

# **Statement of Basis for Vigor Shipyards, LLC.**

## **Air Operating Permit No. 12539**

### **Air Operating Permit Renewal No. 2, (April 14, 2023)**

#### **1. Purpose of the Statement of Basis**

This document summarizes the legal and factual bases for the permit conditions in the air operating permit to be issued to the Vigor Shipyards, LLC. (Vigor) under the authority of the Washington Clean Air Act, Chapter 70A.15 Revised Code of Washington (RCW), Chapter 173-401 of the Washington Administrative Code (WAC), and Puget Sound Clean Air Agency (Agency) Regulation I, Article 7. Unlike the permit, this document is not legally enforceable. It includes references to the applicable statutory or regulatory provisions that relate to Vigor air emissions to the atmosphere. In addition, the Statement of Basis provides a description of the facility's activities and a compliance history.

#### **2. Why Vigor is an Air Operating Permit Source**

Vigor is subject to the requirement to obtain an air operating permit because it is a "major source" as defined in Title V of the federal Clean Air Act (CAA) Amendments of 1990 and its implementing regulations, 40 CFR Part 70 and Chapter 173-401 WAC. A major source has the potential to emit more than 100 tons per year of any criteria pollutant such as carbon monoxide (CO), sulfur dioxide (SO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>), volatile organic matter (VOC), or particulate matter (PM), 10 tons per year or more of any single hazardous air pollutant (HAP) listed in Section 112(b) of the federal Clean Air Act, or 25 tons per year or more of any combination of HAPs.

Vigor qualifies as a major source and is required to obtain an air operating permit because potential emissions of VOCs and HAPs exceed the major source thresholds of 100 tons per year and 25 tons per year, respectively. The major sources of emissions are from the use of solvents and coatings used to support cleaning and coating operations associated with ship building and repair. Actual emissions at Vigor are currently below major source thresholds, but there are no specific facility-wide emission limits that would classify Vigor as a synthetic minor source. Facility-wide emissions are driven by the number and type of projects which can vary considerably from year to year.

#### **3. Source Location and Facility Operation Description**

Vigor is a full-service shipyard specializing in commercial and military vessel repair, overhaul and construction. It is located on the northwest corner of Harbor Island in Seattle, Washington at the intersection of 16th Avenue Southwest and Southwest Florida Street and is accessed from Seattle via South Spokane Street. The area is in attainment for all pollutants.

The facility is approximately 23 acres in size, not including pier areas. Vigor's northern shoreline is surrounded by water from Elliot Bay while its western shoreline is bordered by the Duwamish River. This shipyard has occupied the present facility, or portions of the present facility since June 1918. Harbor Island was created before 1905 by filling the tide flats and delta deposits with demolition debris or dredged material from the east and west waterways of the Duwamish River.

The shipyard consists of three dry docks and associated piers located on the north end of Harbor Island and seven wet moorage berths located adjacent to the shipyard's piers. The piers consist of Pier 3 located at the west side of the yard, Pier 4 located at the northwest corner of the yard, and Piers 5 and 6, located on the north side of the yard. Pier 4 supports Dry dock #1 (Vigilant) to the west and Dry dock #10 (Resolute) to the east. Pier 5 supports Dry dock #3 (Vigilant) to the west. The shipway in the southwest side and Piers 1, 1A, and 2P were demolished for the intertidal salmon estuary. A small portion of Pier 2P was rebuilt for shipyard access. The dry docks can readily move from one location to another.

Repair and overhaul services are mainly performed on vessels with hulls constructed of steel. Services include electrical, mechanical, carpentry, steel fabrication, pipe-fitting, painting, abrasive grit blasting and pressure washing. Operational facilities include shops for abrasive grit blasting, painting, pipe fabrication, carpentry, welding, machining, plate bending, and electrical work. Support facilities include storage and warehouse buildings; sheds for compressors, heating and power plants, and tools; administrative offices; first aid office; and fuel storage.

Vigor has three dry docks that can be used. Dry docks are currently identified as Dry dock #1 (Vigilant), Dry dock #10 (Resolute), and Dry dock #3 (Evolution). Dry dock #1 (Vigilant) is a steel dry dock located on the northwest corner of the property. It is 528 feet long, 87 feet wide and can hold up to 13,000 long tons (LT). Dry dock #3 (Evolution) is 640 feet long, 115 feet wide and can hold up to 22,000 LT. Dry dock #10 (Resolute) is owned by the Navy and operated by Vigor. It is 552 feet long, 93 feet wide and can hold up to 17,000 LT. The addition of new piers or dry docks or modifications that would increase air pollutant emissions from activities that take place on the pier or dry dock (spray coating, abrasive blasting) would potentially trigger Notice of Construction permitting requirements in Regulation I, Article 6.

More than 35% of the vessels hauled out (dry docked) require partial or complete hull blasting, accounting for 80% of the grit used. About 10% is used in the abrasive blast shed on shore. The remaining 10% is used in ship holds and ship superstructures. Spent grit is removed from the dry docks prior to launching a vessel. Spent grit is stored in a covered area prior to being hauled to Lafarge Cement for re-use in the manufacture of cement.

Vigor applies paint to nearly every vessel it services. The primary types of paint used are solvent based epoxy paints, solvent based non-epoxy paints, solvent based zinc paints, and solvent based anti-fouling paints. Painting operations occur both indoors and outdoors at the shipyard. Vessel components small enough to be moved or separated from a vessel can be painted indoors in one of several "paint shops". Vessel painting occurs outdoors when the vessels are in dry dock (below water line work and superstructure painting) or are berthed adjacent to one of the shipyard's piers (superstructure and above water line painting). The majority of air emissions from the shipyard originate from painting operations. Vigor uses VOC compliant paints per Shipbuilding and Repair National Emission Standards for Hazardous Air Pollutants (NESHAP) in 40 CFR part 63 Subpart II.

## **4. Permitting History**

### **4.1 New Source Review Permitting for the Facility**

Since the issuance of the original operating permit, the Agency has reviewed several proposed projects to determine if a Notice of Construction Order of Approval (NOCOA) would be required. A summary of the results of each evaluation is provided below:

