



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 – Groundwater/Surface Water Interaction Technical Memorandum**

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

Dear Piper Roelen:

Thank you for the submission of the “*Agency Review Draft – Groundwater/Surface Water Interaction Close City of Yakima Landfill Site Technical Memorandum*” dated November 26, 2018, which was received by Ecology on November 28, 2018.

The choices of source water chemistry for upgradient groundwater and surface water appear to be good assumptions. The input chemistry for the geochemical model calculations also appears to be a good first assumption along with the assumed mixing zones. This technical memorandum will serve as an initial estimate of the groundwater/surface water interaction at the site. Once more data is collected from other sources, the geochemical modeling may be refined to further inform this interaction.

Please add the input code for the PHREEQC model as an appendix and issue a final document to Ecology.



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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  
Andy King  
Andy Fitz