



STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY

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July 20, 2018

Mr. Jeff Kaspar  
Farallon Consulting  
975 5<sup>th</sup> Avenue Northwest  
Issaquah, WA 98027

**RE: Ecology comments for Draft Conceptual Site Model Technical Memorandum**

Site Name: Agri Tech and Yakima Steel Fabricators  
Site Address: 6 & 10 ½ E Washington, Yakima  
Facility/Site ID No.: 479  
Cleanup Site ID No.: 3639

Dear Mr. Kaspar:

Thank you for the submission of the draft *Conceptual Site Model Technical Memorandum (CSM TM)*. Ecology has reviewed this document in the context of the 2004 *Revised Remedial Investigation Report*, 2007 Bay Chemical flue dust removal activities, Bay Chemical groundwater monitoring, and the 2011 Supplemental FS data.

The draft *CSM TM* adequately addresses the presence of contaminants of concern from the investigation and remediation activities. However, several uncertainties exist due to a lack of recent data and previous sampling limitations. Data gaps that would assist in reducing or eliminating the uncertainties are listed below:

Surface water metals contamination and extent of groundwater metals contamination

Based upon groundwater metal concentrations in monitoring wells 11 and 12 of the Bay Chemical site, there are metals contaminating the groundwater on this site. The groundwater is the source of surface water in the wetland. There has been no sampling of the surface water or onsite monitoring wells for metals but the cleanup levels for metals in surface water are several orders of magnitude below that of groundwater and it may be assumed that the surface water is out of compliance with respect to cadmium, zinc, lead and manganese.

The Bay Chemical flue dust, which is the source of the metals, contains eight metals (Pb, As, Cd, Cr, Cu, Mn, Hg, Zn) of which only four (Pb, Cd, Mn, Zn) are in the groundwater monitoring compliance plan for Bay Chemical. Due to the low cleanup levels for surface water, the other four metals (As, Cr, Cu, Hg) will also need to be evaluated during any cleanup/compliance activity.

### Remaining Bay Chemical metals contamination

Soil excavation during the Bay Chemical cleanup was limited by the buildings and the pesticides in the former lime sulfur waste pit. As a result of this, flue dust material remains on the site under the two buildings and in the waste pit. Metal contaminated soil is likely present around the remaining flue dust, the extent of which will need to be determined during any future removal of the flue dust.

### Vapor intrusion

Tetrachloroethylene contaminated soils exist under the Agritech building, which could present a vapor intrusion risk for the building. Vapor intrusion above action levels will need to be assumed in the absence of data.

### Waste pit

The full extent of the waste pit with associated contamination will not be determined until removal.

### Waste pit groundwater contamination

Groundwater contamination from the waste pit leachate may be more extensive than determined by the existing well network. In particular, the monitoring wells under the Yakima Steel Fabricator building are screened from 2 to 12 feet below ground surface while WDOE-6 is screened from 11 to 17 feet below ground surface where groundwater contamination was found. The down gradient well nest located at MW7 may also have missed the contamination since 7B is screened from 25 to 30 feet below ground surface and 7A is screened from 5 to 15 feet below ground surface. With little vertical dispersion, contaminants in the 15 to 25 feet below ground surface range would have gone undetected.

### Screening Levels

All screening levels will need to be updated or recalculated using current values. The values in the technical memorandum tables appear to be from the 2004 RI. Surface water numbers for metals have changed significantly and are important for the wetland surface water screening levels.

There is a possibility that PQLs from previous testing may be above the screening levels. Please identify any chemicals for discussion moving forward.

### 2011 Supplemental Feasibility Sampling

Ecology does not have a report for this sampling investigation and it is unclear from the records in the Central Regional Office if the report was completed. Please provide a report for this work either as an appendix or as a separate document.

### Specific comments

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Monitoring well 7A is screened from 5 to 15 feet bgs and 7B is screened from 25 to 30 bgs. Reference well logs in 2004 RI.

### Points of Compliance

Standard groundwater points of compliance will be considered going forward. Please remove the statement that the site boundary will be the point of compliance. Appropriate points of compliance will be selected during a later phase of this work.

### Media of Concern

Bioassay testing only removes the sediments of the wetland as a medium of concern. Surface water is still a medium of concern. Please amend this statement and include a surface water section in the constituents of concern section for the 8 metals listed above.

Ecology expects the final *CSM TM* to address or recognize these data gaps, either within the *TM* itself or as part of the Feasibility Study. We understand the need to compile the 2011 results may require additional time, which may be approved upon request. 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,



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