

1-800-422-5623 • (360) 539-7610 Fax: (360) 491-6308

March 13, 2014

Kelly Swan Plant Manager Westport Shipyard, Inc PO Box 308 Westport, WA 98595

Dear Mr. Swan:

Olympic Region Clean Air Agency (ORCAA) received your application to renew the Air Operating Permit (AOP) for the Westport Shipyard facility located at 1807 N Nyhus Street in Westport, WA on March 7, 2014 (prior to the application due date). ORCAA reviewed the application and has deemed it administratively complete.

As detailed in Condition 2.10 of your permit (07AOP575), your current permit will not expire until the renewal permit has been issued or denied as long as you continue to respond to any written data requests regarding your renewal permit by the deadline specified by ORCAA.

If you have any questions, please call me at (360) 539-7610 extension 115.

Sincerely,

Jennifer DeMay Engineer II

Cc: Sam Jones, Westport Shipyard

2940 B Limited Lane NW - Olympia, Washington 98502 - 360-539-7610 - Fax 360-491-6308

### AIR OPERATING PERMIT (AOP) RENEWAL APPLICATION

Form A: General Information

Company Name:		For ORCAA use only	
Westport Shipyard Inc.		File No: 474	
Plant Name:		County No:	
Westport Shipyard		Source No: 701	
vvcstport sinpyara		Application No: 14AOP 10Z9	
Physical Address:		Date Received:	
1807 N. Nyhus, Westport, WA. 98595		RECEIVED	
	no comit de Minister de Maria	·	
Mailing Address (if different from above):		MAR-07 2014	
PO Box 308, Westport, WA. 98595			
THE PARTY OF THE P		ORCAA	
Current AOP Number: 07OP575			
Issuance Date: 6 October 2009	Expiration Date: 6 Oc	toher 2014	
issuance Date. 6 October 2005	Lipitation Date: 0 00	tober 2014	
Do you request confidentiality for any of the records or i	nformation contained in	this application? Yes No	
If yes, provide a separate copy of the application void of the m			
confidential must be individually identified by stamping "confidential" or similar method.			
Confidentiality can be claimed for information unique to the applicant and/or likely to adversely affect the con-			
position of the applicant if released to the public or a competit	or.		
Owner's name and agent:		the second secon	
Westport Shipyard Inc.			
Plant site manager/contact:			
Kelly Swan	l pt	-1	
Title: Phone:		Email: kellyswan@westportshipyard.co	
Plant Manager	360-268-1800	m	
RESPONSIBLE OFFICIAL CERTIFICATION			
I certify that I am the responsible official, as defined in W	/AC 173-401-200(27) for	this facility. I further certify as	
required by WAC 173-401-520, that, based on information			
statements and information in this application are true,		, , , , , , , , , , , , , , , , , , ,	
Responsible Official:			
Dave Hagiwara			
Title:	Phone:	Email:	
General Manager	360-452-5095	dhagiwara@westportshipyard.c	
Addus		om	
Address:			
Signature:	Date: / /		
TO SHALLE S	3/6/14		
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**OLYMPIC REGION CLEAN AIR AGENCY**2940 B Limited Lane NW - Olympia, Washington 98502 - 360-539-7610 – Fax 360-491-6308

## AIR OPERATING PERMIT (AOP) RENEWAL APPLICATION Form B: Emissions Units

Emissions	Emissions Unit Name &	Air Pollu	Air Pollution Control	Fuel(s) Used	Significant o	Significant or Insignificant
Unit Number	Description	Equ	Equipment		WAC 173-401-	WAC 173-401-530 through -533
					(S or I)	Basis
EUI	Lamination and Plug fabrication Bldg. 2 Ventilation stack system	3 exhaust units 10,000 ACFM each	its 10,000	Electrical	X S 🗆 I	
	Bldg. 9 Ventilation stack system.	4 exhaust units 10,000, ACFM each	its 10,000,	Electrical		
EU2	Spray Application Bldg. 5 Spray Booth	(2 exhaust units 18,000 ACFM each)	nits 18,000	Electrical	XS 🗖 I	
EU3	Bldg. 7 & 8 Hydronic floor heating Diesel Boilers (2 units at 2.5 MMBTU each)	N/A	-	Diesel	XS 🗖 I	NESHAP 40 CFR Part 63 Subpart DDDDD
EU4	Diesel Emergency Generators Bldg. 2 & 5 (330 hp generator)	N/A		Diesel	XS 🗆 I	NESHAP 40 CFR Part 63 Subpart 7227
	Bldg. 7 (643 hp generator)			Diesel	_	
	Bldg. 9 (717 hp generator)			Diesel		
IEU 1	Propane Boilers for Hydronic floor heating	N/A			OS XI	WAC 173-401-533 (2)(e)
	Bldg. 2 Propane Boiler hydronics floor heat (4 units at .31 MMBTU each)			Propane		Exempt under NESHAP 40 CFR Part 63 Suhnart DDDDD
	Bldg. 9 Propane Boilers hydronics floor heat (9 units at .31 MMBTU each)			Propane		and not subject to the rule
	Bldg, 4 Propane boiler hydronics floor heat (2 units at .31 MMBTU each)			Propane		