- NOCOA 7253, 9226, NOCOA 9832, NOCOA 10110, NOCOA 10296 all pertain to soil and groundwater remediation that is no longer occurring at this facility. As part of this renewal process, Vigor provided notice that soil and groundwater remediation has been completed and the emission unit has been removed from this operating permit. The NOCOAs are considered obsolete.
- On April 26, 2005, NOC 9227 application was submitted for a sponge-jet abrasive blasting operation to be conducted in an existing building employing existing dust collectors that had been previously approved under NOCOA 2452. The Agency determined that a new NOCOA was not required for the abrasive blasting media change as long as the existing controls are left in place.
- NOCOA 9541 was issued on April 5, 2007. Part of the Building T-72 was established as an abrasive blasting and spray coating facility to replace outdoor abrasive blasting and spray coating activities that took place on the Building Ways (one of four outdoor spray coating areas approved under NOCOA 8678). This Order permitted eight new dust collectors/filtered exhausts which were intended to better capture abrasive blasting dust and paint spray from the currently permitted outdoor operations. The Order also covers operations in one existing spray coating booth (T-199, Paint Shop #3) and one existing spray coating room (T-230, Shop #2). The spray booth and room were previously permitted but conditions from those Orders were pulled into NOCOA 9541, since this new Order cancelled and superseded NOCOA 8678 dated June 10, 2002 (which in turn had cancelled and superseded Orders of Approval No. 5671, 7069 and 7070). NOCOA 9621 was issued on June 22, 2007 and also permits abrasive blasting and spray painting in Building T-72 (similar to Order of Approval No. 9541). Additional filtered ventilation was added at the request of the Seattle Fire Department as they preferred the improved system over the six portable exhausts from the original permit. Conditions are similar, but not identical to those in NOCOA 9541. Conditions in both Orders remain in effect.
- NOCOA 10267 was issued November 17, 2015. The Order modified existing temporary dry abrasive blasting and existing temporary spray coating operations by providing flexibility on the location within the shipyard where these operations are conducted as long as the requirements in this Order are met. Existing temporary spray coating operations on dry docks and vessels pier-side are not addressed in this Order of Approval, but must meet the requirements in Agency regulations. This Order also incorporated permit conditions that applied to existing indoor spray coating operations previously permitted under NOCOA 9541 dated April 5, 2007 (no modification to these operations). This Order cancels and supersedes NOCOA 9541 dated April 5, 2007 and NOCOA 8678 dated June 10, 2002.
- NOCOA 11416 was issued January 1, 2018 for replacement of an existing dry dock with a new dry dock which has 20,000 long ton lifting capacity (Dry Dock #3

(Evolution)). The Order addresses both abrasive blasting and spray coating operations on the dry dock.

- NOCOA 12022 will be issued concurrently with this AOP renewal. This Order will modify NOC 10267 Conditions #5, #12, and #13 to adjust composition of abrasive blast media, particulate control for abrasive blasting, and usage limits for abrasive blast media for the ten temporary dry abrasive blasting operations permitted under NOCOA 10267. This Order provides for increased operational flexibility, but does not result in an increase in production capacity since the limit on the number of operations remains unchanged.

#### **4.2 Regulatory Orders Issued to the Facility**

Order 5970 was issued on June 21, 1995 to establish emission limits on each air pollutant to less than the major source levels in accordance with WAC 173-400-091, Voluntary Limits on Emissions. An Order to Rescind was issued on September 6, 2000 after the permittee submitted a complete application for an air operation permit.

#### **4.3 Operating Permit Issuance and Renewal**

An initial air operating permit application was received by the Agency from Todd Pacific Shipyards on May 4, 2000. Prior to that time, Todd Pacific Shipyards was operating under a synthetic minor permit which limited their VOC and HAP emissions below major source thresholds. The Agency acknowledged that the application was complete in a letter to Todd Pacific Shipyards dated June 19, 2000. The original permit was issued on February 4, 2003.

An air operating permit renewal application was received by the Agency from Vigor on February 5, 2007. The Agency acknowledged that the application was complete in a letter to Vigor dated April 3, 2007. Prior to renewal, an administrative amendment was issued on June 13, 2011 due to a name change from Todd Pacific Shipyards to Vigor. Certain underlying documents referred to in the operating permit, such as Orders of Approval, have not been reopened to change the name of the company, but any terms and conditions in those documents that applied to Todd Pacific Shipyards now apply in exactly the same manner to Vigor. Air operating permit Renewal 1 was issued on August 25, 2016.

An administrative amendment was issued on January 3, 2018 to reflect a change in one of the responsible officials to Mike Pearson.

An air operating permit renewal application was due on February 26, 2021 and was received by the Agency from Vigor on February 8, 2021. The Agency acknowledged that the application was complete in an e-mail to Vigor on March 12, 2021. The air operating permit was renewed on April 14, 2023.

### **5. Compliance History**

Vigor has been inspected by the Agency at least annually since the AOP was first issued. Inspections performed in 2020 and 2021 were conducted via telephone due to the COVID-19 measures to protect agency and Vigor's employees. In addition, the operating permit requires the facility to conduct numerous self-monitoring activities to fix problems as they

are identified, and to report deviations of the AOP requirements to the Agency. Deviations reported by Vigor as well as problems identified during inspections by the Agency may result in Written Warnings (WWs) or Notices of Violation (NOVs).

The facility has received 4 notices of violation in the last five years:

- NOV 3-009828 was issued 12/31/2018 (violation date of 9/11/2018) for failing to file a Notice of Intent for a non-road engine (AOP 12539 Term 6.17). Vigor began operation of a >2000 BHP generator prior to submitting the notice of intent to operate and/or receiving approval. Vigor submitted the notice of intent on the same day the generator started operating (9/11/18). The NOV was closed on 1/30/2019.
- NOV 3-000422 was issued 2/25/2022 (violation date range of 1/6/2021 through 1/17/2022) for operating the Shop #2 spray room outside of the acceptable differential pressure range. During the on-site inspection on 1/6/2022, it was observed that the west differential pressure gauge was disconnected and the corresponding log was based on readings from the disconnected gauge. Review of inspection records show that Gauge #1 was marked as 0" from 2/8/2021 through 3/3/2021, 4/17/2021 through 4/24/2021, 5/3/2021 through 5/6/2021 and 5/17/2021 through 5/27/21. During this renewal, additional language was added to the AOP to clarify the gauge needs to be operational and the procedure that should be used for setting the acceptable pressure drop range.
- NOV 3-000423 was issued 2/25/2022 (violation date range of 1/6/2021 and 2/8/2022) for operating abrasive blasting operations outside of the acceptable range on 1/26/2021 and on 2/8/8/2021. During this renewal, additional language was added to the AOP to clarify the gauge needs to be operational and the procedure that should be used for setting the acceptable pressure drop range.
- NOV 3-000466 was issued 4/12/2022 (violation date range on or about the weeks of 6/21/2021, 7/20/2021, 8/31/202 and 2/14/2022) for use of blasting media that contained crystalline silica in amounts greater than or equal to 0.1 percent by weight based on Safety Data Sheets for the product. Vigor reported total usage was 41 tons.

