

April 12, 2024

Oregon Department of Environmental Quality
Northwest Region
700 NE Multnomah Street, Suite 600
Portland, OR 97232

Attention: Jim Orr

2023 Annual Monitoring Report
Former Mt. Hood Solutions Warehouse Site
4444 NW Yeon Avenue
Portland, Oregon
Project: MtHoodChem-4-002

INTRODUCTION AND BACKGROUND

On behalf of the former Mt. Hood Solutions, Inc., NV5 is pleased to submit this annual monitoring report for the Former Mt. Hood Solutions Warehouse Site located at 4444 NW Yeon Avenue in Portland, Oregon (subject property). This report summarizes the annual monitoring activities conducted in 2023 to meet the reporting requirement set forth in our Revised Vapor Mitigation System Maintenance Manual (VMSMM) and as summarized by the Oregon Department of Environmental Quality's (DEQ's) Conditional No Further Action (NFA) letter.^{1,2}

As applicable to the issuance of the Conditional NFA for the subject property, this submittal provides a brief discussion and presentation of data summarizing monthly monitoring of the engineering control implemented at the subject property for the calendar year 2023.

SUB-SLAB DEPRESSURIZATION/SUB-SLAB VENTILATION SYSTEM DESCRIPTION

The engineering control established at the subject property consists of an active sub-slab depressurization/sub-slab ventilation (SSD/SSV) system driven by in-line fans connected to an array of sub-slab and subsurface ventilation pipes associated with a former soil vapor extraction

¹ GeoDesign, Inc., 2020. *Revised Vapor Mitigation System Maintenance Manual; Former Mt. Hood Solutions Warehouse Site; 4444 NW Yeon Avenue; Portland, Oregon*, dated August 6, 2020. GeoDesign Project: MtHoodChem-4-002

² DEQ, 2021. *Re: Conditional No Further Action Determination; Former Mt. Hood Chemical Corporation Site; 4444 NW Yeon Avenue in Portland, Oregon 97210; ECSI# 81*, dated July 7, 2021.

(SVE) system beneath the subject property floor slab as detailed in the VMSMM. The subject property layout illustrating elements of the SSD/SSV system and associated monitoring points is shown on Figure 1.

As originally constructed, fan placement in relation to the array of subsurface ventilation pipes included in the former SVE trench piping system is summarized as follows:³

- Fan #1: SVE line VE-4
- Fan #2: SVE lines 1n, 1s, and 2s
- Fan #3: SVE lines 3s and 5s
- Fan #4: SVE lines 6s and 7s
- Fan #5: SVE line VE-1d
- Fan #6: SVE line VE-2d
- Fan #7: SVE lines VE-3d
- Fan #8: SVE lines VE-5d, VE-6d, and VE-7d

Within each SVE trench, perforated PVC and/or HDPE extraction pipes are bedded in crushed rock. The in-line fans consist of RadonAway® Model No. HS5000 and Festa Radon Model AMG Eagle Extreme units. Each fan routes extracted vapors to exhaust stacks located on the roofline near the south building exterior. Refer to the VMSMM for SSD/SSV system drawings.

SUMMARY OF MONITORING ACTIVITIES

NV5 performed routine (monthly) monitoring of the SSD/SSV system during calendar year 2023.⁴ During each monitoring event, field personnel conducted the following activities:

- Recorded ambient atmospheric conditions, including temperature, barometric pressure, and relative humidity.
- Conducted a visual observation of the system and confirmed that all fans were operational.
- Measured and recorded vacuum levels and flow rates within each ventilation line.
- Evaluated the accumulation of moisture/condensate in each ventilation line, as indicated by vacuum and flow readings. Removed accumulated condensate within the ventilation lines as appropriate.

³ Refer to reports on file with DEQ for a detailed description of the SVE system formerly in operation at the subject property. With the exception of SVE leg VE-4 (which is a standalone, 3-inch-diameter piping system), each SVE trench includes a deep, 4-inch-diameter extraction line and a shallow (sub-slab), 3-inch-diameter extraction/ventilation line. The “d” designation on the SVE legs denotes the deep, 4-inch-diameter extraction/ventilation line within each SVE trench. The “s” designation on the SVE legs denotes the shallow, 3-inch-diameter extraction/ventilation line within each SVE trench. The “n” designation denotes a separate ventilation line located in the former neutralization sump area.

⁴ Monthly monitoring activities were formally initiated in February 2021 and have included all subsequent months except June 2021.

During each monitoring event, field personnel also measured and recorded induced vacuum levels at selected monitoring points throughout the subject property warehouse structure (see Figure 1).⁵

A summary of SSD/SSV system readings is presented in Table 1, which also includes historical readings before calendar year 2023 for reference. Table 2 presents a summary of induced vacuum readings at selected monitoring points throughout the SSD/SSV operational period.

The Attachment presents summary charts depicting trends in differential pressure (vacuum), flow readings measured in each ventilation line, and selected monitoring point-induced vacuum readings throughout the monitoring period (January through December 2023).

SUMMARY OF FAN MODIFICATION ACTIVITIES

As described in the 2021 and 2022 Annual Monitoring Reports, several of the ventilation lines periodically exhibited increased vacuum levels and decreased flow rates associated with the buildup of condensate in the respective lines. This observation was most significant during the wet season in ventilation lines VE-1d, VE-2d, and VE-3d. However, because the shallow (sub-slab) ventilation pipes are plumbed separately from the deeper lines, the impact of condensate buildup is less pronounced in the shallow array of ventilation lines. In response to the effects of condensate buildup in the deep lines, NV5 personnel completed a fan modification procedure in October 2022 (on a trial basis) to evaluate whether fan modifications could permanently rectify condensate buildup issues while maintaining the target levels of induced vacuum beneath the warehouse structure. On October 27, 2022, NV5 coordinated the following fan modification procedure:

- Removed the inline fans from ventilation lines VE-1d, VE-2d, and VE-3d. Temporarily capped the three ventilation lines to help prevent short-circuiting.
- Transferred the three fans removed from the ventilation lines described above to other existing ventilation lines to operate in series with previously installed fans increasing the ventilation capacity as follows:
 - VE-1d fan moved to ventilation line VE-4
 - VE-2d fan moved to ventilation lines VE-1n, VE-1s, and VE-2s
 - VE-3d fan moved to ventilation lines VE-3s and VE-5s

Following the October 2022 fan modification procedure, NV5 conducted follow-up monitoring events in October and November 2022 to evaluate the efficacy of the fan modification. As summarized in Tables 1 and 2 and the Attachment, induced vacuum levels reflecting the modified fan layout were substantially less than the induced levels of vacuum observed prior to the modification. In response, NV5 coordinated the re-installation of three new fans on ventilation lines VE-1d, VE-2d, and VE-3d on December 20, 2022. The new fans were Festa Radon Model AMG Eagle Extreme. The vacuum and flow capacity of the AMG Eagle Extreme fans

⁵ Accessible observation locations include multi-depth monitoring points V0-7s, V0-7i, V0-7d, V0-8s, V0-8d, V0-9s, V0-9d, V0-10s, V0-10d, V0-11s, V0-11i, V0-11d, V0-12s, V0-12i, V0-12d, V0-13s, V0-13i, V0-13d, V0-14s, V0-14i, and V0-14d. Refer to Figure 1.

are equivalent or better than the originally installed fans. The additional fan installation maintains the fans operating in series on ventilation lines VE-1n, VE-1s, VE-2s, VE-3s, VE-4, and VE-5s, as noted above.

Following re-installation of new fans on ventilation lines VE-1d, VE-2d, and VE-3d, NV5 conducted a round of monitoring to document operational characteristics of the augmented layout on December 20, 2022. As summarized in Tables 1 and 2 and the Attachment, operational characteristics and induced vacuum levels beneath the warehouse structure returned to pre-modification conditions that exceed SSD/SSV system objectives. Additional fan modifications were not made during calendar year 2023.

DISCUSSION OF MONITORING RESULTS

The SSD/SSV system operated continuously throughout calendar year 2023 without disruption. The performance objective of the SSD/SSV system is to (1) operate continuously and (2) maintain an adequate level of induced vacuum to help prevent excessive buildup of vapors beneath the warehouse structure floor slab. Specifically, the target level of induced sub-slab vacuum throughout the warehouse area is -0.02 inch of water, consistent with the value recommended by the U.S. Environmental Protection Agency.⁶ A review of the 2023 performance and monitoring data indicates that the SSD/SSV is exceeding this objective.

Based on a review of the overall 2023 monitoring data, the engineering control appears to be functioning beyond performance objectives. However, condensate accumulation in deeper legs appears to reduce the performance of the system, especially during the winter months. While condensate accumulation in the deeper lines may impact system performance, the overall objective of adequate induced vacuum has been maintained. Monthly condensate removal has been helpful in improving system performance.

PLANNED ACTIVITIES

NV5 will continue conducting monthly monitoring activities in 2024 as prescribed in the VMSMM. Induced sub-slab vacuum measurements will also be recorded. Additionally, NV5 will continue to remove condensate from the ventilation lines and evaluate options to reduce condensate accumulation in the ventilation lines.



⁶ U.S. Environmental Protection Agency, 2008. *Engineering Issue: Indoor Air Vapor Intrusion Mitigation Approaches*. Office of Research and Development, National Risk Management Research Laboratory, Publication 600/R-08-115, dated October 2008.

We appreciate your continued support on this project. Please call if you have questions regarding this submittal.

Sincerely,

NV5

Joshua J. Rowe

Joshua J. Rowe, R.G.
Project Manager

M.F.C.

Mike F. Coenen, P.E.
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JJR:MFC:sn