			[ ] [ ] [ ] [ ] [ ] [ ]	Cimitian	
Emissions   Unit Number	Description	Equipment		WAC 173-401-	WAC 173-401-530 through -533
		•		(S or I)	Basis
IEU 2	Propane Air/Space heaters		Propane	OS XI	WAC 173-401-533
	Bldg. 1 propane space heaters (Air/space heaters (1Unit: .03 MMBTU)	Ň/A			(2)(r)
					Exempt under
	Bldg. 3 propane Space heaters (Air/space	-			NESHAP 40 CFR Part
	neaters (10nit: .09 / MIMIB 10)				and not subject to the
2 °°, 2 °°,					rule
IEU 2	Propane Air/Space heaters			IX S 🗆	WAC 173-401-533
	Bldg. 4 propane Space heaters (Air/Space heater) (111nit: 25 MMRTI)	N/A	Propane		(2)(r)
	() ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( )				Exempt under
					NESHAP 40 CFR Part
	Bldg. 5 Propane space heaters (Air/Space				63 Subpart DDDDD
	heater for booth) (2 Units: 1.23 MIMB1 U				and not subject to the rule
	Diesel Storage for Boiler (4000 gal.	N/A		OS XI	WAC 173-401-533
IEU 3	storage tank)		N/A		(2)(c)
-	Propane storage for boiler (30,000 gal			□ S X I	WAC 173-401-533
IEU 4	storage tank)	N/A	N/A		(2)(d)
IEU 5	Bldg. 1 Powder Coat Evaporator	Evaporator unit	Propane	_s ×_	WAC 173-401-530 (4)
IEU 6	Bldg. 1 Powder Coat ovens			□ S X I	WAC 173-401-530 (4)
	2 Units	N/A	Propane	•	
	1 Unit at .75 MMBTU 1 Unit at .50 MMBTU				
IEU 7	Bldg. 2 Cabinet Shop woodworking	N/A	N/A	1× S 🗖	WAC 173-401-532(55)
IEU 8	Bldg. 7 Cabinet Shop woodworking	N/A	N/A	IX S 🗖	WAC 173-401-532(55)
		-		IX S □	WAC 173-401-533
IEU 9	Bldg, 7 Welding	N/A	N/A	ا ر	(2)(1)
-   TEU 10	Bldg. 7 Metal Polishing	N/A	N/A	- × 3	WAC 1/3-401-332 (14)
IEU 11		N/A	N/A	OS X I	WAC 173-401-533
	Bldg. 9 Acetone Still (30 gallon batch)				(2)(0)
EU 12	Bldg. 7 Diesel storage for generator (4,000 gallons)	N/A	N/A	□ S X I	WAC 173-401-533 (2)(c)
IEU 13	Bldg. 5 Diesel storage for generator (55 gallons)	N/A	N/A	lx s 🗆	WAC 173-401-533 (2)(c)
IEU 14	Lumber storage	N/A	N/A	□ S X I	WAC 173-401-530 (1)(d)
	<b>)</b>				

Emissions	Emissions Unit Name &	Air Pollution Control	Fuel(s) Used	Significant o	Significant or Insignificant
Unit Number	Description	Equipment		WAC 173-401-	WAC 173-401-530 through -533
				(S or I)	Basis
IEU 15	Bldg. 9 Resin storage tank 1 (6,200 gallons)	N/A	N/A	IX S 🗆	WAC 173-401-533 (2)(t)
IEU 16	Bldg. 2 Resin storage tank 2 (3,000 gallons)	N/A	N/A	□ s x i	WAC 173-401-533 (2)(t)
IEU 17	Paved/unpaved road dust	N/A	N/A	□ S X I	WAC 173-401-530
	-			10 s D I	
	,			10 S D I	
				10 s 0 l	

Note 1: 2 emission units were removed from list no longer exist

(1) Bldg. 6 Propane space heaters 310,000 BTU/hr (2) Bldg.3 Waterwall paint booth

### Note 2: units Slight Change

EU3 Bldg. 7 Boilers actually 2 Units at 2.5 MMBTU for both Building 7 & 8
 EU4 Bldg. 2 Emergency actually covers both Bldg. 2 and 5
 EU5 Bldg. 2,4,9 Hydronics floor heat under 1.6 MMBTU and Propane so

EU4 Bldg. 2 Emergency actually covers both Bldg. 2 and 5 EU5 Bldg. 2,4,9 Hydronics floor heat under 1.6 MMBTU and Propane so

excempt under the NESHAP

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# AIR OPERATING PERMIT (AOP) RENEWAL APPLICATION Form C: Emissions

				200		
<b>Emissions Unit</b>	Pollutants (all regulated		Emissions		CAM Applicability	ability
Number	pollutants including	<b>Annual Potential</b>	Have Potential	Actual	Annual Potential	CAM needed?
(from Form B)	greenhouse gases)	Emissions	Emissions	Emissions for	<b>Emissions without</b>	If yes, submit a
		(for each regulated air	Changed Since Submittal of	Calendar Year 2013	regard to Control Device	CAM Plan
			Most Recent AOP			
			Application?			
EU1					1	
Bldg. 2 & 9		Facility Wide PTE	☐ Yes X No		Facility Wide Pie under	☐ Yes X No
Lamination and Plug Fabrication	TOTAL VOCs	under 401PY		4.61 TPY	40174	
	Total HAPs			4.5 TPY	-	
	Styrene	-		4.5 TPY		
	Methyl Methacrylate	,		225 lbs/year		
EU2		Total PTE is under			,	-
Bldg. 5 (Spary		40TPY Facility	☐ Yes X No		Total PTE is under 40TPY	☐ Yes X No
Booths)	Total VOCs	wide standard		5.6 TPY	Facility wide standard	
	Total HAPs			1.89 TPY		
	Ethyl Benzene			100 lbs/year		-
	Methyl ethyl Ketone			744 lbs/year		
	Toluene			.87 ТРҮ		
	Xylene			498 lbs/year		-
	Methyl Isobutyi Ketone			674 lbs/year		
	Ethylene Glycol			16 lbs/year		
		Total PTE is under	1			:
,	Total Other VOCs	401PY Facility wide standard	☐ Yes X No	3.94 TPY	lotal PTE is under 401PY Facility wide standard	☐ Yes X No
	Acetone			1.8 TPY		
	N-Butyl acetate		-	.51 TPY		