## 6. Emission Inventory

Puget Sound Clean Air Agency Regulation I, Section 7.09(a) requires Vigor to submit an annual emission report, listing air contaminants' emissions that were equal to or greater than the following thresholds in the previous calendar year:

Pollutant	Threshold (tons/year)
Carbon monoxide (CO) emissions	25
Nitrogen oxide (NO <sub>x</sub> ) emissions	25
Particulate matter (PM <sub>10</sub> ) emissions	25
Particulate matter (PM <sub>2.5</sub> ) emissions	25
Sulfur oxide (SO <sub>x</sub> ) emissions	25
Volatile organic compounds (VOC) emissions	25

Any single toxic air contaminant (TAC) emissions	2
Facility combined total of all TAC emissions	6

In addition, Vigor must submit any additional information required by WAC 173-400-105(1) and Puget Sound Clean Air Agency Regulation III, Section 1.11. Vigor reports emissions for emissions associated with natural gas combustion, surface coating operations and abrasive blasting operations. A summary of emissions from each of these activities is provided below:

- **Natural gas combustion:** The emissions from natural gas combustion are estimated using the amount of natural gas combusted during the year and EPA emission factors. The most significant emissions are CO and NO<sub>x</sub>, but estimated to be only 1 ton/year or less for each pollutant in 2014.
- **Surface Coating Operations:** Emissions from surface coating operations are estimated using the material balance method. Both TAC and VOC emissions are associated with these operations. The emissions primarily associated with surface coating vary depending on the level of activity at the shipyard. Based on a review of emissions in the last 5 years, emissions were highest in 2018 with VOC emissions estimated at 23.3 tons/year.
- **Abrasive Blasting Operations:** Emissions from abrasive blasting operations are estimated using the amount of abrasive blast material used and EPA emission factors. Emissions associated with abrasive blasting are primarily PM<sub>2.5</sub> and PM<sub>10</sub>. Emissions from abrasive blasting are estimated to be below 1 tons/year.

A summary of emissions reported by the facility in tons/year for the last 5 years is provided in the table below:

	2017	2018	2019	2020	2021	2016
CO	1.0	0.6	0.4	0.9	1.1	0.1
NOx		0.7		1.1	1.3	0.1
HAP	7.2	8.8	5.9	4.8	2.9	12.0
TAC	9.8	12.3	9.3	8.5	4.7	12.1
VOC	21.6	23.3	18.5	18.5	10.6	26.3
PM10	0.2	0.3	0.2	0.2	0.2	0.1
PM2.5	0.1	0.1	0.1	0.1	0.1	0.0
SO2	0.0	0.0	0.0	0.0	0.0	0.0

## 7. Compliance Assurance Monitoring, NESHAP and NSP Applicability Review

### 7.1 Compliance Assurance Monitoring

The CAM rule requires owners and operators to monitor the operation and maintenance of their control equipment so that they can evaluate the performance of their control devices and report whether or not their facilities meet established emission standards. If

owners and operators of these facilities find that their control equipment is not working properly, the CAM rule requires them to take action to correct any malfunctions and to report such instances to the appropriate enforcement agency. Additionally, the CAM rule provides some enforcement tools that will help State and local environmental agencies require facilities to respond appropriately to the monitoring results and improve pollution control operations.

The CAM rule applies at major sources with emission units that have control devices, and where emissions from the emission unit could exceed 100 tons per year if the control device was not operated. In accordance with 40 CFR Part 64, any emission unit that meets all three of the following criteria requires a CAM Plan:

- The unit is subject to an emission limitation or standard for the applicable regulated air pollutant (or a surrogate thereof), other than an emission limitations or standard exempt under 40 CFR 64.2(b)(1). [40 CFR 64.2(a)(1)]
- The unit uses a control device to achieve compliance with any such emission limitation or standard. [40 CFR 64.2(a)(2)]
- The unit has potential pre-control device emissions of the applicable pollutant of at least 100% of the major source amount. [40 CFR 64.2(a)(3)].

Exemptions in 40 CFR 64.2(b)(1) include emission limitations or standards proposed by EPA after November 15, 1990, or emission limitations or standards for which a Part 70 or 71 permit specifies a continuous compliance determination method.

As part of the permit renewal, an analysis was completed for the emission units at the facility. Based on this evaluation, the CAM rule does not apply at Vigor.

Emission calculations showing potential pre-control device emissions for emission units with control devices are shown below the table.

<b><i>EU</i></b>	<b><i>Location</i></b>	<b><i>Description</i></b>	<b><i>Emission limitation or standard</i></b>	<b><i>Control Device</i></b>	<b><i>Potential pre-control device emissions &gt; 100% of major source threshold</i></b>
<i>EU-1</i>	<i>Building T-206</i>	<i>Abrasive blast booth - steel shot Approx 92,500 cubic foot enclosure</i>	<i>PM (0.05 gr/dscf)</i>	<i>Yes – 2 baghouses rated at 46,750</i>	<i>No</i>
<i>EU-2</i>	<i>Building T-72</i>	<i>Abrasive blasting using building filtered exhaust and temporary enclosures. Note that abrasive blasting in this building could also be operated in accordance with NOCOA 10267 and NOCOA 12022 (see EU-3) using temporary enclosures</i>	<i>PM (0.05 gr/dscf)</i>	<i>Yes, dust collector rated at 22,000 cfm</i>	<i>No</i>
<i>EU-3</i>	<i>Dry Docks, Onshore portion of shipyard, and vessels</i>	<i>Up to 10 temporary abrasive blasting operations at any one time. An operation is defined as a project done under a single contractor and on a single vessel. It can consist of one large enclosure or several</i>	<i>PM (0.05 gr/dscf)</i>	<i>Yes, multiple dust collectors each no greater than 20,000 cfm</i>	<i>No</i>

<b>EU</b>	<b>Location</b>	<b>Description</b>	<b>Emission limitation or standard</b>	<b>Control Device</b>	<b>Potential pre-control device emissions &gt; 100% of major source threshold</b>
		<i>smaller enclosures with one or more dust collectors.</i>			
EU-4	Building T-72	<i>Spray painting operations operated in accordance with NOCOA 9621. Note that spray coating in this building could also be operated in accordance with NOC 10267 (see EU-9) using temporary enclosures</i>	<i>PM (0.05 gr/dscf)</i>	<i>Yes, filtered exhaust rated at 22,000 cfm</i>	<i>No</i>
EU-5	Paint Shop #2	<i>One dry filter spray coating room (complete enclosure) with filtered exhaust rated at 100,000 cfm</i>	<i>PM (0.05 gr/dscf)</i>	<i>Filtered exhaust rated at 100,000 cfm</i>	<i>No</i>
EU-6	Building T-206 #1	<i>One paint room with three AAF Type V spray booths with filtered exhaust rated at 35,000 cfm</i>	<i>PM (0.05 gr/dscf)</i>	<i>Filtered exhaust rated at 35,000 cfm</i>	<i>No</i>
EU-7	Dry Docks, Onshore portion of shipyard, and vessels	<i>Temporary spray coating operations</i>	CAM not applicable since unit does not use a control device to achieve compliance with any such emission limitation or standard (40 CFR 64.2(a)(2))		
EU-8	Dry Dock #3 (Evolution)	<i>Temporary spray coating operations on Dry Dock #3 with a 20,000 long ton lifting capacity</i>	<i>PM (0.05 gr/dscf)</i>	<i>If containment system ventilated by fan or blower, filtered exhaust</i>	<i>No</i>
EU-9	On-shore portion of shipyard	<i>Up to 6 temporary spray coating operations at any one time conducted in a complete enclosure</i>	<i>PM (0.05 gr/dscf)</i>	<i>Filtered exhaust rated at no greater than 20,000 cfm</i>	<i>NOCO 10267, 11/17/15</i>
EU-10	Power House	<i>Power House #1: Johnston 309 rated at 5 MMBTU/Hr (Natural Gas) and Power House #2: Cleaver-Brooks CB700-100 rated 4 MMBTU/Hr (Natural Gas)</i>	CAM not applicable since unit does not use a control device to achieve compliance with any such emission limitation or standard (40 CFR 64.2(a)(2))		
EU-11	Dry docks and portable	<i>Existing emergency diesel-fueled generators</i>	CAM not applicable since unit does not use a control device to achieve compliance with any such emission limitation or standard (40 CFR 64.2(a)(2))		
EU-12	Dry dock and Pier side	<i>New diesel-fueled emergency generators, including fire pump engines</i>	CAM not applicable since unit does not use a control device to achieve compliance with any such emission limitation or standard (40 CFR 64.2(a)(2))		



