



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY TIDEWATER REGIONAL OFFICE

Molly Joseph Ward
Secretary of Natural Resources

5636 Southern Boulevard, Virginia Beach, Virginia 23462
(757) 518-2000 Fax (757) 518-2009
www.deq.virginia.gov

David K. Paylor
Director

Maria R. Nold
Regional Director

May 28, 2015

Ms. D. E. Branche
Director, Environmental, Health and Safety
Huntington Ingalls Incorporated (aka Newport News Shipbuilding)
4101 Washington Avenue
Newport News, Virginia 23607

Location: Newport News
Registration No.: 60153
ICIS Id. No.: 51-700-00013

Dear Ms. Branche:

Attached is an administrative amendment to your Title V permit dated April 29, 2015 to operate Huntington Ingalls Incorporated (aka Newport News Shipbuilding) pursuant to 9 VAC 5 Chapter 80 of the Virginia Regulations for the Control and Abatement of Air Pollution. Permit changes are reflected on pages 1, 8-25, and 80. The amended pages supersede the corresponding pages of the April 29, 2015 permit. Please replace these pages with the amended permit pages. The amended Statement of Legal and Factual Basis (SOB) will replace the SOB dated April 29, 2015.

The permit contains legally enforceable conditions. Failure to comply may result in a Notice of Violation and civil penalty. Please read all permit conditions carefully.

In evaluating the application and arriving at a final decision to issue this permit, the Department deemed the application complete on May 14, 2015.

This approval to operate does not relieve Huntington Ingalls Incorporated (aka Newport News Shipbuilding) of the responsibility to comply with all other local, state, and federal permit regulations.

Issuance of this permit is a case decision. The Regulations, at 9 VAC 5-170-200, provide that you may request a formal hearing from this case decision by filing a petition with the Board within 30 days after this permit is mailed or delivered to you. Please consult that and other relevant provisions for additional requirements for such requests.

Additionally, as provided by Rule 2A:2 of the Supreme Court of Virginia, you have 30 days from the date you actually received this permit or the date on which it was mailed to you, whichever occurred first, within which to initiate an appeal to court by filing a Notice of Appeal with:

David K. Paylor, Director
Department of Environmental Quality
PO Box 1105
Richmond, VA 23218-1105

In the event that you receive this permit by mail, three days are added to the period in which to file an appeal. Please refer to Rule 2A of the Rules of the Supreme Court of Virginia for additional information including filing dates and the required content of the Notice of Appeal.

If you have any questions concerning this permit, please contact Ms. Lindsey Evans by phone at (757) 518-2168 or by e-mail at lindsey.evans@deq.virginia.gov.

Sincerely,

Troy D. Breathwaite
Regional Air Permits Manager

TDB/LME/60153_077_15_CoverLtr_T5AdminAmend_HII-NewportNewsShipbuilding.docx

Attachment: Permit

cc: Manager, Data Analysis (electronic file submission)
Manager/Inspector, Air Compliance
Chief, Air Enforcement Branch (3AP13), U.S. EPA, Region III (electronic file submission)



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

TIDEWATER REGIONAL OFFICE

5636 Southern Boulevard, Virginia Beach, Virginia 23462

(757) 518-2000 Fax (757) 518-2009

www.deq.virginia.gov

David K. Paylor
Director

Maria R. Nold
Regional Director

Molly Joseph Ward
Secretary of Natural Resources

Federal Operating Permit Article 1

This permit is based upon the requirements of Title V of the Federal Clean Air Act and Chapter 80, Article 1, of the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution. Until such time as this permit is reopened and revised, modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1, Chapter 13, §10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act, and 9 VAC 5-80-50 through 9 VAC 5-80-300 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia.

Authorization to operate a Stationary Source of Air Pollution as described in this permit is hereby granted to:

Permittee Name:	Huntington Ingalls Incorporated
Facility Name:	Huntington Ingalls Incorporated (aka Newport News Shipbuilding)
Facility Location:	4101 Washington Avenue Newport News, Virginia 23607
Registration Number:	60153
Permit Number:	TRO-60153

This permit includes the following programs:

Federally Enforceable Requirements - Clean Air Act (Pages 4 through 105)

State Only Enforceable Requirements (Page 105)

April 29, 2015

Effective Date

May 28, 2015

Amended Date

April 28, 2020

Expiration Date

Maria R. Nold

May 28, 2015

Signature Date

Table of Contents, pages 2-3

Permit Conditions, pages 4-105

Table of Contents

I.	FACILITY INFORMATION	4
II.	EMISSION UNITS	8
III.	BOILER REQUIREMENTS - SMALL BOILERS AND PROCESS HEATERS	26
A.	LIMITATIONS	26
B.	TESTING AND MONITORING	29
C.	NOTIFICATIONS, RECORDKEEPING, AND REPORTING.....	30
IV.	BOILER REQUIREMENTS - BARGE-MOUNTED BOILERS AND STEAM PLANT BOILERS	32
A.	LIMITATIONS - PHASED FUEL CONVERSION/BOILER REPLACEMENT	32
B.	TESTING AND MONITORING - PHASED FUEL CONVERSION/BOILER REPLACEMENT	34
C.	NOTIFICATIONS, REPORTING, AND RECORDKEEPING - PHASED FUEL CONVERSION/BOILER REPLACEMENT.....	35
D.	LIMITATIONS - POST-MODIFICATION/REPLACEMENT	36
E.	TESTING AND MONITORING - POST-MODIFICATION/REPLACEMENT.....	40
F.	NOTIFICATIONS, REPORTING, AND RECORDKEEPING - POST-MODIFICATION/REPLACEMENT	41
V.	ENGINE/GENERATOR REQUIREMENTS	44
A.	LIMITATIONS	44
B.	MONITORING.....	51
C.	RECORDKEEPING	52
VI.	FOUNDRY OPERATIONS REQUIREMENTS	53
A.	LIMITATIONS	53
B.	MONITORING.....	56
C.	RECORDKEEPING	59
D.	TESTING	60
E.	NOTIFICATIONS AND REPORTING.....	61
VII.	STEEL PREPARATION AND FABRICATION REQUIREMENTS	62
A.	LIMITATIONS	62
B.	MONITORING.....	62
C.	RECORDKEEPING.....	62
D.	TESTING	63
VIII.	SECONDARY LEAD PROCESSING REQUIREMENTS	64
A.	LIMITATIONS	64
B.	MONITORING.....	65
C.	RECORDKEEPING.....	65
D.	TESTING	65
IX.	WOODWORKING REQUIREMENTS	66
A.	LIMITATIONS	66
B.	MONITORING.....	66
C.	RECORDKEEPING	67
D.	TESTING	67
X.	FLAME SPRAY FACILITY AND POWDER COATING OPERATION REQUIREMENTS	68
A.	LIMITATIONS	68
B.	MONITORING.....	70
C.	RECORDKEEPING	71
D.	TESTING	71

XI.	SATELLITE BLAST AND COAT FACILITY REQUIREMENTS.....	72
A.	LIMITATIONS	72
B.	MONITORING.....	73
C.	RECORDKEEPING	74
XII.	BLAST AND COAT FACILITY WEST REQUIREMENTS	75
A.	LIMITATIONS	75
B.	MONITORING.....	76
C.	RECORDKEEPING	78
XIII.	SHIPYARD MACT REQUIREMENTS	79
A.	LIMITATIONS	79
B.	MONITORING AND RECORDKEEPING	80
C.	TESTING	81
D.	REPORTING.....	81
XIV.	SPECIALTY SHOPS REQUIREMENTS	82
A.	LIMITATIONS	82
B.	MONITORING.....	84
C.	RECORDKEEPING	84
D.	TESTING	85
XV.	MISCELLANEOUS ACTIVITIES REQUIREMENTS	86
A.	LIMITATIONS	86
B.	MONITORING.....	87
C.	RECORDKEEPING	88
D.	TESTING	88
XVI.	INSIGNIFICANT EMISSION UNITS	89
XVII.	PERMIT SHIELD & INAPPLICABLE REQUIREMENTS	95
XVIII.	GENERAL CONDITIONS	98
XIX.	STATE-ONLY ENFORCEABLE REQUIREMENTS.....	105

I. Facility Information

Permittee

Huntington Ingalls Incorporated (formerly Northrop Grumman Shipbuilding, Inc. (NGSB))
4101 Washington Avenue
Newport News, Virginia 23607

Facility

Huntington Ingalls Incorporated, aka Newport News Shipbuilding
4101 Washington Avenue
Newport News, Virginia 23607

Responsible Official

D. E. Branche
Director, Environmental, Health and Safety
(757) 380-4651

Contact Person

William M. Cash-Robertson
Environmental Engineer 4
(757) 534-4068

County-Plant Identification Number: 51-700-00013

Facility Description: NAICS 336611

Huntington Ingalls Incorporated, also known as Newport News Shipbuilding, (formerly Northrop Grumman Shipbuilding, Inc.) owns and operates a major ship construction and overhaul facility in Newport News, Virginia. The facility is classified as a major source for criteria and hazardous air pollutant emissions from its various operations. It is, therefore, subject to Title V operating permit requirements. Products manufactured or repaired include U.S. Navy contracted aircraft carriers and submarines, as well as ships for commercial applications such as oil tankers and service ships. Services performed at the facility include all activities related to the repair, overhaul, and conversion of ships. The facility can be divided up into several operational segments as follows:

Fuel Burning Equipment - The facility operates several boilers and other pieces of combustion equipment on site. The main steam plant currently consists of three boilers fired with No. 6 fuel oil, each rated at 136.2 MMBtu/hr. The facility also has two barge-mounted boilers each rated at 213.26 MMBTU/hour, firing No. 6 fuel oil. The source was issued a minor NSR permit on December 19, 2013 (amended on March 10, 2015) to replace the powerhouse boilers with three new natural gas-fired boilers with propane as a backup fuel and to convert the barge-mounted boilers from No. 6 fuel oil to ultra-low sulfur No. 2 distillate oil. The NSR permit also covers the installation and operation of two liquid propane vaporizers, required to gasify the propane at the rate needed for distribution to the new powerhouse boilers and other propane-fired units around the shipyard. The boiler replacement/conversion project will occur in several phases. The source also operates two small natural gas-fired steam boilers rated at 2.343 MMBtu/hr (North Yard Steam Boiler #1 and #2). These units were previously identified as insignificant emission units; however, they are now subject to the requirements of 40 CFR 63, Subpart DDDDD (Major Source Boiler MACT), so are listed in the Significant Emission Unit list. The source also operates various process heaters, which were previously identified as insignificant emission units; however, these units are also now subject to the Boiler MACT. The various hot water heaters at the source are identified in the Insignificant Emission Unit list. These units are not affected sources under the Boiler MACT. There are also ovens larger than 10 MMBTU/hr firing propane or No. 2 fuel oil which belong in the Steel Preparation and Fabrication Operations, the Foundry Operations, and Miscellaneous Activities; however, they are addressed under Fuel Burning Equipment.

Engines/Generators - The facility also operates a number of diesel-fired internal combustion engines to run emergency generators, emergency pumps, and air compressors ranging in size from around 1,500 hp to less than 100 hp.

Foundry Operations - Alloy steels, copper-nickel, aluminum, brass, and other non-ferrous alloys can be produced at the facility foundries for a full range of castings necessary for the construction/repair of ships. Foundry operations generally include the following processes: melting, casting, finishing, and sand handling. Alloying agents and fluxing materials are added to the furnaces as needed for a given casting type. The molten metal is poured into sand molds, allowed to cool, and the castings are separated from the molds at shakeout. The sand is recovered while the castings move to the finishing area. Finishing involves removal of extraneous metal by burning-off, blasting, and grinding. The facility also has a pattern shop to develop and refine the large and complex patterns for such castings as struts, rudders, stern frames, valves, compressor castings, pipes, etc. The sand handling system includes unloading of sand into storage silos, mixing of sand with resin, transferring the sand to machines for the production of molds or cores, and collecting the return sand from the shakeout area. Sand molds provide the exterior shape of the casting. Cores are used for specific internal voids (for example, recessed curves and hollow areas). The foundry uses two electric arc furnaces (EAFs) and one argon/oxygen-degassing furnace (AOD). The EAFs are permitted under a minor NSR permit dated 3/17/2011. The EAFs are subject to the Iron and Steel Foundries MACT (40 CFR 63 Subpart EEEEE). A new particulate emissions control system with a high efficiency cartridge particulate removal system (PCD ID No. 550-C1a) was installed in 2007 to comply with the MACT. Electric Arc Furnaces B and C are subject to Compliance Assurance Monitoring (CAM); however, the MACT EEEEE monitoring requirements satisfy the CAM requirements. No additional CAM requirements have been included for these units. The AOD was originally permitted on 2/24/1978. It is in the same building as the EAFs, but not subject to the MACT. The AOD and Sand Reclaim Operations were previously subject to CAM; however, the 10/17/14 NSR permit established voluntary throughput limits to keep these units out of CAM. The foundry ventilation system (Stack ID No. 550-S1) is equipped with a Dry Feed System that introduces a ferrous sulfate material before the high efficiency cartridge filter system (PCD ID No. 550-C1a) in order to render the chromium emissions non-hazardous. An exemption letter was issued for this system on 3/2/2012. The small brass foundry uses electric induction furnaces for metal melting. This equipment is not subject to the MACT or CAM requirements. (Note: An additional emission unit called "New Sand Operations" (Ref. No. 555-E1) was previously listed in the permit as also being subject to CAM; however, it has been determined that this operation does not exhaust to the atmosphere, thus it has been removed from the permit.)

Steel Preparation and Fabrication Operations - Blasting and coating of steel units are conducted in a blast and coat facility that has computer-controlled temperature and humidity to prevent "flash rust" corrosion on freshly blasted surfaces. The steel units being blasted and coated include plates, I-beams, and other "shapes". After shot blasting the modules, the on-site rail lines carry plates to the fabrication and/or production facilities. Emissions are primarily particulate matter and are exhausted to a baghouse. In the steel fabrication facility, steel plates of varying thickness and sizes are rolled and shaped. Operations include flame cutting, grinding/shearing, cold and hot forming, planing/milling, punching/drilling, and sawing. The steel production facility is an eleven acre complex for the fabrication of structural steel, ranging from small components to complex 300-ton ship subassemblies. Operations include plate preparation, flame planers, an automated panel line, web lines, numerically controlled burning machines, flat and curved block shops, and machinery for assembly of circular hull plates. Plate preparation includes some shot blasting and heating to prepare the surface for the next step in the process, painting. Emissions are primarily particulate matter, some VOCs, and combustion by-products from ovens/furnaces.

Secondary Lead Processing - This facility makes lead shielding plates for reactor spaces and personal protection. For this process, only pure lead ingots are utilized. As permitted on 3/17/2011, there is now one lead casting furnace and a lead repair operation located within building 5471 and a lead school for training located in building 4698. Particulate and lead emissions from both buildings are controlled by a single baghouse. In addition, NNSB conducts some lead casting operations in building 250. The electric lead melting furnace, which is portable, is temporarily moved from building 5471 to building 250 for casting several lead molds at that location over a period of several days. When the lead casting operations in building 250 are complete, the furnace is returned to building 5471. At building 250, the molten lead is ladled by hand into molds, which are mounted on a portable fixture. Ventilation is accomplished by two portable lip vents positioned along either side of the mold and a portable hood placed over the melting furnace. The vents and hood vent to

a dual dust collector. The dust collector is a cartridge type unit with a control efficiency of 99% or better and remains in place at building 250.

Woodworking Operations - Woodworking operations associated with the facility's primary function, shipbuilding, generally occur at three locations. Building No. 3 primarily makes pallets, boxes, and shoring timbers. Equipment used includes moulders, surfacers, saws, planers, lathes, boring machines and drills, shapers, and joiners in various sizes. The model shop is a smaller facility (2,400 square feet) used for fabrication of ships from wood, plastic, or Plexiglas. Full-scale models of these materials are used as training aids, for demonstrations, or for verification of design. Wood is also used to make some mold patterns on the second floor of Building 501 and produce pallets and shipping containers at Building 513. Particulate emissions are controlled by cyclones.

