

April 30, 2024

Via Electronic Mail

Mr. Ray Hoy
Oregon Department of Environmental Quality – Northwest Region
700 NE Multnomah St, Suite 600
Portland, OR 97232

**SUBJECT: FIRST QUARTER 2024 PROGRESS REPORT
(January through March 2024)
Vigor Industrial LLC**

Dear Mr. Hoy:

Floyd|Snider is submitting this Quarterly Progress Report (QPR) on behalf of Vigor Industrial LLC (Vigor) to summarize stormwater source control activities performed during the first quarter of 2024 at the Vigor facility located at 5555 N. Channel Avenue in Portland, Oregon. This report also summarizes National Pollutant Discharge Elimination System (NPDES) 1200-Z Permit compliance activities conducted during the third quarter (January through March) of the 2023/2024 monitoring year.

Paragraph 7(H) of the Order on Consent between the Oregon Department of Environmental Quality (ODEQ) and Vigor (ODEQ No. OPV-NWR-16-05), dated December 19, 2016 (Consent Order), requires submittal of QPRs. The following progress report summarizes activities for the first quarter of 2024 (January 1 through March 31, 2024).

ACTIONS TAKEN DURING THE FIRST QUARTER OF 2024

Consent Order Requirements

- Phase 2 stormwater infrastructure improvements construction was completed in the first quarter of 2024. The stormwater system was commissioned on January 31, 2024.
- Vigor submitted the Phase 1 and Phase 2 Construction Completion Report to ODEQ on March 1, 2024.

National Pollutant Discharge Elimination System Permit Requirements

- On February 14, 2024, Vigor submitted its Discharge Monitoring Report (DMR) for the second quarter (October to December 2023) of the 2023/2024 monitoring year in accordance with the NPDES 1200-Z Permit.
- Vigor continued Year 3 Monitoring in accordance with the NPDES 1200-Z Permit.

ACTIONS SCHEDULED FOR THE SECOND QUARTER OF 2024

- Vigor will submit the DMR for the third quarter (January to March 2024) of the NPDES 1200-Z Permit by May 15, 2023.
- Vigor will conduct stormwater sampling during the fourth quarter (April to June 2024) of the 2023/2024 monitoring year per the NPDES 1200-Z Permit.
- Vigor will continue monitoring contingency source control measures as described in the approved Source Control Measure Monitoring Plan (Appendix G of the Revised Monitoring and Performance Evaluation Report [MPER]).
- Vigor will monitor the electrocoagulation stormwater treatment system (EC system) as described in the Post-Phase 1 and Phase 2 EC System Sampling Work Plan which was submitted to ODEQ on April 10, 2024.
- Vigor will provide a Response to Comments Memo and 2022 MPER Revision to ODEQ by June 28, 2024, to address the 2022 MPER comments received on April 3, 2024.

SUMMARY OF DATA COLLECTED AND ACTIONS TAKEN

- Stormwater grab samples were collected during storm events in January, February, and March. Two representative samples each were collected from Pier D (PD29 and PD42). One sample each was collected from Group M, Basin R, Group P, Group Q, Pier C, and Basin O. Analytical results are shown in the enclosed Table 1.
- Stormwater performance monitoring samples were collected from the EC system in Group Q, a scupper insert in Pier C, Rain Barrel 5 and Rain Barrel 6 in Basin R, and Catch Basin inserts in Pier D (PD29 and PD42) during the first quarter of 2024. Analytical results are shown in the enclosed Table 2.
- Influent samples were collected at CB-200, CB-201, CB-203, and CB-204 in Basin R as a source-tracing effort to better understand potential causes for elevated results in Basin R despite efficient removal in the roof barrels.