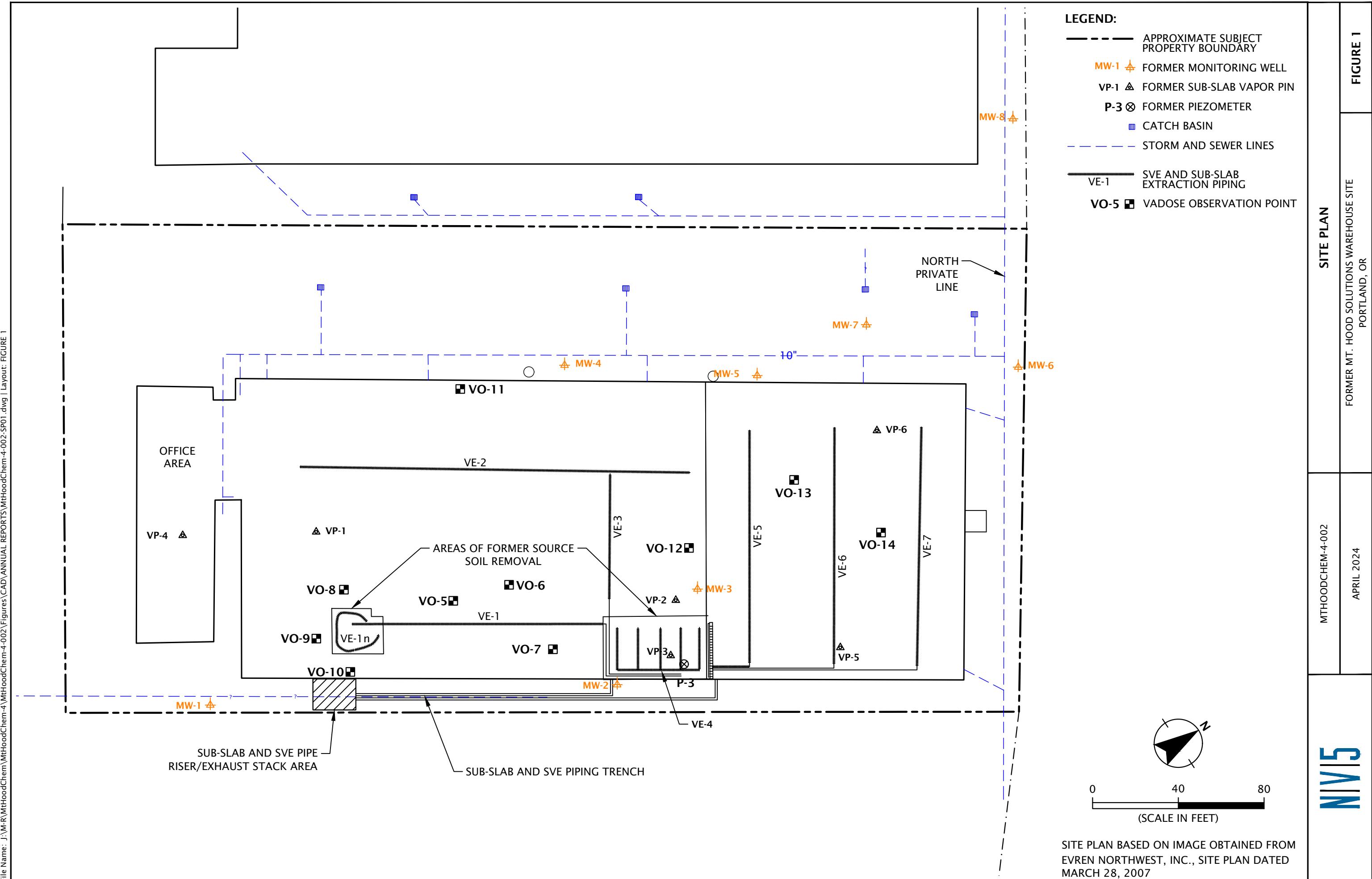
Attachments

One copy submitted

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FIGURES



TABLES

				TABLE 1 SSD/SSV System Data Sheet—Compound Readings Former Mt. Hood Solutions Warehouse Site 4444 NW Yeon Avenue Portland, Oregon																													
Date	Time	Fan #1				Fan #2								Fan #3								Fan #4											
		VE-4				VE-1n				VE-1s				VE-2s				VE-3s				VE-5s				VE-6s							
		Leg Vacuum (low)	Leg PID (ppm)	Leg Velocity (fpm)	Leg Flow (cfm)	Leg Vacuum (low)	Leg PID (ppm)	Leg Velocity (fpm)	Leg Flow (cfm)	Leg Vacuum (low)	Leg PID (ppm)	Leg Velocity (fpm)	Leg Flow (cfm)	Leg Vacuum (low)	Leg PID (ppm)	Leg Velocity (fpm)	Leg Flow (cfm)	Leg Vacuum (low)	Leg PID (ppm)	Leg Velocity (fpm)	Leg Flow (cfm)	Leg Vacuum (low)	Leg PID (ppm)	Leg Velocity (fpm)	Leg Flow (cfm)	Leg Vacuum (low)	Leg PID (ppm)	Leg Velocity (fpm)	Leg Flow (cfm)				
05/04/17	1135 - 1236	-3.5	0.4	60	2.9	-3.5	0.2	105	5.2	-3.5	2.0	105	5.2	-3.5	0.2	65	3.2	-3.4	0.2	70	3.4	-3.6	0.3	110	5.4	-2.5	0.3	2,040	100.2	-2.5	0.3	48	2.4
08/25/17	0745 - 0829	-3.8	0.7	82	4.0	-3.7	0.4	84	4.1	-3.8	0.4	84	4.1	-3.8	0.4	83	4.1	-3.8	0.3	120	5.9	-3.8	0.5	125	6.1	-2.5	0.4	890	43.7	-2.5	0.2	52	2.6
12/07/17	0947 - 1050	-4.1	0.0	101	5.0	-4.0	0.0	108	5.3	-4.0	0.0	111	5.5	-4.0	0.0	107	5.3	-2.8	0.0	78	3.8	-2.8	0.0	1,060	52.0	-2.6	0.0	1,310	64.3	-2.6	0.0	65	3.2
01/08/18	1000 - 1010	-2.4	--	1,350	66.3	-1.4	--	580	28.5	-1.3	--	690	33.9	-1.2	--	650	31.9	-1.7	--	900	44.2	-1.6	--	840	41.2	-1.8	--	940	46.2	-1.8	--	570	28.0
03/15/18	0820 - 0916	-2.4	0.7	1,150	56.5	-1.4	1.1	440	21.6	-1.3	1.3	630	30.9	-1.2	1.3	630	30.9	-1.7	1.2	860	42.2	-1.7	0.9	790	38.8	-1.8	0.8	870	42.7	-1.7	0.7	640	31.4
07/23/20	1245 - 1300	-2.3	--	1,500	73.7	-2.7	--	70	3.4	-2.7	--	68	3.3	-2.6	--	1,116	54.8	-2.0	--	1,112	54.6	-1.9	--	982	48.2	-1.9	--	827	40.6	-1.8	--	890	43.7
	1445 - 1520	-2.3	--	1,285	63.1	-1.4	--	583	28.6	-1.3	--	650	31.9	-1.3	--	625	30.7	-1.8	--	835	41.0	-1.8	--	810	39.8	-1.9	--	770	37.8	-1.8	--	725	35.6
08/23/20	--	-2.3	--	--	73.7	-2.7	--	--	3.4	-2.7	--	--	31.9	-2.6	--	--	54.8	-2.0	--	--	54.6	-1.9	--	--	48.2	-1.9	--	--	40.6	-1.8	--	--	43.7
	--	-2.3	--	--	63.1	-1.4	--	--	28.6	-1.3	--	--	46.6	-1.3	--	--	30.7	-1.8	--	--	40.9	-1.8	--	--	39.8	-1.9	--	--	37.8	-1.8	--	--	35.6
02/19/21	0800 - 0830	-3.9	--	250	12.3	-1.9	--	110	5.4	-1.7	--	890	43.7	-1.4	--	800	39.3	-1.7	--	990	48.6	-1.7	--	830	40.8	-1.8	--	910	44.7	-1.7	--	810	39.8
	1030 - 1100	-2.4	--	1,500	73.7	-1.4	--	550	27.0	-1.3	--	710	34.9	-1.2	--	690	33.9	-1.7	--	970	47.6	-1.7	--	930	45.7	-1.8	--	920	45.2	-1.8	--	700	34.4
03/26/21	1215	-2.4	0.0	--	84.5	-1.5	0.0	--	41.7	-1.4	0.0	--	46.4	-1.3	0.0	--	45.3	-1.8	0.0	--	58.8	-1.7	0.0	--	43.7	-1.9	0.0	--	54.8	-1.8	0.0	--	50.9
04/28/21	1430	-2.4	0.0	--	92.6	-1.4	0.0	--	32.7	-1.3	0.0	--	46.3	-1.2	0.0	--	45.6	-1.8	0.0	--	76.1	-1.7	0.0	--	45.7	-1.8	0.0	--	57.7	-1.8	0.0	--	49.1
05/21/21	1310	-2.3	0.1	--	74.3	-1.4	0.0	--	34.8	-1.3	0.0	--	40.1	-1.3	0.0	--	38.4	-1.8	0.0	--	54.0	-1.8	0.0	--	53.3	-1.8	0.0	--	60.8	-1.8	0.0	--	45.5
07/15/21	1420 - 1525	-2.3	0.1	1,380	67.8	-1.4	0.1	570	28.0	-1.4	0.0	710	34.9	-1.3	0.0	610	30.0	-1.8	0.0	900	44.2	-1.7	0.0	880	43.2	-1.8	0.0	840	41.2	-1.8	0.0	770	37.8
08/25/21	0930 - 1200	-2.3	0.2	1,440	70.7	-1.4	0.2	560	27.5	-1.3	0.2	700	34.4	-1.3	0.2	720	35.3	-1.7	0.1	990	48.6	-1.7	0.2	930	45.7	-1.8	0.2	920	45.2	-1.8	0.2	770	37.8
09/22/21	1200	-2.3	0.1	1,370	67.3	-1.4	0.1	570	28.0	-1.3	0.1	670	32.9	-1.2	0.1	670	32.9	-1.7	0.1	890	43.7	-1.7	0.2	850	41.7	-1.8	0.2	940	46.2	-1.8	0.2	780	38.3
10/27/21	1035	-2.3	0.2	1,260	61.9	-1.4	0.3	530	26.0	-1.3	0.3	640	31.4	-1.2	0.3	640	31.4	-1.7	0.3	920	45.2	-1.7	0.3	830	40.8	-1.8	0.3	780	38.3	-1.7	0.3	680	33.4

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Date	Time	Fan #1				Fan #2								Fan #3						Fan #4														
		VE-4				VE-1n				VE-1s				VE-2s				VE-3s			VE-5s			VE-6s			VE-7s							
		Leg Vacuum (low)	Leg PID (ppm)	Leg Velocity (fpm)	Leg Flow (cfm)	Leg Vacuum (low)	Leg PID (ppm)	Leg Velocity (fpm)	Leg Flow (cfm)	Leg Vacuum (low)	Leg PID (ppm)	Leg Velocity (fpm)	Leg Flow (cfm)	Leg Vacuum (low)	Leg PID (ppm)	Leg Velocity (fpm)	Leg Flow (cfm)	Leg Vacuum (low)	Leg PID (ppm)	Leg Velocity (fpm)	Leg Flow (cfm)	Leg Vacuum (low)	Leg PID (ppm)	Leg Velocity (fpm)	Leg Flow (cfm)	Leg Vacuum (low)	Leg PID (ppm)	Leg Velocity (fpm)	Leg Flow (cfm)					
11/24/21	0800 - 0855	-2.4	0.0	1,250	61.4	-1.4	0.0	500	24.6	-1.3	0.0	620	30.4	-1.1	0.0	600	29.5	-1.7	0.0	870	42.7	-1.7	0.0	790	38.8	-1.8	0.0	740	36.3	-1.7	0.0	680	33.4	
12/16/21	1115 - 1150	-2.4	0.0	590	29.0	-1.4	0.0	640	31.4	-1.4	0.0	640	31.4	-1.2	0.0	680	33.4	-1.7	0.0	830	40.8	-1.7	0.0	810	39.8	-1.7	0.0	780	38.3	-1.7	0.0	600	29.5	
01/21/22	0815 - 0905	-2.4	0.0	1,400	68.7	-1.8	0.0	180	8.8	-1.7	0.0	800	39.3	-1.4	0.0	730	35.8	-1.8	0.0	860	42.2	-1.7	0.0	810	39.8	-1.8	0.0	825	40.5	-1.7	0.0	700	34.4	
01/26/22	0900 - 0920	-2.4	-	--	-	-1.8	-	-	-	-1.7	-	-	-	-1.3	-	-	-	-	-	-	-	-1.7	-	-	-	-	-1.8	-	-	-	-1.7	-	-	-
	1250 - 1320	-2.4	0.1	1,650	81.0	-1.5	0.1	780	38.3	-1.4	0.1	830	40.8	-1.2	0.1	800	39.3	-1.7	0.1	1,020	50.1	-1.7	0.1	1,130	55.5	-1.8	0.2	1,060	52.0	-1.7	0.1	940	46.2	
02/24/22	0925 - 0955	-2.4	-	1,100	54.0	-1.8	-	290	14.2	-1.7	-	720	35.4	-1.0	-	530	26.0	-1.7	--	780	38.3	-1.7	--	730	35.8	-1.8	-	730	35.8	-1.7	-	630	30.9	
	1235 - 1315	-2.4	0.0	1,250	61.4	-1.5	0.0	520	25.5	-1.4	0.0	660	32.4	-1.2	0.0	650	31.9	-1.7	0.0	800	39.3	-1.7	0.0	800	39.3	-1.8	0.0	810	39.8	-1.7	0.0	690	33.9	
03/23/22	0950 - 1020	-2.4	-	1,350	66.3	-1.4	-	570	28.0	-1.3	-	680	33.4	-1.3	-	680	33.4	-1.8	--	910	44.7	-1.7	--	840	41.2	-1.8	-	850	41.7	-1.8	-	710	34.9	
	1320 - 1350	-2.4	0.2	1,500	73.7	-1.5	0.2	620	30.4	-1.4	0.1	720	35.4	-1.3	0.1	720	35.4	-1.8	0.1	920	45.2	-1.8	0.1	910	44.7	-1.8	0.1	950	46.6	-1.8	0.1	810	39.8	
04/27/22	0800 - 0830	-2.4	-	1,300	63.8	-1.4	-	510	25.0	-1.3	-	640	31.4	-1.3	-	630	30.9	-1.8	--	800	39.3	-1.8	--	730	35.8	-1.8	-	780	38.3	-1.8	-	690	33.9	
	1335 - 1405	-2.4	0.1	1,370	67.3	-1.6	0.1	590	29.0	-1.4	0.0	710	34.9	-1.4	0.1	680	33.4	-1.9	0.0	980	48.1	-1.8	0.0	940	46.2	-1.9	0.1	980	48.1	-1.8	0.1	910	44.7	
05/26/22	0840 - 0925	-2.4	-	1,340	65.8	-1.5	-	600	29.5	-1.4	-	680	33.4	-1.3	-	700	34.4	-1.8	--	930	45.7	-1.8	--	860	42.2	-1.9	-	890	43.7	-1.8	-	940	46.2	
	1235 - 1315	-2.4	0.0	1,640	80.5	-1.5	0.0	660	32.4	-1.4	0.0	710	34.9	-1.4	0.0	740	36.3	-1.8	0.0	1,020	50.1	-1.8	0.0	980	48.1	-1.9	0.0	1,060	52.0	-1.8	0.0	890	43.7	
06/27/22	0830 - 0845	-2.3	-	1,410	69.2	-1.5	-	620	30.4	-1.4	-	692	34.0	-1.4	-	675	33.1	-1.8	--	1,025	50.3	-1.8	--	880	43.2	-1.9	-	905	44.4	-1.9	-	905	44.4	
	1300 - 1330	-2.1	0.9	1,654	81.2	-1.5	0.9	730	35.8	-1.4	1.0	850	41.7	-1.4	0.9	875	43.0	-1.8	1.0	1,230	60.4	-1.8	1.0	1,100	54.0	-1.9	1.2	1,300	63.8	-1.9	1.3	1215	59.7	
07/22/22	0830 - 0855	-2.3	-	1,082	53.1	-1.5	-	520	25.5	-1.4	-	560	27.5	-1.4	-	545	26.8	-1.8	--	769	37.8	-1.8	--	771	37.9	-2.0	-	830	40.8	-1.9	-	678	33.3	
	1105 - 1142	-2.3	0.2	1,405	69.0	-1.5	0.2	552	27.1	-1.4	0.3	638	31.3	-1.4	0.2	565	27.7	-1.9	0.2	860	42.2	-1.8	0.2	835	41.0	-1.9	0.2	885	43.5	-1.9	0.2	752	36.9	
08/26/22	0815 - 0845	-2.3	-	1,060	52.0	-1.5	-	371	18.2	-1.4	-	434	21.3	-1.4	-	465	22.8	-1.8	--	680	33.4	-1.8	--	662	32.5	-1.9	-	645	31.7	-1.9	-	530	26.0	
	1115 - 1145	-2.3	0.1	1,096	53.8	-1.5	0.2	405	19.9	-1.4	0.1	491	24.1	-1.4	0.2	442	21.7	-1.8	0.2	628	30.8	-1.8	0.2	620	30.4	-1.9	0.2	635	31.2	-1.9	0.2	645	31.7	