Electroplating - The source previously operated an electroplating plant which performed chrome, silver, zinc, cadmium, lead, copper, and nickel plating, chemical cleaning, pickling, stripping, buffing, and polishing. This operation was subject to 40 CFR 63 Subpart N- National Emission Standards for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks. The source notified DEQ via e-mail on April 8, 2013 that it had permanently shut down the chromium electroplating process on March 5, 2013. The source is no longer subject to the requirements of MACT Subpart N.

Painting/Coating Operations - The facility is subject to 40 CFR 63 Subpart II- National Emission Standards for Shipbuilding and Ship Repair (Surface Coating). Painting/coating operations associated with the facility's primary function, shipbuilding, occur at various locations throughout the facility. Paint booths are located in the fabrication areas and numerous shops (e.g., machine, electric, and hull outfitting). Outside painting occurs in areas such as dry docks, assembly platens, Quonset huts, in the open, under extemporaneous or semi-portable cover, inside, and outside of buildings. Brush, roller, spray, and touch-up painting applications for vessel or non-vessel related items also occur in many operational areas. Paints are generally purchased in small containers (1 to 5 gallons) and then mixed (thinned, if needed) in 5 to 10-gallon paint pots. These pots feed spray gun applicators. In Buildings 274, 275, and 1746, pressurized totes ranging in capacity from 200 to 400 gallons are used. These units are closed-loop to minimize emissions. Unit cleaning is also done in the closed-loop mode. Thinners are purchased in 55-gallon containers. By utilizing relatively small containers rather than large storage tanks, the facility can more effectively meet customer requirements and control quantities of potentially VOC and HAP-containing materials at the facility. The facility was permitted on 2/12/86 for a paint spray room with water wash curtains, associated with the aluminum flame spray facility. The facility also houses a powder coating operation in Building 205 which was initially permitted on 7/10/2000 and amended on 2/14/2001 and 9/2/2011. This unit is a closed-loop system and does not exhaust to the atmosphere. It has been included in the list of insignificant emission units.

Satellite Blast and Coat Facility - The source operates a satellite blast and coat facility for the abrasive blasting and coating of ship assemblies that are too large to house inside the main blast and coat facility. These operations were originally conducted as open, outdoor blasting and painting operations; however, the facility received an NSR permit dated 3/20/2009 to conduct the blasting and coating operations within enclosed fabric-covered shelters. This permit was last amended on 6/7/2010. Particulate emissions from these processes are controlled by portable dust collectors with high efficiency cartridge filters.

Blast and Coat Facility West - This facility is permitted under a minor NSR permit dated November 17, 2014. It is similar in design and operation to the Satellite Blast and Coat Facility (see above). Like the Satellite Blast and Coat Facility, the Blast and Coat Facility West is used for the abrasive blasting and coating of large ship assemblies. Blasting and coating operations take place within enclosed fabric-covered shelters. Particulate emissions from the abrasive blasting process are controlled by portable dust collectors with high efficiency cartridge filters. Particulate emissions from the marine coating processes are controlled by dry filters.

Specialty Shops - Machine shops are located at various locations at the facility. Work at the various machine shops involves metal cleaning, machining, and fabrication of large plates, smaller parts, pipe cutting, and similar activities. Several buildings house very large lathes and milling equipment for turning large metal plates and other large parts.

Piping is fabricated and assembled at the pipe fabrication facility. Equipment includes horizontal boring mills, standard and radial drill presses, lathes, automatic welding machines, standard pipe bending machines, a variable radius pipe roller-bender, pipe threaders, etc. Metal machining and surface preparation are also performed at the pipe fabrication facility. Electrical shops are located at several locations at the facility, manufacturing, maintaining, testing and repairing electrical equipment of all sizes. While the above operations handle metal parts, plastic components are processed by the melamine operations. Particulate emissions are exhausted to cyclones or baghouses. There are also facility-wide parts washer operations that use cleaning solvents that have been determined not subject to 40 CFR Part 63 Subpart T - National Emissions Standards for Halogenated Solvent Cleaning.

Miscellaneous Activities - Other miscellaneous activities at the source include facility-wide abrasive blasting, grit off-loading, grinding, cutting, welding/brazing, gluing, solvent usage, ship mock-ups, wastewater treatment, asbestos handling, shipboard foam installation applications, vessel cleaning, radionuclides, general plant activities (painting, welding, sandblasting, general carpentry, parts cleaning, vehicle maintenance, offset printing, blueprinting, copying, and firefighting), two gasoline service stations, and research and development activities. Facility-wide abrasive blasting, grit off-loading, and welding/brazing listed under FAC-BLAST, FAC-GRIT, and FAC-WELD, respectively, include only those activities that have to be done outside without controls. Note that the blasting units (205-B1 and 205-B2) for the powder coating operation (NSR permit dated 9/2/2011) are addressed in this section.

Also addressed here are the remediation activities which are mainly regulated by the RCRA program (FAC-REMED). Predicted VOC and HAP emissions from the Vapor Extraction System have been determined to be exempt from minor NSR permitting, as well as qualify for the exemption from MACT Subpart GGGGG except for the recordkeeping requirements in 40 CFR 63.7881(c) (2) (See VA DEQ letter dated 11/28/2007).

Storage Tanks - Storage tanks ranging in size from <1,000 gallons up to 500,000 gallons are located at the facility. Most tanks are used for storage of petroleum related materials including No. 6 fuel oil, diesel oil, waste oil, and oily wastewater. Some process related storage tanks are pressurized, e.g., varnish tanks. Totes (200 to 400 gallons), 55-gallon drums, and pots (5 to 10 gallons) are used for painting activities. One 10,000-gallon underground storage tank serves the gasoline service stations. The facility utilizes propane for heaters, dryers, and ovens. Three 30,000-gallon storage tanks and one 70,000-gallon tank are used to supply these units. Natural gas is also used in some areas of the yard and is supplied by outside commercial suppliers through trunk lines. None of the tanks are subject to NSPS Subpart Kb or 9 VAC 5-40-3410 (Rule 4-25), and all tanks qualify as insignificant activities.

II. Emission Units

Equipment to be operated consists of:

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
Fuel Burning Equipment/Steam Boilers and Liquid Propane Vaporizers							
FTSF-E1	FTSF-S1	No. 6 fuel oil-fired barge-mounted boiler, Combustion Engineering Model V2M-8, pre-1983	213.26 MMBTU/hr	Low-NOx burners (TO BE INSTALLED)	TBD	NOx	3/10/15 NSR Permit
FTSF-E2	FTSF-S2	No. 6 fuel oil-fired barge-mounted boiler, Combustion Engineering Model V2M-8, pre-1983	213.26 MMBTU/hr	Low-NOx burners (TO BE INSTALLED)	TBD	NOx	3/10/15 NSR Permit
78-E1	78-S1	No. 6 fuel oil-fired powerhouse boiler, B&W Integral Furnace, 1948	136.2 MMBtu/hr	–	–	–	3/10/15 NSR Permit
78-E2	78-S1	No. 6 fuel oil-fired powerhouse boiler, B&W Integral Furnace, 1948	136.2 MMBtu/hr	–	–	–	3/10/15 NSR Permit
78-E3	78-S1	No. 6 fuel oil-fired powerhouse boiler, B&W Integral Furnace, 1948	136.2 MMBtu/hr	–	–	–	3/10/15 NSR Permit
78-E4	TBD	Natural gas/propane-fired powerhouse boiler (TO BE INSTALLED)	99.4 MMBTU/hr	Low-NOx burners with flue-gas recirculation	TBD	NOx	3/10/15 NSR Permit
78-E5	TBD	Natural gas/propane-fired powerhouse boiler (TO BE INSTALLED)	145 MMBTU/hr	Low-NOx burners with flue-gas recirculation	TBD	NOx	3/10/15 NSR Permit
78-E6	TBD	Natural gas/propane-fired powerhouse boiler (TO BE INSTALLED)	145 MMBTU/hr	Low-NOx burners with flue-gas recirculation	TBD	NOx	3/10/15 NSR Permit

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
LPV-E1	TBD	Liquid propane vaporizer - Algas SDI, utility grade indirect fired horizontal water bath LP-gas vaporizer, Aquavaire model Q3300H (TO BE INSTALLED)	3.8 MMBtu/hr	-	-	-	3/10/15 NSR Permit
LPV-E2	TBD	Liquid propane vaporizer - Algas SDI, utility grade indirect fired horizontal water bath LP-gas vaporizer, Aquavaire model Q3300H (TO BE INSTALLED)	3.8 MMBtu/hr	-	-	-	3/10/15 NSR Permit
1744-E4	1744-S4	North Yard Steam Boiler #1 (natural gas)	2.343 MMBtu/hr	-	-	-	-
1744-E5	1744-S5	North Yard Steam Boiler #2 (natural gas)	2.343 MMBtu/hr	-	-	-	-
Process Heaters (subject to 40 CFR 63, Subpart DDDDD)							
205-E1	205-S4	Small Hot Forming Furnace (propane)	0.4 MMBtu/hr	-	-	-	-
205-E2	205-S5	Rod Furnace (propane)	0.8 MMBtu/hr	-	-	-	-
274-E2	274-S2	Binks Dryer (propane)	0.9 MMBtu/hr	-	-	-	-
274-E3	274-S3	Binks Dryer (propane)	2.4 MMBtu/hr	-	-	-	-
274-E4	274-S4	Space Heater Flat Prep Inspection (propane)	1.875 MMBtu/hr	-	-	-	-
274-E5	274-S5	Space Heater Flat Prep Inspection (propane)	0.562 MMBtu/hr	-	-	-	-

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
274-E6	274-S6	Space Heater Flat Prep Inspection (propane)	0.562 MMBtu/hr	-	-	-	-
274-E7	274-S7	Space Heater Flat Prep Inspection (propane)	1.88 MMBtu/hr	-	-	-	-
274-E8	274-S8	Space Heater Flat Prep Inspection (propane)	0.56 MMBtu/hr	-	-	-	-
274-E9	274-S9	Wing Heat - Space Heater Flat Prep Inspection (propane)	0.4 MMBtu/hr	-	-	-	-
274-E10	274-S10	Wing Heat - Space Heater Flat Prep Inspection (propane)	0.4 MMBtu/hr	-	-	-	-
274-E11	274-S11	Wing Heat - Space Heater Flat Prep Inspection (propane)	0.4 MMBtu/hr	-	-	-	-
550-E6	550-S6	Core Drying Oven (propane)	2.5 MMBtu/hr	-	-	-	-
4681-E1	4681-S1	Phosphate Line Bake Oven (natural gas)	4.2 MMBtu/hr	-	-	-	-
4681-E2	4681-S2	Phosphate Line Dry-Off Oven (natural gas)	4.2 MMBtu/hr	-	-	-	-
550-E15	550-S15	#3 Furnace, #39386 (propane)	1.3 MMBtu/hr	-	-	-	-
60-E4	60-S4	Curing Oven - Main Machine Shop (w/ filter) (propane)	0.175 MMBtu/hr	-	-	-	-

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
276-E5	276-S5	Oven (propane)	2.58 MMBtu/hr	-	-	-	-
275-E1	275-S1	Drying Oven - Shape Prep (propane)	3.2 MMBtu/hr	-	-	-	-
275-E2	275-S2	Preheat Oven - Shape Prep (propane)	1.88 MMBtu/hr	-	-	-	-
275-E3	275-S3	Preheat Oven - Shape Prep (propane)	1.88 MMBtu/hr	-	-	-	-
64-E3	64-S3	Bayco burn-out oven, Model BB-288, using propane, 1979	1.5 MMBTU/hr	Afterburner, 1 MMBTU/hr	64-C3	PM	10/18/1979 NSR Permit
550-E22	550-S22	#1 Furnace, #44417 (propane)	5.0 MMBtu/hr	-	-	-	-
4702-EF2	4702-S1	Paint Booth - Space Heater (propane)	1.089 MMBtu/hr	-	-	-	-
Hot Water Boilers (subject to 40 CFR 63, Subpart DDDDD)							
521-E1	521-S1	Natural gas-fired hot water boiler (24 gal tank)	2 MMBtu/hr	-	-	-	-
521-E2	521-S2	Natural gas-fired hot water boiler (24 gal tank)	2 MMBtu/hr	-	-	-	-
521-E3	521-S3	Natural gas-fired hot water boiler (24 gal tank)	2 MMBtu/hr	-	-	-	-
521-E4	521-S4	Natural gas-fired hot water boiler (24 gal tank)	2 MMBtu/hr	-	-	-	-
521-E5	521-S5	Natural gas-fired hot water boiler (24 gal tank)	2 MMBtu/hr	-	-	-	-

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
1877-E1	1877-S1	Natural gas-fired hot water boiler (unknown tank size)	3 MMBtu/hr	-	-	-	-
1796-E1	1796-S1	Natural gas-fired hot water boiler (24 gal tank)	2 MMBtu/hr	-	-	-	-
4678-E1	4678-S1	Natural gas-fired hot water boiler (31 gal tank)	2 MMBtu/hr	-	-	-	-
4678-E2	4678-S2	Natural gas-fired hot water boiler (31 gal tank)	2 MMBtu/hr	-	-	-	-
4678-E3	4678-S3	Natural gas-fired hot water boiler (31 gal tank)	2 MMBtu/hr	-	-	-	-
Fuel Burning Equipment - Steel Preparation and Fabrication							
276-E1	276-S1	Propane-fired oven, construction date unknown	15.3 MMBTU/hr	-	-	-	-
276-E2	276-S2	Propane-fired Ray Campbell Furnace, construction date unknown	15.4 MMBTU/hr	-	-	-	-
Fuel Burning Equipment - Foundry							
550-E8	550-S8	Propane-fired heat treating furnace # 5784	15.3 MMBTU/hr	-	-	-	-
550-E9	550-S9	Propane-fired heat treating furnace # 5302	27 MMBTU/hr	-	-	-	-
550-E13	550-S13	Propane-fired heat treating furnace #57531	12 MMBTU/hr	-	-	-	-
Fuel Burning Equipment - Miscellaneous Activities							
1278-E1	1278-S1	Annealing oven- Northside, #2 oil	20.79 MMBTU/hr	-	-	-	-
Engines/Generators							

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
GSE-10006657	-	Emergency generator, stationary, diesel Mfr Date: 1976; Install Date: 12/1/76	125 kW 108.3 hp	-	-	-	-
GSE-10006525	-	Emergency generator, stationary, diesel Mfr Date: 1976; Install Date: 12/1/76	210 kW 350 hp	-	-	-	-
GSE-10006537	-	Emergency generator, stationary, diesel Mfr Date: 1976; Install Date: 12/1/76	565 kW 805 hp	-	-	-	-
GSE-10006847	-	Emergency generator, stationary, diesel Mfr Date: 1977; Install Date: 12/1/77	210 kW 350.1 hp	-	-	-	-
GSE-10002521	-	Emergency generator, stationary, diesel Mfr Date: 1980; Install Date: 11/1/80	155 kW 258.3 hp	-	-	-	-
GSE-10002509	-	Emergency generator, stationary, diesel Mfr Date: 1980; Install Date: 11/1/80	155 kW 258.3 hp	-	-	-	-
GSE-10005521	-	Emergency generator, stationary, diesel Mfr Date: 1980; Install Date: 4/1/81	730 kW 1216.7 hp	-	-	-	-
GSE-10002704	-	Emergency generator, stationary, diesel Mfr Date: 1981; Install Date: 8/1/81	250 kW 470 hp	-	-	-	-
GSE-10003018	-	Emergency generator, stationary, diesel Mfr Date: 1982; Install Date: 9/1/82	1100 kW 1833.3 hp	-	-	-	-
GSE-10003655	-	Emergency generator, stationary, diesel Mfr Date: 1984; Install Date: 7/1/84	242 kW 375 hp	-	-	-	-
GSE-10003735	-	Emergency generator, stationary, diesel Mfr Date: 1984; Install Date: 12/1/84	500 kW 833.3 hp	-	-	-	-
GSE-10003942	-	Emergency generator, stationary, diesel Mfr Date: 1984; Install Date: 6/1/85	50 kW 82 hp	-	-	-	-
GSE-10003998	-	Emergency generator, stationary, diesel Mfr Date: 1985; Install Date: 12/1/85	30 kW 50.1 hp	-	-	-	-
GSE-10003995	-	Emergency generator, stationary, diesel Mfr Date: 1985; Install Date: 12/1/85	30 kW 50.1 hp	-	-	-	-
GSE-10003992	-	Emergency generator, stationary, diesel Mfr Date: 1985; Install Date: 12/1/85	30 kW 50.1 hp	-	-	-	-
GSE-10004007	-	Emergency generator, stationary, diesel Mfr Date: 1985; Install Date: 12/1/85	30 kW 50.1 hp	-	-	-	-
GSE-10006964	-	Emergency generator, stationary, diesel Mfr Date: 1985; Install Date: 12/1/85	30 kW 50.1 hp	-	-	-	-