Sincerely,
FLOYD | SNIDER



Adia Jumper, PE
Project Manager

Encl. Table 1 Stormwater Grab Sample Analytical Data
Table 2 Stormwater Performance Monitoring Sample Analytical Data
Table 3 Building 72 Source Tracing Influent Sample Analytical Data
Copies: Harrison Holzgang, Vigor Industrial LLC
Alan Sprott, Vigor Industrial LLC
David Lacey, Oregon Department of Environmental Quality
Laura Hanna, USEPA Region X
Angelica Greene, City of Portland Bureau of Environmental Services

Tables

Table 1
Stormwater Grab Sample Analytical Data

Location Name				Group M	Basin R	Group P	Group Q	Pier D (PD29)		Pier C	Pier D (PD42)		Basin O
Sample Name				M(001)-022124	R(004)-010924	P(005)-021524	Q(007)-031324 Eff	PD29(008)-022124	PD29(008)-032824-Eff	PierC(009)-021524-Eff	PD42(010)-022124	PD42(010)-032824-Eff	O(013)-022124
Sample Date				2/21/2024	1/9/2024	2/15/2024	3/13/2024	2/21/2024	3/28/2024	2/15/2024	2/21/2024	3/28/2024	2/21/2024
Analyte ⁽¹⁾	CAS No.	Consent Order Screening Criteria ⁽²⁾	2021 to 2025 1200-Z Permit Benchmarks or Impairment Reference Concentrations ⁽³⁾	Unit									
Conventionals													
pH	pH	--	--	pH				6.91					
Nitrate + Nitrite (as Nitrogen)	--	--	10	mg/L				0.086					
Total Suspended Solids	TSS	--	30	mg/L				<10 J					
Total Metals													
Aluminum	7429-90-5	--	1,100	µg/L				45.9					
Arsenic	7440-38-2	0.018	--	µg/L				<0.000100					
Copper	7440-50-8	2.7	15	µg/L	27.7	29.1	17.8	14.5	68.3	30.4	57.6	81.3	44.3
Iron	7439-89-6	--	10,000	µg/L				2,860	777	179	59.2	1,370	556
Lead	7439-92-1	0.54	240	µg/L				0.394					
Zinc	7440-66-6	36	240	µg/L		624		95.8					
Polychlorinated Biphenyl (PCB) Aroclors													
Aroclor 1016	12674-11-2	0.96	--	µg/L				<0.000193					
Aroclor 1221	11104-28-2	0.034	--	µg/L				<0.000193					
Aroclor 1232	11141-16-5	0.034	--	µg/L				<0.000193					
Aroclor 1242	53469-21-9	0.034	--	µg/L				<0.000193					
Aroclor 1248	12672-29-6	0.034	--	µg/L				<0.000193					
Aroclor 1254	11097-69-1	0.033	--	µg/L				<0.000193					
Aroclor 1260	11096-82-5	0.034	--	µg/L				<0.000193					
Total PCBs	T_PCB (U=0)	0.0000064	--	µg/L				<0.000193					
Phthalate Esters													
Bis(2-ethylhexyl)phthalate	117-81-7	0.2	--	µg/L				<0.332 J					
Polycyclic Aromatic Hydrocarbons (PAHs)													
2-Methylnaphthalene	91-57-6	0.2	--	µg/L				<0.00997 J					
Acenaphthene	83-32-9	0.2	--	µg/L				<0.00997 J					
Acenaphthylene	208-96-8	0.2	--	µg/L				<0.00997 J					
Anthracene	120-12-7	0.2	--	µg/L				<0.00997 J					
Benzo(a)anthracene	56-55-3	0.0012	--	µg/L				<0.00997 J					
Benzo(a)pyrene	50-32-8	0.00012	--	µg/L				<0.00997 J					
Benzo(b)fluoranthene	205-99-2	0.0012	--	µg/L				<0.00997 J					
Benzo(g,h,i)perylene	191-24-2	0.2	--	µg/L				<0.00997 J					
Benzo(k)fluoranthene	207-08-9	0.0013	--	µg/L				<0.00997 J					