Fmissions Unit	Pollutants (all regulated			Emissions	-	CAM Applicability	ability
	II t = - t		$\vdash$	Dottontin	V	Annual Dotontial	Chapter 1800
Number (from Form B)	poliutants including greenhouse gases)	Annual Potential Emissions		nave Potentiai Emissions	Actual Emissions for	Emissions without	If yes, submit a
		(for each	ਰ ਫ਼	Changed Since	Calendar Year 2013	regard to Control Device	CAM Plan
		pollutants)	Σ	Most Recent			
			AOP	٩٥ : :			
		-	<u> </u>	Application?			
	Butyl alcohol				0		
	Ethyl acetate				424 lbs/year		
	Isopropanol				.84 TPY		
	N-butyl Alcohol				297 lbs/year		
	Monobutyl Ether Acetate			-	503 lbs/year		
	1,2,4 Trimethylbenzene				20 lbs/year		
	Cyclohexanone				20 lbs/year		
	1-Methoxy-2-Propanol				94 lbs/year		
	Benzyl Alcohol				256 lbs/year		
	2-Methoxy-1-Methylethyl				:		
	Acetate				738 lbs/year		
	Ethyl-3-Epoxypropionate			-	219 lbs/year		
	Benzyl Butyl Phthalate				4 lbs/year		
	Ethanol				28 lbs/year		
EU3							· · · · · · · · · · · · · · · · · · ·
2 bollers for Bldg 7 & Bldg 8				□ Yes X No			
Hydronic Floor		;					
Heating	Total VOCs	.4 T/YR			.4 T/YK	THE PROPERTY OF THE PROPERTY O	
	Total HAPs				-		
Boiler #1							
	PM	.256 TPY			.030 T/YR		
	PM-10	.259 TPY			.069 T/YR		
	VOC	.016 TPY			.002 T/YR		
	Methane (CH4)	.07 T/YR			16 LB/YR		
	Nitrous Oxide (N20)	.01 T/YR			3 LB/YR	•	

		.   .	LITIISSIOIIS		ליווימטיווללר ואוכט	apility
	Carbon Dioxide (CO2)	1785 T/YR		203 T/YR		
	Sulfuric Acid (SO2)	.017 TPY		.002 T/YR		
	Carbon Monoxide (CO)	.388 TPY		.045 T/YR		
	Nitrogen Oxides (NOx)	1.553 TPY		.181 T/YR		
Boiler #2						
	PM	.256 TPY		.030 T/YR		,
	PM-10	.259 TPY		.069 T/YR		
	VOC	.016 TPY		.002 T/YR		
	Methane (CH4)	.07 T/YR		16 LB/YR		
	Nitrous Oxide (N20)	.01 T/YR		3 LB/YR		
	Carbon Dioxide (CO2)	1785 T/YR		203 T/YR		
و المراجعة	Sulfuric Acid (SO2)	.017 TPY		.002 T/YR		
	Carbon Monoxide (CO)	.388 TPY		.045 T/YR		
4.7	Nitrogen Oxides (NOx)	1.553 TPY		.181 T/YR		
EU4 Emergency			N X SeV			ON X SOX
	Total VOCs	0 T/YR		0 T/YR		
	Total HAPs					
	Total Methane (CH4)	.11 TPY		.001 TPY		
	Total Nitrous Oxide (N20)	.002 TPY		.0001 TPY		
	Total Carbon Dioxide (CO2)	270 TPY		16 TPY		
Emergency Generator 1. (Bldg. 2 & 5)						
	Hydrocarbon (HC)	.05 TPY		.003 TPY		
	Sulfuric Acid (SO2)	.0008 TPY		.00005 TPY		
	Particulate Matter (PM)	.05 TPY		.003 ТРУ		
	Carbon Monoxide (CO)	.45 TPY		.03 ТРҮ		
	Nitrogen Oxides (NOx)	1.69 TPY		.10 TPY		
Emergency Generator 2. (Bldg. 7)						
	Hydrocarbon (HC)	.05 TPY		.003 ТРҮ		
	Sulfuric Acid (SO2)	.0008 TPY		.00005 TPY		

.

<b>Emissions Unit</b>	Emissions Unit   Pollutants (all regulated		Emissions		CAM Applicability	
	Particulate Matter (PM)	.05 ТРҮ		.003 TPY		
	Carbon Monoxide (CO)	.45 TPY		.03 ТРҮ		
	Nitrogen Oxides (NOx)	1.69 TPY		.10 TPY		
Emergency				•		
Generator 3.						<del></del>
(Bldg. 9)						
	Hydrocarbon (HC)	.06 TPY		.003 TPY		
	Sulfuric Acid (SO2)	.0010 TPY		.00006 TPY		
	Particulate Matter (PM)	.06 ТРУ		.004 TPY		
	Carbon Monoxide (CO)	.54 TPY		.03 ТРҮ		
	Nitrogen Oxides (NOx)	2.03 TPY	·	.12 TPY		

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### AIR OPERATING PERMIT (AOP) RENEWAL APPLICATION Form D: Applicability Determinations

### **Facility Changes**

Are/were there any		If yes
Notice of Construction Approval Orders that have been issued but not incorporated into the Air Operating Permit?	X Yes 🗖 No	Complete Form E for each Approval Order
Off-permit changes according to WAC 173-401-724?	☐ Yes X No	Complete Form F
Section 502(b)(10) changes according to WAC 173-401-722(2)?	☐ Yes X No	Complete Form F
New sources or modifications that did not require a Notice of Construction?	☐ Yes X No	Complete Form G
New Applicable Requirements		
		If yes
Are there any new applicable requirements?	X Yes 🗖 No	*Emergency Generators *Diesel Boilers
Are there any inapplicable	☐ Yes X No	
requirements for which the source would like to request to extend the permit shield?		Complete Form H
Does the accidental release prevention regulation apply to the facility? (40 CFR Part 68)	☐ Yes X No	Attach a list of the regulated substances present in processes at the facility and identify the applicable program
Current Compliance		
		If no
Is the source in compliance with all of the conditions of the current permit?	X Yes 🗖 No	Attach a compliance plan.