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
GSE-10004013	-	Emergency generator, stationary, diesel Mfr Date: 1985; Install Date: 12/1/85	50 kW 83.3 hp	-	-	-	-
GSE-10006991	-	Emergency generator, stationary, diesel Mfr Date: 1985; Install Date: 12/1/85	50 kW 83.3 hp	-	-	-	-
GSE-10004005	-	Emergency generator, stationary, diesel Mfr Date: 1985; Install Date: 12/1/85	175 kW 355 hp	-	-	-	-
GSE-10004043	-	Emergency generator, stationary, diesel Mfr Date: 1985; Install Date: 12/1/85	250 kW 425 hp	-	-	-	-
GSE-10004745	-	Emergency generator, stationary, diesel Mfr Date: 1987; Install Date: 12/1/87	35 kW 58.3 hp	-	-	-	-
GSE-10004528	-	Emergency generator, stationary, diesel Mfr Date: 1987; Install Date: 12/1/87	1100 kW 1833.3 hp	-	-	-	-
GSE-10004569	-	Emergency generator, stationary, diesel Mfr Date: 1987; Install Date: 12/1/87	1100 kW 1833.3 hp	-	-	-	-
GSE-10004860	-	Emergency generator, stationary, diesel Mfr Date: 1989; Install Date: 1/1/90	35 kW 58.3 hp	-	-	-	-
GSE-7000001092	-	Emergency generator, stationary, diesel Mfr Date: 1989; Install Date: 1/1/90	1050 kW 1620 hp	-	-	-	-
GSE-10005070	-	Emergency generator, stationary, diesel Mfr Date: 1991; Install Date: 3/1/92	140 kW 268 hp	-	-	-	-
GSE-10005144	-	Emergency generator, stationary, diesel Mfr Date: 1991; Install Date: 5/1/92	350 kW 535 hp	-	-	-	-
GSE-10005145	-	Emergency generator, stationary, diesel Mfr Date: 1991; Install Date: 5/1/92	350 kW 535 hp	-	-	-	-
GSE-10008532	-	Emergency generator, stationary, diesel Mfr Date: 1997; Install Date: 1/23/98	60 kW 100 hp	-	-	-	-
GSE-10008534	-	Emergency generator, stationary, diesel Mfr Date: 1997; Install Date: 1/23/98	60 kW 100 hp	-	-	-	-
GSE-10008530	-	Emergency generator, stationary, diesel Mfr Date: 1997; Install Date: 1/23/98	60 kW 100 hp	-	-	-	-
GSE-10008531	-	Emergency generator, stationary, diesel Mfr Date: 1997; Install Date: 1/23/98	60 kW 100 hp	-	-	-	-
GSE-10008536	-	Emergency generator, stationary, diesel Mfr Date: 1997; Install Date: 1/23/98	60 kW 100 hp	-	-	-	-

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
GSE-10008537	-	Emergency generator, stationary, diesel Mfr Date: 1997; Install Date: 1/23/98	60 kW 100 hp	-	-	-	-
GSE-10008478	-	Emergency generator, stationary, diesel Mfr Date: 1999; Install Date: 1/1/99	400 kW 449 hp	-	-	-	-
GSE-10015352	-	Emergency generator, stationary, diesel Mfr Date: 2004; Install Date: 8/30/04	355 kW 591.7 hp	-	-	-	-
GSE-10024319	-	Emergency generator, stationary, diesel Mfr Date: 2004; Install Date: 1/1/05	100 kW 166.7 hp	-	-	-	-
GSE-10015903	-	Emergency generator, stationary, diesel Mfr Date: 2004; Install Date: 1/15/05	350 kW 583.3 hp	-	-	-	-
GSE-10018416	-	Emergency generator, stationary, diesel Mfr Date: 2006; Install Date: 1/1/07	350 kW 476 hp	-	-	-	-
GSE-10017399	-	Emergency generator, stationary, diesel Mfr Date: 2006; Install Date: 1/11/07	60 kW 100.1 hp	-	-	-	-
GSE-10018465	-	Emergency generator, stationary, diesel Mfr Date: 2005; Install Date: 2/18/07	60 kW 100 hp	-	-	-	-
PSF-10017424	-	Emergency fire pump, stationary, diesel Mfr Date: 2006; Install Date: 2/18/07	336 kW 450 hp	-	-	-	-
GSE-10018464	-	Emergency generator, stationary, diesel Mfr Date: 2005; Install Date: 2/18/07	500 kW 764 hp	-	-	-	-
GSE-10018413	-	Emergency generator, stationary, diesel Mfr Date: 2006; Install Date: 6/22/07	60 kW 100.1 hp	-	-	-	-
GSE-10018412	-	Emergency generator, stationary, diesel Mfr Date: 2006; Install Date: 6/22/07	60 kW 100.1 hp	-	-	-	-
PSE-10018737	-	Emergency pump (not fire), stationary, diesel Mfr Date: 2007; Install Date: 1/25/08	403 kW 540 hp	-	-	-	-
PSE-10018735	-	Emergency pump (not fire), stationary, diesel Mfr Date: 2007; Install Date: 1/25/08	403 kW 540 hp	-	-	-	-
GSE-10022299	-	Emergency generator, stationary, diesel Mfr Date: 2009; Install Date: 12/4/09	80 kW 133.1 hp	-	-	-	-
PSF-10022335	-	Emergency fire pump, stationary, diesel Mfr Date: 2009; Install Date: 1/31/10	160 hp	-	-	-	-

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
GSE-10025550	-	Emergency generator, stationary, diesel Mfr Date: 2011; Install Date: 10/15/11	2000 kW 2937 hp	-	-	-	11/21/11 NSR Permit
GSE-10025551	-	Emergency generator, stationary, diesel Mfr Date: 2011; Install Date: 10/15/11	2000 kW 2937 hp	-	-	-	11/21/11 NSR Permit
GSE-10028237	-	Emergency generator, stationary, diesel Mfr Date: 2012; Install Date: 10/9/12	300 kW 402 hp	-	-	-	-
PSF-10028208	-	Emergency fire pump, stationary, diesel Mfr Date: 2012; Install Date: 3/1/13	175 hp	-	-	-	-
Foundry Operations							
550-E1	550-S1	Argon/Oxygen Degassing Furnace, Whiting Corporation	25 tons/hr	Cartridge Filter system, Donaldson Torit- Downflo Oval 4-128, 99.9% design control efficiency	550-C1a	PM	10/17/14 NSR Permit
550-E3		Electric Arc Furnace B	3 tons/hr				3/17/11 NSR Permit
550-E4		Electric Arc Furnace C	6 tons/hr				3/2/12 Exemption Letter
FDFS-E1		Foundry Dry Feed System	2.2 lbs/hr				-
550-E12		Riser Burn Booth, hand torches	0.068 tons/hr				-
550-EF1	-	Charging/Tapping Operations	12.5 tons/hr	-	-	-	-
550-EF2	-	Pouring casting/Casting cooling Operation	25 tons/hr	-	-	-	-
550-EF3		Mold Making	N/A	-	-	-	-

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
550-EF5	_	Shakeout Operations	N/A	_	_	_	_
550-E20	550-S20	Steel Shot Abrasive Blasting, #5610	6 tons/hr	Cartridge Filter System, Donaldson Torit - Downflo Oval 4-48, 99.9% design control efficiency	550-C20	PM	_
550-E21	550-S21	Sawing operation, #5616	0.01 tons/hr	Cyclone, 70% design control efficiency	550-C21	PM	_
555-E11	555-S11	Sand Reclaim Operations, hopper	12.5 tons/hr	Baghouse, Standard Havens Alpha Mark III, size 24 SH, #34561, 95% design control efficiency	555-C11	PM	_
555-EF3	_	Riser Burn Area, #34561, hand torches	0.068 ton/hr	_	_	_	_
528-EF2	_	Riser Burn Area	N/A	_	_	_	_
556-EF1	_	Electric Induction Furnaces (4 each)	0.5 to 4 tons	_	_	_	_
556-EF3	_	Pouring casting/Casting cooling Operation	4 ton/hr	_	_	_	_
Steel Preparation and Fabrication Operations							
274-E1	274-S1	Abrasive Shot Blasting	2.5 tons/hr	Wheelabrator #19, Model 126D, 95% design control efficiency	274-C1	PM	_
275-E5	275-S5	Abrasive Shot Blasting	2.5 tons/hr	Pangborn C70, Type CM, 95% design control efficiency	275-C5	PM	_
276-E3PC	Building vents	Plasma Cutting	_	_	_	_	_

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
288-E1	288-S1	Abrasive Blasting- Steel shots	2.5 tons/hr	RF Cox Associates baghouse, 95% design control efficiency	288-C1	PM	-
288-E2	288-S2	Abrasive Blasting- Steel shots	2.5 tons/hr	RF Cox Associates baghouse, 95% design control efficiency	288-C2	PM	-
288-E3	288-S3	Abrasive Blasting- Steel shots	2.5 tons/hr	RF Cox Associates baghouse, 95% design control efficiency	288-C3	PM	-
Secondary Lead Processing							
4582-E12	4582-S2	One (1) Lead Casting Furnace and Lead Repair Operation, located in building 5471	4.7 tons/hr	Baghouse, Standard Havens Alpha Mark III 18, 99.0% design control efficiency	4582-C2	PM	3/17/11 NSR Permit
4582-E12		Additional operating location of Unit #4582-E12 at Bldg 250	4.7 tons/hr				
LS-E1	4582-S2	Lead School (for training) with 3 work stations, located in building 4698	0.05 tons/hr				
Wood Working							
3-E1	3-S1	Cutting/Planer/Re-saw	-	Cyclone, 90.0% design control efficiency	3-C1	PM	-
501-E2	501-S2	Foundry Pattern Shop - wood cutting machines	-	Cyclone, 90.0% design control efficiency	501-C2	PM	-
513-E1	513-S1	Warehouse No. 6 Saws	-	Cyclone, 90.0% design control efficiency	513-C1	PM	-

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
Painting Operations							
Painting Operations/Group P-X33							
232-E1 through E6	232-S1 through S6	Consolidated Paint Facility, 2 banks of 3 paint booths each (6 total)	-	Binks Dynaprecipitator, water wash curtain, 98% design control efficiency	232-C1 through C6	PM-10	-
4681-E3	4681-S3	Metal Finishing Bldg, paint booth, manual	-	Greenline Corporation, water wash curtain, 98% design control efficiency	4681-C2	PM-10	-
4681-E4	4681-S4	Metal Finishing Bldg, paint booth (Zn phosphate coating line), automated	-	Greenline Corporation, water wash curtain, 98% design control efficiency	4681-C3	PM-10	-
4701-E10	4701-S10	Aluminum Wire Flame Spray booth, manual	-	Global Finishing Solutions water wash curtains, 98% design control efficiency	4701-C10	PM-10	2/12/86 NSR Permit
4701-E11	4701-S11	Aluminum Wire Flame Spray booth, manual	-	Global Finishing Solutions water wash curtains, 98% design control efficiency	4701-C11	PM-10	2/12/86 NSR Permit
4701-E12	4701-S12	Flame Spray Facility paint booth, north unit, manual	-	Global Finishing Solutions water wash curtains, 98% design control efficiency	4701-C12	PM-10	2/12/86 NSR Permit
4701-E13	4701-S13	Flame Spray Facility paint booth, south unit, manual	-	Global Finishing Solutions water wash curtains, 98% design control efficiency	4701-C13	PM-10	2/12/86 NSR Permit
4702-E1	4702-S1	Paint Spray Bldg, antenna paint booth	-	Filter (paper), JBI Automatic Spray Booth, 90% design control efficiency	4702-C1	PM-10	-

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
4730-NP	4730-NPFE	Grit Blast & Paint Facility, North Paint Room	-	Filter (paper), 90% design control efficiency	4730-NPC	PM-10	-
4730-SP	4730-SPFE	Grit Blast & Paint Facility, South Paint Room	-	Filter (paper), 90% design control efficiency	4730-SPC	PM-10	-
60-E5	-	Engraving	-	-	-	-	-
Painting Operations/P-SHIPSPRAY							
P-SHIPSPRAY	-	Outside Vessel Painting- manual spray painting	-	-	-	-	-
Painting Operations/P-SHIPBRUSH							
P-SHIPBRUSH	-	General facility-wide marine coating operations, brush, roller, and touch-up application on vessels and vessel parts- manual brush painting	-	-	-	-	-
Painting Operations/Powder Coating Operation							

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
205-C1a 205-C1b 205-C1c	205-C1aS 205-C1bS 205-C1cS	Parts Washer with three burners, natural gas-fired, Eclipse Imersojet IJ6	One burner rated at 2.0 MMBTU/hr and two burners rated at 1.3 MMBTU/hr each	-	-	-	9/2/11 NSR Permit
205-C2	205-C2S	Preheat oven, natural gas-fired, Eclipse AH520	Burner and evaporator rated at 5.5 MMBTU/hr	-	-	-	9/2/11 NSR Permit
205-C3	205-C3S	Cure oven, , natural gas-fired, Eclipse AH520	Burner and evaporator rated at 5.5 MMBTU/hr	-	-	-	9/2/11 NSR Permit
206-C1	206-C1S	Heat cleaning oven, propane-fired, Steelman Model 4.56.54 BA-C	0.6 MMBTU/hr	Direct Flame Afterburner, 99.0% design control efficiency	206-C1C	VOC	9/2/11 NSR Permit
Painting Operations/Group P-X15							
274-E13	274-S13	Plate Preparation & Inspection, paint booth	-	Dry filter (paper), 90% design control efficiency	274-C13	PM-10	-
275-E4 and 275-E6	275-S4 and 275-S6, resp.	Shape Preparation, paint booths (two)	-	Dry filter (paper), 90% design control efficiency	275-C4 and 275-C6, resp.	PM-10	-
Painting Operations/Group P-FAC							
P-FAC	-	General facility-wide non-vessel brush, roller, spray and touch-up painting operations- manual brush and spray painting	-	-	-	-	-
103-E2	103-S2	Maintenance Shop, paint booth	-	Filter (paper), 90% design control efficiency	103-C2	PM-10	-