Table 1
Stormwater Grab Sample Analytical Data

Location Name				Group M	Basin R	Group P	Group Q	Pier D (PD29)		Pier C	Pier D (PD42)		Basin O
Sample Name				M(001)-022124	R(004)-010924	P(005)-021524	Q(007)-031324 Eff	PD29(008)-022124	PD29(008)-032824-Eff	PierC(009)-021524-Eff	PD42(010)-022124	PD42(010)-032824-Eff	O(013)-022124
Sample Date				2/21/2024	1/9/2024	2/15/2024	3/13/2024	2/21/2024	3/28/2024	2/15/2024	2/21/2024	3/28/2024	2/21/2024
Analyte ⁽¹⁾	CAS No.	Consent Order Screening Criteria ⁽²⁾	2021 to 2025 1200-Z Permit Benchmarks or Impairment Reference Concentrations ⁽³⁾	Unit									
Polycyclic Aromatic Hydrocarbons (PAHs) (cont.)													
Chrysene	218-01-9	0.0013	--	µg/L				<0.00997 J					
Dibenz(a,h)anthracene	53-70-3	0.00012	--	µg/L				<0.00997 J					
Fluoranthene	206-44-0	0.2	--	µg/L				<0.00997 J					
Fluorene	86-73-7	0.2	--	µg/L				<0.00997 J					
Indeno(1,2,3-c,d)pyrene	193-39-5	0.0012	--	µg/L				<0.00997 J					
Naphthalene	91-20-3	0.2	--	µg/L				<0.00997 J					
Phenanthrene	85-01-8	0.2	--	µg/L				<0.00997 J					
Pyrene	129-00-0	0.2	--	µg/L				<0.00997 J					
Total cPAHs	BaPEq (U=1/2)	0.00012	--	µg/L				<0.00997 J					

Notes:

Blank cells are intentional.

-- No standard.

Italics Detected exceedance of the benchmark.

BOLD Detected exceedance of the screening criterion.

BOLD/RED Detected exceedance of both the screening criterion and the benchmark.

1 Parameters listed are those specified in the Consent Order for requiring source control.

2 Screening criteria of CULs presented in Table 17 of the 2017 USEPA Portland Harbor Record of Decision or screening level values from Table 3-1 of ODEQ's 2005 Joint Source Control Strategy where a CUL does not exist.

3 Benchmarks and impairment pollutant reference concentrations are as presented in Vigor's 2021–2025 National Pollutant Discharge Elimination System 1200-Z General Industrial Stormwater Permit No. 70596.

Abbreviations:

- CAS Chemical Abstracts Service
- CUL Cleanup level
- µg/L Micrograms per liter
- mg/L Milligrams per liter
- ODEQ Oregon Department of Environmental Quality
- USEPA U.S. Environmental Protection Agency

Qualifiers:

- < Analyte was not detected at the given method detection limit.
- J Concentration is estimated.