#### Abrasive Blasting Operations:

Abrasive blasting operations take place under three emission units. For emission unit 1, two dust collectors are used to control emissions. For emission unit 3, up to 10 temporary operations are permitted which can include multiple dust collectors. Each unit is subject to our PM emission standard in Regulation I, Section 9.09. However, because of the nature of the operations, it is difficult to evaluate a single dust collector. The applicant submitted an analysis based on the maximum amount of abrasive blast material permitted under NOCOA 12022 which is 8,000 tons/year. Although this doesn't cover all operations, it does represent several abrasive blast operations that would be occurring at Vigor and well overestimates a single operation/dust collector. Based on a review of abrasive blast material used facility-wide for the last 5 years (as reported for the emission inventory report), the maximum reported quantity was 2976 tons in 2018.

The applicant submitted an analysis for both steel shot and non-steel shot, using uncontrolled PM emission factors from San Diego Air Quality Management District. The higher emission factor was for non-steel shot using the emission factor for miscellaneous blast medium. Pre-control emissions were 40 tons/year. Because the facility-wide evaluation using worst-case assumptions that would overestimate PM emissions demonstrated potential emissions were below 100 tons/year, additional more refined analysis for each control device was unnecessary.

#### Spray Coating Operations

Spray coating takes place in several spray rooms or temporary enclosures throughout the site. Most are required to be equipped with dry filters (control device) and are subject to our PM emission standard in Regulation I, Section 9.09. However, because of the nature of the operations, it is difficult to evaluate a single spray room or temporary enclosure. The applicant submitted an analysis to demonstrate pre-control device emissions would be significantly below major source thresholds of 100 tons/year by evaluating potential worst-case emissions for the entire facility using a material balance method. This method is based on the quantity of coating and solvents that may be used at the facility. Assumptions to determine pre-control device emissions include:

- Coating and solvent throughput is assumed to be the maximum spray coating throughput over the last 5 years (from 2018), with a 50% safety factor added. This number was then rounded to the nearest 1,000 gallons.
- The density of the hypothetical worst-case paint is assumed to be the highest density among coatings used in that worst-case year of 2018. This density is 22.52 lb/gal, which is expected to be substantially higher than the average coating density.
- The solids content is assumed to be 100% by weight which is substantially higher than the average coating solids content.
- Expected spray transfer efficiency for high efficiency spray equipment which is the industry standard is 65%. There was no estimate of fall-out of spray coating prior to filter which would further lower pre-control device emissions since particulate matter would not reach the dry filters (control device).

Facility-wide pre-controlled PM is estimated at 86.6 tons/year. Because the facility-wide evaluation using worst-case assumptions that would overestimate PM emissions

demonstrated potential emissions were below 100 tons/year, additional more refined analysis for each control device was unnecessary.

## **7.2 NESHAP for Shipbuilding and Repair (Surface Coating)**

40 CFR Part 63, Subpart II applies since Vigor is a ship repair facility that is classified as a major source of hazardous air pollutants (HAP). The rule limits the volatile organic hazardous air pollutant (VOHAP) content of several categories of marine coatings and specifies work practice standards to minimize evaporative emissions and spills from handling, transfer, and storage of organic thinning solvent and paint waste. The rule provides four options for determining compliance with the coating limits, but only three have been included in this operating permit. The fourth option would allow Vigor to use an alternative test method to measure the VOHAP content of each coating or groups of coatings, but the test method requires approval by EPA. Since Vigor has not obtained approval for an alternative test method to date, this option was not included in the permit.

The requirements apply facility-wide. There have been no changes to the NESHAP since the last renewal except to Table 1 of the NESHAP which specifies General Provision applicability to Subpart II, but that was just one minor change clarifying the 40 CFR 63.9(k) only applies as specified in 40 CFR 63.9(j). 40 CFR 63.9(k) addresses electronic submission of notifications or reports. If Vigor reclassifies from a major source to an area source in the future, they must submit the notification according to 40 CFR 63.9(k). This specific reference has been added to the permit as part of the renewal. As part of this AOP renewal, this table has been copied into the permit as an attachment.

## **7.3 NESHAP for HAP for Major Sources: Industrial, Commercial and Institutional Boilers and Process Heaters**

40 CFR Part 63, Subpart DDDDD establishes emission limitations and work practice standards for HAP emitted from industrial, commercial, and institutional boilers and process heaters located at major sources of HAP. The regulation applies to Vigor since they operate two industrial boilers and Vigor is a major source of HAP. The two boilers that operate at the shipyard are fired on natural gas so the boilers meet the definition of units designed to burn gas 1. All have a heat input capacity less than or equal to 5 MMBtu/hr. Applicable requirements are contained in Table 12 of the permit. Amendments were made to the NESHAP on 10/6/2022 which became effective 12/5/22 which have been incorporated into this permit renewal.

The one-time energy assessment required by the NESHAP was conducted on August 19, 2015. Results were submitted to the Agency by e-mail on February 10, 2016. The assessment was conducted by Trinity Consultant. This documentation adequately demonstrates compliance with the one-time energy assessment requirement.

## **7.4 NESHAP for HAP for Stationary Reciprocating Internal Combustion Engines (RICE)**

Vigor has three existing diesel-fueled emergency generators and three existing diesel-fueled emergency generators, including two diesel-fueled fire pump engines. Each unit is rated at greater than 500 brake horsepower (BHP).

The three emergency generators were constructed before December 19, 2002 (existing stationary RICE). 40 CFR 63.6585 specifies Vigor is subject to this NESHAP since they

operate a stationary RICE at a major source of HAP emissions. An affected source is any existing, new or reconstructed stationary RICE located at the facility. 40 CFR 63.6590(b)(3)(iii) specifies that existing emergency stationary RICE with a site rating of more than 500 BHP located at a major source of HAP emissions do not have to meet the requirements of 40 CFR Part 63, Subpart ZZZZ and of Subpart A.

The diesel-fueled fire pump engines were constructed after December 19, 2002 so are considered a new stationary RICE. 40 CFR 63.6590(b) specifies that a new or reconstructed emergency stationary RICE with a site rating of more than 500 BHP does not have to meet the requirement of 40 CFR Part 63, Subpart ZZZZ or of Subpart A except for the initial notification requirements in 40 CFR 63.6645(f).