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
Satellite Blast and Coat Facility							
SBF-E1	SBF-S1	Abrasive blasting process equipment, located in an enclosed fabric-covered shelter, custom design	18,000 lbs/hr	Portable dust collectors w/ high efficiency cartridge filters, 99% design control efficiency	SBF-C1	PM/PM-10	6/7/10 NSR Permit
SPF-E1	SPF-S2	Marine coating process equipment, located in an enclosed fabric-covered shelter, custom design	76.8 gal coating/hr	Portable dust collectors w/ high efficiency cartridge filters, 99% design control efficiency	SPF-C1	PM/PM-10	6/7/10 NSR Permit
Blast and Coat Facility West							
4730-SBCF-E1	4730-SBCF-S1	Abrasive blasting process equipment, located in an enclosed fabric-covered shelter, custom design	18,000 lbs/hr	Portable dust collectors w/ high efficiency cartridge filters, 99.999% design control efficiency	4730-SBCF-C1	PM/PM-10	11/17/14 NSR Permit
4730-SBCF-E2	4730-SBCF-S2	Marine coating process equipment, located in an enclosed fabric-covered shelter, custom design	96 gal coating/hr	Dry filters, 99% control efficiency	4730-SBCF-C2	PM/PM-10	11/17/14 NSR Permit
4730-SBCF-E3	4730-SBCF-S3	Marine coating process equipment, located in an enclosed fabric-covered shelter, custom design	96 gal coating/hr	Dry filters, 99% control efficiency	4730-SBCF-C3	PM/PM-10	11/17/14 NSR Permit
Specialty Shops							
64-E1	64-S1	Electrical Shop drill press/sander (not used for wood)	–	Cyclone, 90% design control efficiency	64-C1	PM	–
64-E9		Grinding metal	–			PM	–
64-E2	64-S2	Electrical Shop saw	–	Baghouse, 95% design control efficiency	64-C2	PM	–
60-E2	60-S2	Grinding operations	–	Cartridge filters Donaldson Torit Downflow DFO3-12, 99% design control efficiency	60-C2	PM	–

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
114-E1	114-S1	Saw metals	–	Cartridge filters Donaldson Torit Downflow 2DF8, #40859, 99% design control efficiency	114-C1	PM	–
4896-E1	4896-S1	Melamine Operations (2 Milling Machines, Band Saw, and Lathe)	–	Dust collector, Donaldson Torit Model 90-219-5, 99% control efficiency	4896-C1	PM	–
FAC-PW	Building vents	Facility-wide parts- washer operations	–	–	–	–	–
Miscellaneous Activities							
FAC-BLST	–	External abrasive blasting - facility-wide	–	–	–	–	–
FAC-GRIT	–	Utility grit off-loading	–	–	–	–	–
50-E1	50-S1	Wheelabrator #11980 Table Blast Unit -Abrasive blasting/steel shots	2.5 tons/hr	Cartridge filters, Torit Ultraweb Downflow II DFT3-12, 99% design control efficiency	50-C1	PM	–
4730-NB	4730-NR (Northside Reclaim)	Abrasive blasting/steel shot - North Blast Room	–	Torit Ultraweb Cartridge Dust collector, 99.0% design control efficiency	4730-NRC	PM	–
	4730-NLE (Northside Local Exhaust)		–	Torit Ultraweb Cartridge Dust collector, 99.0% design control efficiency	4730-NLC	PM	–
4730-SB	4730-SR (Southside Reclaim)	Abrasive blasting/steel shot - South Blast Room	–	Torit Ultraweb Cartridge Dust collector, 99.0% design control	4730-SRC	PM	–

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
	4730-SLE (Southside Local Exhaust)		-	Torit Ultraweb Cartridge Dust collector, 99.0% design control efficiency	4730-SLC	PM	-
201-E1	201-S1	Abrasive blasting/steel shot (10/1970), Wheelabrator #7614	2.5 tons/hr	Cartridge filters Torit UltraWeb Downflow DFO3-12, 99% design control efficiency	201-C1	PM	-
PORT-DC	Various	Various portable dust collectors for abrasive blasting and welding operations	-	Various portable dust collectors	Various	PM	-
4701-E1	4701-S1	Abrasive blasting/steel grit, garnet, aluminum oxide	384 lbs/hr	Baghouse, MISCO/IPEC custom-made units, 95 % design control efficiency	4701-C1	PM	-
1768-E1	1768-S1	Grinding/cutting/welding - Welding School	-	Cyclone, Torit, 90 % design control efficiency	1768-C1	PM	-
FAC-BLAST	-	Abrasive blasting - facility-wide	-	-	-	-	-
FAC-WELD	-	Welding - facility-wide	-	-	-	-	-
FAC-GLUE	-	Gluing operations - facility-wide	-	-	-	-	-
FAC-SOLV	-	Solvent/thinner usage - facility-wide	-	-	-	-	-
SS-E1	-	Service station - gasoline	-	-	-	-	-

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
SS-E2	–	Service station - diesel	–	–	–	–	–
5-E2	5-S2	Wheelabrator /Tumblast Machine (Blast Unit)- Abrasive Blasting /steel shots	2.5 tons/hr	Baghouse, Wheelabrator Dustube Model 112-AC, 95.0% design control efficiency	5-C2	PM	–
205-B1	205-S1	Powder coating steel shot blast unit	–	Baghouse, Wheelabrator USF 44, design control efficiency 95%	205-BC1	PM	9/2/11 NSR Permit
205-B2	205-S2	Powder coating steel shot blast unit	–	Baghouse, Pangborn Model 25-5-8, Type HP-1, design control efficiency 95%	205-BC2	PM	9/2/11 NSR Permit
FAC-REMEDI	–	HAP contained in remediation materials removed during all site remediation, as defined in 40 CFR §63.7657	–	–	–	–	–

*The Size/Rated capacity and PCD efficiency is provided for informational purposes only, and is not an applicable requirement.

III. Boiler Requirements - Small Boilers and Process Heaters

A. Limitations

Unit Reference No.	Name/Description of Unit	Pollutants	Description of Applicable Requirement/ Emission Limit/Standard/Work Practice	Citation
Boilers				
1744-E4	North Yard Steam Boiler #1 (natural gas)	HAP	See Condition 2 below	40 CFR 63, Subpart DDDDD
1744-E5	North Yard Steam Boiler #2 (natural gas)	HAP	See Condition 2 below	40 CFR 63, Subpart DDDDD
Process Heaters				
205-E1	Small Hot Forming Furnace (propane)	HAP	See Condition 2 below	40 CFR 63, Subpart DDDDD
205-E2	Rod Furnace (propane)	HAP	See Condition 2 below	40 CFR 63, Subpart DDDDD
274-E2	Binks Dryer (propane)	HAP	See Condition 2 below	40 CFR 63, Subpart DDDDD
274-E3	Binks Dryer (propane)	HAP	See Condition 2 below	40 CFR 63, Subpart DDDDD
274-E4	Space Heater Flat Prep Inspection (propane)	HAP	See Condition 2 below	40 CFR 63, Subpart DDDDD
274-E5	Space Heater Flat Prep Inspection (propane)	HAP	See Condition 2 below	40 CFR 63, Subpart DDDDD
274-E6	Space Heater Flat Prep Inspection (propane)	HAP	See Condition 2 below	40 CFR 63, Subpart DDDDD
274-E7	Space Heater Flat Prep Inspection (propane)	HAP	See Condition 2 below	40 CFR 63, Subpart DDDDD
274-E8	Space Heater Flat Prep Inspection (propane)	HAP	See Condition 2 below	40 CFR 63, Subpart DDDDD

Unit Reference No.	Name/Description of Unit	Pollutants	Description of Applicable Requirement/ Emission Limit/Standard/Work Practice	Citation
274-E9	Wing Heat - Space Heater Flat Prep Inspection (propane)	HAP	See Condition 2 below	40 CFR 63, Subpart DDDDD
274-E10	Wing Heat - Space Heater Flat Prep Inspection (propane)	HAP	See Condition 2 below	40 CFR 63, Subpart DDDDD
274-E11	Wing Heat - Space Heater Flat Prep Inspection (propane)	HAP	See Condition 2 below	40 CFR 63, Subpart DDDDD
550-E6	Core Drying Oven (propane)	HAP	See Condition 2 below	40 CFR 63, Subpart DDDDD
4681-E1	Phosphate Line Bake Oven (natural gas)	HAP	See Condition 2 below	40 CFR 63, Subpart DDDDD
4681-E2	Phosphate Line Dry-Off Oven (natural gas)	HAP	See Condition 2 below	40 CFR 63, Subpart DDDDD
550-E15	#3 Furnace, #39386 (propane)	HAP	See Condition 2 below	40 CFR 63, Subpart DDDDD
60-E4	Curing Oven - Main Machine Shop (w/ filter) (propane)	HAP	See Condition 2 below	40 CFR 63, Subpart DDDDD
276-E5	Oven (propane)	HAP	See Condition 2 below	40 CFR 63, Subpart DDDDD
275-E1	Drying Oven - Shape Prep (propane)	HAP	See Condition 2 below	40 CFR 63, Subpart DDDDD
275-E2	Preheat Oven - Shape Prep (propane)	HAP	See Condition 2 below	40 CFR 63, Subpart DDDDD
275-E3	Preheat Oven - Shape Prep (propane)	HAP	See Condition 2 below	40 CFR 63, Subpart DDDDD
64-E3	Bayco burn-out oven, Model BB-288, using propane, 1979	HAP	See Condition 2 below	40 CFR 63, Subpart DDDDD

Unit Reference No.	Name/Description of Unit	Pollutants	Description of Applicable Requirement/ Emission Limit/Standard/Work Practice	Citation
550-E22	#1 Furnace, #44417 (propane)	HAP	See Condition 2 below	40 CFR 63, Subpart DDDDD
4702-EF2	Paint Booth - Space Heater (propane)	HAP	See Condition 2 below	40 CFR 63, Subpart DDDDD
Fuel Burning Equipment - Steel Preparation and Fabrication				
276-E1	Oven (propane)	PM	PM emissions shall not exceed E lbs/MMBTU as calculated by the equation $E=1.0906H^{0.2594}$, where H is the total capacity in MMBTU/hour	9 VAC 5-40-900
		SO ₂	SO ₂ emissions shall not exceed 2.64 lbs/MMBTU	9 VAC 5-40-930
276-E2	Ray Campbell Furnace (propane)	OPACITY	Opacity limited to 20% except for one 6-minute period in each hour in which opacity shall not exceed 60%	9 VAC 5-40-940B
		HAP	See Condition 2 below	40 CFR 63, Subpart DDDDD
Fuel Burning Equipment - Foundry				
550-E8	#4 Heat Treating Furnace, #5784 (propane)	PM	PM emissions shall not exceed E lbs/MMBTU as calculated by the equation $E=1.0906H^{0.2594}$, where H is the total capacity in MMBTU/hour	9 VAC 5-40-900
550-E9	#5 Heat Treating Furnace, #5302 (propane)	SO ₂	SO ₂ emissions shall not exceed 2.64 lbs/MMBTU	9 VAC 5-40-930
		OPACITY	Opacity limited to 20% except for one 6-minute period in each hour in which opacity shall not exceed 60%	9 VAC 5-40-940B
550-E13	#2 Heat Treating Furnace, #57531 (propane)	HAP	See Condition 2 below	40 CFR 63, Subpart DDDDD
Fuel Burning Equipment - Miscellaneous Activities				
1278-E1	Annealing oven-Northside (distillate oil)	PM	PM emissions shall not exceed E lbs/MMBTU as calculated by the equation $E=1.0906H^{0.2594}$, where H is the total capacity in MMBTU/hour	9 VAC 5-40-900
		SO ₂	SO ₂ emissions shall not exceed 2.64 lbs/MMBTU	9 VAC 5-40-930
		OPACITY	Opacity limited to 20% except for one 6-minute period in each hour in which opacity shall not exceed 60%	9 VAC 5-40-940B
		HAP	See Condition 2 below	40 CFR 63, Subpart DDDDD

1. **Boiler Requirements - Small Boilers and Process Heaters - (All Units) - Limitations - Emissions** from each of the small boilers and process heaters at the facility shall not exceed the limitations specified in Table III.A. (9 VAC 5-80-110, 9 VAC 5-40-900, 9 VAC 5-40-930, 9 VAC 5-40-940, and 40 CFR 63, Subpart DDDDD)
2. **Boiler Requirements - Small Boilers and Process Heaters - (All Units) - Limitations - MACT, Subpart DDDDD** - The permittee shall comply with the applicable limitations of 40 CFR 63, Subpart DDDDD (National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters) for each new or existing gas 1-fired boiler (as defined in §63.7490 and §63.7575) as follows:
 - a. Compliance with 40 CFR 63, Subpart DDDDD shall be achieved by the dates specified in §63.7495.
 - b. For existing units: The permittee shall comply with the applicable work practice standards in Table 3 (one-time energy assessment) and tune-up requirements in 40 CFR 63.7500(e). Boilers and process heaters in the units designed to burn gas 1 fuels subcategory are not subject to the emission limits in Tables 1 and 2 or 11 through 13, or the operating limits in Table 4.
 - c. For new units: The permittee shall comply with the applicable tune-up requirements in 40 CFR 63.7500(e). Boilers and process heaters in the units designed to burn gas 1 fuels subcategory are not subject to the emission limits in Tables 1 and 2 or 11 through 13, or the operating limits in Table 4.
 - d. The permittee shall comply with the applicable general compliance requirements in §63.7505.
 - e. The permittee shall comply with the applicable initial compliance requirements in §63.7510 and §63.7530.
(9 VAC 5-80-110, 9 VAC 5-60-100, 40 CFR 63.7495, 63.7500, 63.7505, 63.7510, and 63.7530)

B. Testing and Monitoring

3. **Boiler Requirements - Small Boilers and Process Heaters - (276-E1, 276-E2, 550-E8, 550-E9, 550-E13, and 1278-E1) - Testing and Monitoring - SO₂ and PM-10** - Emissions of SO₂ and PM-10 from units 276-E1, 276-E2, 550-E8, 550-E9, 550-E13, and 1278-E1 shall be monitored by keeping records of throughput, type of fuel used, and appropriate data on fuel properties. The permittee shall calculate emissions of SO₂ and PM-10 in pounds per million BTU daily using daily fuel throughputs, fuel sulfur contents, and appropriate emission factors from the current AP-42. In lieu of a daily calculation, the permittee may make a one-time demonstration of maximum potential SO₂ and PM-10 emissions in pounds per million BTU using maximum fuel throughput, fuel sulfur content, and appropriate emission factors from AP-42, 5th Edition. The permittee shall maintain records of daily calculations for the most recent 5-year period. If the one-time maximum emission demonstration option is chosen, the permittee shall maintain a record of such a demonstration for the life of the affected units.
(9 VAC 5-80-110 B)

4. **Boiler Requirements - Small Boilers and Process Heaters - (276-E1, 276-E2, 550-E8, 550-E9, 550-E13, and 1278-E1) - Monitoring - Visible Emissions Observations/Evaluations** - The permittee shall observe each stack of ovens/ furnaces 276-E1, 276-E2, 550-E8, 550-E9, 550-E13, and 1278-E1 for visible emissions for at least six minutes once per month during daylight hours of operation if the unit operates that month. If visible emissions are noted, corrective action shall be taken to eliminate the visible emissions. If visible emissions continue after corrective action, a visible emissions evaluation (VEE) shall be immediately conducted on the stack for at least six minutes in accordance with Method 9 (40 CFR 60, Appendix A). If the VEE opacity average for the stack exceeds ten percent (10%), the VEE shall continue for one hour from initiation to determine compliance with the opacity limits. Results of observations and/or VEEs shall be recorded in an operation log. Records of observations shall include the following:

The name of the observer,
Date and time of the observation,
An indication that the process was operating,
An indication of the presence or absence of visible emissions, and
Any corrective action taken to eliminate visible emissions, including the date and time the process was shut down and/or repairs were completed.