### Form D: Applicability Determinations, Page 2

### **Requested Changes**

Are there any requested changes to		If yes	
Testing conditions?	☐ Yes X No		•
Monitoring conditions (other than those being replaced by CAM)?	☐ Yes X No		
Recordkeeping conditions?	☐ Yes X No	Complete Form I	
Reporting conditions?	☐ Yes X No		
Non-applicable conditions?	☐ Yes X No		
Any conditions?	☐ Yes X No		,

### Other Changes/Corrections

Are there any		If yes
Changes to the Process Descriptions in the current Technical Support Document?  Changes to the Emission Unit Summary in the current Technical Support Document?	X Yes  No	Please attach details or marked up copy of current permit.  1: Section 2.2, 2.4, 2.5, 2.4  2: Emission unit change -Need to add EU3, EU4
Changes to the Regulatory Determinations in the current Technical Support Document? Changes to the Insignificant Emission Units listed in the current Technical Support Document?	X Yes No	
Changes to the current Statement of Basis in the current Technical Support Document?	Yes No	

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### AIR OPERATING PERMIT (AOP) RENEWAL APPLICATION Form E: NOC Approval Orders

For each NOC Approval Order that was issued but conditions were not incorporated into the AOP, list each new applicable requirement (including approval order requirements, NSPS, NESHAPs, etc). Please complete a separate form for each NOC Approval Order.

NOC # 13NOC978	Date Issued: 9/16/2013
Approval Order Condition # or Citation of Regulation	Condition or Description of Applicable Requirement
Condition 1: Technical Specifications ORCAA 6.2.1(I)	<ul> <li>Metal Cleaning and Etching: Use Non-atomized hand pump spray,         Alidox (30-40% sulfuric Acid, 10-20% phosphoric acid, .1-1.5%         hydrofluoric acid), Secure Tec ES (1-5% phosphoric acid)</li> <li>Evaporator: Samsco Water Evaporator with 100,000 BTU propane         Adams Burner and evaporation rate of 8 gal/hr. Neutralization with         Dubios OH 25 (20-30% sodium hydroxide) to balance the pH between 8-         12.</li> </ul>
Condition 2: O&M Plan ORCAA 6.1.4 (a)(1); ORCAA Rule 4.3 (g)	<ul> <li>Procedures for operation and maintenance of metal cleaning and etching process to include procedures for minimizing fugitive emissions</li> <li>Procedures to ensure that the evaporator is operated, maintained and repaired consistent with manufacturers specifications</li> <li>Procedures for monitoring pH of neutralization tank</li> </ul>
Condition 3: Required Records ORCAA Rule 8.11	<ul> <li>Maintain record in form suitable and readily available for expeditions review</li> <li>Keep record for 5 years following date of each recorded action</li> <li>Records of Maintenance checks and repairs conducted on the evaporator</li> <li>Records of pH monitoring required in condition 2</li> <li>Copy of the Order of Approval</li> </ul>
ORCAA Rule 6.1, WAC 173- 400-110, WAC 173-400-114 WAC 173-400-040 (8) ORCAA 7.S	Approval by ORCAA through NOC application is required prior to establishing or constructing any new source of emissions, or modifying an existing source.  Prohibits installation or use of any means that conceals or masks an emission of an air contaminant that would otherwise violate any provisions of the chapter.
ORCAA 7.5  ORCAA 8.8  WAC 173-400-10S(1)  WAC 173-400-040(6), ORCAA 7.6	Requires air contaminant sources to keep any process and/or air pollution control equipment in good operation and repair  Maintenance of records relating to air pollutant emissions and submittal of an annual emissions inventory if required  Prohibits emissions of any air contaminant from any source that are detrimental to person or property
WAC 173-400-107, ORCAA 8.7	Requires source operators to demonstrate that excess emissions were unavoidable in order to obtain relief in an enforcement action

- WE	Prohibits particulate emissions from any source to be deposited, beyond the property under direct control for he woner or operator of the source, in sufficient quantity to
WAC 173-400-040 (3),	interfere unreasonably with the use and enjoyment of the property upon which the
ORCAA 8.3 (e)	material was deposited.
WAC 173-400-040 (9),	Requires reasonable precautions be taken to prevent fugitive dust from becoming
ORCAA 8.3 (c )	airborne
WAC 173-400-040 (4)	Requires that reasonable precautions be taken for controlling of fugitive emissions.
	Use of "recognized good practices and procedures" for control of any odor which may
WAC 173-400-040 (S)	unreasonable interfere with the use of enjoyment of another person's property.
	Requires reasonable available control techniques and measures be used to control
· ·	odor-bearing gases. Prohibits emissions of any odor that unreasonably interferes with
ORCAA 8.S	another person's use and enjoyment of their property.
	Requires: Maintenance records on the nature and amounts of emissions and other
•	related information as deemed necessary by ORCAA; reporting emissions to ORCAA
ORCAA 8.11	upon request
	Prohibits emissions of sulfur dioxide from any emissions unit in excess of 1000 ppm of
•	sulfur dioxide on a dry basis, corrected to 7% oxygen for combustion sources, and
WAC 173-400-040 (7)	based on the average of any period of sixty consecutive minutes
WAC 173-400-040 (9),	Requires reasonable precautions be taken to prevent fugitive dust from becoming
ORCAA 8.3 (c )	airborne

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### AIR OPERATING PERMIT (AOP) RENEWAL APPLICATION Form E: NOC Approval Orders

For each NOC Approval Order that was issued but conditions were not incorporated into the AOP, list each new applicable requirement (including approval order requirements, NSPS, NESHAPs, etc). Please complete a separate form for each NOC Approval Order.