TABLE 1 SSD/SSV System Data Sheet—Compound Readings Former Mt. Hood Solutions Warehouse Site 4444 NW Yeon Avenue Portland, Oregon																																	
Date	Time	Fan #1				Fan #2								Fan #3							Fan #4												
		VE-4				VE-1n				VE-1s				VE-2s				VE-3s			VE-5s			VE-6s			VE-7s						
		Leg Vacuum (low)	Leg PID (ppm)	Leg Velocity (fpm)	Leg Flow (cfm)	Leg Vacuum (low)	Leg PID (ppm)	Leg Velocity (fpm)	Leg Flow (cfm)	Leg Vacuum (low)	Leg PID (ppm)	Leg Velocity (fpm)	Leg Flow (cfm)	Leg Vacuum (low)	Leg PID (ppm)	Leg Velocity (fpm)	Leg Flow (cfm)	Leg Vacuum (low)	Leg PID (ppm)	Leg Velocity (fpm)	Leg Flow (cfm)	Leg Vacuum (low)	Leg PID (ppm)	Leg Velocity (fpm)	Leg Flow (cfm)	Leg Vacuum (low)	Leg PID (ppm)	Leg Velocity (fpm)	Leg Flow (cfm)				
09/26/22	0855 - 0921	-2.3	-	770	37.8	-1.5	-	414	20.3	-1.4	-	502	24.6	-1.3	-	479	23.5	-1.8	--	747	36.7	-1.7	--	681	33.4	-1.9	-	565	27.7	-1.8	-	510	25.0
	1115 - 1145	-2.3	0.5	1,128	55.4	-1.5	0.2	545	26.8	-1.4	0.1	612	30.0	-1.4	0.1	516	25.3	-1.8	0.0	725	35.6	-1.8	0.1	805	39.5	-1.9	0.1	915	44.9	-1.8	0.0	654	32.1
10/27/22	0730 - 0800	-2.3	0.1	1,005	49.3	-1.4	0.1	275	13.5	-1.3	0.1	344	16.9	-1.3	0.1	340	16.7	-1.7	0.1	625	30.7	-1.7	0.1	538	26.4	-1.8	0.1	635	31.2	-1.7	0.1	455	22.3
	1313 - 1342	-4.0	0.0	2,100	103.1	-1.8	0.1	480	23.6	-1.7	0.1	930	45.7	-1.6	0.1	530	26.0	-2.5	0.2	760	37.3	-2.4	0.2	720	35.4	-1.8	0.2	1,100	54.0	-1.8	0.2	490	24.1
11/02/22	1020 - 1130	-4.1	0.0	1,277	62.7	-1.9	0.1	329	16.2	-1.7	0.1	441	21.7	-1.6	0.1	396	19.4	-2.5	0.1	585	28.7	-2.4	0.1	583	28.6	-1.8	0.1	500	24.6	-1.8	0.1	381	18.7
11/10/22	0930 - 0948	-4.1	-	2,058	101.0	-1.9	-	385	18.9	-1.7	-	515	25.3	-1.7	-	462	22.7	-2.5	--	658	32.3	-2.4	--	616	30.2	-1.8	-	578	28.4	-1.7	-	428	21.0
	1305 - 1340	-4.1	0.1	2,025	99.4	-1.9	0.2	397	19.5	-1.7	0.2	770	37.8	-1.6	0.2	477	23.4	-2.4	0.2	722	35.5	-2.4	0.2	661	32.5	-1.8	0.3	841	41.3	-1.7	0.2	660	32.4
12/20/22	1040 - 1130	-4.2	0.0	1,510	74.1	-2.0	0.0	530	26.0	-1.9	0.0	650	31.9	-1.8	0.0	660	32.4	-2.6	0.0	840	41.2	-2.5	0.0	950	46.6	-1.9	0.0	700	34.4	-1.8	0.0	600	29.5
01/24/23	0840 - 0910	-4.2	-	1,600	78.6	-2.6	-	200	9.8	-2.3	-	840	41.2	-2.3	-	630	30.9	-2.5	--	930	45.7	-2.4	--	900	44.2	-1.8	-	740	36.3	-1.7	-	680	33.4
	1155 - 1235	-4.2	0.0	1,880	92.3	-2.0	0.0	600	29.5	-1.9	0.0	760	37.3	-1.8	0.0	760	37.3	-2.6	0.0	1,050	51.6	-2.5	0.0	1,010	49.6	-1.8	0.0	830	40.8	-1.8	0.0	660	32.4
02/21/23	1045 - 1115	-4.1	-	1,660	81.5	-2.0	-	510	25.0	-1.8	-	670	32.9	-1.8	-	620	30.4	-2.6	--	960	47.1	-2.5	--	960	47.1	-1.8	-	870	42.7	-1.8	-	700	34.4
	1350 - 1420	-4.2	0.0	1,520	74.6	-2.0	0.0	540	26.5	-1.9	0.0	660	32.4	-1.8	0.0	640	31.4	-2.6	0.0	880	43.2	-2.5	0.0	770	37.8	-1.8	0.0	660	32.4	-1.8	0.1	500	24.6
03/23/23	0840 - 0910	-4.1	-	1,660	81.5	-2.0	-	520	25.5	-1.8	-	700	34.4	-1.7	-	630	30.9	-2.5	--	950	46.6	-2.4	--	920	45.2	-1.8	-	700	34.4	-1.8	-	600	29.5
	1325 - 1355	-4.2	0.0	1,600	78.6	-2.1	0.0	570	28.0	-1.9	0.0	660	32.4	-1.9	0.0	630	30.9	-2.6	0.0	920	45.2	-2.6	0.0	850	41.7	-1.8	0.0	740	36.3	-1.8	0.0	600	29.5
04/21/23	0840 - 0910	-4.2	-	2,080	102.1	-2.0	-	570	28.0	-1.8	-	700	34.4	-1.7	-	680	33.4	-2.6	--	1,160	57.0	-2.5	--	900	44.2	-1.8	-	830	40.8	-1.8	-	590	29.0
	1150 - 1220	-4.2	0.0	2,240	110.0	-2.1	0.0	620	30.4	-1.9	0.0	890	43.7	-1.9	0.0	820	40.3	-2.6	0.0	990	48.6	-2.5	0.0	970	47.6	-1.8	0.0	770	37.8	-1.8	0.0	780	38.3
05/23/23	1035 - 1100	-4.1	-	1,690	83.0	-2.1	-	590	29.0	-2.0	-	670	32.9	-1.9	-	650	31.9	-2.7	--	830	40.8	-2.6	--	1,000	49.1	-1.9	-	730	35.8	-1.9	-	610	30.0
	1310 - 1340	-4.1	0.2	1,690	83.0	-2.1	0.2	710	34.9	-2.0	0.1	700	34.4	-1.9	0.2	710	34.9	-2.6	0.1	960	47.1	-2.6	0.2	1,070	52.5	-1.9	0.1	970	47.6	-1.8	0.1	700	34.4

TABLE 1 SSD/SSV System Data Sheet—Compound Readings Former Mt. Hood Solutions Warehouse Site 4444 NW Yeon Avenue Portland, Oregon																																	
Date	Time	Fan #1				Fan #2								Fan #3						Fan #4													
		VE-4				VE-1n				VE-1s			VE-2s			VE-3s			VE-5s			VE-6s		VE-7s									
		Leg Vacuum (low)	Leg PID (ppm)	Leg Velocity (fpm)	Leg Flow (cfm)	Leg Vacuum (low)	Leg PID (ppm)	Leg Velocity (fpm)	Leg Flow (cfm)	Leg Vacuum (low)	Leg PID (ppm)	Leg Velocity (fpm)	Leg Flow (cfm)	Leg Vacuum (low)	Leg PID (ppm)	Leg Velocity (fpm)	Leg Flow (cfm)	Leg Vacuum (low)	Leg PID (ppm)	Leg Velocity (fpm)	Leg Flow (cfm)	Leg Vacuum (low)	Leg PID (ppm)	Leg Velocity (fpm)	Leg Flow (cfm)								
06/27/23	0845 - 0930	-4.1	0.0	2,020	99.2	-2.1	0.0	590	29.0	-2.0	0.0	930	45.7	-1.9	0.0	750	36.8	-2.7	0.1	1,300	63.8	-2.6	0.0	1,340	65.8	-1.9	0.1	860	42.2	-1.9	0.1	660	32.4
07/24/23	0910 - 0950	-4.0	0.1	2,050	100.7	-2.1	0.1	600	29.5	-1.9	0.1	720	35.4	-1.9	0.1	660	32.4	-2.6	0.1	990	48.6	-2.6	0.1	870	42.7	-1.9	0.1	640	31.4	-1.9	0.1	570	28.0
08/25/23	0910 - 0950	-4.0	0.0	2,100	103.1	-2.0	0.0	730	35.8	-1.9	0.1	690	33.9	-1.9	0.0	810	39.8	-2.6	0.1	1,120	55.0	-2.5	0.0	1,400	68.7	-1.9	0.0	730	35.8	-1.8	0.0	610	30.0
09/28/23	0730 - 900	-4.1	0.1	1,561	76.6	-2.0	0.0	565	27.7	-1.9	0.0	628	30.8	-1.8	0.0	656	32.2	-2.6	0.0	967	47.5	-2.5	0.0	943	46.3	-1.9	0.0	810	39.8	-1.8	0.0	546	26.8
	1230 - 1305	-4.0	0.0	2,046	100.5	-2.0	0.0	615	30.2	-1.9	0.0	962	47.2	-1.8	0.0	803	39.4	-2.6	0.0	1,241	60.9	-2.5	0.0	1,104	54.2	-1.8	0.0	849	41.7	-1.8	0.0	606	29.8
10/24/23	0830 - 0905	-4.1	-	1,285	63.1	-2.0	-	540	26.5	-1.9	-	646	31.7	-1.8	-	566	27.8	-2.6	--	858	42.1	-2.5	--	850	41.7	-1.9	-	660	32.4	-1.8	-	554	27.2
	1145 - 1220	-4.1	0.0	1,290	63.3	-2.1	0.0	517	25.4	-1.9	0.0	612	30.0	-1.9	0.0	625	30.7	-2.6	0.0	836	41.0	-2.5	0.0	784	38.5	-1.9	0.0	624	30.6	-1.8	0.0	531	26.1
11/27/23	0855 - 0945	-4.1	-	1,584	77.8	-1.9	-	602	29.6	-1.7	-	753	37.0	-1.7	-	726	35.6	-2.5	-	1,004	49.3	-2.4	-	962	47.2	-1.8	-	759	37.3	-1.7	-	622	30.5
11/27/23	1215 - 1245	-4.1	0.0	1,894	93.0	-1.9	0.0	804	39.5	-1.8	0.0	876	43.0	-1.7	0.0	814	40.0	-2.4	0.0	1,113	54.6	-2.4	0.0	1,075	52.8	-1.8	0.0	996	48.9	-1.7	0.0	762	37.4
12/14/23	0900-0930	-4.1	-	1,692	83.1	-1.9	-	620	30.4	-1.8	-	720	35.4	-1.7	-	675	33.1	-2.5	-	1,080	53.0	-2.4	-	1,008	49.5	-1.8	-	802	39.4	-1.7	-	672	33.0
12/14/23	1230-1315	-4.1	0.0	1,758	86.3	-2.0	0.0	626	30.7	-1.8	0.0	794	39.0	-1.8	0.0	800	39.3	-2.5	0.0	1,175	57.7	-2.4	0.0	1,065	52.3	-1.8	0.0	820	40.3	-1.8	0.0	676	33.2

TABLE 1 SSD/SSV System Data Sheet—Compound Readings Former Mt. Hood Solutions Warehouse Site 4444 NW Yeon Avenue Portland, Oregon																												
Date	Time	Fan #5				Fan #6				Fan #7				Fan #8								Cumulative Flow Rate (cm)	Remarks					
		VE-1d				VE-2d				VE-3d				VE-5d				VE-6d										
		Leg Vacuum (iow)	Leg PID (ppm)	Leg Velocity (fpm)	Leg Flow (cfm)	Leg Vacuum (iow)	Leg PID (ppm)	Leg Velocity (fpm)	Leg Flow (cfm)	Leg Vacuum (iow)	Leg PID (ppm)	Leg Velocity (fpm)	Leg Flow (cfm)	Leg Vacuum (iow)	Leg PID (ppm)	Leg Velocity (fpm)	Leg Flow (cfm)	Leg Vacuum (iow)	Leg PID (ppm)	Leg Velocity (fpm)	Leg Flow (cfm)							
05/04/17	1135 - 1236	-2.8	0.2	2,050	178.9	-3.4	4.5	105	9.2	-3.4	3.0	59	5.1	-1.6	0.3	1,480	129.2	-1.7	0.3	140	12.2	-1.7	0.2	150	13.1	481	First event following additional fan installation (8 fans online)	
08/25/17	0745 - 0829	-3.7	1.9	81	7.1	-3.7	1.0	80	7.0	-3.8	0.9	80	7.0	-0.8	0.8	570	49.7	-0.8	0.6	305	26.6	-0.8	0.2	307	26.8	206	Second event following additional fan installation (8 fans online)	
12/07/17	0947 - 1050	-4.1	0.0	117	10.2	-4.1	0.0	107	9.3	-4.1	0.0	112	9.8	-1.6	0.0	1,015	88.6	-1.7	0.0	46	4.0	-1.7	0.0	45	3.9	280	Third event following additional fan installation (8 fans online)	
01/08/18	1000 - 1010	-2.3	--	800	69.8	-2.0	--	780	68.1	-2.0	--	790	68.9	-1.3	--	890	77.7	-1.3	--	180	15.7	-1.3	--	250	21.8	711	Follow-up measurements following removal of condensate from lines	
03/15/18	0820 - 0916	-2.9	0.1	500	43.6	-2.2	0.3	660	57.6	-2.1	0.2	740	64.6	-1.5	0.5	870	75.9	-1.5	0.2	150	13.1	-1.5	0.2	160	14.0	628	Fourth event following additional fan installation (8 fans online)	
07/23/20	1245 - 1300	-3.7	--	102	8.9	-3.6	--	107	9.3	-3.7	--	114	9.9	-1.3	--	872	76.1	-1.3	--	583	50.9	-1.3	--	53	4.6	492	Fifth event following additional fan installation (8 fans online), before removal of condensate from lines	
	1445 - 1520	-2.1	--	540	47.1	-1.8	--	870	75.9	-1.7	--	835	72.9	-1.2	--	715	62.4	-1.2	--	521	45.5	-1.2	--	215	18.8	704	Follow-up measurements following removal of condensate from lines	
08/23/20	--	-3.7	--	--	8.9	-3.6	--	--	9.3	-3.7	--	--	9.9	-1.3	--	--	76.1	-1.3	--	--	50.9	-1.3	--	--	4.6	521		Condensate removal event—pre-removal
	--	-2.1	--	--	47.6	-1.8	--	--	75.9	-1.7	--	--	72.9	-1.2	--	--	62.4	-1.2	--	--	45.5	-1.2	--	--	18.8	719		Condensate removal event—post removal
02/19/21	0800 - 0830	-4.0	--	120	10.5	-4.0	--	120	10.5	-3.9	--	120	10.5	-2.3	--	890	77.7	-2.1	--	55	4.8	-2.1	--	70	6.1	405	Condensate removal event—pre-removal	
	1030 - 1100	-2.2	--	960	83.8	-1.9	--	910	79.4	-1.7	--	920	80.3	-1.3	--	880	76.8	-1.3	--	240	20.9	-1.3	--	290	25.3	789	Condensate removal event—post removal	
03/26/21	1215	-3.3	0.0	--	36.0	-3.7	0.0	--	41.8	-3.8	0.0	--	39.1	-1.9	0.0	--	94.2	-1.9	0.0	--	14.6	-2.0	0.0	--	13.5	704	Evren	
04/28/21	1430	-3.3	0.0	--	36.0	-3.5	0.0	--	36.2	-3.8	0.0	--	35.5	-1.8	0.0	--	138.1	-1.8	0.0	--	9.5	-1.8	0.0	--	9.2	746	Evren	
05/21/21	1310	-3.1	1.1	--	35.0	-3.2	0.2	--	42.0	-3.3	0.3	--	13.0	-1.7	0.1	--	97.5	-1.8	0.0	--	5.8	-1.8	0.0	--	10.2	618	with Evren	
07/15/21	1420 - 1525	-1.9	0.1	870	75.9	-1.5	0.0	950	82.9	-1.5	0.1	890	77.7	-1.2	0.1	820	71.6	-1.2	0.0	580	50.6	-1.2	0.0	60	5.2	769		
08/25/21	0930 - 1200	-1.8	0.1	840	73.3	-1.4	0.1	920	80.3	-1.4	0.1	910	79.4	-1.2	0.2	760	66.3	-1.2	0.2	630	55.0	-1.2	0.2	58	5.1	784		
09/22/21	1200	-1.8	0.0	890	77.7	-1.4	0.0	880	76.8	-1.4	0.0	920	80.3	-1.1	0.1	810	70.7	-1.1	0.1	590	51.5	-1.1	0.1	82	7.2	775	Also completed vacuum removal event. No considerable condensate present.	
10/27/21	1035	-2.8	0.2	660	57.6	-3.4	0.2	170	14.8	-3.5	0.2	170	14.8	-1.1	0.2	710	62.0	-1.1	0.2	510	44.5	-1.1	0.2	40	3.5	520	VE-1d, 2d, and 3d appear to have accumulated some condensate since last.	