If a VEE is conducted, records shall be in accordance with Method 9 (40 CFR 60, Appendix A).
(9 VAC 5-80-110)

5. **Boiler Requirements - Small Boilers and Process Heaters - (All Units) - Testing and Monitoring - MACT, Subpart DDDDD** - The permittee shall comply with the applicable testing and monitoring requirements of 40 CFR 63, Subpart DDDDD (National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters) for each new or existing gas 1-fired boiler (as defined in §63.7490 and §63.7575) as follows:
- The permittee shall comply with the applicable tune-up requirements in §63.7515.
 - The permittee shall comply with the applicable continuous compliance requirements in §63.7540. Boilers and process heaters in the units designed to burn gas 1 fuels subcategory with a heat input capacity of less than or equal to 5 million Btu per hour must complete a tune-up every 5 years as specified in §63.7540(a)(12).
- (9 VAC 5-80-110, 9 VAC 5-60-100, 40 CFR 63.7515, and 63.7540)

C. Notifications, Recordkeeping, and Reporting

6. **Boiler Requirements - Small Boilers and Process Heaters - (276-E1, 276-E2, 550-E8, 550-E9, 550-E13, and 1278-E1) - Notifications, Recordkeeping, and Reporting** - The permittee shall maintain records of all required visible emissions evaluations and/or observations and all required emissions calculations for units 276-E1, 276-E2, 550-E8, 550-E9, 550-E13, and 1278-E1. These visible emissions evaluations and/or observations records and monthly emissions calculations shall be maintained at the facility for inspection by DEQ for the most recent 5-year period. If a one-time emissions calculation is performed to demonstrate compliance with the SO₂ and PM-10 limitations outlined in this section, the permittee shall maintain a record of such demonstration for the life of the affected units.
(9 VAC 5-80-110 F)

7. **Boiler Requirements - Small Boilers and Process Heaters - (All Units) - Notifications, Recordkeeping, and Reporting - MACT, Subpart DDDDD** - The permittee shall comply with the applicable notification, recordkeeping, and reporting requirements of 40 CFR 63, Subpart DDDDD (National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters) for each new or existing gas 1-fired boiler (as defined in §63.7490 and §63.7575), as follows:
 - a. The permittee shall comply with the applicable notification requirements in §63.7545.
 - b. The permittee shall comply with the applicable reporting requirements in §63.7550.
 - c. The permittee shall comply with the applicable recordkeeping requirements in §63.7555 and §63.7560.
(9 VAC 5-80-110, 9 VAC 5-60-100, 40 CFR 63.7545, 63.7550, 63.7555, and 63.7560)

IV. Boiler Requirements - Barge-Mounted Boilers and Steam Plant Boilers

A. Limitations - Phased Fuel Conversion/Boiler Replacement

Unit Reference No.	Name/Description of Unit	Pollutants	Description of Applicable Requirement/ Emission Limit/Standard/Work Practice	Citation
FTSF-E1, FTSF-E2, 78-E1, 78-E2, and 78-E3	Barge-mounted boilers and existing steam plant (powerhouse) boilers	SO ₂	2.1% sulfur fuel oil and 2.23 lbs/MMBTU	Conditions 10 and 13 of the 3/10/15 NSR Permit and 9 VAC 5-40-930
FTSF-E1, FTSF-E2, 78-E1, 78-E2, and 78-E3	Barge-mounted boilers and existing steam plant (powerhouse) boilers	PM	PM emissions shall not exceed E lbs/MMBTU as calculated by the equation $E=1.0906H^{0.2594}$, where H is the total capacity in MMBTU/hour	9 VAC 5-40-900
FTSF-E1, FTSF-E2, 78-E1, 78-E2, and 78-E3	Barge-mounted boilers and existing steam plant (powerhouse) boilers	OPACITY	Prior to the completion of the modification of each barge-mounted boiler and the replacement of each powerhouse boiler, visible emissions from each boiler shall not exceed 20 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 60 percent opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.	Condition 14 of the 3/10/15 NSR Permit
78-E1, 78-E2, and 78-E3	Existing steam plant (powerhouse) boilers	HCl Mercury CO Filterable PM (or TSM)	See Condition 15	40 CFR 63, Subpart DDDDD

8. **Boiler Requirements - (FTSF-E1, FTSF-E2, 78-E1, 78-E2, and 78-E3) - Limitations** - Prior to the completion of the modification of each barge-mounted boiler and the replacement of each powerhouse boiler, emissions from each of the boilers shall not exceed the limitations specified in Table IV.A. (9 VAC 5-80-110, 40 CFR 63, Subpart DDDDD, and Conditions 10, 13, and 14 of the 3/10/15 NSR Permit)
9. **Boiler Requirements - (FTSF-E1 and FTSF-E2) - Limitations - Phased Fuel Conversion** - Each barge-mounted boiler (Ref. Nos. FTSF-E1 and FTSF-E2) shall be physically modified to accommodate the conversion from No. 6 fuel oil. Upon the completion of the modification of each boiler, the boiler shall not be permitted to burn No. 6 fuel oil. The boilers shall be modified in phases. (9 VAC 5-80-110 and Condition 6 of the 3/10/15 NSR Permit)

10. **Boiler Requirements - (78-E1, 78-E2, 78-E3, 78-E4, 78-E5, and 78-E6) - Limitations - Phased Boiler Replacement** - Each existing powerhouse boiler (Ref. Nos. 78-E1, 78-E2, and 78-E3) shall be replaced with a new powerhouse boiler (Ref. Nos. 78-E4, 78-E5, and 78-E6). Upon the completion of the replacement of each boiler, the boiler shall not be permitted to burn No. 6 fuel oil. The boilers shall be replaced in phases.
(9 VAC 5-80-110 and Condition 7 of the 3/10/15 NSR Permit)
11. **Boiler Requirements - (FTSF-E1 and FTSF-E2) - Limitations - Phased Fuel Conversion/Boiler Replacement - Fuel** - Prior to the completion of the modification of each barge-mounted boiler, the approved fuel for the barge-mounted boilers (Ref. Nos. FTSF-E1 and FTSF-E2) is No. 6 fuel oil. A change in the fuel may require a permit to modify and operate.
(9 VAC 5-80-110 and Condition 8 of the 3/10/15 NSR Permit)
12. **Boiler Requirements - (78-E1, 78-E2, and 78-E3) - Limitations - Phased Fuel Conversion/Boiler Replacement - Fuel** - Prior to the completion of the replacement of each existing powerhouse boiler, the approved fuel for the existing powerhouse boilers (Ref. Nos. 78-E1, 78-E2, and 78-E3) is No. 6 fuel oil. A change in the fuel may require a permit to modify and operate.
(9 VAC 5-80-110 and Condition 9 of the 3/10/15 NSR Permit)
13. **Boiler Requirements - (FTSF-E1, FTSF-E2, 78-E1, 78-E2, and 78-E3) - Limitations - Phased Fuel Conversion/Boiler Replacement - Heat Input Limitation - Total** - During the phased fuel conversion and boiler replacement process, the heat input of all boilers (Ref. Nos. FTSF-E1, FTSF-E2, 78-E1, 78-E2, and 78-E3), combined, shall not exceed 2,190,000 MMBtu per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
(9 VAC 5-80-110 and Condition 11 of the 3/10/15 NSR Permit)
14. **Boiler Requirements - (FTSF-E1 and FTSF-E2) - Limitations - Phased Fuel Conversion/Boiler Replacement - Heat Input Limitation - Barge-Mounted Boilers** - When burning No. 6 fuel oil, the heat input of both barge-mounted boilers (Ref. Nos. FTSF-E1 and FTSF-E2), combined, shall not exceed 750,000 MMBtu per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months. Monthly heat input shall be calculated by multiplying the monthly metered No. 6 fuel oil usage by the DEQ-approved heating value of the fuel (150,000 Btu/gal).
(9 VAC 5-80-110 and Condition 12 of the 3/10/15 NSR Permit)
15. **Boiler Requirements - (78-E1, 78-E2, and 78-E3) - Limitations - Phased Fuel Conversion/Boiler Replacement - MACT, Subpart DDDDD** - Prior to the replacement of each powerhouse boiler, the permittee shall comply with the applicable limitations of 40 CFR 63, Subpart DDDDD (National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters) for each existing powerhouse boiler, as follows:
 - a. Compliance with 40 CFR 63, Subpart DDDDD shall be achieved by the dates specified in §63.7495.
 - b. The permittee shall comply with the applicable emission limits (Table 2), work practice standards (Table 3), and operating limits (Table 4) in 40 CFR 63.7500. These standards apply at all times the affected unit is operating, except during periods of start up and shutdown during which time you must comply only with Table 3.
 - c. The permittee shall comply with the applicable general compliance requirements in §63.7505.

- d. The permittee shall comply with the applicable initial compliance requirements in §63.7510 and §63.7530.
(9 VAC 5-80-110, 9 VAC 5-60-100, 40 CFR 63.7495, 63.7500, 63.7505, 63.7510, and 63.7530)

B. Testing and Monitoring - Phased Fuel Conversion/Boiler Replacement

16. **Boiler Requirements - (FTSF-E1, FTSF-E2, 78-E1, 78-E2, and 78-E3) - Testing and Monitoring - SO₂ and PM-10 - Phased Fuel Conversion/Boiler Replacement** - Emissions of SO₂ and PM-10 from boilers FTSF-E1, FTSF-E2, 78-E1, 78-E2, and 78-E3 shall be monitored by keeping records of throughput, type of fuel used, and appropriate data on fuel properties. The permittee shall calculate emissions of SO₂ and PM-10 in pounds per million BTU daily using daily fuel throughputs, fuel sulfur contents, and appropriate emission factors from the current AP-42. In lieu of a daily calculation, the permittee may make a one-time demonstration of maximum potential SO₂ and PM-10 emissions in pounds per million BTU using maximum fuel throughput, fuel sulfur content, and appropriate emission factors from AP-42, 5th Edition. The permittee shall maintain records of daily calculations for the most recent 5-year period. If the one-time maximum emission demonstration option is chosen, the permittee shall maintain a record of such a demonstration for the life of the affected units.
(9 VAC 5-80-110 B)
17. **Boiler Requirements - (78-E1, 78-E2, and 78-E3) - Testing and Monitoring - Visible Emissions Evaluations - Phased Fuel Conversion/Boiler Replacement** - The permittee shall perform a visible emissions evaluation on the stack of boilers 78-E1, 78-E2, and 78-E3 once per month during daylight hours of operation for at least eighteen minutes in accordance EPA Method 9 (reference 40 CFR 60, Appendix A). If the VEE opacity average for the stack exceeds ten percent (10%), the VEE shall continue for one hour from initiation to determine compliance with the opacity limits. The permittee shall keep records in accordance with EPA Method 9 and maintain the records at the facility for inspection by DEQ for the most recent 5-year period.
(9 VAC 5-80-110 E)
18. **Boiler Requirements - (78-E1, 78-E2, and 78-E3) - Testing and Monitoring - Phased Fuel Conversion/Boiler Replacement - MACT, Subpart DDDDD** - Prior to the replacement of each powerhouse boiler, the permittee shall comply with the applicable testing and monitoring requirements of 40 CFR 63, Subpart DDDDD (National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters) for each existing powerhouse boiler, as follows:
- a. The permittee shall comply with the applicable performance testing, fuel analysis, and tune-up requirements in §63.7515.
 - b. The permittee shall comply with the performance testing procedures in §63.7520.
 - c. The permittee shall comply with the applicable fuel analysis and fuel specification requirements in §63.7521.
 - d. If emissions averaging is chosen as an alternative to meeting the requirements of §63.7500 for PM (or TSM), HCl, or mercury on a boiler or process heater basis, the permittee shall comply with the applicable emissions averaging requirements in §63.7522.
 - e. The permittee shall comply with the applicable monitoring, installation, operation, and maintenance requirements in §63.7525.
 - f. The permittee shall comply with the applicable monitoring data collection requirements in 63.7535.

- g. The permittee shall comply with the applicable continuous compliance requirements in §63.7540 and §63.7541 (if applicable).

(9 VAC 5-80-110, 9 VAC 5-60-100, 40 CFR 63.7505, 63.7510, 63.7520, 63.7521, 63.7522, 63.7525, 63.7530, 63.7535, 63.7540, and 63.7541)

C. Notifications, Reporting, and Recordkeeping - Phased Fuel Conversion/Boiler Replacement

19. **Boiler Requirements - (FTSF-E1, FTSF-E2, 78-E1, 78-E2, and 78-E3) - Notifications, Reporting, and Recordkeeping - Phased Fuel Conversion/Boiler Replacement** - Prior to the completion of the modification of each barge-mounted boiler (Ref. Nos. FTSF-E1 and FTSF-E2) and the replacement of each powerhouse boiler (Ref. Nos. 78-E1, 78-E2, and 78-E3), the permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Tidewater Regional Office. These records shall include, but are not limited to:

- a. Records of all No. 6 fuel oil shipments purchased, indicating sulfur content per shipment.
- b. Monthly heat input records for the barge-mounted boilers (Ref. Nos. FTSF-E1 and FTSF-E2) and all boilers, combined (Ref. Nos. FTSF-E1, FTSF-E2, 78-E1, 78-E2, and 78-E3).

These records shall be available for inspection by the DEQ and shall be current for the most recent five years. (9 VAC 5-80-110 and Condition 15 of the 3/10/15 NSR Permit)

20. **Boiler Requirements - (FTSF-E1, FTSF-E2, 78-E1, 78-E2, and 78-E3) - Notifications, Reporting, and Recordkeeping - Phased Fuel Conversion/Boiler Replacement** - The permittee shall maintain records of all required visible emissions evaluations and/or observations for units 78-E1, 78-E2, and 78-E3 and all required emissions calculations for units FTSF-1, FTSF-2, 78-E1, 78-E2, and 78-E3. These visible emissions evaluations and/or observations records and monthly emissions calculations shall be maintained at the facility for inspection by DEQ for the most recent 5-year period. If a one-time emissions calculation is performed to demonstrate compliance with the SO₂ and PM-10 limitations outlined in this section, the permittee shall maintain a record of such demonstration for the life of the affected units.
(9 VAC 5-80-110 F)

21. **Boiler Requirements - (78-E1, 78-E2, and 78-E3) - Notifications, Reporting, and Recordkeeping - Phased Fuel Conversion/Boiler Replacement - MACT, Subpart DDDDD** - Prior to the replacement of each powerhouse boiler, the permittee shall comply with the applicable notification, reporting, and recordkeeping requirements of 40 CFR 63, Subpart DDDDD (National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters) for each existing powerhouse boiler (as defined in §63.7490 and §63.7575), as follows:
- a. The permittee shall comply with the applicable notification requirements in §63.7545.
 - b. The permittee shall comply with the applicable reporting requirements in §63.7550.
 - c. The permittee shall comply with the applicable recordkeeping requirements in §63.7555 and §63.7560.
- (9 VAC 5-80-110, 9 VAC 5-60-100, and 40 CFR 63.7545, 63.7550, 63.7555, and 63.7560)

D. Limitations - Post-Modification/Replacement

Unit Reference No.	Name/Description of Unit	Pollutants	Description of Applicable Requirement/ Emission Limit/Standard/Work Practice	Citation
FTSF-E1 and FTSF-E2	Barge-mounted boilers	PM, PM-10, PM-2.5, SO ₂ , NO _x , CO, VOC	When burning distillate oil, emissions from the operation of each barge-mounted boiler shall not exceed the limits specified below: PM 5.0 lbs/hr PM-10 3.5 lbs/hr PM-2.5 2.4 lbs/hr SO ₂ 0.3 lbs/hr NO _x 36.6 lbs/hr CO 7.6 lbs/hr VOC 0.3 lbs/hr These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions 22, 23, 24, 0, 29, and 30.	Condition 27 of the 3/10/15 NSR Permit
78-E4, 78-E5, and 78-E6	New steam plant (powerhouse) boilers	PM, PM-10, PM-2.5, SO ₂ , NO _x , CO, VOC	When burning natural gas or propane, emissions from the operation of each powerhouse boiler shall not exceed the limits specified below: PM 1.1 lbs/hr PM-10 1.1 lbs/hr PM-2.5 1.1 lbs/hr SO ₂ 2.4 lbs/hr NO _x 29.0 lbs/hr CO 11.9 lbs/hr VOC 1.6 lbs/hr These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions 22, 23, 25, 31, and 32.	Condition 28 of the 3/10/15 NSR Permit
78-E5 and 78-E6	New steam plant (powerhouse) boilers	NO _x	0.20 lb/MMBtu	40 CFR 60, Subpart Db §60.44a(1)(ii)