NOC # 09MOD701		Date Issued: 30 Jun 2009		
Approval Order Condition # or Citation of Regulation	Condition or Description of Applicable Requirement			
Permit # 4.15 Condition 5	Commercial/Military Vessel Coating Limit Remove limitations of on coating used with commercial vessels and become subject to requirements of 40 CFR Part 63 Subpart II *Old information still reflected in Table 4.1 pg. 12 item# 4.16			
Permit # 4.18 Condition 2,3,4,5, and 6	CFR Part 63 Subpart II Requested incorporating of recordkeeping of 40 CFR P	condition 4.18 and become subject to requirements of 40 of applicable emissions limitations, monitoring, and eart 63 Subpart II ected in Table 4.1 pg. 12 item# 4.18		
,				

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### AIR OPERATING PERMIT (AOP) RENEWAL APPLICATION Form H: New Requirements

For each new requirement that might apply to your facility, list the requirement, the emission unit it might apply to, and the applicability determination

New Requirement	Emission Unit	Applies?	Reason	For inapplicable requirements, request permit	Monitoring?
				shield?	
40 CFR 63		X Yes	2- Diesel Boilers	☐ Yes	
Subpart DDDDD	EU3	□ No	at 2.05 MMBTU	X No	
Boilers Major			each both of		
Area Source			which are under	·	·
			the heat input		
-			capacity ≤ 5		
	-		MMBtu/hr		
40 CFR 63			Propane	☐ Yes	
Subpart DDDDD	IEU2	☐ Yes	Air/Space	X No	·
Boilers Major		X No	heaters		
Area Source			These units do		
			not fall into any		
40 CFR 63			of the categories	☐ Yes	
Subpart DDDDD	IEU1	☐ Yes	3 - Propane Boilers for	X No	
Boilers Major	IEOT	X No	Hydronic floor	A NO	
Area Source		A 100	heating. All-units		
Airea Source			are less than 1.6		
			MMBTU/hr		
NESHAP 40 CFR	,	X Yes	3 – Diesel	☐ Yes	
Part 63 Subpart	EU4	□ No	Emergency	X No	
ZZZZ			Generators		
* .				·	
		☐ Yes		☐ Yes	
		☐ No		□ No	
		☐ Yes		☐ Yes	
•		□ No		□ No	
		☐ Yes		☐ Yes	
		□ No		□ No	•
		☐ Yes		☐ Yes	
		☐ No		☐ No	
		☐ Yes		☐ Yes	
		☐ No		☐ No	

### 2.0 PROCESS DESCRIPTIONS

### 2.1 Overview

Westport Shipyard Inc. is located on Nyhus Street near the Westport Marina, in Westport, Washington. The Westport Shipyard facility manufactures yachts and other large marine vessels using fiberglass reinforced plastics.

Westport Shipyard was in existence as a yacht manufacturing facility at this location prior to 1980 and has been registered as an air pollutant source with ORCAA since 1990. In 1995, Westport Shipyard received conditional approval to construct a spray booth for boat finishing operations and requested a voluntary limit on emissions in order to opt out of the Air Operating Permit program. In June 1998 Westport Shipyard conducted a facility source test that showed that styrene emissions had been previously underestimated. This, in addition to expected sales growth, caused Westport Shipyard to request approval to exceed their 10 TPY styrene emission limit. Westport Shipyard received a new emission limit in March 1999 as well as approval to install additional exhaust/ventilation systems on their main lamination buildings.

### 2.2 Raw Materials and Fuels

The primary raw materials and fuels used by Westport Shipyard in the fabrication of yachts and hulls are polyester resin, methyl ethyl ketone peroxide, gelcoat, paints and solvents, lumber, metal parts, diesel and propane.

Polyester resins are used in the fiberglass-reinforced plastic processes. Westport Shipyard used approximately 299 tons of polyester resins in 2008 and has an on-site resin storage capacity of approximately 290 45 tons. Bulk resin is stored in two on-site storage tanks (one 62,000 6,200 gallon tank and one 3,000 gallon tank). Styrene emissions result from the use of polyester resins and is classified as a toxic air pollutant (TAP) per Washington's Air Toxics Regulation (CAS No. 100-42-5) and a hazardous air pollutant (HAP) listed in Section 112 of the Federal Clean Air Act.

Methyl ethyl ketone peroxide (MEKP) is used as a catalyst in the fiberglass-reinforced plastic processes. MEKP is purchased in solution with methyl ethyl ketone. The solution is stored in plastic storage bins outside Buildings 2 and 9. Both MEKP and methyl ethyl ketone are classified as TAPs per Washington's Air Toxic Regulations (CAS No. 1338-23-4 and CAS No. 78-93-3, respectively).