A 2022 emergency diesel-fuel generator (Generac SD500) rated at 760 BHP is located on Dry Dock 3 (Evolution). 40 CFR 63.6590(b) specifies that a new or reconstructed emergency stationary RICE with a site rating of more than 500 BHP does not have to meet the requirement of 40 CFR Part 63, Subpart ZZZZ or of Subpart A except for the initial notification requirements in 40 CFR 63.6645(f).

Because this NESHAP includes criteria to qualify for these limited requirements, the permit contains requirements to record the hours of operation of each engine and the purpose of the operation as specified in 40 CFR 63.6640(f). Operating the engines under these criteria and tracking and recording hours of operation is included to assure compliance (WAC 173-401-630(1) sufficiency monitoring). If engines become non-emergency in the future, additional requirements would apply.

For emergency generators located inside the dry dock, Vigor requested the Agency verify NESHAP applicability since the dry dock is actually classified as a marine vessel, and engines operated on marine vessels are exempt from the rule. However, the Agency has determined that the dry dock is part of a stationary facility since it does not operate at locations away from Vigor. Therefore, these engines are considered stationary sources.

Vigor operates one pier crane that is powered solely by a diesel/electric generator but it is mobile on a track and self-propelled. This meets the definition of a non-road engine in 40 CFR 1068.3, and is therefore not subject to the NESHAP which applies only to stationary sources.

*Non-road engine means:*

*(1) Except as discussed in paragraph (2) of this definition, a non-road engine is an internal combustion engine that meets any of the following criteria:*

*(i) It is (or will be) used in or on a piece of equipment that is self-propelled or serves a dual purpose by both propelling itself and performing another function (such as garden tractors, off-highway mobile cranes and bulldozers).*

*(ii) It is (or will be) used in or on a piece of equipment that is intended to be propelled while performing its function (such as lawnmowers and string trimmers).*

*(iii) By itself or in or on a piece of equipment, it is portable or transportable, meaning designed to be and capable of being carried or moved from one location to another. Indicia*

*of transportability include, but are not limited to, wheels, skids, carrying handles, dolly, trailer, or platform.*

*(2) An internal combustion engine is not a non-road engine if it meets any of the following criteria:*

*(i) The engine is used to propel a motor vehicle, an aircraft, or equipment used solely for competition.*

*(ii) The engine is regulated under 40 CFR part 60, (or otherwise regulated by a federal New Source Performance Standard promulgated under section 111 of the Clean Air Act (42 U.S.C. 7411)).*

*(iii) The engine otherwise included in paragraph (1)(iii) of this definition remains or will remain at a location for more than 12 consecutive months or a shorter period of time for an engine located at a seasonal source. A location is any single site at a building, structure, facility, or installation. Any engine (or engines) that replaces an engine at a location and that is intended to perform the same or similar function as the engine replaced will be included in calculating the consecutive time period. An engine located at a seasonal source is an engine that remains at a seasonal source during the full annual operating period of the seasonal source. A seasonal source is a stationary source that remains in a single location on a permanent basis (i.e., at least two years) and that operates at that single location approximately three months (or more) each year. See §1068.31 for provisions that apply if the engine is removed from the location.*

## **7.5 Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (New Source Performance Standard)**

Vigor has two emergency diesel-fueled fire pump engines each rated at 600 BHP. The fire pump engines are rental units required to be on-site for specific projects. They can remain at the site for more than 12 months so are not nonroad engines. Vigor anticipates switching to electric pumps from the dry docks, but requires the flexibility to bring on these long-term rental units to meet customer firefighting needs. Since these are rental units, the permit terms are written assuming the following:

- The engines will always be Model Year 2009 or newer;
- The engines are rated at 600 BHP; and
- The engines may or may not have diesel particulate filters.

Vigor also operated one new emergency diesel-fueled emergency engine each rated at 762 BHP located on Dry Dock 3 (Evolution).

Since the fire pump engines are manufactured as a certified National Fire Protection (NFPA) fire pump engine after July 1, 2006 and the emergency engine is a model year 2022 (2007 or newer), Vigor is subject to the New Source Performance Standard for Stationary Compression Ignition Internal Combustion Engines in 40 CFR Part 60, Subpart IIII. The fire pump engines must comply with the emission standards in table 4 of 40 CFR Part 60, Subpart IIII. The emergency engine located on Dry Dock 3 (Evolution) must comply with the emission standards for new nonroad compression ignition engines for all pollutants, for the same model year and maximum engine power. Engines must be

operated on diesel fuel that meets the requirements of 40 CFR 1090.305 for nonroad diesel fuel. The requirement in 40 CFR 60.4209 for installation of a backpressure monitor does not apply since that only applies to engines equipped with diesel particulate filters to comply with emission standards in 40 CFR 60.4204 (non-emergency engines).

## 8. Applicable Requirements and Other Changes in the Renewal

The permit only identifies the requirements that the Agency has determined to be within the scope of the definition of “applicable requirements” under the operating permit program. Vigor is legally responsible for complying with all applicable requirements of the operating permit as well as other requirements that do not fit the definition of “applicable requirements” found in Chapter 173-401 WAC.

### 8.1 Emission Unit Summary Table

A new table was added prior to Section 1 that gives a general description of the two emission units at the facility. The table is reproduced below and lists the emission units regulated under this permit located at the facility. The information in the table is for informational purposes only.

EU	Location	Description	Control Equipment	NOC Order of Approval
EU-1	Building T-206	Abrasive blast booth - steel shot Approx 92,500 cubic foot enclosure	Two Baghouses rated at 46,750 cfm each	Order of Approval No. 2452, 6/13/83
EU-2	Building T-72	Abrasive blasting using building filtered exhaust and temporary enclosures. Note that abrasive blasting in this building could also be operated in accordance with NOCOA 10267 and NOCOA 12022 (see EU-3) using temporary enclosures	Complete enclosure Filtered exhaust/dust collection system rated at 22,000 cfm	Order of Approval No. 9621, 6/22/07
EU-3	Three Floating Dry Docks (#1 (Vigilant), #3 (Evolution) and #10 (Resolute)) Onshore portion of shipyard Vessels pierside (5 piers)	Up to 10 temporary abrasive blasting operations at any one time. An operation is defined as a project done under a single contractor and on a single vessel. It can consist of one large enclosure or several smaller enclosures with one or more dust collectors.	Complete enclosure Dust Collectors ( $\leq 20,000$ cfm)	Order of Approval No. 12022 (4/14/2023) Order of Approval No. 10267 11/27/15 Order of Approval No. 11416 1/2/19
EU-4	Building T-72	Spray painting operations operated in accordance with NOCOA 9621. Note that spray coating in this building could also be operated in accordance with NOC 10267 (see EU-9) using temporary enclosures	Filtered exhaust rated at 22,000 cfm	NOCOA 9621, 6/22/07

