



July 18, 2025

Project No. M2809.01.002

Rebecca Digiustino

Oregon Department of Environmental Quality

A700 NE Multnomah Street, Suite 600

Portland, Oregon 97232

Re: Response to Oregon Department of Environmental Quality Comments on Vapor Intrusion Mitigation System Design and Level 1 Risk Assessment Technical Memorandum, Hunt's Market (04-16-0669), 40490 Old Highway 30, Astoria, Oregon 97103

Dear Rebecca Digiustino:

Maul Foster & Alongi, Inc. (MFA) has prepared this letter on behalf of Country Market to respond to the Oregon Department of Environmental Quality (DEQ) comments on the *Vapor Intrusion Mitigation System Design and Level 1 Risk Assessment Technical Memorandum* (Technical Memo) for the formerly Hunt's Marketplace located at 40490 Old Highway 30, Astoria, Oregon (the Site) dated June 26, 2025. DEQ comments are reiterated below in italics, and MFA's response is included following each comment.

DEQ Comment: Vapor Intrusion Mitigation System Design (page 2)

Please submit the water-based latex paint material specification sheets for DEQ review and approval when the specific product to be used is identified. The material specification sheets do not need to be submitted prior to approval of the Design Plan but should be DEQ-approved prior to initial application of the product.

MFA Response: MFA will submit the water-based latex paint material specification sheets for DEQ review and approval once a specific product has been identified with the contractor.

DEQ Comments: Figure 1

- a) *Please include what land uses were considered when determining the nearest possible non-residential child exposure to the stack emissions (e.g., schools, playgrounds, day care facilities, etc.).*

MFA Response: The Technical Memo has been updated to include a description of selected exposure sites. Schools, day care facilities, and playgrounds were all considered, and Hilda Lahti School was identified as the closest of these land use types to the Site.

- b) *The nearest "Acute (24-hour) Exposure Location" should be the apartment located on-site.*

MFA Response: Figure 1 and the Level 1 Risk Assessment included in Attachment D of the Technical Memo have been updated to consider the on-site apartment for acute (24-hour) exposure.

DEQ Comments: Attachment A – Country Market Vapor Intrusion Mitigation System Plan Set

Sheet C1.1 – Note 1

- a) *Please confirm the requirement for termination of the vertical riser from the building (i.e., 7' away from any window, door, roof hatch, opening or air intake into the building) is in accordance with local fire code. For reference, the City of Portland Fire code requires explosive/flammable vapors, fumes, or dusts be 10 feet from operable building openings (e.g., any air intake, opening window, etc.).*

MFA Response: MFA reviewed Clatsop County codes, Oregon Mechanical Specialty Code (OMSC), and Oregon Fire Code (OFC) to determine required clearances from operable openings and air intakes. Clatsop County adopts the OMSC and OFC. OMSC requires 10 feet of clearance from operable openings or air intakes (ICC 2021a), and OFC requires 5 feet of clearance from building openings (ICC 2021b). OMSC requirements were used as the most conservative specification. Note 1 of Sheet C1.1 and the Technical Memo have been updated to reflect these changes.

- b) *Please confirm the requirement for termination of the vertical riser from the property line (i.e., 4' away from the property line) is in accordance with Oregon Fire Code (OFC) and local fire code. Vent pipe outlets for flammable vapors are typically at least 5 feet from property lines.*

MFA Response: MFA reviewed Clatsop County codes and OFC to determine the required clearance from property lines. Clatsop County adopts the OFC. OFC requires 5 feet of clearance from property lines (ICC 2021b). Note 1 of Sheet C1.1 and the Technical Memo have been updated to reflect this change. Vent riser terminations are located greater than 20 feet from property lines.

Sheet C1.1 – Note 6

- c) *Please add the minimum pressure requirements for the fans in this description.*

MFA Response: Note 6 of Sheet C1.1 has been updated to include the minimum pressure requirements.

DEQ Comment: Attachment C – Fan Sizing Calculations

In Section 4, the residence is listed as 1,280 square feet in size. However, in Section 5, the north crawlspace is listed as 840 square feet and the south crawlspace is listed as 560 square feet, which is 1,400 square feet in total. Although the difference does not impact the general risk factors in the calculations, presumably the square footage of the crawlspace and the residence would be the same. Please confirm the square footages of the listed square footages for the crawlspaces and residence are correct.

MFA Response: The crawlspace areas specified in Section 5 are correct. The total residence square footage has been updated in Section 4.

Sincerely,

Maul Foster & Alongi, Inc.

A handwritten signature in black ink that reads "Krysta Krippaehne-Stein". The signature is written in a cursive, flowing style.

Krysta Krippaehne-Stein, PE
Project Engineer

Attachments

References

Limitations

References

- ICC. 2021a. "2022 Oregon Mechanical Specialty Code. Chapter 5 Exhaust Systems." International Code Council, International Mechanical Code. Effective date October 1, 2022. Last updated September 2022. Accessed July 17, 2025.
https://codes.iccsafe.org/content/ORMSC2022P1/chapter-5-exhaust-systems#ORMSC2022P1_Ch05_Sec512
- ICC. 2021b. "2022 Oregon Fire Code. Chapter 57 Flammable and Combustible Liquids." International Code Council, International Fire Code. Effective date October 1, 2022. Last updated September 2022. Accessed July 17, 2025.
<https://codes.iccsafe.org/content/ORFC2022P1/chapter-57-flammable-and-combustible-liquids>
- MFA. 2025. Technical Memorandum re: *Vapor Intrusion Mitigation System Design and Level 1 Risk Assessment, Country Market, 40490 Old Highway 30 (DEQ Site ID: 04-16-0669)*. From Krysta Krippaehne-Stein, PE to Khalil Alomari, Country Market. June 26.

Limitations

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