Gelcoat is used on the yacht molds prior to the fiberglass-reinforced resin process. Approximately 13.4 tons of gelcoat were used in 2008 and Westport Shipyard has an on-site storage capacity of approximately 1000 pounds. Gelcoat is stored in 55 gallon drums. Styrene emissions result from gelcoat usage.

A variety of paints and solvents are used throughout the facility. Westport Shipyard used approximately 4452 gallons of paints and 11,906 gallons of solvents in 2008. Emissions from paints and solvents include volatile organic compounds and various toxic air pollutants.

Acetone is the primary solvent used. Approximately 9680 gallons of acetone were used in 2008.

PAGE 2 only two slight Changes to the Technical Document see mark out and new numbers in red

Acetone is stored in 55 gallon drums and is used for cleaning.

Westport also manufactures furniture components for the interior of the yachts. Part of the manufacturing process involves application of a finish coating. In 2008 Westport used about 368 gallons of lacquer and about 69 gallons of reducer/thinner.

Nitric acid is used in the powder coating operation to clean and etch-the metal parts. Nitric acid is classified as a TAP per Washington's Air Toxics Regulation (CAS No. 7697-37-2). This operation was changed see NOC13NOC978

Lumber and unfinished metal parts are used in the construction of structural hull components, bulkheads, and other yacht components.

Fuel used at the facility includes diesel and propane.

Diesel is used as fuel for a two boilers boiler and two three emergency generators. The boiler uses a 4000-gallon storage tank, located near Building #7. There are two three storage tanks for the emergency generators: a 400 gallon tank near Building #7, a 55 gallon tank near Building #5, and a 500 gallon tank near Building #9. Westport Shipyard uses approximately 33,000 gallons of diesel annually. Diesel storage is considered an insignificant emission unit per WAC 173-401-533(2)(c).

Propane is stored in eight two storage tanks located throughout the on site: four 500 gallon tanks on the east side of the Building #3, two 1000 gallon tanks on the west side of Building #1, a 1000 gallon tank on the north side of Building #4, and a 500 gallon tank on the east side of Building #4. The first tank has a 30,000 gallon capacity and is located on the South East corner of the property. The second tank has a 1000 gallon capacity and is at the South West corner of building 9. Westport Shipyard uses approximately 68,000 125,000 gallons of propane annually. Propane storage is considered an insignificant emission unit per WAC 173-401-533(2)(d).

### 2.3 Lamination Operations

Location:

Building #2 Small parts lamination

Building #4-Mold-storage and large parts lamination

Building #7 Secondary lamination

Building #9 Large parts lamination (hulls, decks, bridges, etc.)

Building #2

Small parts are laminated in Building #2. Building #2 operations result in VOC and particulate emissions from application of VOC-containing materials such as resins, gelcoats, core material, and adhesives. Spray or hand application techniques as well as an infusion process are used to apply these materials. Building #2 is equipped with # three units at 30,000 10,000 acfm ventilation units system that exhausts through three 46-foot vertical stacks.

There are two enclosed and filtered booths in Building #2 used for application of primers and topcoats and two enclosed and filtered booths used for part preparation. Part preparation involves sanding and grinding the small parts as well as application of fairing compounds.

Building #4

Large mold parts are repaired, laminated and assembled in Building #4. This area is also used for mold storage. Operations in Building #4 result in VOC and particulate emission. VOC emissions result from use of VOC-containing materials such as resins, gelcoats, and adhesives. Particulate

PAGE 3 change to reflect 13NOC978, change in storage tanks for diesel, change in propane usage, change in bldg. 2 ventilation system clarifying 3-10,000 cfm units

matter results from cutting core material and from spray application of resins and gelcoats. Spray or hand application techniques as well as an infusion process are used to apply these materials.

### Building #7

Building #7 is used to assemble the yachts. Combining the hull, decks, bridges, and small parts of the yachts involves some secondary lamination. Only hand lay-up techniques are used to assemble the parts. Building #9

In Building #9 yacht hulls, decks and bulkheads are fabricated using hand lay-up lamination and spray application techniques. Yacht hulls and decks are made by building the part on the inside of a mold. To form the smooth outside surface of the hull, gelcoat is applied to the mold using conventional spray application techniques. After the gelcoat is applied, the composite structure is built-up by applying successive layers of fiberglass reinforced resin using an impregnator. The impregnator is a piece of equipment mounted on an overhead crane that continuously feeds a sheet of fiberglass-woven material into a reservoir of resin and then onto the surface of the mold. The fiberglass-woven material becomes saturated or "impregnated" with resin as it is pulled through the reservoir. The resin-saturated fiberglass is gently lowered onto the composite surface as the impregnator travels on the crane over the length of the mold. Immediately after the resin-saturated fiberglass sheet comes into contact with the mold, surface rollers are used to mechanically force air bubbles out of the composite. Core foam material is secured to the hull with putty then covered with resin and fiberglass.

The lamination process results in emissions of VOC from the use of resin and other VOC-containing materials. The predominant volatile compound emitted is styrene. Particulate emissions are created during grinding and sanding processes. Emissions are captured and exhausted through an exhaust/ventilation system.

Construction of Building #9 began in 2007 and was completed in 2008. Building #9 was includes four exhaust units each rated at 7,000 10,000 acfm. Air intakes are connected to mobile ducting to allow them to be moved to specific locations to enhance capture of VOC and particulate. The air intake registers are equipped with high efficiency (95% plus particulate removal efficiency) dry filters to remove particulate prior to exhaust. In situations where lamination operations are taking place in multiple locations, exhaust intake registers are directed to areas of highest concentrations. While spraying resin and gel coat, exhaust intake registers are located on the inside of the hull to optimize VOC capture.

