



June 23, 2023

Project No. M2473.01.001

Kevin Dana

Oregon Department of Environmental Quality

700 NE Multnomah Street, Suite 600

Portland, Oregon 97232

Sent via email: kevin.dana@deq.oregon.gov

Re: Response to the Oregon Department of Environmental Quality (DEQ) Comments on Risk Evaluation Work Plan, Shortstack Belmont, 2721-2731 SE Belmont Street, Portland, Oregon, ESCI Site ID#5731

Dear Kevin Dana:

Maul Foster & Alongi, Inc. (MFA) has prepared this letter on behalf of Shortstack Belmont LLC (Shortstack) to respond to the Oregon Department of Environmental Quality's (DEQ) comments on the *Risk Evaluation Work Plan* (REWP) for the Shortstack site located at 2721-2731 SE Belmont Street, Portland, Oregon (the Site), dated February 27, 2023. The DEQ's comments on the REWP were provided via email correspondence from Kevin Dana dated March 16, 2023 (the email) and were discussed in a meeting between MFA and the DEQ on March 29, 2023 (the meeting). DEQ's comments from the email are reiterated below in bold, followed by MFA's response. Per the request of the DEQ, MFA has submitted a revised REWP dated June 23, 2023 (revised REWP).

Please provide cross-section views of the proposed buildings, to show the overall height/length dimensions and the locations of the vent stacks in relation to the roof lines.

See Attachment to the revised REWP.

Please include a figure showing where the samples from the prior investigations were collected.

See Figure 3-1 of the revised REWP.

The Summary of Analytical Results should be labeled as Table 3-3 (as indicated on Page IV), not Table 3-2.

This error has been addressed in the revised REWP.

The Proposed Level 1 Risk Assessment Emission Rates should be labeled as Table 3-4 (as indicated on Page IV), not Table 3-3.

This error has been addressed in the revised REWP.

Why were average contaminant concentrations selected for annual emission estimate? For some contaminants, concentrations varied greatly. Please provide additional rationale to support the values proposed for the concentration inputs.

Selection of average concentrations for annual evaluations is consistent with protocols employed for risk assessments in the Cleaner Air Oregon program when assessing chronic risk. Because concentrations vary among the different sampling periods, and overall concentrations in the soil are assumed to decrease over time, it is most appropriate to take the average of the testing results for the chronic risk assessment. For an acute assessment, MFA has conservatively (i.e., biased high) assumed the highest of the analytical results for a maximum daily estimate. This approach is also consistent with protocols employed for acute risk assessments in the Cleaner Air Oregon program.

For some contaminants (such as vinyl chloride), laboratory method detection limits (MDLs) were above applicable risk-based concentrations (RBCs). Please describe how these potentially present contaminants are being considered in the risk evaluation.

Per discussions with the DEQ in the meeting, MFA has incorporated exceptions for the daughter products of tetrachloroethylene (PCE) in the analytical results analysis methodology presented in the revised REWP. The daughter products of PCE include: vinyl chloride (CAS 75-01-4), *trans*-1,2-dichloroethene (CAS 156-60-5), *cis*-1,2-dichloroethane (CAS 156-59-2), and 1,1-dichloroethene (CAS 75-35-4). The analysis methodology is presented in Section 3.3 of the revised REWP.

The figures indicate several off-site buildings are in close proximity to the development and to the vent pipes. What is the height of these adjacent buildings and how is building interference/downwash being considered in the risk evaluation?

MFA has proposed a Level 1 risk assessment consistent with guidance provided by the DEQ in communications in December 2022. This assessment uses dispersion factors developed by the DEQ for such assessments. The Level 1 dispersion factors were developed by the DEQ, and the height of the proposed buildings at the Site are used as a criterion when selecting the dispersion factors from the Level 1 tables.

The vertical permeability is estimated at a value of 0.1, which correlates to clay. This value should be based on the soil types present at the property. Please provide additional discussion for this parameter, including heterogeneity/homogeneity of the subsurface soil conditions, and how the selected permeability value will affect the resulting emission rates.

Additional discussion of the subsurface soil conditions is presented in Section 3.2 of the revised REWP. MFA has amended the value of vertical permeability used to estimate the flow rate from the passive soil vapor extraction system to reflect site specific soil conditions.

Sincerely,

Maul Foster & Alongi, Inc.



Amy DeVita-McBride
Project Air Quality Consultant

Attachment

Risk Evaluation Work Plan (Revision 1)

cc: Heidi Nelson, Environmental Engineer, DEQ
Mike Poulsen, Project Manager and Toxicologist, DEQ
Jennifer Levy, Principal, Cascade Environmental Solutions
Anna Mackay, Principal, Siter City
Jessy Ledesma, Principal, HomeWork Development