TABLE 1 SSD/SSV System Data Sheet—Compound Readings Former Mt. Hood Solutions Warehouse Site 4444 NW Yeon Avenue Portland, Oregon																											
Date	Time	Fan #5				Fan #6				Fan #7				Fan #8								Cumulative Flow Rate (cm)	Remarks				
		VE-1d				VE-2d				VE-3d				VE-5d				VE-6d									
		Leg Vacuum (iow)	Leg PID (ppm)	Leg Velocity (fpm)	Leg Flow (cfm)	Leg Vacuum (iow)	Leg PID (ppm)	Leg Velocity (fpm)	Leg Flow (cfm)	Leg Vacuum (iow)	Leg PID (ppm)	Leg Velocity (fpm)	Leg Flow (cfm)	Leg Vacuum (iow)	Leg PID (ppm)	Leg Velocity (fpm)	Leg Flow (cfm)	Leg Vacuum (iow)	Leg PID (ppm)	Leg Velocity (fpm)	Leg Flow (cfm)						
11/24/21	0800 - 0855	-3.7	0.0	230	20.1	-3.8	0.0	120	10.5	-3.9	0.0	110	9.6	-1.4	0.0	900	78.5	-1.5	0.0	180	15.7	-1.5	0.0	75	6.5	448	VE-1d, 2d, 3d, 6d, and 7d appear to be affected by condensate.
12/16/21	1115 - 1150	-2.5	0.0	590	51.5	-2.1	0.0	580	50.6	-1.8	0.0	710	62.0	-1.4	0.0	880	76.8	-1.4	0.0	150	13.1	-1.4	0.0	110	9.6	599	Completed condensate removal before readings were collected.
01/21/22	0815 - 0905	-3.9	0.0	105	9.2	-3.9	0.0	110	9.6	-3.9	0.0	150	13.1	-1.7	0.0	1,040	90.8	-1.8	0.0	45	3.9	-1.8	0.0	43	3.8	453	VE-1d, 2d, 3d, 6d, and 7d appear to be affected by condensate.
01/26/22	0900 - 0920	-3.9	--	--	--	-3.9	--	--	--	-3.9	--	--	--	-1.5	--	--	--	-1.6	--	--	--	-1.6	--	--	--	--	Vacuum readings only, collected before condensate removal.
	1250 - 1320	-2.5	0.2	700	61.1	-1.8	0.1	850	74.2	-1.7	0.1	1,000	87.3	-1.1	0.1	960	83.8	-1.1	0.1	250	21.8	-1.1	0.1	410	35.8	854	Readings collected following condensate removal.
02/24/22	0925 - 0955	-3.8	--	180	15.7	-3.9	--	140	12.2	-3.9	--	130	11.3	-1.6	--	880	76.8	-1.6	--	55	4.8	-1.6	--	55	4.8	408	Readings collected before condensate removal.
	1235 - 1315	-2.3	0.0	590	51.5	-1.9	0.0	670	58.5	-1.7	0.0	740	64.6	-1.2	0.0	820	71.6	-1.3	0.0	140	12.2	-1.3	0.0	250	21.8	648	Readings collected following condensate removal.
03/23/22	0950 - 1020	-3.6	--	350	30.5	-3.6	--	190	16.6	-3.6	--	180	15.7	-1.7	--	1,070	93.4	-1.7	--	75	6.5	-1.7	--	65	5.7	508	Readings collected before condensate removal.
	1320 - 1350	-2.4	0.2	770	67.2	-1.9	0.2	820	71.6	-1.7	0.1	900	78.5	-1.3	0.1	970	84.7	-1.4	0.2	90	7.9	-1.4	0.1	360	31.4	771	Readings collected following condensate removal.
04/27/22	0800 - 0830	-3.4	--	350	30.5	-3.6	--	280	24.4	-3.8	--	220	19.2	-1.6	--	960	83.8	-1.7	--	130	11.3	-1.7	--	140	12.2	499	Readings collected before condensate removal.
	1335 - 1405	-2.3	0.1	890	77.7	-1.8	0.1	1160	101.2	-1.9	0.0	880	76.8	-1.4	0.1	980	85.5	-1.4	0.1	180	15.7	-1.4	0.1	340	29.7	815	Readings collected following condensate removal.
05/26/22	0840 - 0925	-2.9	--	600	52.4	-2.3	--	800	69.8	-3.0	--	380	33.2	-1.5	--	970	84.7	-1.5	--	120	10.5	-1.5	--	310	27.1	651	Readings collected before condensate removal.
	1235 - 1315	-2.3	0.0	1,050	91.6	-1.9	0.0	1,030	89.9	-1.7	0.0	1,030	89.9	-1.3	0.0	1,030	89.9	-1.3	0.0	250	21.8	-1.3	0.0	380	33.2	884	Readings collected following condensate removal.
06/27/22	0830 - 0845	-2.1	--	950	82.9	-1.6	--	1,025	89.5	-1.6	--	1,015	88.6	-1.1	--	865	75.5	-1.1	--	457	39.9	-1.1	--	482	42.1	856	Readings collected before condensate removal.
	1300 - 1330	-2.1	0.7	1,175	102.5	-1.6	0.8	1,257	109.7	-1.6	0.8	1,275	111.3	-1.1	0.8	865	75.5	-1.1	0.8	575	50.2	-1.1	0.8	550	48.0	1048	Readings collected following condensate removal.
07/22/22	0830 - 0855	-2.0	--	655	57.2	-1.5	--	758	66.2	-1.5	--	746	65.1	-1.1	--	596	52.0	-1.1	--	322	28.1	-1.1	--	310	27.1	643	Readings collected before condensate removal.
	1105 - 1142	-2.0	0.2	786	68.6	-1.5	0.2	866	75.6	-1.5	0.2	858	74.9	-1.3	0.2	780	68.1	-1.3	0.2	476	41.5	-1.3	0.2	353	30.8	753	Readings collected following condensate removal.
08/26/22	0815 - 0845	-1.9	--	580	50.6	-1.5	--	645	56.3	-1.5	--	642	56.0	-1.1	--	502	43.8	-1.1	--	290	25.3	-1.1	--	267	23.3	549	Readings collected before condensate removal.
	1115 - 1145	-1.9	0.3	615	53.7	-1.5	0.2	697	60.8	-1.4	0.1	707	61.7	-1.1	0.1	565	49.3	-1.1	0.1	355	31.0	-1.1	0.1	194	16.9	579	Readings collected following condensate removal.

TABLE 1 SSD/SSV System Data Sheet—Compound Readings Former Mt. Hood Solutions Warehouse Site 4444 NW Yeon Avenue Portland, Oregon																											
Date	Time	Fan #5				Fan #6				Fan #7				Fan #8								Cumulative Flow Rate (cm)	Remarks				
		VE-1d				VE-2d				VE-3d				VE-5d				VE-6d									
09/26/22	0855 - 0921	-1.9	--	493	43.0	-1.5	--	512	44.7	-1.4	--	529	46.2	-1.0	--	407	35.5	-1.0	--	258	22.5	-1.0	--	214	18.7	486	Readings collected before condensate removal.
	1115 - 1145	-1.9	0.7	804	70.2	-1.4	0.7	830	72.4	-1.4	0.5	660	57.6	-1.0	0.2	548	47.8	-1.0	0.2	388	33.9	-1.0	0.2	315	27.5	657	Readings collected following condensate removal.
10/27/22	0730 - 0800	-1.9	0.0	595	51.9	-1.5	0.0	548	47.8	-1.2	0.0	478	41.7	-0.8	0.1	390	34.0	-0.8	0.1	257	22.4	-0.8	0.1	130	11.3	458	Readings collected before fan reconfiguration. No condensate removal.
	1313 - 1342	--	--	--	--	--	--	--	--	--	--	--	--	-1.0	0.1	640	55.9	-1.0	0.1	500	43.6	-1.0	0.1	170	14.8	463	Readings collected following fan reconfiguration.
11/02/22	1020 - 1130	--	--	--	--	--	--	--	--	--	--	--	--	-0.8	0.1	393	34.3	-0.9	0.1	208	18.2	-0.9	0.1	41	3.6	277	Readings collected following fan reconfiguration.
11/10/22	0930 - 0948	--	--	--	--	--	--	--	--	--	--	--	--	-1.7	--	872	76.1	-1.7	--	83	7.2	-1.7	--	132	11.5	375	Readings collected before condensate removal.
	1305 - 1340	--	--	--	--	--	--	--	--	--	--	--	--	-1.6	0.2	847	73.9	-1.6	0.1	84	7.3	-1.7	0.2	80	7.0	410	Readings collected following condensate removal.
12/20/22	1040 - 1130	-2.5	0.0	785	68.5	-1.9	0.0	650	56.7	-1.9	0.0	700	61.1	-1.5	0.0	690	60.2	-1.5	0.0	120	10.5	-1.5	0.0	140	12.2	647	Readings collected following condensate removal and addition of three new fans on VE-1d, -2d, and -3d.
01/24/23	0840 - 0910	-4.9	--	190	16.6	-4.7	--	210	18.3	-5.0	--	230	20.1	-3.8	--	180	15.7	-3.8	--	160	14.0	-3.7	--	160	14.0	439	Readings collected before condensate removal.
	1155 - 1235	-2.9	0.0	690	60.2	-2.5	0.0	720	62.8	-2.1	0.0	930	81.2	-1.4	0.0	800	69.8	-1.4	0.0	120	10.5	-1.4	0.0	210	18.3	755	Readings collected following condensate removal.
02/21/23	1045 - 1115	-4.5	--	160	14.0	-4.4	--	130	11.3	-4.5	--	180	15.7	-1.9	--	830	72.4	-2.0	--	55	4.8	-2.0	--	60	5.2	480	Readings collected before condensate removal.
	1350 - 1420	-2.8	0.0	680	59.3	-2.4	0.0	650	56.7	-2.3	0.0	740	64.6	-1.4	0.0	680	59.3	-1.5	0.0	60	5.2	-1.5	0.0	270	23.6	636	Readings collected following condensate removal.
03/23/23	0840 - 0910	-4.8	--	130	11.3	-4.5	--	170	14.8	-4.9	--	140	12.2	-3.6	--	140	12.2	-3.6	--	95	8.3	-3.7	--	100	8.7	408	Readings collected before condensate removal.
	1325 - 1355	-3.0	0.0	520	45.4	-2.5	0.0	690	60.2	-2.3	0.0	760	66.3	-1.4	0.0	700	61.1	-1.4	0.0	100	8.7	-1.4	0.0	210	18.3	649	Readings collected following condensate removal.
04/21/23	0840 - 0910	-4.3	--	230	20.1	-4.4	--	210	18.3	-4.5	--	140	12.2	-1.8	--	1,030	89.9	-1.8	--	53	4.6	-1.8	--	51	4.5	531	Readings collected before condensate removal.
	1150 - 1220	-3.0	0.0	890	77.7	-2.4	0.0	770	67.2	-2.3	0.0	850	74.2	-1.4	0.0	780	68.1	-1.4	0.0	73	6.4	-1.4	0.0	300	26.2	791	Readings collected following condensate removal.
05/23/23	1035 - 1100	-2.7	--	610	53.2	-2.1	--	720	62.8	-2.1	--	680	59.3	-1.2	--	560	48.9	-1.2	--	160	14.0	-1.2	--	340	29.7	660	Readings collected before condensate removal.
	1310 - 1340	-2.7	0.3	720	62.8	-2.1	0.2	850	74.2	-2.1	0.2	800	69.8	-1.2	0.1	860	75.1	-1.3	0.2	260	22.7	-1.2	0.2	310	27.1	770	Readings collected following condensate removal.