Occasionally, molds (also known as "plugs") are fabricated in Building #9. Plugs are made by forming a fiberglass/resin composite on a foam male mold. The foam molds are purchased by Westport Shipyard from an off-site manufacturer. The fiberglass/resin composite is built-up on the foam mold using spray lay-up lamination techniques.

2.4 Spray Painting & Finishing Operations

Location:

Building #1 Powder coating

Building #3-Waterwall paint booth Unit removed

PAGE 4 correction to exhaust units in Bldg. 9 and removed Building 3 Waterwall

Building #5 Paint booth

Building #7 Surface coating

Building #7 Annex Paint booth

Building #1

Powder coating in Building #1 consists of three separate operations: nitric acid rinse tank, spray booth, and oven. Emissions from the operations are below the PQL, therefore, they are considered an insignificant emission unit per WAC 173-401-530(4).

- The nitric acid rinse tank is 540 gallons and contains a solution of 10% nitric acid and Safeguard 6500 (Amine base detergent). The rinse is used to clean and etch the metal parts before coating. Process changed under 13NOC978
- Powder coating is conducted in a spray booth that contains filters. The metal part is electrically charged and the powder coating applied using spray techniques. The three-sided booth is 10 feet x 10 feet x 7 feet. Unit no longer exhausts to the outside air.
- After coating, the metal pieces are cured in a propane-fired oven. The oven is rated at 0.4 MWBtu/hr.

The first oven is rated at .5 MMBTU

The second oven is rated at .75 MMBTU

### Building #3

Building #3 contains a fully enclosed waterwall paint booth for spray coating small parts. The operation uses less than 2 gallons of surface coating material per day, therefore it is considered an insignificant emission unit per WAC 173-401-533(q).

### Building #5

Building #5 is a fully enclosed paint spray booth used for spray-painting yachts. The 50-foot by 125-foot booth was permitted under NOC# 657 and constructed in 1995.

High transfer efficiency coating techniques are used and spray booth air is filtered prior to exhaust to remove particulate. There are two 50-foot stacks with an air flowrate of 18,000 dscfm each. Some surface coating is also conducted in Buildings #2 and #7. With the exception of primer application, all surface coating is hand-applied. Primer is applied using HVLP spray guns and by hand in the south bay of Building #7.

### Building #7 Annex

Building #7 Annex contains a 30' by 20' spray booth. The spray booth is used to spray apply surface coatings to the wood components to be installed inside the yachts.

### 2.5 Wood Working Operations

Location:

Building #7 Annex Wood Shop

The Building #7 Annex wood shop is used for building and assembly of wooden components. The operation includes a dust collection system with a baghouse that filters air before being returned to the shop. Emissions from cutting and sanding the wood is controlled by a 7,000 acfm pulse-jet baghouse. This cabinet shop is considered an insignificant emission unit per WAC 173-401-532(55).

### PAGE 5 corrections

### 2.6 Space Heating Operations

Location:

Building #7 Diesel boiler (there is one (1) two (2) 140,000 btu/hr 2,500,000 btu/hr boiler)

Building #2 Propane boilers (there are four (4) 310,000 btu/hr boilers)

Building #4 Propane boiler (there are two (2) 200,000 310,000 btu/hr boilers)

Building #9 Propane boilers (there are nine (9) 310,000 btu/hr boilers)

Building #1 Propane space heaters

Building #3 Propane space heaters

Building #4 Propane space heaters

### Building #6 Propane space heaters-Removed from building

Building #5 Propane air preheater

Westport Shipyard operates 15 small boilers and various heaters for space heating.

The diesel boiler is located in a shed next to Building #7 and is used for heating Building #7. The two boilers are rated at 2.05 MMBtu/hr. The diesel boiler is considered an insignificant emission unit per WAC 173-401-533(2)(g).

Four propane boilers are located in Building #2 and are used for heating Building #2. The boilers are rated at 0.31 MMBtu/hr each. Two 0.31 MMBtu/hr propane boilers are located in Building #4 and are used solely for space heating. There are nine (9) propane boilers in Building #9 used for space heating, and each boiler is rated at 0.31 MMBtu/hr. The propane boilers are considered insignificant emission units per WAC 173-401-533(2)(e).

Propane heaters are located in Buildings #1 - #6 #4 and are considered insignificant emission units per WAC 173-401-533(2)(r).

### 2.7 Assembly

Location:

Building #7 Assembly

Building #7 has been used primarily for assembly operations. Assembly operations involve piecing together the major yacht components that have been fabricated elsewhere at the facility. Assembly operations result in minor pollutant emissions rates compared to hull or deck fabrication due to the smaller amounts of VOC-containing materials used during assembly.

Building #7 is not equipped with an exhaust/ventilation system.

### 2.8 Maintenance and Miscellaneous Activities

Location:

Building #7 Annex Welding

Building #9 Acetone Still

Building #7 Emergency Diesel Generator

Building #5 & 2 Emergency Diesel Generator

Building #9 Emergency Diesel Generator

### PAGE 6 corrections

### 3.0 EMISSION UNIT SUMMARY

### 3.1 LAMINATION AND PLUG FABRICATION (EU1)

The lamination of hulls, decks, bulkheads and fabrication of plugs in Building #9 and lamination of small parts in Building #2 are designated as emission unit #1 (EU1). EU1 consists of spray application, hand lay-up, and impregnation lamination controlled by a ventilation system equipped with filters. Expansion of the lamination process was permitted in 1999 under NOC# 98NOC049. Construction of Building #9 was approved through NOC 07NOC554.