Unit Reference No.	Name/Description of Unit	Pollutants	Description of Applicable Requirement/ Emission Limit/Standard/Work Practice	Citation
FTSF-E1, FTSF-E2, 78-E4, 78-E5, 78-E6, LPV-E1, and LPV-E2	Barge-mounted boilers, new steam plant (powerhouse) boilers, and liquid propane vaporizers	PM, PM-10, PM-2.5, SO ₂ , NO _x , CO, VOC	<p>Upon the completion of the modification of all barge-mounted boilers and the replacement of all powerhouse boilers, emissions from the operation of all boilers and the liquid propane vaporizers, combined, shall not exceed the limits specified below:</p> <p>PM 25.8 tons/yr PM-10 18.0 tons/yr PM-2.5 12.1 tons/yr SO₂ 18.0 tons/yr NO_x 219.0 tons/yr CO 90.2 tons/yr VOC 12.0 tons/yr</p> <p>These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions 22-33.</p>	Condition 29 of the 3/10/15 NSR Permit
FTSF-E1 and FTSF-E2	Barge-mounted boilers	OPACITY	<p>Upon the completion of the modification of each barge-mounted boiler, visible emissions from each boiler shall not exceed 20 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30 percent opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.</p>	Condition 30 of the 3/10/15 NSR Permit
78-E4, 78-E5, and 78-E6	New steam plant (powerhouse) boilers	OPACITY	<p>Upon the completion of the replacement of each powerhouse boiler, visible emissions from each boiler shall not exceed 20 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30 percent opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.</p>	Condition 31 of the 3/10/15 NSR Permit

Unit Reference No.	Name/Description of Unit	Pollutants	Description of Applicable Requirement/ Emission Limit/Standard/Work Practice	Citation
LPV-E1 and LPV-E2	Liquid propane vaporizers	OPACITY	Visible emissions from each liquid propane vaporizer shall not exceed 20 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30 percent opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.	Condition 32 of the 3/10/15 NSR Permit

22. **Boiler Requirements - (FTSF-E1, FTSF-E2, 78-E4, 78-E5, 78-E6, LPV-E1, and LPV-E2) - Limitations - Post-Modification/Replacement** - Upon the completion of the modification of each barge-mounted boiler and the replacement of each powerhouse boiler, emissions from each of the boilers and the liquid propane vaporizers shall not exceed the limitations specified in Table IV.D.
 (9 VAC 5-80-110, 40 CFR 60, Subpart Db, and Conditions 27-32 of the 3/10/15 NSR Permit)

23. **Boiler Requirements - (FTSF-E1, FTSF-E2, 78-E4, 78-E5, 78-E6, LPV-E1, and LPV-E2) - Limitations - Post-Modification/Replacement - Heat Input Limitation** - Upon the completion of the modification of the barge-mounted boilers and the replacement of the powerhouse boilers, the heat input of all boilers (Ref. Nos. FTSF-E1, FTSF-E2, 78-E4, 78-E5, and 78-E6) and the liquid propane vaporizers (Ref. Nos. LPV-E1 and LPV-E2), combined, shall not exceed 2,190,000 MMBtu per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
 (9 VAC 5-80-110 and Condition 16 of the 3/10/15 NSR Permit)

24. **Boiler Requirements - (FTSF-E1 and FTSF-E2) - Limitations - Post-Modification/Replacement - Fuel** - Upon the completion of the modification of each barge-mounted boiler, the approved fuel for each barge-mounted boiler (Ref. Nos. FTSF-E1 and FTSF-E2) is distillate oil. A change in the fuel may require a permit to modify and operate.
 (9 VAC 5-80-110 and Condition 17 of the 3/10/15 NSR Permit)

25. **Boiler Requirements - (78-E4, 78-E5, and 78-E6) - Limitations - Post-Modification/Replacement - Fuel** - Upon the completion of the replacement of each powerhouse boiler, the approved fuels for each powerhouse boiler (Ref. Nos. 78-E4, 78-E5, and 78-E6) are natural gas and propane. A change in the fuel may require a permit to modify and operate.
 (9 VAC 5-80-110 and Condition 18 of the 3/10/15 NSR Permit)

26. **Boiler Requirements - (LPV-E1 and LPV-E2) - Limitations - Post-Modification/Replacement - Fuel** - The approved fuel for each liquid propane vaporizer (Ref. Nos. LPV-E1 and LPV-E2) is propane. A change in the fuel may require a permit to modify and operate.
 (9 VAC 5-80-110 and Condition 19 of the 3/10/15 NSR Permit)

27. **Boiler Requirements - (FTSF-E1 and FTSF-E2) - Limitations - Post Modification/Replacement - Fuel -**
The distillate oil shall meet the specifications below:

DISTILLATE OIL which meets the ASTM D396 specification for numbers 1 or 2 fuel oil:
Maximum sulfur content per shipment: 0.0015 %

(9 VAC 5-80-110 and Condition 20 of the 3/10/15 NSR Permit)

28. **Boiler Requirements - (FTSF-E1 and FTSF-E2) - Limitations - Post-Modification/Replacement - Fuel Certification -** The permittee shall obtain a certification from the fuel supplier with each shipment of distillate oil. Each fuel supplier certification shall include the following:
- The name of the fuel supplier;
 - The date on which the distillate oil was received;
 - The quantity of distillate oil delivered in the shipment;
 - A statement that the distillate oil complies with the American Society for Testing and Materials specifications (ASTM D396) for numbers 1 or 2 fuel oil; and
 - The sulfur content of the distillate oil.

Fuel sampling and analysis, independent of that used for certification, as may be periodically required or conducted by DEQ may be used to determine compliance with the fuel specifications stipulated in Condition A.13. Exceedance of these specifications may be considered credible evidence of the exceedance of emission limits.

(9 VAC 5-80-110 and Condition 21 of the 3/10/15 NSR Permit)

29. **Boiler Requirements - (FTSF-E1 and FTSF-E2) - Limitations - Post-Modification/Replacement - Emission Controls -** When burning distillate oil, the nitrogen oxide emissions from each barge-mounted boiler (Ref. Nos. FTSF-E1 and FTSF-E2) shall be controlled by the use of low-NOx burners. The low-NOx burners shall be installed and operated in accordance with the manufacturer's specifications.
(9 VAC 5-80-110, 9 VAC 5-50-260, and Condition 22 of the 3/10/15 NSR Permit)

30. **Boiler Requirements - (FTSF-E1 and FTSF-E2) - Limitations - Post-Modification/Replacement - Emission Controls -** When burning distillate oil, the carbon monoxide and volatile organic compound emissions from each barge-mounted boiler (Ref. Nos. FTSF-E1 and FTSF-E2) shall be controlled by the use of good combustion operating practices.
(9 VAC 5-80-110, 9 VAC 5-50-260, and Condition 23 of the 3/10/15 NSR Permit)

31. **Boiler Requirements - (78-E4, 78-E5, and 78-E6) - Limitations - Post-Modification/Replacement - Emission Controls -** When burning natural gas or propane, the nitrogen oxide emissions from each powerhouse boiler (Ref. Nos. 78-E4, 78-E5, and 78-E6) shall be controlled by the use of low-NOx burners and flue gas recirculation (FGR). The low-NOx burners shall be installed and operated in accordance with the manufacturer's specifications.
(9 VAC 5-80-110, 9 VAC 5-50-260, and Condition 24 of the 3/10/15 NSR Permit)

32. **Boiler Requirements - (78-E4, 78-E5, and 78-E6) - Limitations - Post-Modification/Replacement - Emission Controls -** When burning natural gas or propane, the carbon monoxide and volatile organic compound emissions from each powerhouse boiler (Ref. Nos. 78-E4, 78-E5, and 78-E6) shall be controlled by the use of good combustion operating practices.
(9 VAC 5-80-110, 9 VAC 5-50-260, and Condition 25 of the 3/10/15 NSR Permit)

33. **Boiler Requirements - (LPV-E1 and LPV-E2) - Limitations - Post-Modification/Replacement - Emission Controls** - The nitrogen oxide, carbon monoxide and volatile organic compound emissions from each liquid propane vaporizer (Ref. Nos. LPV-E1 and LPV-E2) shall be controlled by the use of good combustion operating practices.
(9 VAC 5-80-110, 9 VAC 5-50-260, and Condition 26 of the 3/10/15 NSR Permit)
34. **Boiler Requirements - (78-E4, 78-E5, and 78-E6) - Limitations - Post-Modification/Replacement - MACT, Subpart DDDDD** - Upon the completion of the replacement of each powerhouse boiler, the permittee shall comply with the applicable limitations of 40 CFR 63, Subpart DDDDD (National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters) for each new powerhouse boiler, as follows:
- a. Compliance with 40 CFR 63, Subpart DDDDD shall be achieved by the dates specified in §63.7495.
 - b. The permittee shall comply with the applicable tune-up requirements in 40 CFR 63.7500(e). Boilers and process heaters in the units designed to burn gas 1 fuels subcategory are not subject to the emission limits in Tables 1 and 2 or 11 through 13, or the operating limits in Table 4.
 - c. The permittee shall comply with the applicable general compliance requirements in §63.7505.
 - d. The permittee shall comply with the applicable initial compliance requirements in §63.7510 and §63.7530.
- (9 VAC 5-80-110, 9 VAC 5-60-100, and 40 CFR 63.7495, 63.7500, 63.7505, 63.7510, and 63.7530)

E. Testing and Monitoring - Post-Modification/Replacement

35. **Boiler Requirements - (FTSF-E1, FTSF-E2, 78-E4, 78-E5, and 78-E6) - Testing and Monitoring - Visible Emissions Observations/Evaluations - Post-Modification/Replacement** - The permittee shall observe the stack of each boiler (Ref. Nos. FTSF-E1, FTSF-E2, 78-E4, 78-E5, and 78-E6) for visible emissions for at least six minutes once per month during daylight hours of operation if the unit operates that month. If visible emissions are noted, corrective action shall be taken to eliminate the visible emissions. If visible emissions continue after corrective action, a visible emissions evaluation (VEE) shall be immediately conducted on the boiler stack for at least six minutes in accordance with Method 9 (40 CFR 60, Appendix A). If the VEE opacity average for the boiler stack exceeds ten percent (10%), the VEE shall continue for one hour from initiation to determine compliance with the opacity limits. Results of observations and/or VEEs shall be recorded in an operation log. Records of observations shall include the following:

The name of the observer,
Date and time of the observation,
An indication that the process was operating,
An indication of the presence or absence of visible emissions, and
Any corrective action taken to eliminate visible emissions, including the date and time the process was shut down and/or repairs were completed.

If a VEE is conducted, records shall be in accordance with Method 9 (40 CFR 60, Appendix A).

(9 VAC 5-80-110)

36. **Boiler Requirements - (78-E5, and 78-E6) - Testing and Monitoring - Post-Modification/Replacement - NSPS, Subpart Db** - Upon the completion of the replacement of each powerhouse boiler, the permittee shall comply with the applicable testing and monitoring requirements of 40 CFR 60, Subpart Db (Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units) for each new powerhouse boiler, as follows:

- a. The permittee shall comply with the applicable compliance and performance test methods requirements in §60.46b.
 - b. The permittee shall comply with the applicable monitoring requirements in §60.48b.
(9 VAC 5-80-110, 9 VAC 5-50-410, 40 CFR 60.46b, and 60.48b)
37. **Boiler Requirements - (78-E4, 78-E5, and 78-E6) - Testing and Monitoring - Post-Modification/Replacement - MACT, Subpart DDDDD** - Upon the completion of the replacement of each powerhouse boiler, the permittee shall comply with the applicable testing and monitoring requirements of 40 CFR 63, Subpart DDDDD (National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters) for each new powerhouse boiler, as follows:
- a. The permittee shall comply with the applicable tune-up requirements in §63.7515.
 - b. The permittee shall comply with the applicable continuous compliance requirements in §63.7540. Boilers and process heaters in the units designed to burn gas 1 fuels subcategory with a heat input capacity of 10 million Btu per hour or greater must complete a tune-up each year, as specified in §63.7540(a)(10).
(9 VAC 5-80-110, 9 VAC 5-60-100, and 40 CFR 63.7515 and 63.7540)
38. **Boiler Requirements - (All Units) - Testing and Monitoring - Emissions Testing - Post-Modification/Replacement** - The facility shall be constructed so as to allow for emissions testing upon reasonable notice at any time, using appropriate methods. Sampling ports shall be provided when requested and safe sampling platforms and access shall be provided.
(9 VAC 5-80-110, 9 VAC 5-50-30 F, and Condition 5 of the 3/10/15 NSR Permit)
39. **Boiler Requirements - (All Units) - Testing and Monitoring- Post- Modification/Replacement** - If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the appropriate method(s) in accordance with procedures approved by the DEQ.
(9 VAC 5-80-110)

F. Notifications, Reporting, and Recordkeeping - Post-Modification/Replacement

40. **Boiler Requirements - (FTSF-E1, FTSF-E2, 78-E4, 78-E5, 78-E6, LPV-E1, and LPV-E2) - Notifications, Reporting, and Recordkeeping - Post-Modification/Replacement** - Upon the completion of the modification of each barge-mounted boiler (Ref. Nos. FTSF-E1 and FTSF-E2) and the replacement of each powerhouse boiler (Ref. Nos. 78-E4, 78-E5, and 78-E6), the permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Tidewater Regional Office. These records shall include, but are not limited to:
- a. Annual heat input of all boilers (Ref. Nos. FTSF-E1, FTSF-E2, 78-E4, 78-E5, and 78-E6) and the liquid propane vaporizers (Ref. Nos. LPV-E1 and LPV-E2), combined (in MMBtu/yr), calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months. Monthly heat input shall be calculated by multiplying the monthly metered natural gas or distillate oil usage by the DEQ-approved heating value of the fuels (1,020 Btu/scf for natural gas and 140,000 Btu/gal for distillate oil).
 - b. All fuel supplier certifications.