TABLE 1
SSD/SSV System Data Sheet—Compound Readings
Former Mt. Hood Solutions Warehouse Site
4444 NW Yeon Avenue
Portland, Oregon

TABLE 1
SSD/SSV System Data Sheet—Compound Readings
Former Mt. Hood Solutions Warehouse Site
4444 NW Yean Avenue
Portland, Oregon

Date	Time	Fan #5				Fan #6				Fan #7				Fan #8												Cumulative Flow Rate (cfm)	Remarks		
		VE-1d				VE-2d				VE-3d				VE-5d				VE-6d				VE-7d							
		Leg Vacuum (iow)	Leg PID (ppm)	Leg Velocity (fpm)	Leg Flow (cfm)	Leg Vacuum (iow)	Leg PID (ppm)	Leg Velocity (fpm)	Leg Flow (cfm)	Leg Vacuum (iow)	Leg PID (ppm)	Leg Velocity (fpm)	Leg Flow (cfm)	Leg Vacuum (iow)	Leg PID (ppm)	Leg Velocity (fpm)	Leg Flow (cfm)	Leg Vacuum (iow)	Leg PID (ppm)	Leg Velocity (fpm)	Leg Flow (cfm)	Leg Vacuum (iow)	Leg PID (ppm)	Leg Velocity (fpm)	Leg Flow (cfm)				
06/27/23	0845 - 0930	-2.5	0.0	910	79.4	-1.9	0.0	930	81.2	-1.9	0.0	1050	91.6	-1.1	0.0	630	55.0	-1.1	0.0	380	33.2	-1.1	0.0	380	33.2	880	No condensate removal because performance data indicated that SSD lines were not impacted by condensate.		
07/24/23	0910 - 0950	-2.4	0.1	950	82.9	-1.8	0.1	860	75.1	-1.8	0.1	1030	89.9	-1.1	0.1	600	52.4	-1.1	0.1	340	29.7	-1.1	0.1	350	30.5	799	No condensate removal because performance data indicated that SSD lines were not impacted by condensate. Ambient PID = 0.1 ppm.		
08/25/23	0910 - 0950	-2.3	0.1	970	84.7	-1.8	0.0	1040	90.8	-1.8	0.0	980	85.5	-1.0	0.0	700	61.1	-1.0	0.2	400	34.9	-1.0	2.4	450	39.3	884	No condensate removal because performance data indicated that SSD lines were not impacted by condensate. Ambient PID = 0.0 ppm.		
09/28/23	0730 - 900	-2.3	0.0	708	61.8	-1.8	0.0	716	62.5	-1.8	0.0	709	61.9	-1.0	0.0	436	38.0	-1.0	0.0	316	27.6	-1.0	0.0	294	25.7	667	Readings collected before attempted condensate removal.		
	1230 - 1305	-2.3	0.0	1148	100.2	-1.8	0.0	1065	92.9	-1.8	0.0	1062	92.7	-1.0	0.0	529	46.2	-1.0	0.0	446	38.9	-0.9	0.0	383	33.4	901	Readings collected following attempted condensate removal. No significant amounts of condensate were removed from the SSD lines.		
10/24/23	0830 - 0905	-2.4	--	715	62.4	-1.9	--	638	55.7	-1.9	--	680	59.3	-1.0	--	437	38.1	-1.0	--	316	27.6	-1.0	--	277	24.2	619	Readings collected before condensate removal.		
	1145 - 1220	-2.4	0.0	802	70.0	-1.9	0.0	715	62.4	-1.9	0.0	716	62.5	-1.0	0.0	433	37.8	-1.0	0.0	337	29.4	-1.0	0.1	272	23.7	634	Readings collected following condensate removal.		
11/27/23	0855 - 0945	-4.4	--	300	26.2	-4.8	--	173	15.1	-4.9	--	121	10.6	-1.4	--	750	65.5	-1.4	--	178	15.5	-1.4	--	116	10.1	498	Readings collected before condensate removal.		
11/27/23	1215 - 1245	-2.8	0.0	750	65.5	-2.3	0.0	763	66.6	-2.0	0.0	880	76.8	-0.98	0.0	674	58.8	-0.96	0.0	342	29.8	-0.96	0.0	276	24.1	808	Readings collected following condensate removal.		
12/14/23	0900-0930	-4.5	--	300	26.2	-4.4	--	130	11.3	-4.6	--	157	13.7	-1.7	--	912	79.6	-1.7	--	110	9.6	-1.7	--	66	5.8	517	Readings collected before condensate removal.		
12/14/23	1230-1315	-2.8	0.0	650	56.7	-2.3	0.0	720	62.8	-2.2	0.0	775	67.6	-1.2	0.0	712	62.1	-1.2	0.0	180	15.7	-1.2	0.0	260	22.7	734	Readings collected following condensate removal.		

Notes:
 cfm: cubic feet per minute
 iow: inches of water
 fpm: feet per minute
 PID: photoionization detector
 ppm: parts per million
 --: not measured or recorded

TABLE 2
SSD/SSV System Induced Vacuums—Observation Points
Former Mt. Hood Solutions Warehouse Site
4444 NW Yeon Avenue
Portland, Oregon

Date	Time	VP-1 (sub-slab)		VP-2 (sub-slab)		VP-3 (sub-slab)		VO-4s (sub-slab)		VO-4d (2 – 3 feet BGS)		VO-5s (sub-slab)		VO-5i (2 – 3 feet BGS)		VO-5d (4 – 5 feet BGS)		VO-6s (sub-slab)		VO-6i (2 – 3 feet BGS)		VO-6d (4 – 5 feet BGS)		VO-7s (sub-slab)		VO-7i (2 – 3 feet BGS)		VO-7d (4 – 5 feet BGS)		VO-8s (sub-slab)		VO-8d (1.5 – 2.5 feet BGS)		VO-9s (sub-slab)	
		Vacuum (low)	PID (ppm)	Vacuum (low)	PID (ppm)	Vacuum (low)	PID (ppm)	Vacuum (low)	PID (ppm)	Vacuum (low)	PID (ppm)	Vacuum (low)	PID (ppm)	Vacuum (low)	PID (ppm)	Vacuum (low)	PID (ppm)	Vacuum (low)	PID (ppm)	Vacuum (low)	PID (ppm)	Vacuum (low)	PID (ppm)	Vacuum (low)	PID (ppm)	Vacuum (low)	PID (ppm)	Vacuum (low)	PID (ppm)	Vacuum (low)	PID (ppm)				
05/04/17	0922 - 1106	-0.023	0.4	-	-	-0.023	0.7	-0.16	0.0	-0.21	0.0	-0.39	0.2	-	-	-	-	-	-	-	-	-0.286	0.1	-0.228	0.0	-0.075	0.1	-0.056	0.2	-0.082	0.3	-0.013	0.1		
08/24/17	0834 - 1052	-0.002	4.3	-0.006	0.4	-0.006	7.1	-0.003	4.3	-0.004	6.2	-0.001	2.9	-0.004	4.4	-0.004	4.9	-0.013	2.7	-	-	-	-	-0.012	2.5	-0.005	2.3	-0.003	1.4	-0.006	6.6	-0.007	5.2	-0.020	1.5
12/07/17	0849 - 1245	0.000	0.3	-0.002	0.3	0.000	0.0	-	-	-	-	-	-	0.000	0.8	-0.003	0.5	-0.002	0.5	-	-	-	-	-0.004	0.0	0.002	1.2	0.000	0.0	0.000	0.6	-0.004	0.0	0.000	0.0
01/08/18	1011 - 1039	-	-	-	-	-	-	-	-	-	-	-	-	-0.092	--	-0.095	--	-0.412	--	--	--	--	--	-0.133	--	-0.291	--	-0.249	--	-0.121	--	-0.147	--	-0.022	--
03/15/18	0934 - 1208	-0.098	0.9	-0.070	0.3	-0.262	1.1	-	-	-	-	-	-	-0.121	0.9	-0.129	0.9	-0.377	1.3	-	-	-	-	-0.28	0.6	-0.26	0.7	-0.180	1.2	-0.140	1.2	-0.162	1.6	-0.030	1.7
10/27/21	1100 - 1130	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-0.327	0.3	-0.34	0.3	-0.248	0.3	-0.195	0.3	-0.216	0.3	-0.054	0.3	
11/24/21	0910 - 0950	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-0.208	0.1	-0.204	0.1	-0.185	0.1	-0.136	0.1	-0.146	0.1	-0.035	0.1	
12/16/21	1200 - 1250	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-0.408	0.1	-0.367	0.1	-0.277	0.1	-0.206	0.1	-0.233	0.1	-0.047	0.1	
01/26/22	0925 - 1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-0.138	--	-0.142	--	-0.159	--	-0.082	--	-0.083	--	-0.023	--	
	1335 - 1405	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-0.448	0.1	-0.396	0.1	-0.281	0.1	-0.217	0.1	-0.242	0.1	-0.044	0.1	
02/24/22	0925 - 0955	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-0.204	--	-0.203	--	-0.192	--	-0.114	--	-0.124	--	-0.031	--	
	1325 - 1400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-0.437	0.0	-0.396	0.0	-0.287	0.0	-0.214	0	-0.248	0.0	-0.049	0.0	
03/23/22	1030 - 1115	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-0.303	--	-0.303	--	-0.280	--	-0.201	--	-0.210	--	-0.056	--	
	1400 - 1430	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-0.520	0.2	-0.477	0.2	-0.381	0.2	-0.290	0.2	-0.295	0.2	-0.068	0.2	
04/27/22	0830 - 0855	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-0.320	--	-0.323	--	-0.301	--	-0.217	--	-0.225	--	-0.064	--	
	1410 - 1440	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-0.546	0.1	-0.510	0.1	-0.406	0.1	-0.312	0.1	-0.338	0.1	-0.093	0.1	
05/26/22	0935 - 1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-0.461	--	-0.438	--	-0.377	--	-0.315	--	-0.330	--	-0.082	--	
	1320 - 1350	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-0.551	0.0	-0.512	0.0	-0.419	0.0	-0.344	0	-0.365	0.0	-0.101	0.0	
06/27/22	0845 - 0930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-0.588	--	-0.543	--	-0.429	--	-0.387	--	-0.404	--	-0.134	--	
	1330 - 1415	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-0.611	0.6	-0.567	0.8	-0.462	0.7	-0.409	0.9	-0.429	0.8	-0.147	0.7	
07/22/22	0859 - 0930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-0.587	--	-0.554	--	-0.438	--	-0.360	--	-0.410	--	-0.121	--	
	1105 - 1142	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-0.591	0.5	-0.533	0.9	-0.438	0.7	-0.368	0.1	-0.407	0.1	-0.176	0.1	

TABLE 2
SSD/SSV System Induced Vacuums—Observation Points
Former Mt. Hood Solutions Warehouse Site
4444 NW Yeon Avenue
Portland, Oregon

Date	Time	VP-1 (sub-slab)		VP-2 (sub-slab)		VP-3 (sub-slab)		VO-4s (sub-slab)		VO-4d (2 – 3 feet BGS)		VO-5s (sub-slab)		VO-5i (2 – 3 feet BGS)		VO-5d (4 – 5 feet BGS)		VO-6s (sub-slab)		VO-6i (2 – 3 feet BGS)		VO-6d (4 – 5 feet BGS)		VO-7s (sub-slab)		VO-7i (2 – 3 feet BGS)		VO-7d (4 – 5 feet BGS)		VO-8s (sub-slab)		VO-8d (1.5 – 2.5 feet BGS)		VO-9s (sub-slab)	
		Vacuum (low)	PID (ppm)	Vacuum (low)	PID (ppm)	Vacuum (low)	PID (ppm)	Vacuum (low)	PID (ppm)	Vacuum (low)	PID (ppm)	Vacuum (low)	PID (ppm)	Vacuum (low)	PID (ppm)	Vacuum (low)	PID (ppm)	Vacuum (low)	PID (ppm)	Vacuum (low)	PID (ppm)	Vacuum (low)	PID (ppm)	Vacuum (low)	PID (ppm)	Vacuum (low)	PID (ppm)	Vacuum (low)	PID (ppm)	Vacuum (low)	PID (ppm)				
08/26/22	0850 – 0915	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–			
	1155 – 1220	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–			
09/26/22	0930 – 1000	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–			
	1235 – 1305	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–			
10/26/22	1235 – 1305	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–			
10/27/22	1355 – 1425	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–			
11/02/22	1140 – 1225	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–			
11/10/22	0905 – 0926	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–			
	1145 – 1215	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–			
12/20/22	1150 – 1240	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–			
01/24/23	0915 – 0945	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–			
	1245 – 1315	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–			
02/21/23	1145 – 1215	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–			
	1425 – 1455	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–			
03/23/23	0920 – 0950	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–			
	1420 – 1450	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–			
04/21/23	0920 – 0940	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–			
	1230 – 1300	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–			
05/23/23	1105 – 1130	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–			
	1350 – 1422	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–			
06/27/23	0945 – 1030	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–			

TABLE 2
SSD/SSV System Induced Vacuums—Observation Points
Former Mt. Hood Solutions Warehouse Site
4444 NW Yeon Avenue
Portland, Oregon