EU	Location	Description	Control Equipment	NOC Order of Approval
EU-5	Paint Shop #2	One dry filter spray coating room (complete enclosure) with filtered exhaust rated at 100,000 cfm	Filtered exhaust rated at 100,000 cfm	NOCOA 10267, 11/17/15
EU-6	Building T-206 #1	One paint room with three AAF Type V spray booths with filtered exhaust rated at 35,000 cfm	Filtered exhaust rated at 35,000 cfm	NOCOA. 2452, 6/13/83
EU-7	Two Floating Dry Docks (#1 (Vigilant) and #10 (Resolute)) Vessels pierside (5 Piers)	Temporary spray coating operations	None	NOC not required since existing activity prior to requirement to permit
EU-8	Dry Dock #3 (Evolution)	Temporary spray coating operations on Dry Dock #3 with a 20,000 long ton lifting capacity	Enclosures as needed to prevent visible emissions or overspray  If containment system ventilated by fan or blower, filtered exhaust	NOCOA. 11416 1/2/19
EU-9	On-shore portion of shipyard	Up to 6 temporary spray coating operations at any one time conducted in a complete enclosure	Filtered exhaust rated at no greater than 20,000 cfm	NOCOA 10267, 11/17/15
EU-10	Power House	Power House #1: Johnston 309 rated at 5 MMBTU/Hr (Natural Gas)	None	Smaller than 10 MMBTU/hr (NOC not required)
	Power House	Power House #2: Cleaver-Brooks CB700-100 rated 4 MMBTU/Hr (Natural Gas)	None	Installed 1963 (NOC not required)
EU-11	Drydock 10 (Resolute)	Existing onboard emergency diesel-fueled generator (D399 Cat) rated at 1079 hp (Pre-2002)	None	NOC not required
	Drydock 10 (Resolute)	Existing onboard emergency diesel-fueled generator (D399 Cat) rated at 1079 hp (Pre-2002)	None	NOC not required
	Portable	Existing emergency diesel-fueled generator (3512 Cat) rated at 1650 hp (Pre-2002)	None	NOC not required
EU-12	Pier side	New emergency diesel-fueled fire pump engine rated at 600 hp (2009 or newer)	Diesel Particulate Filter (if applicable)	NOC not required
	Pier side	New emergency diesel-fueled fire pump engine rated at 600 hp (2009 or newer)	Diesel Particulate Filter (if applicable)	NOC not required

In the previous permit, there were only five emission units. Abrasive blasting operations and surface coating operations were each considered a single emission unit. However, it was determined as part of this renewal that the requirements based on different permitted locations were too different to group all abrasive blasting operations under one emission unit and all surface coating under a second emission unit. By only grouping when there are identical limitations, the Agency believes this provides clarity on the requirements.

In addition, the emission unit association with groundwater remediation has been removed from this renewal since that activity is not longer active at the facility and all associated equipment has been removed.

Sections 1 and 2 are reformatted in the AOP renewal so that all facility-wide requirements and the corresponding compliance methods are in Section 1, and the emission unit specific requirements and corresponding compliance methods are in Section 2. The intent was to make it easier to connect the applicable requirement and the compliance method. Facility-wide requirements apply to all emission units. For some emission units, there are no emission unit specific requirements so only facility-wide requirements or compliance methods apply. This is noted specifically under compliance methods for those emission units.

## **8.2 Updates, Changes, and Additions to Applicable Requirements**

### **PSCAA State Implementation Plan (SIP) Changes**

The PSCAA State Implementation Plan (SIP) required by US EPA was updated since the last Vigor renewal permit was issued. This update resulted in replacing multiple state WAC rules with PSCAA rules. Below are the WAC rules that were changed or eliminated from the permit and the PSCAA replacements:

- WAC 173-400-040(1)(c) is replaced by PSCAA Reg I, 3.04
- WAC 173-400-040(2) is replaced by PSCAA Reg I, 9.03
- WAC 173-400-040(6) is replaced by PSCAA Reg I, 9.11(a)
- WAC 173-400-040(7) is replaced by PSCAA Reg I, 9.07
- WAC 173-400-040(8) is replaced by PSCAA Reg I, 9.13
- WAC 173-400-040(9)(a) is replaced by PSCAA Reg I, 9.15
- WAC 173-400-050(1) and (3) and -060 is replaced by PSCAA Reg I, 9.09

### **Additional and Modified Conditions**

WAC 173-401-600 specifies each permit shall contain terms and conditions that assure compliance with all applicable requirements at the time of permits issuance. Every requirement in an operating permit shall be based upon the most stringent of the following requirements:

- The federal Clean Air Act (FCAA) and rules implementing that act, including provisions of the approved state implementation plan. This includes NESHAP and NSPS requirements that apply to Vigor.

- Chapter 70A.15 RCW and rules implementing that chapter. This includes requirements in regulatory orders issued by Agency. Vigor currently does not have any regulatory orders, but regulations implementing the Washington Clean Air Act are included in the permit.
- The requirements of any order or regulation adopted by the Agency. This includes NOCOAs and Agency regulations.
- Chapter 70A.388 RCW and rules adopted thereunder. This RCW applies to nuclear energy and radiation which do not apply to Vigor.
- Chapter 80.50 RCW and rules adopted thereunder. This RCW applies to energy facilities – site locations which do not apply to Vigor.

Where an applicable requirement does not require periodic testing or monitoring, periodic monitoring sufficient to yield reliable data and associated recordkeeping may be added in accordance with WAC 173-401-615(1)(b) (“gap filling” provision) In addition, WAC 173-401-630(1) also contains authority to address situations where monitoring exists, but is deemed insufficient. PSCAA relied on these authorities to add monitoring where needed. As part of this renewal, the Agency has added or changed conditions to address these issues.

Additions and changes to this renewal include:

- The name of the facility has changed from Vigor Shipyards, Inc. to Vigor Shipyards, LLC.
- Regulation I, Section 3.04(a) which states all emission units are required to use RACT has been added to the facility-wide applicable requirements. Although this is a general requirement, WAC 173-401-605(c) specifies that emission standards and other requirements at the time of operating permit issuance or renewal are considered RACT. Therefore, no additional monitoring is required.
- For the particulate matter standards, the previous permit relied on opacity monitoring for the compliance method. In the renewal, the Agency added Condition 5.12 which states the Agency or Ecology has the authority to conduct testing of a source or to order the permitted to have it tested and to report the results to the Agency or Ecology (gap-filling requirement).
- For the hydrochloric acid standard, the previous permit did not require monitoring. In the renewal, the Agency added Condition 5.12 which states the Agency or Ecology has the authority to conduct testing of a source or to order the permitted to have it tested and to report the results to the Agency or Ecology (gap-filling requirement).
- The specific requirements for the O&M Plan in the Agency’s Regulation 1, section 7.09(b) have been explicitly included in the permit at EPA’s request as new condition 1.19. This new condition was added to the compliance method for conditions 1.12 and 1.13.

Following these requirements demonstrates that Vigor has properly implemented the O&M Plan, but it does not prohibit PSCAA or EPA from taking any necessary enforcement action to address violations of the underlying applicable requirements after proper investigation.