Table 2
Stormwater Performance Monitoring Sample Analytical Data

Location Name					Q (007)			Pier C (009)			B72RB5		
Source Control Measure					EC System			Scupper Insert			Roof Barrel		Removal Efficiency
Sample Name					Q(007)-031324-Inf	Q(007)-031324-Eff	Removal Efficiency	PierC(009)-021524-Inf	PierC(009)-021524-Eff	Removal Efficiency	RB5-010924-Inf	RB5-010924-Eff	
Sample Date					3/13/2024	3/13/2024			2/15/2024		2/15/2024		1/9/2024
Analyte ⁽¹⁾	CAS No.	Consent Order Screening Criteria ⁽²⁾	2021 to 2025 1200-Z Permit Benchmarks or Impairment Reference Concentrations ⁽³⁾	Unit									
Conventionals													
pH	pH	--	--	pH	6.83	6.91	-1%						
Nitrate + Nitrite (as Nitrogen)	--	--	10	mg/L	0.080	0.086	-7%						
Total Suspended Solids	TSS	--	30	mg/L	11 J	<10 J	100%						
Total Metals													
Aluminum	7429-90-5	--	1,100	µg/L	90.4	45.9	49%						
Arsenic	7440-38-2	0.018	--	µg/L	0.223	<0.000100	100%						
Copper	7440-50-8	2.7	15	µg/L	50.8	14.5	71%	57.6	57.6	0%	24.7	8.90 64%	
Iron	7439-89-6	--	10,000	µg/L	2,240	2,860	-28%	<50.0	59.2	-18%			
Lead	7439-92-1	0.54	240	µg/L	1.31	0.394	70%						
Zinc	7440-66-6	36	240	µg/L	418	95.8	77%				884	272 69%	
Polychlorinated Biphenyl (PCB) Aroclors													
Aroclor 1016	12674-11-2	0.96	--	µg/L	<0.0000211	<0.000193							
Aroclor 1221	11104-28-2	0.034	--	µg/L	<0.0000211	<0.000193							
Aroclor 1232	11141-16-5	0.034	--	µg/L	<0.0000211	<0.000193							
Aroclor 1242	53469-21-9	0.034	--	µg/L	<0.0000211	<0.000193							
Aroclor 1248	12672-29-6	0.034	--	µg/L	<0.0000211	<0.000193							
Aroclor 1254	11097-69-1	0.033	--	µg/L	<0.0000211	<0.000193							
Aroclor 1260	11096-82-5	0.034	--	µg/L	<0.0000211	<0.000193							
Total PCBs	T_PCB (U=0)	0.0000064	--	µg/L	<0.0000211	<0.000193							
Phthalate Esters													
Bis(2-ethylhexyl)phthalate	117-81-7	0.2	--	µg/L	<0.333 J	<0.332 J							
Polycyclic Aromatic Hydrocarbons (PAHs)													
2-Methylnaphthalene	91-57-6	0.2	--	µg/L	<0.00999 J	<0.00997 J							
Acenaphthene	83-32-9	0.2	--	µg/L	<0.00999 J	<0.00997 J							
Acenaphthylene	208-96-8	0.2	--	µg/L	<0.00999 J	<0.00997 J							
Anthracene	120-12-7	0.2	--	µg/L	<0.00999 J	<0.00997 J							
Benzo(a)anthracene	56-55-3	0.0012	--	µg/L	<0.00999 J	<0.00997 J							
Benzo(a)pyrene	50-32-8	0.00012	--	µg/L	<0.00999 J	<0.00997 J							
Benzo(b)fluoranthene	205-99-2	0.0012	--	µg/L	<0.00999 J	<0.00997 J							
Benzo(g,h,i)perylene	191-24-2	0.2	--	µg/L	<0.00999 J	<0.00997 J							
Benzo(k)fluoranthene	207-08-9	0.0013	--	µg/L	<0.00999 J	<0.00997 J							
Chrysene	218-01-9	0.0013	--	µg/L	<0.00999 J	<0.00997 J							
Dibenz(a,h)anthracene	53-70-3	0.00012	--	µg/L	<0.00999 J	<0.00997 J							
Fluoranthene	206-44-0	0.2	--	µg/L	<0.00999 J	<0.00997 J							
Fluorene	86-73-7	0.2	--	µg/L	<0.00999 J	<0.00997 J							

Table 2
Stormwater Performance Monitoring Sample Analytical Data

Location Name					Q (007)			Pier C (009)			B72RB5		
Source Control Measure					EC System			Scupper Insert			Roof Barrel		
Sample Name					Q(007)-031324-Inf	Q(007)-031324-Eff	Removal Efficiency	PierC(009)-021524-Inf	PierC(009)-021524-Eff	Removal Efficiency	RB5-010924-Inf	RB5-010924-Eff	Removal Efficiency
Sample Date					3/13/2024	3/13/2024		2/15/2024	2/15/2024		1/9/2024	1/9/2024	
Analyte ⁽¹⁾	CAS No.	Consent Order Screening Criteria ⁽²⁾	2021 to 2025 1200-Z Permit Benchmarks or Impairment Reference Concentrations ⁽³⁾	Unit									
Polycyclic Aromatic Hydrocarbons (PAHs) (cont.)													
Indeno(1,2,3-c,d)pyrene	193-39-5	0.0012	--	µg/L	<0.00999 J	<0.00997 J							
Naphthalene	91-20-3	0.2	--	µg/L	<0.00999 J	<0.00997 J							
Phenanthrene	85-01-8	0.2	--	µg/L	<0.00999 J	<0.00997 J							
Pyrene	129-00-0	0.2	--	µg/L	<0.00999 J	<0.00997 J							
Total cPAHs	BaPEq (U=1/2)	0.00012	--	µg/L	<0.00999 J	<0.00997 J							

Notes:

Blank cells are intentional.