Date	Time	VP-1 (sub-slab)		VP-2 (sub-slab)		VP-3 (sub-slab)		VO-4s (sub-slab)		VO-4i (2 – 3 feet BGS)		VO-4d (4 – 5 feet BGS)		VO-5s (sub-slab)		VO-5i (2 – 3 feet BGS)		VO-5d (4 – 5 feet BGS)		VO-6s (sub-slab)		VO-6i (2 – 3 feet BGS)		VO-6d (4 – 5 feet BGS)		VO-7s (sub-slab)		VO-7i (2 – 3 feet BGS)		VO-7d (4 – 5 feet BGS)		VO-8s (sub-slab)		VO-8d (1.5 – 2.5 feet BGS)		VO-9s (sub-slab)	
		Vacuum (low)	PID (ppm)	Vacuum (low)	PID (ppm)	Vacuum (low)	PID (ppm)	Vacuum (low)	PID (ppm)	Vacuum (low)	PID (ppm)	Vacuum (low)	PID (ppm)	Vacuum (low)	PID (ppm)	Vacuum (low)	PID (ppm)	Vacuum (low)	PID (ppm)	Vacuum (low)	PID (ppm)	Vacuum (low)	PID (ppm)	Vacuum (low)	PID (ppm)	Vacuum (low)	PID (ppm)	Vacuum (low)	PID (ppm)	Vacuum (low)	PID (ppm)						
07/24/23	1000 – 1040	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	-0.729	0.1	-0.665	0.1	-0.547	0.1	-0.482	0.2	-0.507	0.1	-0.178	0.2				
08/25/23	1000 – 1045	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	-0.728	0.0	-0.676	0.3	-0.553	13.7	-0.455	0.0	-0.482	0.0	-0.142	0.0				
09/28/23	0915 – 1005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	-0.648	0.0	-0.591	0.0	-0.445	0.0	-0.368	0.0	-0.400	0.0	-0.109	0.0				
	1310 – 1345	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	-0.645	0.0	-0.591	0.0	-0.444	0.0	-0.367	0.0	-0.396	0.0	-0.105	0.0				
10/24/23	0910 – 0935	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	-0.652	–	-0.596	–	-0.459	–	-0.366	–	-0.398	–	-0.108	–				
	1235 – 1310	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	-0.646	0.0	-0.596	0.0	-0.460	0.0	-0.358	0.0	-0.388	0.0	-0.105	0.0				
11/27/23	0945 – 1020	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	-0.273	–	-0.255	–	-0.225	–	-0.169	–	-0.183	–	-0.048	–				
11/27/23	1250 – 1320	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	-0.489	0.0	-0.436	0.0	-0.313	0.0	-0.247	0.0	-0.284	0.0	-0.066	0.0				
12/14/23	0900 -0930	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	-0.342	–	-0.339	–	-0.290	–	-0.215	–	-0.229	–	-0.068	–				
12/14/23	1230 -1315	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	-0.534	0.0	-0.489	0.0	-0.370	0.0	-0.288	0.0	-0.321	0.0	-0.082	0.0				

TABLE 2
SSD/SSV System Induced Vacuums—Observation Points
Former Mt. Hood Solutions Warehouse Site
4444 NW Yeon Avenue
Portland, Oregon

Date	Time	VO-9d (1.5 - 2.5 feet BGS)		VO-10s (sub-slab)		VO-10d (1.5 - 2.5 feet BGS)		VO-11s (sub-slab)		VO-11i (2 - 3 feet BGS)		VO-11d (4 - 5 feet BGS)		VO-12s (sub-slab)		VO-12i (2 - 3 feet BGS)		VO-12d (4 - 5 feet BGS)		VO-13s (sub-slab)		VO-13i (2 - 3 feet BGS)		VO-13d (4 - 5 feet BGS)		VO-14s (sub-slab)		VO-14i (2 - 3 feet BGS)		VO-14d (4 - 5 feet BGS)		Remarks
		Vacuum (low)	PID (ppm)	Vacuum (low)	PID (ppm)	Vacuum (low)	PID (ppm)	Vacuum (low)	PID (ppm)	Vacuum (low)	PID (ppm)	Vacuum (low)	PID (ppm)	Vacuum (low)	PID (ppm)	Vacuum (low)	PID (ppm)	Vacuum (low)	PID (ppm)	Vacuum (low)	PID (ppm)	Vacuum (low)	PID (ppm)	Vacuum (low)	PID (ppm)	Vacuum (low)	PID (ppm)	Vacuum (low)	PID (ppm)			
05/04/17	0922 - 1106	-0.025	0.1	-0.012	0.2	-0.020	0.2	-0.005	0.1	-0.006	0.1	-0.008	0.1	-0.021	0.2	-0.045	0.2	-0.068	0.2	-0.168	0.2	-0.192	0.2	-0.202	0.2	-0.136	0.2	-0.140	0.1	-0.152	0.1	First event following additional fan installation (8 fans online).
08/24/17	0834 - 1052	-0.020	1.8	-0.020	0.6	-0.020	0.8	-0.001	0.5	-0.001	0.5	-0.002	0.5	-0.008	0.6	-0.028	0.9	-0.049	1.4	-0.177	0.7	-0.246	0.7	-0.190	0.7	-0.221	0.6	-0.240	0.6	-0.292	0.7	Second event following additional fan installation (8 fans online).
12/07/17	0849 - 1245	0.000	0.0	0.007	0.0	0.007	0.0	0.001	0.0	0.000	0.0	0.000	0.0	-0.005	0.0	-0.028	0.0	-0.055	0.0	-0.148	0.0	-0.170	0.0	-0.160	0.0	-0.038	0.0	-0.044	0.0	-0.048	0.0	Third event following additional fan installation (8 fans online).
01/08/18	1011 - 1039	-0.050	--	-0.029	--	-0.041	--	--	--	--	--	--	--	-0.096	--	-0.161	--	-0.237	--	-0.148	--	-0.170	--	-0.189	--	-0.085	--	-0.099	--	-0.14	--	Follow-up measurements following removal of condensate from lines.
03/15/18	0934 - 1208	-0.062	0.7	-0.041	1.1	-0.052	0.6	-0.044	0.8	-0.048	0.6	-0.054	0.4	-0.153	1.1	-0.209	0.9	-0.264	0.7	-0.217	0.7	-0.245	0.7	-0.243	1.0	-0.13	0.7	-0.141	0.7	-0.18	0.7	Fourth event following additional fan installation (8 fans online).
10/27/21	1100 - 1130	-0.098	0.3	-0.078	0.3	-0.093	0.3	-0.042	0.3	-0.040	0.3	-0.050	0.3	-0.15	0.3	-0.162	0.3	-0.198	0.3	-0.267	0.3	-0.288	0.3	-0.325	0.3	-0.283	0.3	-0.284	0.3	-0.31	0.3	
11/24/21	0910 - 0950	-0.073	0.1	-0.053	0.1	-0.064	0.1	-0.026	0.1	-0.027	0.1	-0.027	0.1	-0.128	0.1	-0.134	0.1	-0.163	0.1	-0.188	0.1	-0.193	0.1	-0.220	0.1	-0.209	0.1	-0.229	0.1	-0.234	0.1	
12/16/21	1200 - 1250	-0.093	0.1	-0.072	0.1	-0.087	0.1	-0.06	0.2	-0.069	0.2	-0.078	0.2	-0.193	0.2	-0.21	0.2	-0.304	0.2	-0.191	0.2	-0.209	0.2	-0.224	0.2	-0.157	0.2	-0.162	0.2	-0.20	0.2	Removed condensate earlier in the day.
01/26/22	0925 - 1000	-0.038	--	-0.028	--	-0.032	--	-0.026	--	-0.024	--	-0.027	--	-0.133	--	-0.140	--	-0.167	--	-0.191	--	-0.208	--	-0.210	--	-0.145	--	-0.150	--	-0.172	--	Measurements collected before condensate removal in late morning.
	1335 - 1405	-0.091	0.1	-0.072	0.1	-0.086	0.1	-0.064	0.1	-0.072	0.1	-0.081	0.1	-0.205	0.1	-0.222	0.1	-0.319	0.1	-0.201	0.1	-0.214	0.1	-0.238	0.1	-0.227	0.1	-0.234	0.1	-0.282	0.1	Measurements collected in early afternoon following late morning condensate removal.
02/24/22	0925 - 0955	-0.057	--	-0.040	--	-0.046	--	-0.024	--	-0.025	--	-0.026	--	-0.134	--	-0.139	--	-0.168	--	-0.184	--	-0.202	--	-0.203	--	-0.137	--	-0.141	--	-0.159	--	Measurements collected before condensate removal in late morning.
	1325 - 1400	-0.095	0.0	-0.072	0.0	-0.085	0.0	-0.063	0.0	-0.067	0.0	-0.076	0.0	-0.212	0.0	-0.228	0.0	-0.328	0.0	-0.192	0.0	-0.207	0.0	-0.225	0.0	-0.190	0.0	-0.198	0.0	-0.236	0.0	Measurements collected in early afternoon following late morning condensate removal.
03/23/22	1030 - 1115	-0.098	--	-0.077	--	-0.089	--	-0.063	--	-0.064	--	-0.064	--	-0.230	--	-0.235	--	-0.266	--	-0.322	--	-0.342	--	-0.319	--	-0.267	--	-0.268	--	-0.279	--	Measurements collected before condensate removal in late morning.
	1400 - 1430	-0.125	0.2	-0.096	0.2	-0.111	0.2	-0.107	0.2	-0.114	0.2	-0.125	0.3	-0.329	0.3	-0.344	0.2	-0.436	0.2	-0.329	0.3	-0.342	0.3	-0.324	0.3	-0.325	0.3	-0.331	0.3	-0.374	0.3	Measurements collected in early afternoon following late morning condensate removal.
04/27/22	0830 - 0855	-0.106	--	-0.081	--	-0.094	--	-0.069	--	-0.068	--	-0.067	--	-0.250	--	-0.258	--	-0.292	--	-0.342	--	-0.366	--	-0.341	--	-0.296	--	-0.302	--	-0.321	--	Measurements collected before condensate removal in morning.
	1410 - 1440	-0.148	0.1	-0.126	0.1	-0.114	0.1	-0.115	0.2	-0.131	0.1	-0.122	0.1	-0.350	0.1	-0.366	0.1	-0.455	0.2	-0.351	0.2	-0.378	0.2	-0.348	0.2	-0.351	0.2	-0.358	0.2	-0.395	0.2	Measurements collected in afternoon following morning condensate removal.
05/26/22	0935 - 1000	-0.142	--	-0.101	--	-0.115	--	-0.112	--	-0.114	--	-0.114	--	-0.342	--	-0.346	--	-0.399	--	-0.400	--	-0.422	--	-0.389	--	-0.431	--	-0.431	--	-0.456	--	Measurements collected before condensate removal in morning.
	1320 - 1350	-0.156	0.0	-0.113	0.0	-0.130	0.0	-0.142	0.0	-0.146	0.0	-0.151	0.0	-0.394	0.0	-0.411	0.0	-0.496	0.0	-0.413	0.0	-0.433	0.0	-0.413	0.0	-0.468	0.0	-0.470	0.0	-0.494	0.0	Measurements collected in afternoon following morning condensate removal.
06/27/22	0845 - 0930	-0.185	--	-0.136	--	-0.154	--	-0.157	--	-0.153	--	-0.163	--	-0.408	--	-0.423	--	0.504	--	-0.467	--	-0.483	--	-0.470	--	-0.606	--	-0.608	--	-0.633	--	Measurements collected before condensate removal in morning.
	1330 - 1415	-0.197	0.8	-0.147	0.8	-0.167	0.7	-0.172	0.7	-0.177																						

TABLE 2
SSD/SSV System Induced Vacuums—Observation Points
Former Mt. Hood Solutions Warehouse Site
4444 NW Yeon Avenue
Portland, Oregon

