

Department of Environmental Quality

Northwest Region Portland Office 700 NE Multnomah St Ste 600 Portland, OR 97232-4100 (503) 229-5263 FAX (503) 229-6957 TTY 711

March 5, 2025

David Weatherby 3140 NE Broadway Street Portland, Oregon 97232

Re: DEQ Comments on Vapor Intrusion Assessment Results

Hunt's Market (04-16-0669) 40490 Old Highway 30, Astoria, Oregon 97103

Dear David Weatherby,

The Oregon Department of Environmental Quality (DEQ) has reviewed the February 7, 2025, technical memorandum titled *Vapor Intrusion Assessment Results* (Tech Memo) submitted on behalf of Khalil Alomari by Maul Foster Alongi (MFA) for the Hunt's Market property located at 40490 Old Highway 30 in Astoria, Oregon (site).

In accordance with DEQ's draft *Guidance for Assessing and Remediating Vapor Intrusion into Buildings* (VI Guidance), indoor air represents a hot spot when risk-based concentrations are exceeded (without a multiplier). Additionally, an accelerated timeline may be necessary based on the magnitude of the exceedances. **Due to the elevated gasoline-range organics and benzene concentrations detected in the indoor air samples collected at the site, an urgent response is <b>necessary**. As outlined in Table A from VI Guidance, Appendix A (attached), interim mitigation measures should be implemented within a month.

Due to the urgent response needed to address the elevated indoor air concentrations, please submit a work plan for the installation of an active vapor mitigation system for DEQ review within 7 days of receipt of this letter.

Please contact me by phone (503) 926-2257 or email (<u>rebecca.digiustino@deq.oregon.gov</u>) if you have any questions.

Sincerely,

Rebecca Digiustino Project Manager

Northwest Region Cleanup Program

## **Appendix A**

## **Vapor Intrusion Response Matrix for Indoor Air**

Indoor air response action levels are provided in the following table. Note: compare results to acute and chronic RBCs. Also use lines of evidence (LOEs) to inform response.

**Table A. Vapor Intrusion General Response Matrix for Indoor Air** 

Indoor Air Concentration (Attributed to VI) <sup>a</sup> – Acute Exposure <sup>1</sup>			
No Data	≤ acute RBCair	> acute RBCair to ≤ 3 x acute RBCair <sup>e</sup>	> 3 x acute RBCair <sup>e</sup>
Monitor  Initiate sub-slab and/or indoor air sampling if vapor intrusion is suspected.	Monitor/ No Action Use LOEs to determine need for additional sampling.	few weeks.	<ul> <li>mitigation measures<sup>b,c</sup> within a few days.</li> <li>Confirm effectiveness through monitoring.</li> </ul>
	Indoor Air Co	ncentration (Attributed to VI) <sup>a</sup> – Chro	onic Exposure
No Data	≤ chronic RBCair	Noncancer:  > chronic RBCair to  ≤ 3x chronic RBCair <sup>e</sup> Cancer:  > chronic RBCair to  ≤ 10x chronic RBCair <sup>e</sup>	Noncancer:  > 3x chronic RBCaire  Cancer:  > 10 x chronic RBCaire

## **Notes:**

<sup>1</sup>Acute based on EPA Region 9 recommendations (EPA, 2014).

Acute RBCair = Acute Risk-Based Concentration for air

Chronic RBCair = Chronic Risk-Based Concentration for air

- a. Indoor air concentrations exceeding indoor air RBCs are considered hot spots if air concentrations are not reliably contained.
- b. Potential actions include the following with additional detail provided in Section 6:
  - Increasing building pressurization and/or ventilation.
  - Sealing potential conduits where vapors may enter the building.
  - Treating indoor air using carbon filtration, air purifiers, etc.
  - Installing and operating engineered exposure controls, such as sub-slab or crawlspace depressurization systems.
- c. Temporary relocation of residents or workers may be necessary under certain circumstances until VI risks are mitigated. ORS 465.210 gives DEQ authority to conduct removal actions, and ORS 465.200(25) defines "removal" as including "temporary evacuation and housing of threatened individuals."
- d. Coordination should occur between the property owner or representative(s) on their behalf, DEQ, and Oregon Health Authority (OHA) as necessary to develop a public outreach plan and appropriate next steps. See Section 7 Community Engagement for more resources. Elements of public outreach and community engagement to potentially exposed people include:
  - Identify women of childbearing age for developmental contaminants.
  - Explain the potential health hazards to building occupants.
  - Obtain permission to access buildings for investigation and exposure reduction, if warranted.
- e. Accelerated response action limits and urgent response action limits may be raised on a siteand chemical-specific basis if DEQ determines that higher levels are warranted based on consideration of factors such as severity of effects and degree of uncertainty used to develop toxicity values.