- The language in the facility-wide requirements table and compliance methods associated with these requirements have been updated for clarity based on the latest Agency permit language.
- A standard Agency NOCOA condition, Condition No. 1, requires that the equipment, device or process be installed according to plans and specifications submitted to the Agency. Once the equipment is installed, the Agency requires certification by the applicant that the installation was as approved; this is usually done with a Notice of Completion. While the Notice of Completion is a one-time requirement that Vigor has complied with, Vigor cannot change the approved equipment in such a manner that requires an NOC Order of Approval without first obtaining approval. In the previous permit, Condition No. 1 for equipment or operations subject to an NOCOA was not specifically included in the requirements table. This has been added back in during the renewal process.
- By splitting the abrasive blasting operations into three emission units and the spray coating operations into six emission units, requirements in the requirements table and compliance methods have been updated to accurately follow the actual underlying requirement for each operation.
- For the description of abrasive blasting operations and spray coating operations, additional detail has been added to better explain what a single operation might consist of (informational only).
- For EU-1, EU-6 and EU-7, there were no requirements for monitoring, recording and reporting. Sufficiency monitoring under WAC 173-401-615(1) was added. For the abrasive blasting operation and spray coating in Building T-206 (Paint Shop #1), Vigor rarely if ever uses these emission units and it is likely the units will not be used in the future. The sufficiency monitoring focuses on making sure the equipment is in good working order prior to use. For the spray coating on dry docks #1 and #10 (EU-7), sufficiency monitoring has been added to require a review of reasonable precautions prior to a spray coating operation and a check for overspray daily when spray coating is being completed on the dry dock.
- The renewal permit added language for setting the acceptable range for differential pressure for both dust collectors and spray booth filters and specifies the gauge must be operating at all times the unit is in use (sufficiency monitoring).
- NOCOA 12022 will be issued at the same time as the operating permit so conditions in the NOCOA have been incorporated into this permit. This NOCOA was issued to replace some conditions in NOCOA 10267 as they pertain to abrasive blasting. The new conditions limit the abrasive blasting media usage and require a higher efficiency filter be used in the dust collectors.
- NOCOA 11416 was issued since the last permit was issued and addresses emissions associated with abrasive blasting and spray coating on the replacement Dry dock #3 (Evolution). These permit conditions have been incorporated into the permit.
- In the previous permit, there was a single citation for Regulation III, Section 2.02 which states it is unlawful for any person to cause or allow the operation of any source in violation of Part 61 or Part 63 NESHAP in effect as the federal regulation reference date listed in Regulation I, Section 3.25. The permit has been updated

- so any reference to a federal NESHAP also includes reference to PSCAA Regulation III, Section 2.02 and PSCAA Regulation I, 3.25 Federal Regulation Reference Date which specifies that the effective date of the federal rule is the one cited in this Agency regulation (7/1/22).
- Regulation I, Section 6.11 states it is unlawful for any person to cause or allow the operation of any source in violation of Part 60 NSPS in effect as the federal regulation reference date listed in Regulation I, Section 3.25. The permit has been updated so any reference to a federal NSPS also includes reference to PSCAA Regulation I, Section 6.11 and PSCAA Regulation I, 3.25 Federal Regulation Reference Date which specifies that the effective date of the federal rule is the one cited in this Agency regulation (7/1/22).
  - For the Shipbuilding and Repair NESHAP Implementation plan requirement, the regulation specifies the permittee shall prepare a plan. The Agency has added the clause “and follow” as part of sufficiency monitoring requirements.
  - For coating compliance with the NESHAP, the compliance methods have added clarifying language that a batch is based on product ID number. Batch can imply same product but different color additives which do not change the underlying VOC content and result in an undue burden on the source for recordkeeping. Based on reviews of reports submitted for over 20 years, the Agency is confident that tracking by product ID number is sufficient to demonstrate compliance the NESHAP VOC limits.
  - For natural gas boilers listed in Emission Unit 10, the requirements for tune-up are specific to boilers rated at 5 MMBtu/hr or less. In the previous permit, requirements for a larger boiler were also included but that boiler is no longer operating at the facility.
  - Two new fire pump engines and applicable requirements have been added to the permit as Emission Unit 12.
  - Added new emergency engine located on Dry Dock 3 (Evolution) to Emission Unit 12 based on comment received during the public comment period.
  - Sections 3 through 9 are the Agency’s standard sections of the permits and have been updated to reflect any updates.
  - Generally applicable retention of records requirement was modified to reflect that reporting of greenhouse gas emissions would have to be retained for a period of 10 years, not just the standard 5 years. Currently, Vigor does not trigger greenhouse gas reporting requirements.
  - Several attachments were added to the end of the permit including Table 1 to Subpart II of Part 63 – General Provisions applicability, Table 2 to Subpart II of Part 63 – VOC HAP Limits for Marine Coatings, and Table 10 to Subpart DDDDD of Part 63, General Provisions applicability.

### **8.3 Routine Recordkeeping Requirements**

A summary of recordkeeping requirements is included in the table below. Record retention requirements are included in Condition 6.3 of the permit.

General	Facility- wide Opacity Monitoring	Weekly	Condition 1.14
	Facility-wide Inspections	Monthly	Condition 1.15
	Nuisance Response	If complaint received	Condition 1.16 Condition 2.16
	Operation and Maintenance (O&M) Plan Requirements	Per O&M Plan	Conditions 1.18 and 1.20
	Contemporaneous record of all deviations	As required	Condition 5.5
Emission Activity Specific	Enclosure monitoring	Prior to conducting abrasive blasting or spray coating in temporary enclosure	Condition 2.14, 2.34, 2.69. 2.106
	Abrasive Blasting Operation Monitoring	Prior to initiating new blasting process	Condition 2.3
	Abrasive Blasting Operation Monitoring	Once each shift	Condition 2.15, 2.35
	Abrasive Blast Media Documentation	Prior to conducting abrasive blasting	Condition 2.16, 2.36,
	Abrasive Blast Material Usage Monitoring	If triggered	Condition 2.37
	Record of Temporary Operations	Daily	Condition 2.38, 2.107
	Spray Coating Operation Monitoring	Once each shift	Condition 2.70, 2.77, 2.81, 2.84. 2.94, 2.107
	Containment Determination	Prior to spray coating on Dry Dock #3	Condition 2.93
Shipbuilding and Repair NESHAP	Monthly records of non-exempt coatings used, their appropriate category, and applicable VOHAP limit	Monthly	Condition 2.52
	Records of certification of as-supplied VOC content for each batch of coating compiled on a monthly basis	Monthly	Condition 2.53
	In lieu of testing each batch, records showing compliance based on procedures in Condition 2.52	Monthly	Condition 2.54
	Results of any Method 24 measurement test	Ongoing	Condition 2.55
	Shipbuilding and Repair NESHAP Implementation Plan	Ongoing	Condition 2.56
	Shipbuilding and Repair NESHAP Recordkeeping	Ongoing	Condition 2.57
Boiler NESHAP	Copy of each notification and report submitted to comply with NESHAP, including notification of compliance status and one-time energy assessment	Ongoing	Condition 2.121

	Results of tune-up of each boiler	Tune-up schedule	Condition 2.122
	Information required by NESHAP	Ongoing	Condition 2.123
	For unit designed to burn natural gas that uses alternative fuel, maintain records of total hours per calendar year that unit operated during periods of gas curtailment or gas supply emergencies	If triggered	Condition 2.124
RICE Engine NESHAP	Records demonstrating diesel fuel meets requirements for non-road diesel in 40 CFR 80.510(b)	Ongoing	Condition 2.128, 2.133, 2.136
	Records of operating and maintaining stationary RICE to the manufacture's emission related operation and maintenance instruction	Ongoing	Condition 2.137, 2.138, 2.141
	Records demonstrating operation of each engine as an emergency stationary RICE	Ongoing	Condition 2.132, Condition 2.145

#### 8.4 Routine Reporting Requirements

A summary of routine reporting is included in the table below. This does not reports or notifications triggered by a specific action such as non-road engine notifications, Notice of Construction applications, excess emissions reports, initial notifications for federal regulations, compliance test notifications and reports, AOP permit modification and renewal applications, or contemporaneous written notification of off permit changes. Mailing addresses and instructions for electronic submittal of compliance reports are included in Section 5 of the permit.