These records shall be available for inspection by the DEQ and shall be current for the most recent five years.
(9 VAC 5-80-110 and Condition 33 of the 3/10/15 NSR Permit)

41. **Boiler Requirements - (FTSF-E1, FTSF-E2, 78-E4, 78-E5, and 78-E6) - Notifications, Reporting, and Recordkeeping - Post-Modification/Replacement** - The permittee shall furnish written notification to the Tidewater Regional Office of:
- a. The date on which construction commences on each boiler. “Commence” and “construction” shall meet the definitions in 9 VAC 5-80-1110 C.
 - b. The actual date on which the physical modification of each barge-mounted boiler commenced (if different than the date required in (a) above), within 30 days after such date.
 - c. The actual date on which the replacement of each powerhouse boiler commenced (if different than the date required in (a) above), within 30 days after such date.
 - d. The anticipated start-up date of each modified barge-mounted boiler postmarked not more than 60 days nor less than 30 days prior to such date.
 - e. The anticipated start-up date of each replacement powerhouse boiler postmarked not more than 60 days nor less than 30 days prior to such date.
 - f. The actual start-up date of each modified barge-mounted boiler within 15 days after such date.
 - g. The actual start-up date of each replacement powerhouse boiler within 15 days after such date.
(9 VAC 80-110 and Condition 34 of the 3/10/15 NSR Permit)
42. **Boiler Requirements - (78-E4) - Notifications, Reporting, and Recordkeeping - Post-Modification/Replacement - NSPS, Subpart Dc** - Upon the completion of the replacement of each powerhouse boiler, the permittee shall comply with the applicable notification, reporting, and recordkeeping requirements of 40 CFR 60, Subpart Dc (Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units) for each new powerhouse boiler, as follows:
- a. The permittee shall comply with the applicable notification, reporting, and recordkeeping requirements in §60.48c(a).
 - b. The permittee shall record and maintain records of the amount of each fuel combusted during each calendar month (64.48c(g)(2)).
- (9 VAC 5-80-110, 9 VAC 5-50-410, and 40 CFR 60.48c)
43. **Boiler Requirements - (78-E5, and 78-E6) - Notifications, Reporting, and Recordkeeping - Post-Modification/Replacement - NSPS, Subpart Db** - Upon the completion of the replacement of each powerhouse boiler, the permittee shall comply with the applicable notification, reporting, and recordkeeping requirements of 40 CFR 60, Subpart Db (Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units) for each new powerhouse boiler, as follows:
- a. The permittee shall comply with the applicable notification, reporting, and recordkeeping requirements in §60.49b.
- (9 VAC 5-80-110, 9 VAC 5-50-410, and 40 CFR 60.49b)

44. **Boiler Requirements - (78-E4, 78-E5, and 78-E6) - Notifications, Reporting, and Recordkeeping - Post-Modification/Replacement - MACT, Subpart DDDDD** - Upon the completion of the replacement of each powerhouse boiler, the permittee shall comply with the applicable notification, reporting, and recordkeeping requirements of 40 CFR 63, Subpart DDDDD (National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters) for each new powerhouse boiler, as follows:
- a. The permittee shall comply with the applicable notification requirements in §63.7545.
 - b. The permittee shall comply with the applicable reporting requirements in §63.7550.
 - c. The permittee shall comply with the applicable recordkeeping requirements in §63.7555 and §63.7560. (9 VAC 5-80-110, 9 VAC 5-60-100, and 40 CFR 63.7545, 63.7550, 63.7555, and 63.7560)

V. Engine/Generator Requirements

A. Limitations

Unit Reference No.	Name/Description of Unit	Pollutants	Description of Applicable Requirement/ Emission Limit/Standard/Work Practice	Citation
GSE-10025550 and GSE-10025551	Stationary diesel emergency generators	SO ₂	Maximum sulfur content of distillate oil: 0.0015%	Condition 5 of the 11/21/11 NSR Permit
GSE-10025550 and GSE-10025551	Stationary diesel emergency generators	NO _x	NO _x emissions shall not exceed the following limits: 23.4 lbs/hr 11.7 tons/yr These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions 45-48.	Condition 7 of the 11/21/11 NSR Permit
GSE-10025550 and GSE-10025551	Stationary diesel emergency generators	CO	CO emissions shall not exceed the following limits: 5.3 lbs/hr 2.6 tons/yr These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions 45-48.	Condition 7 of the 11/21/11 NSR Permit
GSE-10025550 and GSE-10025551	Stationary diesel emergency generators	VOC	VOC emissions shall not exceed the following limits: 2.1 lbs/hr 1.0 tons/yr These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible	Condition 7 of the 11/21/11 NSR Permit

Unit Reference No.	Name/Description of Unit	Pollutants	Description of Applicable Requirement/ Emission Limit/Standard/Work Practice	Citation
			evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions 45-48.	
GSE-10025550 and GSE-10025551	Stationary diesel emergency generators	OPACITY	Visible emissions from each emergency generator shall not exceed 20 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30 percent opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.	Condition 8 of the 11/21/11 NSR Permit
GSE-10006657, GSE-10006525, GSE10006537, GSE-10006847, GSE-10002521, GSE-10002509, GSE-10005521, GSE-10002704, GSE-10003018, GSE-10003655, GSE-10003735, GSE-10003942, GSE-10003998, GSE-10003995, GSE-10003992, GSE-10004007, GSE-10006964, GSE-10004013, GSE-10006991, GSE-10004005, GSE-10004043, GSE-10004745, GSE-10004528, GSE-10004569, GSE-10004860, GSE-7000001092, GSE-10005070,	Stationary diesel emergency generators	OPACITY	Opacity is limited to 20% except for one 6-minute period in each hour in which opacity shall not exceed 30%. These limits apply at all times except during startup, shutdown, and malfunction.	9 VAC 5-50-80

Unit Reference No.	Name/Description of Unit	Pollutants	Description of Applicable Requirement/ Emission Limit/Standard/Work Practice	Citation
GSE-10005144, GSE-10005145, GSE-10008532, GSE-10008534, GSE-10008530, GSE-10008531, GSE-10008536, GSE-10008537, GSE-10008478, GSE-10015352. GSE-10024319, GSE-10015903, GSE-10018416, GSE-10017399, GSE-10018465, GSE-10018464, GSE-10018413, GSE-10018412, GSE-10022299, GSE-10025550, GSE-10025551, GSE-10028237				
PSF-10017424, PSE-10018737, PSE-10018735, PSF-10022335, PSF-10028208	Stationary diesel emergency pumps	OPACITY	Opacity is limited to 20% except for one 6-minute period in each hour in which opacity shall not exceed 30%. These limits apply at all times except during startup, shutdown, and malfunction.	9 VAC 5-50-80
GSE-10018416, GSE-10017399, GSE-10018413, GSE-10018412, PSE-10018737, PSE-10018735, GSE-10022299, GSE-10025550, GSE-10025551, GSE-10028237	Stationary diesel emergency engines/generators constructed after July 11, 2005 and manufactured after April 1, 2006	CO, NOx, PM, VOC	Emission limitations outlined in 40 CFR 60.4205	40 CFR 60.4205 (NSPS Subpart IIII)
PSF-10017424, PSF-10022335, PSF-10028208	Stationary diesel emergency fire pumps constructed after July 11, 2005	CO, NOx, PM, VOC	Emission limitations outlined in 40 CFR 60.4205	40 CFR 60.4205 (NSPS Subpart IIII)

Unit Reference No.	Name/Description of Unit	Pollutants	Description of Applicable Requirement/ Emission Limit/Standard/Work Practice	Citation
	and manufactured after July 1, 2006			
GSE-10006657, GSE-10006525, GSE-10006847, GSE-10002521, GSE-10002509, GSE-10002704, GSE-10003655, GSE-10003942, GSE-10003998, GSE-10003995, GSE-10003992, GSE-10004007, GSE-10006964, GSE-10004013, GSE-10006991, GSE-10004005, GSE-10004043, GSE-10004745, GSE-10004860, GSE-10005070, GSE-10008532, GSE-10008534, GSE-10008530, GSE-10008531, GSE-10008536, GSE-10008537, GSE-10008478, GSE-10024319	Stationary diesel emergency generators ≤ 500 hp installed before June 12, 2006 (Existing Emergency RICE ≤ 500 hp)	HAP	Emission limits in Table 2c to 40 CFR 63 Subpart ZZZZ	40 CFR 63.6602 (MACT Subpart ZZZZ)
GSE-10018416, GSE-10017399, GSE-10018465, PSF-10017424, GSE-10018413, GSE-10018412, GSE-10022299, PSF-10022335, GSE-10028237, PSF-10028208	Stationary diesel emergency engines/generators ≤ 500 hp installed after June 12, 2006 (New Emergency RICE ≤ 500 hp)	HAP	Meet the requirements of 40 CFR 63 Subpart ZZZZ by meeting the requirements of 40 CFR 60 Subpart IIII	40 CFR 63.6590(c)(6) (MACT Subpart ZZZZ)

Unit Reference No.	Name/Description of Unit	Pollutants	Description of Applicable Requirement/ Emission Limit/Standard/Work Practice	Citation
GSE-10006537, GSE-10005521, GSE-10003018, GSE-10003735, GSE-10004528, GSE-10004569, GSE-7000001092, GSE-10005144, GSE-10005145	Stationary diesel emergency generators > 500 hp installed before December 19, 2002 (Existing Emergency RICE > 500 hp)	HAP	Existing emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that do not operate or are not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.40(f)(2)(ii) and (iii) do not have to meet the requirements of 40 CFR 63, Subpart ZZZZ or 40 CFR 63, Subpart A, including initial notification requirements. However, emergency stationary RICE must operate according to the conditions in 40 CFR 63.6640(f)(1) through (3) to be considered “emergency” under 40 CFR 63, Subpart ZZZZ.	40 CFR 63.6590(b)(3)(iii) and 40 CFR 63.6640(f)(1) through (3) (MACT Subpart ZZZZ)
GSE-10015352, GSE-10015903, GSE-10018464, PSE-10018737, PSE-10018735, GSE-10025550	Stationary diesel emergency engines/generators > 500 hp installed after December 19, 2002 (New Emergency RICE > 500 hp)	HAP	New emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that do not operate or are not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii) do not have to meet the requirements of 40 CFR 63, Subpart ZZZZ or 40 CFR 63, Subpart A, except for the initial notification requirements of 40 CFR 63.6645(f). However, emergency stationary RICE must operate according to the conditions in 40 CFR 63.6640(f)(1) through (3) to be considered “emergency” under this subpart.	40 CFR 63.6590(b)(1)(i) and 40 CFR 63.6640(f)(1) through (3) (MACT Subpart ZZZZ)

45. **Engine/Generator Requirements (All Units) - Limitations - Emission Limits** - Emissions from each of the engines/generators at the facility shall not exceed the limitations specified in Table V.A. (9 VAC 5-80-110, 40 CFR 60, Subpart IIII, 40 CFR 63, Subpart ZZZZ, and Conditions 5, 7, and 8 of the 11/21/11 NSR Permit)

46. **Engine/Generator Requirements (GSE-44550 and GSE-44551) - Limitations - Operating Hours** - Each emergency generator (Unit Ref. Nos. GSE-44550 and GSE-44551) shall not operate more than 500 hours per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
(9 VAC 5-80-110 and Condition 3 of the 11/21/11 NSR Permit)
47. **Engine/Generator Requirements (GSE-44550 and GSE-44551) - Limitations - Fuel** - The approved fuel for the emergency generators (Ref. Nos. GSE-44550 and GSE-44551) is distillate oil. A change in the fuel may require a permit to modify and operate.
(9 VAC 5-80-110 and Condition 4 of the 11/21/11 NSR Permit)
48. **Engine/Generator Requirements (GSE-44550 and GSE-44551) - Limitations - Fuel** - The distillate oil shall meet the specifications below:

DISTILLATE OIL which meets the ASTM D396 specification for numbers 1 or 2 fuel oil:
Maximum sulfur content per shipment: 0.0015 %
(9 VAC 5-80-110 and Condition 5 of the 11/21/11 NSR Permit)
49. **Engine/Generator Requirements (GSE-44550 and GSE-44551) - Limitations - Fuel Certification** - The permittee shall obtain a certification from the fuel supplier with each shipment of distillate oil. Each fuel supplier certification shall include the following:
- a. The name of the fuel supplier;
 - b. The date on which the distillate oil was received;
 - c. The quantity of distillate oil delivered in the shipment;
 - d. A statement that the distillate oil complies with the American Society for Testing and Materials specifications (ASTM D396) for numbers 1 or 2 fuel oil; and
 - e. The sulfur content of the distillate oil.
- Fuel sampling and analysis, independent of that used for certification, as may be periodically required or conducted by DEQ may be used to determine compliance with the fuel specifications stipulated in Condition 48. Exceedance of these specifications may be considered credible evidence of the exceedance of emission limits.
(9 VAC 5-80-110 and Condition 6 of the 11/21/11 NSR Permit)
50. **Engine/Generator Requirements - Limitations - NSPS, Subpart IIII** - The permittee shall comply with the applicable requirements of 40 CFR 60, Subpart IIII (Standards of Performance for Stationary Compression Ignition Internal Combustion Engines) as follows:
- a. The permittee shall comply with the applicable emissions standards in 40 CFR 60.4205 for emergency engines.
 - b. The permittee shall comply with the applicable fuel requirements in 40 CFR 60.4207.
 - c. The permittee shall comply with the applicable monitoring requirements in 40 CFR 60.4209.
 - d. The permittee shall comply with the applicable compliance requirements in 40 CFR 60.4211.
 - e. The permittee shall comply with the applicable testing requirements in 40 CFR 60.4212 and 40 CFR 60.4213.

- f. The permittee shall comply with the applicable notification, reporting, and recordkeeping requirements in 40 CFR 60.4214.
- g. The permittee shall comply with the applicable requirements of the General Provisions as outlined in Table 8 to 40 CFR 60 Subpart III.

The permittee shall refer to the most current version of the applicable regulation for additional or revised requirements not included in this permit.

(9 VAC 5-80-110, 9 VAC 5-50-410, 40 CFR 60.4205, 60.4207, 60.4209, 60.4211, 60.4212, 60.4213, 60.4214, and 60.4218)

- 51. **Engine/Generator Requirements - Limitations - MACT, Subpart ZZZZ** - The permittee shall comply with the applicable requirements of 40 CFR 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). The permittee shall refer to the most current version of the applicable regulation for additional or revised requirements not included in this permit. (9 VAC 5-80-110, 9 VAC 5-60-100, and 40 CFR 63, Subpart ZZZZ)
- 52. **Engine/Generator Requirements - Limitations - MACT, Subpart ZZZZ** - New or reconstructed emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that do not operate or are not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii) do not have to meet the requirements of 40 CFR 63, Subpart ZZZZ or 40 CFR 63, Subpart A, except for the initial notification requirements of 40 CFR 63.6645(f). However, emergency stationary RICE must operate according to the conditions in 40 CFR 63.6640(f)(1) through (3) to be considered “emergency” under this subpart. Any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in 63.6640(f)(1) through (3) is prohibited. If the engine is not operated according to the requirements in paragraphs (f)(1) through (4) of this section, the engine will not be considered an emergency engine under 40 CFR 63, Subpart ZZZZ and must meet all requirements for non-emergency engines. (9 VAC 5-80-110, 9 VAC 5-60-100, 40 CFR 63.6590(b)(1)(i), and 40 CFR 63.6640(f)(1) through (3))
- 53. **Engine/Generator Requirements - Limitations - MACT, Subpart ZZZZ** - Existing emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that do not operate or are not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii) do not have to meet the requirements of 40 CFR 63, Subpart ZZZZ or 40 CFR 63, Subpart A, including initial notification requirements. However, emergency stationary RICE must operate according to the conditions in 40 CFR 63.6640(f)(1) through (3) to be considered “emergency” under this subpart. Any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in 63.6640(f)(1) through (3) is prohibited. If the engine is not operated according to the requirements in paragraphs (f)(1) through (4) of this section, the engine will not be considered an emergency engine under 40 CFR 63, Subpart ZZZZ and must meet all requirements for non-emergency engines. (9 VAC 5-80-110, 9 VAC 5-60-100, 40 CFR 63.6590(b)(3)(iii), and 40 CFR 63.6640(f)(1) through (3))
- 54. **Engine/Generator Requirements - Limitations - MACT, Subpart ZZZZ** - All new or reconstructed emergency stationary RICE with a site rating of less than or equal to 500 brake HP shall meet the requirements of 40 CFR 63, Subpart ZZZZ by meeting the requirements of 40 CFR 60 Subpart III, as applicable. No further requirements apply for such engines under 40 CFR 63, Subpart ZZZZ. (9 VAC 5-80-110, 9 VAC 5-60-100, and 40 CFR 63.6590(c)(6))

55. **Engine/Generator Requirements - Limitations - MACT, Subpart ZZZZ** - All existing emergency compression ignition (CI) stationary RICE with a site rating of less than or equal to 500 brake HP shall be in compliance with 40 CFR 63, Subpart ZZZZ by May 3, 2013. These units shall comply with the following requirements, as applicable:
- a. Emission limitations in 40 CFR 63.6602 (Table 2c).
 - b. Fuel requirements in 40 CFR 63.6604(b) (for emergency CI engines with a site rating of more than 100 brake hp and a displacement of less than 30 liters per cylinder that use diesel fuel and operate or are contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii) or that operate for the purpose specified in §63.6640(f)(4)(ii)).
 - c. General compliance requirements in 40 CFR 63.6605.
 - d. Monitoring, installation, collection, operation, and maintenance requirements in 40 CFR 63.6625(e), (f), (h), and (i).
 - e. Continuous compliance requirements in 40 CFR 63.6640.
 - f. Recordkeeping requirements in 40 CFR 63.6655 (except (c)) and 63.6660.
 - g. Reporting requirements as specified in Footnote 1 of Table 2c and 63.6650(h) (for emergency CI engines with a site rating of more than 100 brake hp that operate or are contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii) or that operate for the purpose specified in §63.6640(f)(4)(ii)).
 - h. Requirements of the General Provisions as outlined in Table 8 to 40 CFR 63 Subpart ZZZZ, except per 63.6645(a)(5), the following do not apply: 63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), and 63.9(b)-(e), (g) and (h).
- (9 VAC 5-80-110, 9 VAC 5-60-100, 40 CFR 63.6602, 63.6604, 63.6605, 63.6625, 63.6640, 63.6645, 63.6650, 63.6655, and 63.6660)

B. Monitoring

56. **Engine/Generator Requirements (GSE-44550 and GSE-44551) - Monitoring - Visible Emissions Observations/Evaluations** - The permittee shall observe each emergency generator exhaust (Unit Ref. Nos. GSE-44550 and GSE-44551) for visible emissions for at least six minutes once per month during daylight hours of operation. If visible emissions are noted, corrective action shall be taken to eliminate the visible emissions. If visible emissions continue after corrective action, a visible emissions evaluation (VEE) shall be immediately conducted on the generator for at least six minutes in accordance with Method 9 (40 CFR 60, Appendix A). If the VEE opacity average for the generator exceeds ten percent (10%), the VEE shall continue for one hour from initiation to determine compliance with the opacity limits. Results of observations and/or VEEs shall be recorded in an operation log. Records of observations shall include the following:

The name of the observer,
Date and time of the observation,
An indication that the process was operating,
An indication of the presence or absence of visible emissions, and
Any corrective action taken to eliminate visible emissions, including the date and time the process was shut down and/or repairs were completed.