Date	Time	VO-9d (1.5 - 2.5 feet BGS)		VO-10s (sub-slab)		VO-10d (1.5 - 2.5 feet BGS)		VO-11s (sub-slab)		VO-11i (2 - 3 feet BGS)		VO-11d (4 - 5 feet BGS)		VO-12s (sub-slab)		VO-12i (2 - 3 feet BGS)		VO-12d (4 - 5 feet BGS)		VO-13s (sub-slab)		VO-13i (2 - 3 feet BGS)		VO-13d (4 - 5 feet BGS)		VO-14s (sub-slab)		VO-14i (2 - 3 feet BGS)		VO-14d (4 - 5 feet BGS)		Remarks
		Vacuum (low)	PID (ppm)	Vacuum (low)	PID (ppm)	Vacuum (low)	PID (ppm)	Vacuum (low)	PID (ppm)	Vacuum (low)	PID (ppm)	Vacuum (low)	PID (ppm)	Vacuum (low)	PID (ppm)	Vacuum (low)	PID (ppm)	Vacuum (low)	PID (ppm)	Vacuum (low)	PID (ppm)	Vacuum (low)	PID (ppm)	Vacuum (low)	PID (ppm)	Vacuum (low)	PID (ppm)	Vacuum (low)	PID (ppm)			
08/26/22	0850 - 0915	-0.181	-	-0.127	-	-0.144	-	-0.147	-	-0.149	-	-0.152	-	-0.406	-	-0.423	-	-0.517	-	-0.463	-	-0.489	-	-0.482	-	-0.620	-	-0.623	-	-0.648	-	Measurements collected before morning condensate removal.
	1155 - 1220	-0.189	0.6	-0.133	0.6	-0.148	0.6	-0.148	0.8	-0.150	0.7	-0.151	0.7	-0.408	1.0	-0.425	0.9	-0.514	1.0	-0.466	0.7	-0.487	0.7	-0.478	0.7	-0.591	0.6	-0.609	0.5	-0.623	0.6	Measurements collected in afternoon following morning condensate removal.
09/26/22	0930 - 1000	-0.154	-	-0.115	-	-0.131	-	-0.117	-	-0.121	-	-0.126	-	-0.338	-	-0.353	-	-0.450	-	-0.387	-	-0.415	-	-0.408	-	-0.473	-	-0.480	-	-0.524	-	Measurements collected before morning condensate removal.
	1235 - 1305	-0.147	0.0	-0.109	0.0	-0.125	0.0	-0.119	0.0	-0.123	0.0	-0.129	0.0	-0.331	0.1	-0.435	0.0	-0.346	0.0	-0.384	0.0	-0.404	0.0	-0.410	0.1	-0.461	0.0	-0.469	0.0	-0.512	0.0	Measurements collected in afternoon following morning condensate removal.
10/26/22	1235 - 1305	-0.092	0.2	-0.067	0.2	-0.081	0.2	-0.053	0.3	-0.070	0.3	-0.063	0.3	-0.211	0.3	-0.225	0.3	-0.320	0.3	-0.211	0.3	-0.209	0.3	-0.259	0.3	-0.246	0.3	-0.248	0.3	-0.297	0.3	Measurements collected in morning before fan reconfiguration.
10/27/22	1355 - 1425	-0.091	0.2	-0.077	0.3	-0.086	0.3	-0.036	0.2	-0.032	0.2	-0.033	0.3	-0.185	0.3	-0.188	0.2	-0.206	0.2	-0.254	0.3	-0.280	0.3	-0.318	0.3	-0.284	0.3	-0.293	0.3	-0.342	0.3	Measurements collected in afternoon following fan reconfiguration.
11/02/22	1140 - 1225	-0.091	0.3	-0.074	0.4	-0.088	0.4	-0.040	0.4	-0.039	0.4	-0.042	0.4	-0.188	0.4	-0.189	0.4	0.218	0.4	-0.257	0.4	-0.278	0.4	-0.313	0.4	-0.257	0.5	-0.264	0.5	-0.301	0.5	Measurements collected in afternoon following fan reconfiguration.
11/10/22	0905 - 0926	-0.074	-	-0.064	-	-0.073	-	-0.028	-	-0.028	-	-0.027	-	-0.153	-	-0.157	-	-0.184	-	-0.197	-	-0.221	-	-0.250	-	-0.152	-	-0.156	-	-0.180	-	Measurements collected in afternoon following fan reconfiguration.
	1145 - 1215	-0.091	0.1	0.077	0.2	-0.085	0.2	-0.033	0.3	-0.032	0.3	-0.034	0.3	-0.162	0.3	-0.166	0.3	-0.191	0.3	-0.204	0.3	-0.230	0.3	-0.238	0.3	-0.153	0.3	-0.167	0.3	-0.195	0.3	Measurements collected in afternoon following fan reconfiguration.
12/20/22	1150 - 1240	-0.140	0.0	-0.108	0.0	-0.120	0.0	-0.078	0.0	-0.088	0.0	-0.090	0.0	-0.293	0.0	-0.294	0.0	-0.434	0.0	-0.265	0.0	-0.295	0.0	-0.281	0.0	-0.210	0.0	-0.213	0.0	-0.245	0.0	Measurements collected after addition of new fans on VE-1d, -2d, and -3d lines.
01/24/23	0915 - 0945	-0.057	--	-0.049	--	-0.057	--	-0.038	--	-0.038	--	-0.039	--	-0.209	--	-0.210	--	-0.211	--	-0.202	--	-0.208	--	-0.187	--	-0.153	--	-0.157	--	-0.177	--	Measurements collected before condensate removal.
	1245 - 1315	-0.132	0.0	-0.111	0.0	-0.128	0.0	-0.083	0.0	-0.091	0.0	-0.101	0.0	-0.311	0.0	-0.327	0.0	-0.430	0.0	-0.287	0.0	-0.306	0.0	-0.292	0.0	-0.245	0.0	-0.256	0.0	-0.302	0.0	Measurements collected following condensate removal.
02/21/23	1145 - 1215	-0.108	-	-0.084	-	-0.112	-	-0.041	-	-0.044	-	-0.047	-	-0.251	-	-0.252	-	-0.274	-	-0.308	-	-0.327	-	-0.297	-	-0.200	-	-0.203	-	-0.219	-	Measurements collected before condensate removal.
	1425 - 1455	-0.134	0.3	-0.119	0.4	-0.133	0.4	-0.101	0.4	-0.110	0.4	-0.121	0.4	-0.348	0.5	-0.363	0.5	-0.463	0.5	-0.317	0.3	-0.338	0.3	-0.319	0.3	-0.254	0.3	-0.264	0.3	-0.309	0.3	Measurements collected following condensate removal. Sub-slab PID readings same as ambient, likely due to fluctuating PID calibration and not representative of volatiles detection.
03/23/23	0920 - 0950	-0.103	-	-0.088	-	-0.096	-	-0.062	-	-0.058	-	-0.060	-	-0.255	-	-0.252	-	-0.262	-	-0.237	-	-0.244	-	-0.208	-	-0.175	-	-0.186	-	-0.204	-	Measurements collected before condensate removal.
	1420 - 1450	-0.160	0.0	-0.131	0.0	-0.150	0.0	-0.121	0.0	-0.128	0.0	-0.138	0.0	-0.389	0.0	-0.404	0.0	-0.500	0.0	-0.349	0.0	-0.370	0.0	-0.350	0.0	-0.301	0.0	-0.308	0.0	-0.346	0.0	Measurements collected following condensate removal.
04/21/23	0920 - 0940	-0.123	-	-0.104	-	-0.117	-	-0.067	-	-0.071	-	-0.072	-	-0.264	-	-0.269	-	-0.300	-	-0.337	-	-0.360	-	-0.333	-	-0.231	-	-0.236	-	-0.257	-	Measurements collected before condensate removal.
	1230 - 1300	-0.157	0.1	-0.133	0.1	-0.152	0.1	-0.120	0.1	-0.130	0.1	-0.143	0.1	-0.377	0.2	-0.392	0.2	-0.489	0.2	-0.336	0.1	-0.358	0.1	-0.331	0.1	-0.290	0.1	-0.298	0.1	-0.338	0.1	Measurements collected following condensate removal. Ambient PID reading = 0.1 ppm.
05/23/23	1105 - 1130	-0.204	-	-0.156	-	-0.175	-	-0.154	-	-0.159	-	-0.162	-	-0.450	-	-0.464	-	-0.558	-	-0.404	-	-0.427	-	-0.400	-	-0.434	-	-0.444	-	-0.489	-	Measurements collected before condensate removal.
	1350 - 1422	-0.194	0.0	-0.146	0.0	-0.167	0.0	-0																								

TABLE 2
SSD/SSV System Induced Vacuums—Observation Points
Former Mt. Hood Solutions Warehouse Site
4444 NW Yeon Avenue
Portland, Oregon

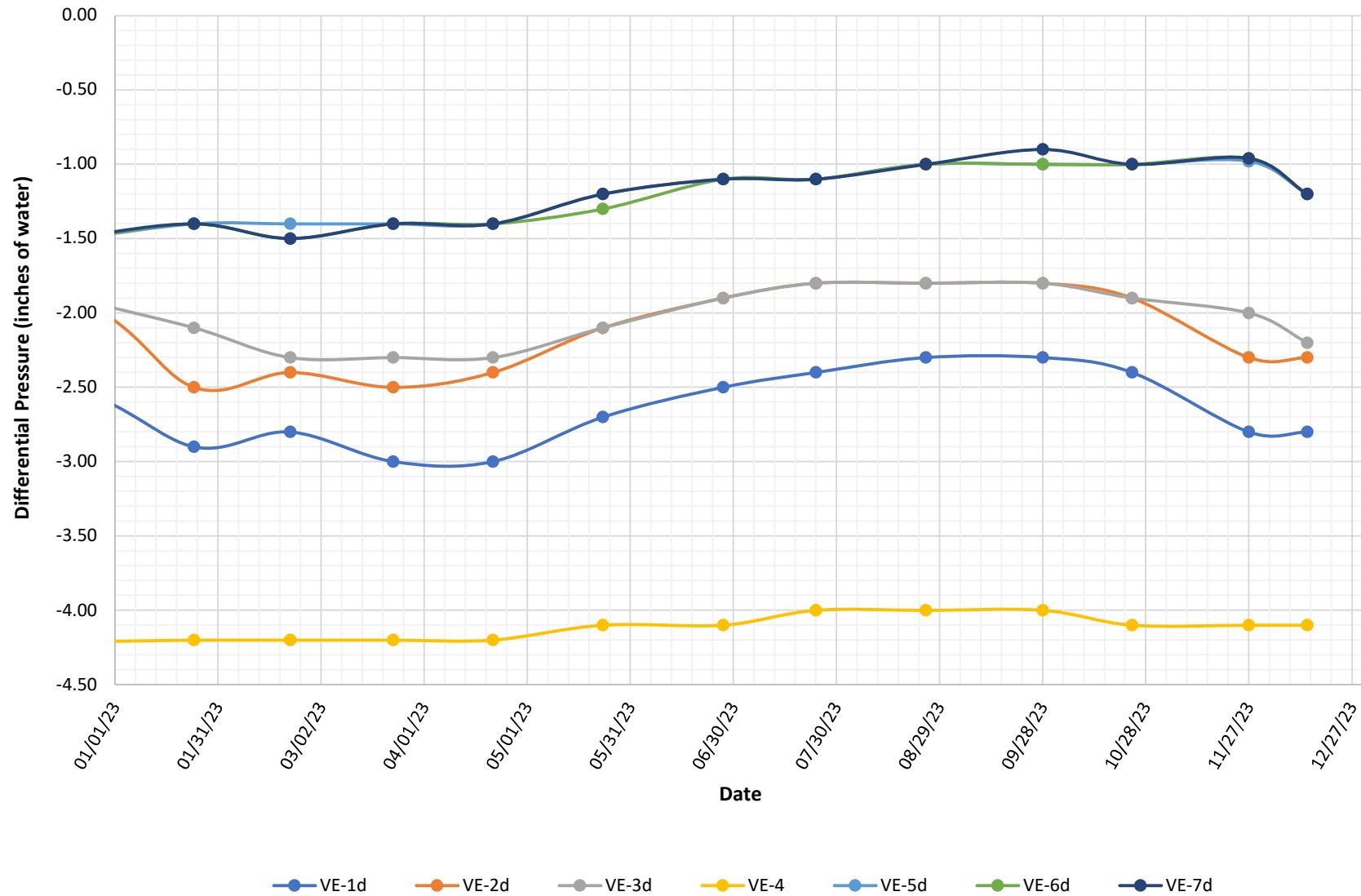
Date	Time	VO-9d (1.5 - 2.5 feet BGS)		VO-10s (sub-slab)		VO-10d (1.5 - 2.5 feet BGS)		VO-11s (sub-slab)		VO-11i (2 - 3 feet BGS)		VO-11d (4 - 5 feet BGS)		VO-12s (sub-slab)		VO-12i (2 - 3 feet BGS)		VO-12d (4 - 5 feet BGS)		VO-13s (sub-slab)		VO-13i (2 - 3 feet BGS)		VO-13d (4 - 5 feet BGS)		VO-14s (sub-slab)		VO-14i (2 - 3 feet BGS)		VO-14d (4 - 5 feet BGS)		Remarks
		Vacuum (low)	PID (ppm)	Vacuum (low)	PID (ppm)	Vacuum (low)	PID (ppm)	Vacuum (low)	PID (ppm)	Vacuum (low)	PID (ppm)	Vacuum (low)	PID (ppm)	Vacuum (low)	PID (ppm)	Vacuum (low)	PID (ppm)	Vacuum (low)	PID (ppm)	Vacuum (low)	PID (ppm)	Vacuum (low)	PID (ppm)	Vacuum (low)	PID (ppm)	Vacuum (low)	PID (ppm)	Vacuum (low)	PID (ppm)			
07/24/23	1000 - 1040	-0.231	0.1	-0.169	0.1	-0.192	0.1	-0.178	0.1	-0.183	0.1	-0.185	0.1	-0.516	0.1	-0.525	0.1	-0.620	0.1	-0.483	0.1	-0.511	0.2	-0.489	0.1	-0.575	0.1	-0.590	0.1	-0.610	0.1	No condensate removal due to performance data indicating SSD lines not impacted by condensate. Ambient PID = 0.0 to 0.1 ppm.
08/25/23	1000 - 1045	-0.213	0.0	-0.159	0.0	-0.175	0.0	-0.158	0.0	-0.166	0.0	-0.176	0.0	-0.461	0.0	-0.480	0.0	-0.571	0.0	-0.444	0.0	-0.471	0.0	-0.461	0.0	-0.528	0.0	-0.534	0.0	-0.568	0.0	No condensate removal due to performance data indicating SSD lines not impacted by condensate. Ambient PID = 0.0 to 1.5 ppm.
09/28/23	0915 - 1005	-0.163	0.0	-0.134	0.0	-0.150	0.0	-0.125	0.0	-0.133	0.0	-0.143	0.0	-0.363	0.0	0.380	0.0	-0.488	0.0	-0.360	0.0	-0.386	0.0	-0.389	0.0	-0.420	0.0	-0.430	0.0	-0.478	0.0	Measurements collected before condensate removal.
	1310 - 1345	-0.158	0.0	-0.132	0.0	-0.151	0.0	-0.121	0.0	-0.129	0.0	-0.139	0.0	-0.354	0.0	-0.374	0.0	-0.481	0.0	-0.359	0.0	-0.380	0.0	-0.383	0.0	-0.413	0.0	-0.423	0.0	-0.472	0.0	Measurements collected after attempted condensate removal. Significant amounts of condensate were not removed from the SSD lines.
10/24/23	0910 - 0935	-0.159	-	-0.137	-	-0.154	-	-0.119	-	-0.126	-	-0.134	-	-0.365	-	-0.380	-	-0.476	-	-0.358	-	-0.379	-	-0.372	-	-0.421	-	-0.426	-	-0.466	-	Measurements collected before condensate removal.
	1235 - 1310	-0.156	0.0	-0.136	0.0	-0.152	0.0	-0.121	0.0	-0.128	0.0	-0.135	0.0	-0.366	0.0	-0.378	0.0	-0.473	0.0	-0.342	0.0	-0.359	0.0	-0.350	0.0	-0.396	0.0	-0.396	0.0	-0.432	0.0	Measurements collected following condensate removal.
11/27/23	0945 - 1020	-0.078	-	-0.072	-	-0.077	-	-0.026	-	0.026	-	-0.025	-	-0.140	-	-0.148	-	-0.178	-	-0.200	-	-0.219	-	-0.236	-	-0.164	-	-0.167	-	-0.197	-	Measurements collected before condensate removal.
11/27/23	1250 - 1320	-0.104	0.0	-0.094	0.0	-0.107	0.0	-0.061	0.0	-0.078	0.0	-0.069	0.0	-0.215	0.1	-0.228	0.0	-0.334	0.0	-0.205	0.0	-0.220	0.0	-0.248	0.0	-0.213	0.0	-0.223	0.0	-0.265	0.0	Measurements collected following condensate removal. Ambient PID 0.1 to 0.2 ppm.
12/14/23	0900 - 0930	-0.104	-	-0.093	-	-0.105	-	-0.042	--	-0.043	-	-0.044	--	-0.196	-	-0.201	--	-0.236	--	-0.277	--	-0.299	--	-0.276	--	-0.193	--	-0.215	--	-0.195	--	Measurements collected before condensate removal.
12/14/23	1230 - 1315	-0.127	0.0	-0.116	0.0	-0.130	0.0	-0.086	0.0	-0.103	0.0	-0.094	0.0	-0.279	0.3	-0.295	0.0	-0.392	0.1	-0.286	0.1	-0.306	0.1	-0.300	0.1	-0.275	0.2	-0.281	0.1	-0.326	0.1	Measurements collected following condensate removal. Ambient PID 0.1 to 0.8 ppm.