-- No standard.

Italics Detected exceedance of the benchmark.

BOLD Detected exceedance of the screening criterion.

BOLD/RED Detected exceedance of both the screening criterion and the benchmark.

1 Parameters listed are those specified in the Consent Order for requiring source control.

2 Screening criteria of CULs presented in Table 17 of the 2017 USEPA Portland Harbor Record of Decision or screening level values from Table 3-1 of ODEQ's 2005 Joint Source Control Strategy where a CUL does not exist.

3 Benchmarks and impairment pollutant reference concentrations are as presented in Vigor's 2021–2025 National Pollutant Discharge Elimination System 1200-Z General Industrial Stormwater Permit No. 70596.

Abbreviations:

CAS Chemical Abstracts Service

CUL Cleanup level

µg/L Micrograms per liter

mg/L Milligrams per liter

ODEQ Oregon Department of Environmental Quality

USEPA U.S. Environmental Protection Agency

Qualifiers:

< Analyte was not detected at the given method detection limit.

J Concentration is estimated.

Table 2
Stormwater Performance Monitoring Sample Analytical Data

Location Name					B72RB6			PD29 (008)			PD42 (010)		
Source Control Measure					Roof Barrel		Removal Efficiency	CB Media Insert		Removal Efficiency	CB Media Insert		Removal Efficiency
Sample Name					RB6-010924-Inf	RB6-010924-Eff		PD29(008)-032824-Inf	PD29(008)-032824-Eff		PD42(010)-032824-Inf	PD42(010)-032824-Eff	
Sample Date					1/9/2024	1/9/2024		3/28/2024	3/28/2024		3/28/2024	3/28/2024	
Analyte ⁽¹⁾	CAS No.	Consent Order Screening Criteria ⁽²⁾	2021 to 2025 1200-Z Permit Benchmarks or Impairment Reference Concentrations ⁽³⁾	Unit									
Conventionals													
pH	pH	--	--	pH									
Nitrate + Nitrite (as Nitrogen)	--	--	10	mg/L									
Total Suspended Solids	TSS	--	30	mg/L									
Total Metals													
Aluminum	7429-90-5	--	1,100	µg/L									
Arsenic	7440-38-2	0.018	--	µg/L									
Copper	7440-50-8	2.7	15	µg/L	28.1	8.41	70%	291	30.4	90%	338	44.3	87%
Iron	7439-89-6	--	10,000	µg/L				6,490	179	97%	3,690	556	85%
Lead	7439-92-1	0.54	240	µg/L									
Zinc	7440-66-6	36	240	µg/L	1,240	436	65%						
Polychlorinated Biphenyl (PCB) Aroclors													
Aroclor 1016	12674-11-2	0.96	--	µg/L									
Aroclor 1221	11104-28-2	0.034	--	µg/L									
Aroclor 1232	11141-16-5	0.034	--	µg/L									
Aroclor 1242	53469-21-9	0.034	--	µg/L									
Aroclor 1248	12672-29-6	0.034	--	µg/L									
Aroclor 1254	11097-69-1	0.033	--	µg/L									
Aroclor 1260	11096-82-5	0.034	--	µg/L									
Total PCBs	T_PCB (U=0)	0.0000064	--	µg/L									
Phthalate Esters													
Bis(2-ethylhexyl)phthalate	117-81-7	0.2	--	µg/L									
Polycyclic Aromatic Hydrocarbons (PAHs)													
2-Methylnaphthalene	91-57-6	0.2	--	µg/L									
Acenaphthene	83-32-9	0.2	--	µg/L									
Acenaphthylene	208-96-8	0.2	--	µg/L									
Anthracene	120-12-7	0.2	--	µg/L									
Benzo(a)anthracene	56-55-3	0.0012	--	µg/L									
Benzo(a)pyrene	50-32-8	0.00012	--	µg/L									
Benzo(b)fluoranthene	205-99-2	0.0012	--	µg/L									
Benzo(g,h,i)perylene	191-24-2	0.2	--	µg/L									
Benzo(k)fluoranthene	207-08-9	0.0013	--	µg/L									
Chrysene	218-01-9	0.0013	--	µg/L									
Dibenz(a,h)anthracene	53-70-3	0.00012	--	µg/L									
Fluoranthene	206-44-0	0.2	--	µg/L									
Fluorene	86-73-7	0.2	--	µg/L									

