

December 7, 2017

Mr. Greg Aitken
Oregon Department of Environmental Quality
165 E. 7th Avenue, Suite 100
Eugene, OR 97401

Dear Mr. Aitken:

The United States Environmental Protection Agency (USEPA) released updated Regional Screening Level (RSL) tables in June 2017. A significant change to the RSL tables resulted from revised toxicity factors for carcinogenic polynuclear aromatic hydrocarbons (cPAHs) including benzo[a]pyrene (BaP) (USEPA, 2017), which previously were identified as the main risk contributors at the Former SP Yard in Ashland, Oregon. At the request of the Union Pacific Railroad Company (UPRR), CH2M re-evaluated the site data set for soil using the revised USEPA toxicity factors. CH2M and UPRR presented the findings of this evaluation on a conference call with the Oregon Department of Environmental Quality (ODEQ) on October 16th. A summary of the evaluation is presented below:

Summary of Approved Removal Action Approach (2010 to 2017)

- Cleanup areas were developed based on a site-wide 90% upper confidence limit (UCL) approach accepted by ODEQ in 2010. The full cleanup approach was described in the Updated Remedial Action Work Plan (RAWP), which was accepted by ODEQ in February 2017. The RAWP outlined excavation and disposal of approximately 18,700 cubic yards of soil, whereas the 2001 Record of Decision (ROD) included approximately 35,500 cubic yards of soil.
- A “hill-topping” approach was used, where surface soil samples (0-3 feet depth) were ranked from highest to lowest by BaP concentration, and the highest samples iteratively removed, followed by re-calculation of 90% UCL. The hill-topping procedure was found to be most effective when focused on removing samples with the highest BaP concentrations.
- The hill-topping process was repeated until the residual excess lifetime cancer risk (ELCR) for the entire parcel under a residential exposure scenario was below 1×10^{-6} for individual carcinogens and 1×10^{-5} for combined carcinogens. The hazard quotient (HQ) was below 1 for all noncarcinogens.

Re-calculation of Risk (September 2017)

- 90% UCL concentrations were re-calculated for the single site-wide exposure with the following changes:
 - The latest version of ProUCL was used (ver 5.1.00, May 2016)

- The updated risk-based screening levels were used for cPAHs (USEPA, 2017), which incorporated changes to the default exposure factors that USEPA adopted in 2014.
- Excess lifetime cancer risk for cPAHs (BaP TEQ basis) does not exceed ODEQ's acceptable risk threshold for individual carcinogens of 1×10^{-6}
- Cumulative cancer risk does not exceed ODEQ's acceptable cumulative risk threshold of 1×10^{-5}
- No individual chemical has HQ>1 and HI for all chemicals = 0.3
- 90% UCL for lead is 347 mg/kg (n=165), less than ODEQ's RBC of 400 mg/kg

Conclusions and Path Forward

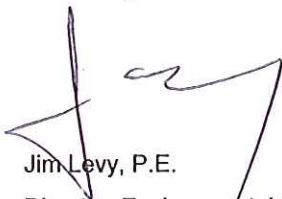
Based on the re-evaluation of site data using the most recent USEPA toxicity factors, the site risks are currently below ODEQ acceptable risk thresholds without conducting any soil removal. The reassessment of site risk significantly impacts the currently approved site remedy. Based on this new information, UPRR requests the following actions:

- UPRR requests to rescind the RAWP approved by ODEQ in February 2017. Until further notice, UPRR proposes not to move forward with the current excavation/disposal remedy at the site.
- UPRR requests that ODEQ move forward to prepare an Explanation of Significant Differences (ESD) to the existing ROD, with a change in the remedial action from excavation and disposal to a conditional No Further Action (NFA) with a deed restriction.

Citation

United States Environmental Protection Agency (USEPA). 2017. *Toxicological Review of Benzo(a)pyrene*. EPA/635/R-17/003Fa. Final. Integrated Risk Information System, National Center for Environmental Assessment. January.

Sincerely,



Jim Levy, P.E.

Director, Environmental Site Remediation
Union Pacific Railroad Company