Report	Contents	Due
Deviation Report	All instances of deviation from the permit	If potential threat to human health or safety, ASAP but no later than 12 hours after discovered. Otherwise, no later than 30 days after end of month during which deviation occurred. May certify in semi-annual report
Semiannual Shipbuilding and Repair NESHAP Compliance Report	Reporting specified in NESHAP	No later than August 29 for reporting period between January 1 through June 30. No later than February 28 for reporting period between July 1 through December 31
Certification of Reports	Summarizes each permit report during 6-month period with certification of responsible official (as applicable)	No later than July 31 for reporting period between January 1 through June 30. No later than January 31 for reporting period between July 1 through December 31
Annual Compliance Certification	Certification of compliance with permit terms and conditions	By February 28 for the reporting period between January 1 through December 31
Annual Emission Inventory	Facility emission inventory	As required by Agency

Report	Contents	Due
Greenhouse Gas Reporting	Greenhouse Gas Emission Report	If exceeds emission thresholds
Boiler NESHAP Report	Compliance reports	Due January 31 of the following year after 2- or 5-year periods of compliance
Boiler NESHAP Modification	Notification of switches in fuel or physical change	Within 30 days of the switch/change
Changes to Notifications	Change to information provided un 40 CFR 63.9	Within 15 calendar days after the change

## 9. Obsolete Requirements

The following Orders of Approval are obsolete so conditions in the Order have not been included in the AOP:

- NOCOA Nos. 5671, 7069 and 7070 cancelled and superseded by NOCOA 8678 (June 10, 2002)
- Order 5970 was issued on June 21, 1995 to establish emission limits on each air pollutant to less than the major source levels in accordance with WAC 173-400-091, Voluntary Limits on Emissions. An Order to Rescind was issued on September 6, 2000 after the permittee submitted a complete application for an air operation permit so Order 5970 is obsolete.
- NOCOA 7253 cancelled and superseded by NOCOA 9832 (April 23, 2008)
- NOCOA cancelled and superseded by NOCOA (August 16, 2010)
- NOCOA cancelled and superseded by NOCOA 10296 (March 17, 2011)
- NOCOA dated April 5, 2007 and NOCOA 8678 dated June 10, 2002 cancelled and superseded by NOCOA 10267 (November 17, 2015).
- NOCOA 8496 for Stage 1 vapor recovery system on underground storage tank is obsolete since the equipment is no longer on-site.
- NOCOA 4213 dated December 19, 1991 for one portable gas-fired boiler rated at 6,280 MBH is obsolete since the boiler is no longer on-site.
- NOCOA 9226 dated February 28, 2006 for soil and groundwater remediation is obsolete since the remediation is complete and the equipment has been removed.
- NOCOA 9541 cancelled and superseded by NOCOA 10267 issued November 17, 2015.
- NOCOA 10110 dated August 16, 2010 for soil and groundwater remediation is obsolete since the remediation is complete and the equipment has been removed.
- NOCOA 10296 dated March 17, 2011 for soil and groundwater remediation is obsolete since the remediation is complete and the equipment has been removed.

In addition, NOCOA No. 9621, Condition No 14 was not included in the AOP since the requirement no longer applies. The condition requires HVLP gun operators to receive

training in best management practices for outdoor spray coating operations, but this NOCOA does not authorize outdoor spray coating operations, but only spray coating in Building T-72.

## 10. Inapplicable Requirements

The requirements identified in Section 8 of Vigor Shipyard's Air Operating Permit do not apply to the facility, or to the specific emissions units identified in the permit. The permit shield applies to all requirements so identified.

Vigor did not request additional requirements be identified as inapplicable.

## 11. Insignificant Emission Units and Activities

Section 9 of the permit addresses insignificant emission units and activities. In accordance with WAC 173-401-530(1), determination of an emission unit or activity as insignificant does not exempt the unit or activity from any applicable requirement.

An emission unit or activity is insignificant based on one or more of the criteria identified in WAC 173-401-530. This includes categorical exemption, exemption based on emissions being below emission thresholds in WAC 173-401-530(4), or exemption based on size or production rate. Activities that generate only fugitive emissions which are subject to no applicable requirement other than generally applicable requirements can also be classified as insignificant. Categorical exemption units or activities do not need to be listed in the permit application, but all others do. Insignificant emission units and activities that are not categorically exempt under WAC 173-401-532 have been identified in Section 9 of the permit. Categorical exempt units that were identified in the permit application include:

Unit Name	Basis for IEU Designation
Electrical Shop Oven, Building T-14	WAC 173-401-532(107)
Sludge/Oily Water Storage Tanks (9)	WAC 173-401-532(4)
Carpentry shop projects	WAC 173-401-532(55)

## 12. Public Comments and Responses

The 30-day public comment period for the air operating permit renewal ended February 9, 2023. Notices were published on the Agency's website, in the Washington State permit register, in the Seattle Times, and in the Daily Journal of Commerce.

The Agency received one comment on January 16, 2023 from John Rosevear at Vigor Shipyards, LLC. Vigor had purchased an emergency generator for use at the facility and the commenter requested the engine be added to the permit. This emergency engine was added to the list of engines under Section 2.D.2 of the permit, Emission Unit 12. The emission unit title was changed from New Fire Pump Engines to New Stationary Emergency Engines which includes both the new emergency engine and the fire pump engines that were already listed in the draft permit. Requirement 2.134 was added since this engine is subject to the emission standards in 40 CFR 60.4205(b) and the fire pump engines are subject to the emission standards in 40 CFR 60.4205(c). All other requirements remain the same and apply to all new emergency engines, including the fire pump engines. The Generac SD500 generator unit will be located on Dry Dock 3 (Evolution). Vigor submitted technical data and a Statement of Exhaust Emissions for

the 2022 Perkins Diesel Fueled Generator Model SD/MD500 rated at 760 BHP. The EPA Certificate number is NCPXL15.2NZS-002 and the Certification Type is for a Stationary Emergency CI (40 CFR Part 60 Subpart IIII).

### **13. EPA Review**

The proposed Air Operating Permit was sent to EPA on February 23, 2023. No comments were received.