Table 2
Stormwater Performance Monitoring Sample Analytical Data

Location Name					B72RB6			PD29 (008)			PD42 (010)		
Source Control Measure					Roof Barrel			CB Media Insert			CB Media Insert		
Sample Name					RB6-010924-Inf	RB6-010924-Eff	Removal Efficiency	PD29(008)-032824-Inf	PD29(008)-032824-Eff	Removal Efficiency	PD42(010)-032824-Inf	PD42(010)-032824-Eff	Removal Efficiency
Sample Date					1/9/2024	1/9/2024		3/28/2024	3/28/2024		3/28/2024	3/28/2024	
Analyte ⁽¹⁾	CAS No.	Consent Order Screening Criteria ⁽²⁾	2021 to 2025 1200-Z Permit Benchmarks or Impairment Reference Concentrations ⁽³⁾	Unit									
Polycyclic Aromatic Hydrocarbons (PAHs) (cont.)													
Indeno(1,2,3-c,d)pyrene	193-39-5	0.0012	--	µg/L									
Naphthalene	91-20-3	0.2	--	µg/L									
Phenanthrene	85-01-8	0.2	--	µg/L									
Pyrene	129-00-0	0.2	--	µg/L									
Total cPAHs	BaPEq (U=1/2)	0.00012	--	µg/L									

Notes:

Blank cells are intentional.

-- No standard.

Italics Detected exceedance of the benchmark.

BOLD Detected exceedance of the screening criterion.

BOLD/RED Detected exceedance of both the screening criterion and the benchmark.

1 Parameters listed are those specified in the Consent Order for requiring source control.

2 Screening criteria of CULs presented in Table 17 of the 2017 USEPA Portland Harbor Record of Decision or screening level values from Table 3-1 of ODEQ's 2005 Joint Source Control Strategy where a CUL does not exist.

3 Benchmarks and impairment pollutant reference concentrations are as presented in Vigor's 2021–2025 National Pollutant Discharge Elimination System 1200-Z General Industrial Stormwater Permit No. 70596.

Abbreviations:

CAS Chemical Abstracts Service

CUL Cleanup level

µg/L Micrograms per liter

mg/L Milligrams per liter

ODEQ Oregon Department of Environmental Quality

USEPA U.S. Environmental Protection Agency

Qualifiers:

< Analyte was not detected at the given method detection limit.

J Concentration is estimated.

Table 3
Building 72 Source Tracing Influent Sample Analytical Data

Location Name					CB-200	CB-201	CB-203	CB-204
Sample Name					CB200-010924	CB201-010924	CB203-010924	CB204-010924
Sample Date					1/9/2024	1/9/2024	1/9/2024	1/9/2024
Analyte ⁽¹⁾	CAS No.	Consent Order Screening Criteria ⁽²⁾	2021 to 2025 1200-Z Permit Benchmarks or Impairment Reference Concentrations ⁽³⁾	Unit				
Total Metals								
Copper	7440-50-8	2.7	15	µg/L	884	269	440	1,130
Zinc	7440-66-6	36	240	µg/L	1,020	1,040	1,830	2,390

Notes:

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BOLD/RED Detected exceedance of both the screening criterion and the benchmark.

1 Parameters listed are those specified in the Consent Order for requiring source control.

2 Screening criteria of CULs presented in Table 17 of the 2017 USEPA Portland Harbor Record of Decision or screening level values from Table 3-1 of ODEQ's 2005 Joint Source Control Strategy where a CUL does not exist.

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