the need to assess asbestos from insulation disposed during the years of operation as a landfill. There does appear to be a discussion in the sample and analysis plan.
- 4) The excavated materials management plan should recognize that soil excavated in the Boise Mill site to the north may not have field indicators of contamination. Stockpiles outside of the MSW footprint should be thoroughly tested for COCs as outlined in the Boise Mill RI WP. The Boise Mill RI may be far enough along at this point to reduce the number of COCs but for this document, the full analytical suite should be included.
- 5) Field observations may not be sufficient to identify contaminants in the excavated material. Sampling of excavated material will be important data regarding the sources of non-methane gases and help with decisions on the remaining portions of the landfill.
- 6) Figure C - the soil management decision logic chart should include consultation with Ecology on sampling as well. A second chart may be needed for the northern work through the Boise Mill site but there may be a need to sample all material being removed if previous data is not available.
- 7) The northern portion of the MSW footprint with the proposed road has a petroleum contaminated groundwater plume. Plans should be in place to manage this water.

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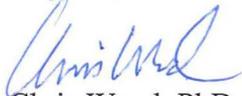
- 8) There are several monitoring wells that will have to be decommissioned. Nearby replacements are expected to be included.
- 9) Sample and analysis plan should include a full list of screening levels and PQLs.
- 10) Will this plan include excavation for stormwater pipeline on the western portion of the landfill? If so, please include in all of the plans and reports.

Ecology recognizes that there may be some items that may be completed outside the scope of this work such as preparation of the bid documents. If needed, a meeting should take place in the next 30 days to finalize the deliverable list prior to the release of the interim action work plan for public comment.

Please proceed with preparation of the "*Interim Action Work Plan Closed City of Yakima Landfill Site, Yakima, Washington*".

Please feel free to contact me at [cwen461@ecy.wa.gov](mailto:cwen461@ecy.wa.gov) or 509-454-7837 if you have any questions or requests.

Regards,



Chris Wend, PhD, PE  
Cleanup Project Manager  
Toxics Cleanup Program  
Central Regional Office

cc: Joan Davenport  
Brett Sheffield  
Jeff Cutter  
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Andy Fitz