Notes:
BGS: below ground surface
cfm: cubic feet per minute
iow: inches of water
fpm: feet per minute
PID: photoionization detector
ppm: parts per million
--: not measured or recorded

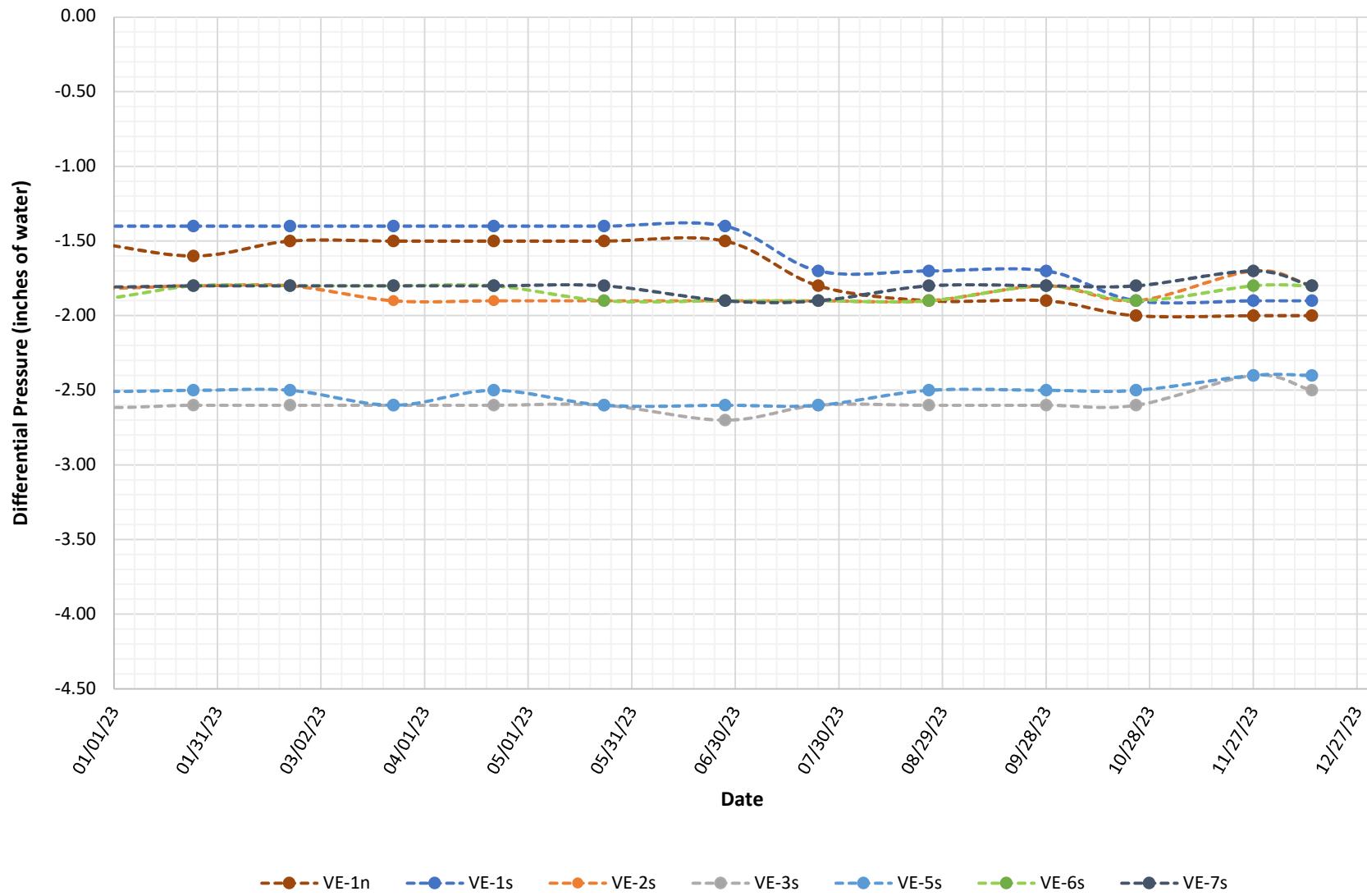
ATTACHMENT

SSD/SSV System Trends - Differential Pressure in Deep Ventilation Legs

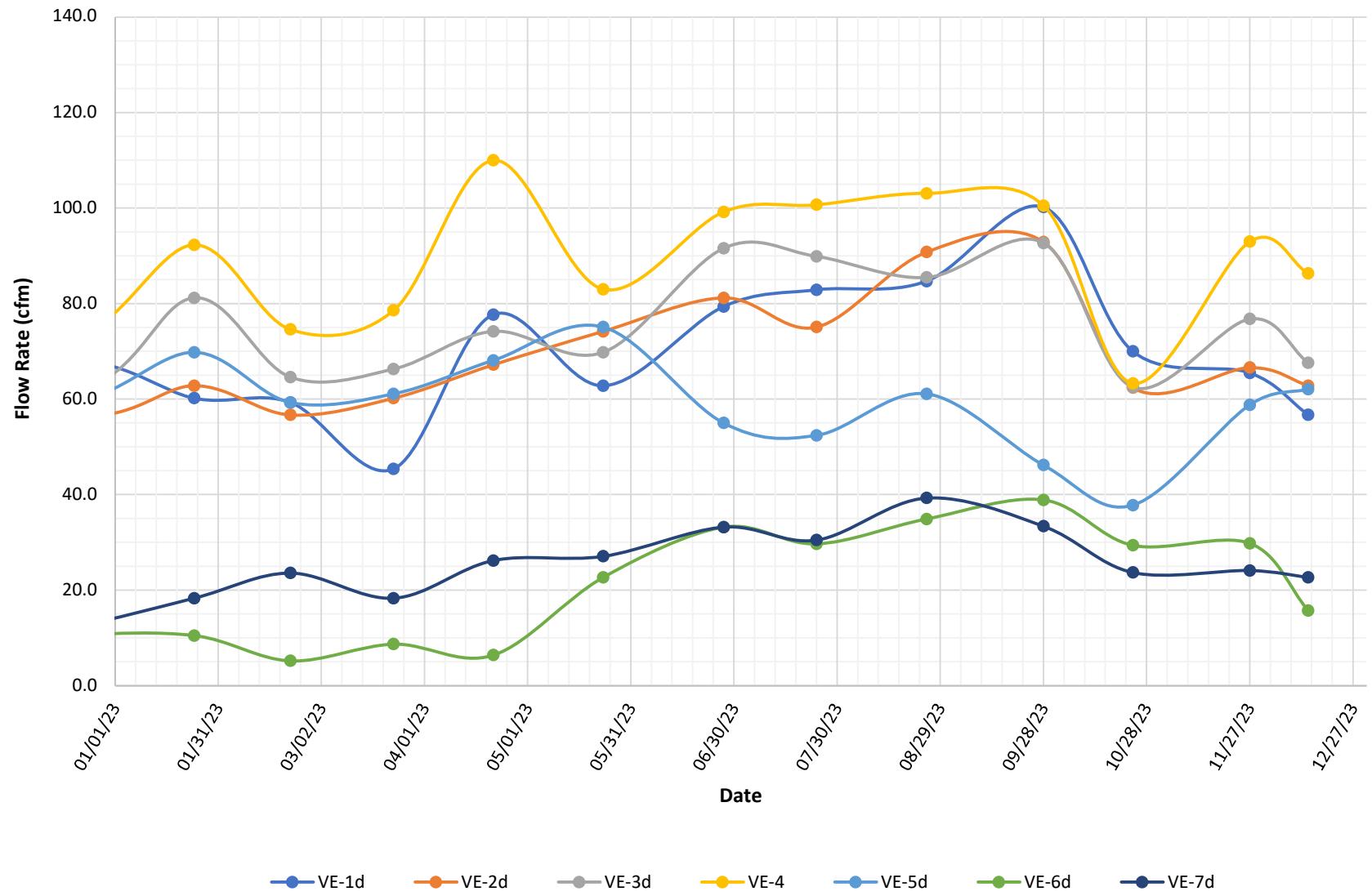
Calendar Year 2023



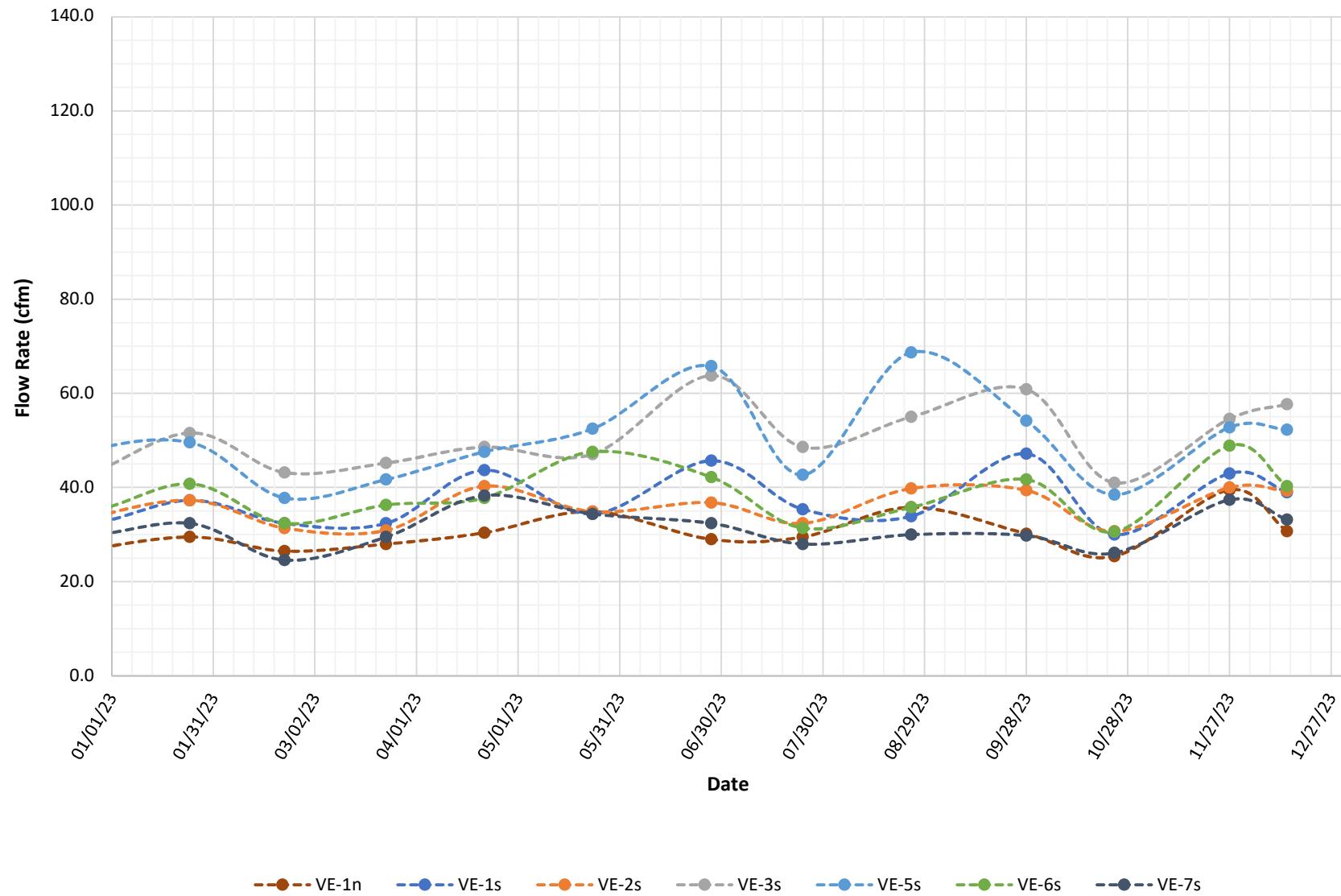
SSD/SSV System Trends - Differential Pressure in Shallow/Sub-Slab Ventilation Legs Calendar Year 2023



SSD/SSV System Trends - Flow Rates in Deep Ventilation Legs Calendar Year 2023



SSD/SSV System Trends - Flow Rates in Shallow/Sub-Slab Ventilation Legs Calendar Year 2023



SSD/SSV System Trends - Induced Vacuum at Monitoring Points

Calendar Year 2023