The lamination process is subject to the conditions in NOC# 98NOC049 Order of Approval and the general requirements under chapter 173-400 WAC and ORCAA Regulations. The Order of Approval included a plant-wide emission limit and material usage and emissions recordkeeping. The emission limit was increased in 08NOC627 from 32 tons per year of VOC to 40 tons per year.

### 3.2 SPRAY PAINTING (EU2)

The spray painting activities in Building #5, Building #2, and Building #7 are designated as emission unit #2 (EU2).

Installation of the spray booth in Building #5 was permitted in 1995 under NOC# 657. Installation of the spray booths in Building #7 was permitted in 2006 under 06NOC462. The installation of the spray booths in Building #2 was permitted in 2008 under 08NOC598.

The spray painting process is subject to the conditions in NOC#657 Order of Approval, 06NOC462 Order of Approval, and 08NOC598 Order of Approval and the general requirements under chapter 173-400 WAC and ORCAA Regulations. The Order of Approvals include requirements to filter exhaust and have an Operation and Maintenance Plan.

Technical

Need to add EU3

Need to add EU4

**PAGE 8 corrections** 

**TABLE 3.1 EMISSION UNIT SUMMARY** 

Description	Control Equipment/Techniques	NOC
<ul> <li>Lamination of hulls, decks, and bulkheads</li> </ul>	Ventilation system	01MOD181
lmmma an atara		(5/14/2003)
: - impregnators		07NOC554
- Spray application	(Onlinge to 10,000 NOT M Educity	(1/25/2008)
- Flow coating		
Fabrication of plugs		
- Impregnators		
- Spray application		
- Flow coating		
Small parts lamination	Ventilation system	08NOC630 (10/23/2008)
- Spray application	- 3 exhaust unit	(10/20/2000)
- Flow coating	- 10,000 ACFM	
Spray application of paints	Spray booth	657 (7/19/95)
	Lamination of hulls, decks, and bulkheads     Impregnators     Spray application     Flow coating     Fabrication of plugs     Impregnators     Spray application     Fiow coating     Small parts lamination     Spray application     Spray application     Flow coating	<ul> <li>Lamination of hulls, decks, and bulkheads         <ul> <li>Impregnators</li> <li>Spray application</li> </ul> </li> <li>Flow coating</li> <li>Fabrication of plugs</li> <li>Impregnators</li> <li>Spray application</li> <li>Fiow coating</li> <li>Spray application</li> <li>Fiow coating</li> <li>Small parts lamination</li> <li>Spray application</li> <li>Spray application</li> <li>Spray application</li> <li>Spray application</li> <li>To,000 ACFM</li> </ul>

**TABLE 3.2 INSIGNIFICANT EMISSION UNITS** 

Process	IEU Name	Size/Capacity	Basis for IEU Designation
Space heating	#1 Building #7 Diesel boiler	140,000 Btu/hr	WAC 173-401-533(2)(g)
	Building #2 Propane boiler (4 identical units)	310,000 Btu/hr	WAC 173-401-533(2)(e)
	Building #9 Propane boilers (9 identical units)	310,000 Btu/hr	WAC 173-401-533(2)(e)
	Building #4 Propane boiler	20 <del>0,000</del> Btu/hr <b>310,000</b>	WAC 173-401-533(2)(e)
	Building #1 Propane space heaters	3 <del>10,000</del> Btu/hr <b>40,000</b>	WAC 173-401-533(2)(r)
	Building #3 Propane space heaters	3 <del>10,000</del> -Btu/hr <b>97,000</b>	WAC 173-401-533(2)(r)
	Building #4 Propane space heaters	3 <del>10,000</del> Btu/hr <b>250,000</b>	WAC 173-401-533(2)(r)
	Building #5 Propane air preheater (2 units)	3 <del>10,000</del> -Btu/hr <b>1,250,000</b>	WAC 173-401-533(2)(r)
	#2. Building #6 Propane space heaters	310,000 Btu/hr	WAC 173-401-533(2)(r)
	Diesel storage (boiler)	4000 gallons	WAC 173-401-533(2)(c)
	Propane storage (Building #7)	30,000 gallons	WAC 173-401-533(2)(d)
Powder coating	#5-Nitric-acid rinse tank	Emissions below PQL	WAC 173-401-530(4)
	Spray booth	Emissions below PQL	WAC 173-401-530(4)
	Oven (2 units)	Emissions below PQL	WAC 173-401-530(4)
Woodworking	Building #2 cabinet shop		WAC 173-401-532(55)
	Building #7 cabinet shop		WAC 173-401-532(55)
Spray painting	#4 Waterwall paint booth (Building #3)	<2 gallons per day	WAC 173-401-533(q)
Miscellaneous	Welding (Building #7)		WAC 173-401-533(2)(i)
	Metal polishing	'	WAC 173-401-532(14)
	Acetone still	30 gallons/batch	WAC 173-401-533(2)(o)
	#6Emergency diesel generator (Bldg #7)	643 hp	WAC 173-401-530(4)
	Emergency diesel generator (Bldg #5)	330 hp	WAC 173-401-530(4)
	Emergency diesel generator (Bldg #9)	717 hp	WAC-173-401-530(4)
	Diesel storage (Bldg #7 generator)	<del>400</del> -gailons <b>4,00</b> 0	WAC 173-401-533(2)(c)
	Diesel storage (Bldg #5 generator)	55 gallons	-WAC-173-401-533(2)(c)
	Lumber storage		WAC 173-401-530(1)(d)
	Resin Storage Tank #1	6 <del>2,000</del> gallons <b>6,200</b>	WAC 173-401-533(2)(t)
	Resin Storage Tank #2	3,000 gallons	WAC 173-401-533(2)(t)
	Paved/unpaved road dust	""	WAC 173-401-530(1)(d)