If a VEE is conducted, records shall be in accordance with Method 9 (40 CFR 60, Appendix A).
(9 VAC 5-80-110)

C. Recordkeeping

57. **Engine/Generator Requirements (All Units) - Recordkeeping** - The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Tidewater Regional Office. These records shall include, but are not limited to:
- a. Annual hours of operation of each emergency generator (Ref. Nos. GSE-44550 and GSE-44551), calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
 - b. All fuel supplier certifications.

These records shall be available for inspection by the DEQ and shall be current for the most recent five years. (9 VAC 5-80-110 and Condition 9 of the 11/21/11 NSR Permit)

VI. Foundry Operations Requirements

A. Limitations

Unit Reference No.	Name/Description of Unit	Pollutants	Description of Applicable Requirement/ Emission Limit/Standard/Work Practice	Citation
550-E1	AOD	NOx	NOx emissions shall not exceed the following limits: 5.0 lbs/hr 1.0 tons/yr These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions 58 and 62.	Condition 12 of the 10/17/14 NSR Permit
550-E1	Argon/Oxygen Degassing Furnace (AOD)	OPACITY	Opacity limited to 20% except for one 6-minute period in each hour in which opacity shall not exceed 30%. These limits apply at all times except during startup, shutdown, and malfunction.	Condition 14 of the 10/17/14 NSR Permit
555-E11	Sand Reclaim Operation	PM	PM emissions shall not exceed the following limits: 2.3 lbs/hr 3.6 tons/yr These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions 58, 60, and 63.	Condition 13 of the 10/17/14 NSR Permit
555-E11	Sand Reclaim Operation	OPACITY	Opacity limited to 20% except for one 6-minute period in each hour in which opacity shall not exceed 60%.	Condition 15 of the 10/17/14 NSR Permit
FDFS-E1	Foundry Dry Feed System	OPACITY	Opacity limited to 20% except for one 6-minute period in each hour in which opacity shall not exceed 30%. These limits apply at all times except during startup, shutdown, and malfunction.	9 VAC 5-50-80
550-E3 and 550-E4	Electric Arc Furnaces B and C	PM	0.005 grains/dscf	40 CFR 63.7690 (a)(1) (MACT Subpart EEEEE)

Unit Reference No.	Name/Description of Unit	Pollutants	Description of Applicable Requirement/ Emission Limit/Standard/Work Practice	Citation
550-E4	Electric Arc Furnace C	PM	PM emissions shall not exceed the following limits: 0.8 lbs/hr 3.4 tons/yr These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions 58 and 61.	Condition 10 of the 3/17/11 NSR Permit
550-E4	Electric Arc Furnace C	PM-10	PM-10 emissions shall not exceed the following limits: 0.8 lbs/hr 3.4 tons/yr These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions 58 and 61.	Condition 10 of the 3/17/11 NSR Permit
550-E3 and 550-E4	Electric Arc Furnaces B and C	OPACITY	Opacity limited to 5%. This limit applies at all times except during startup, shutdown, and malfunction.	9 VAC 5-50-260 and Condition 12 of the 3/17/11 NSR Permit
550-EF1, 550-EF2, 550-EF5	Fugitive emissions from buildings 550 that house units that do not emit through a conveyance	OPACITY	Fugitive emissions shall not exhibit opacity greater than 20% (6-minute average) except for one 6-minute average per hour that does not exceed 27% opacity.	40 CFR 63.7690 (a)(7) (MACT Subpart EEEEE)
550-E12 and 555-EF3	Riser Burn Areas	OPACITY	Opacity limited to 20% except for one 6-minute period in each hour in which opacity shall not exceed 60%	9 VAC 5-40-2430 referencing 9 VAC 5-40-60 et seq.
550-E12 and 555-EF3	Riser Burn Areas	PM	3.05 lbs/hour	9 VAC 5-40-2410
550-E20	Steel Shot Abrasive Blasting	OPACITY	Opacity limited to 20% except for one 6-minute period in each hour in which opacity shall not exceed 60%	9 VAC 5-40-2430 referencing 9 VAC 5-40-60 et seq.
550-E20	Steel Shot Abrasive Blasting	PM	18.70 lbs/hour	9 VAC 5-40-2410

Unit Reference No.	Name/Description of Unit	Pollutants	Description of Applicable Requirement/ Emission Limit/Standard/Work Practice	Citation
550-E21	Sawing Operation	OPACITY	Opacity limited to 20% except for one 6-minute period in each hour in which opacity shall not exceed 60%	9 VAC 5-40-2430 referencing 9 VAC 5-40-60 et seq.
550-E21	Sawing Operation	PM	3.05 lbs/hour	9 VAC 5-40-2410

58. **Foundry Operations Requirements - (All Units) - Limitations** - Emissions from each of the foundry operation units shall not exceed the limits specified in Table VI.A.
 (9 VAC 5-80-110, 40 CFR 63.7690 (MACT Subpart EEEEE), Conditions 12, 13, 14, and 15 of the 10/17/14 NSR Permit, and Conditions 10 and 12 of the 3/17/11 NSR Permit)
59. **Foundry Operations Requirements - (550-E1) - Limitations - Emission Controls** - Particulate emissions from the Argon/Oxygen Degassing (AOD) Furnace (Unit Ref. No. 550-E1) shall be controlled by a cartridge filter system (PCD ID No. 550-C1a). The cartridge filter system shall be provided with adequate access for inspection and shall be in operation when the AOD Furnace is operating.
 (9 VAC 5-80-110 and Condition 3 of the 10/17/14 NSR Permit)
60. **Foundry Operations Requirements - (555-E11) - Limitations - Emission Controls** - Particulate emissions from the Sand Reclaim operation (Unit Ref. No. 555-E11) shall be controlled by a fabric filter (PCD ID No. 555-C11). The fabric filter shall be provided with adequate access for inspection and shall be in operation when the Sand Reclaim Operation is operating.
 (9 VAC 5-80-110 and Condition 4 of the 10/17/14 NSR Permit)
61. **Foundry Operations Requirements - (550-E3 and 550-E4) - Limitations - Emission Control** - Particulate emissions from the Electric Arc Furnaces (Ref. Nos. 550-E3 and 550-E4) shall be controlled by a cartridge filter system (Ref. No. 550-C1a). The cartridge filter system shall be provided with adequate access for inspection and shall be in operation when the Electric Arc Furnaces are operating.
 (9 VAC 5-80-110, 40 CFR 63.7690(c), and Condition 4 of the 3/17/11 NSR Permit)
62. **Foundry Operations Requirements - (550-E1) - Limitations - Throughput** - The throughput of metal to the Argon/Oxygen Degassing (AOD) Furnace (Unit Ref. No. 550-E1) shall not exceed 10,000 tons per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
 (9 VAC 5-80-110 and Condition 10 of the 10/17/14 NSR Permit)
63. **Foundry Operations Requirements - (555-E11) - Limitations - Throughput** - The throughput of sand to the Sand Reclaim Operation (Unit Ref. No. 555-E11) shall not exceed 40,000 tons per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
 (9 VAC 5-80-110 and Condition 11 of the 10/17/14 NSR Permit)

B. Monitoring

64. **Foundry Operations Requirements - (550-C1a) - Monitoring - Monitoring Device** - The cartridge filter system (PCD ID No. 550-C1a) shall be equipped with a device to continuously measure the differential pressure drop across the filters. The monitoring device shall be installed, maintained, calibrated, and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. The monitoring device shall be provided with adequate access for inspection and shall be in operation when the cartridge filter system is operating.
(9 VAC 5-80-110, 40 CFR 63 Subpart EEEEE, Condition 5 of the 3/17/11 NSR Permit, and Condition 5 of the 10/17/14 NSR Permit)
65. **Foundry Operations Requirements - (550-C1a) - Monitoring - Monitoring Device Observation** - To ensure good performance, the monitoring device used to continuously measure the differential pressure drop across the cartridge filter system (PCD ID No. 550-C1a) shall be observed by the permittee with a frequency of not less than once per operating day. The permittee shall continuously record measurements from the monitoring device. The permittee shall keep a log of the monitoring device measurements. The log shall include the date and time the measurement was made, an indication that the process was operating, the acceptable pressure drop range, the measured pressure drop, and a description of the corrective actions taken whenever a pressure drop outside the acceptable range was observed, including the date and time repairs were completed.
(9 VAC 5-80-110, Condition 6 of the 3/17/11 NSR Permit, and Condition 6 of the 10/17/14 NSR Permit)
66. **Foundry Operations Requirements - (550-C1a) - Monitoring - Monitoring Device** - The cartridge filter system (PCD ID No. 550-C1a) shall be equipped with a cartridge leak detection system. The monitoring device shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. The monitoring device shall be provided with adequate access for inspection and shall be in operation when the cartridge filter system is operating.
(9 VAC 5-80-110, 40 CFR 64.2, 40 CFR 63 Subpart EEEEE, Condition 7 of the 3/17/11 NSR Permit, and Condition 7 of the 10/17/14 NSR Permit)
67. **Foundry Operations Requirements - (555-C11) - Monitoring - Monitoring Devices** - The fabric filter (PCD ID No. 555-C11) for the Sand Reclaim Operation (Unit Ref. No. 555-E11) shall be equipped with a device to continuously measure the differential pressure drop across the filter. The device shall be installed, maintained, calibrated, and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. The monitoring device shall be provided with adequate access for inspection and shall be in operation when the fabric filter is operating.
(9 VAC 5-80-110 and Condition 8 of the 10/17/14 NSR Permit)
68. **Foundry Operations Requirements - (555-C11) - Monitoring - Monitoring Device Observation** - To ensure good performance, the monitoring device used to continuously measure the differential pressure drop across the fabric filter (PCD ID No. 555-C11) for the Sand Reclaim Operation (Ref. No. 555-E11) shall be observed by the permittee with a frequency of not less than once per operating day while reclaiming sand. The permittee shall keep a log of the observations from the monitoring device, including the name of the observer, the date and time of the observation, the observed pressure drop reading, the acceptable pressure drop range, and any corrective action taken when the pressure drop reading is outside the acceptable range (including, but not limited to, a brief description and date of completion of corrective action).
(9 VAC 5-80-110 and Condition 9 of the 10/17/14 NSR Permit)

69. **Foundry Operations Requirements - (550-S1) - Monitoring - Visible Emissions Evaluations** - The permittee shall perform a visible emissions evaluation on the stack of the Argon/Oxygen Degassing (AOD) Furnace and Foundry Dry Feed System (Stack No. 550-S1) once every six months during daylight hours of operation utilizing EPA Method 9 (reference 40 CFR 60, Appendix A). The permittee shall keep records in accordance with EPA Method 9 and maintain the records at the facility for inspection by DEQ for the most recent 5-year period.
(9 VAC 5-80-110 E and Condition 16 of the 10/17/14 NSR Permit)
70. **Foundry Operations Requirements - (550-S20) - Monitoring - Visible Emissions Observations/Evaluations** - The permittee shall observe the stack of the Steel Shot Abrasive Blasting Operation (Stack No. 550-S20) at least once per month during daylight hours of operations for visible emissions for at least six minutes. If visible emissions are noted from the stack, operational adjustment or maintenance shall be performed to eliminate the visible emissions. If visible emissions continue after maintenance actions, a visible emissions evaluation (VEE) shall be immediately conducted on the stack for at least six minutes in accordance with Method 9 (40 CFR 60, Appendix A). If the VEE opacity average for the stack exceeds ten percent (10%), the VEE shall continue for one hour from initiation to determine compliance with the opacity limit. Results of observations and/or VEEs shall be recorded in an operation log. Records of observations shall include the following:

The name of the observer,
Date and time of the observation,
An indication that the process was operating,
An indication of the presence or absence of visible emissions, and
Any corrective action taken to eliminate visible emissions, including the date and time the process was shut down and/or repairs were completed.

If a VEE is conducted, records shall be in accordance with Method 9 (40 CFR 60, Appendix A).
(9 VAC 5-80-110)
71. **Foundry Operations Requirements - (550-E3, 550-E4, 550-EF1, 550-EF2, and 550-EF5) - Monitoring - Requirements by Reference - MACT, Subpart EEEEE** - Except where this permit is more restrictive than the applicable requirement, the Foundry Operation shall be operated in compliance with the requirements of 40 CFR 63 Subpart EEEEE.
Note: All applicable requirements of 40 CFR 63, Subpart EEEEE may not be specifically listed in this permit. The permittee should refer to the applicable regulation for additional requirements not included in this permit.
(9 VAC 5-80-110 and Condition 9 of the 3/17/11 NSR Permit)
72. **Foundry Operations Requirements - (550-E3, 550-E4, 550-EF1, 550-EF2, and 550-EF5) - Monitoring - Work Practice Standards - MACT, Subpart EEEEE** - The permittee must prepare and operate at all times according to a written certification that the foundry purchases and uses only metal ingots, pig iron, slitter, or other materials that do not include post-consumer automotive body scrap, post-consumer engine blocks, post-consumer oil filters, oily turnings, lead components, mercury switches, plastics, or free organic liquids.
(9 VAC 5-80-110 and 40 CFR 63.7700(b))

73. **Foundry Operations Requirements - (550-E3 and 550-E4) - Monitoring - Operations and Maintenance Requirements - MACT, Subpart EEEEE** - The permittee must prepare and operate at all times according to a written operation and maintenance plan (O&M Plan) for each capture and collection system and control device for the **Electric Arc Furnaces (Unit Ref. Nos. 550-E3 and 550-E4)** that are subject to the emission limit in 40 CFR 63.7690(a). Your O&M Plan is subject to approval by the Director, Tidewater Regional Office, and must contain elements described in 40 CFR 63.7710 (b)(1) through (6). Applicable requirements are including, but not limited to, the following:
- Monthly inspections of the equipment that is important to the performance of the total capture system (i.e., pressure sensors, dampers, and damper switches) (40 CFR 63.7710 (b)(1)).
 - Preventive maintenance plan for each control device, including a preventive maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance (40 CFR 63.7710 (b)(3)).
 - A site specific monitoring plan for each bag leak detection system (40 CFR 63.7710(b)(4)).
 - Corrective action plan for the cartridge filter system (40 CFR 63.7710(b)(5)).
 - Procedures for providing an ignition source to mold vents of sand mold systems in each pouring area and pouring station unless it has been determined that the mold vent gases either are not ignitable, ignite automatically, or cannot be ignited due to accessibility or safety issues. This determination must be documented and records are maintained (40 CFR 63 7710(b)(6)).
- (9 VAC 5-80-110 and 40 CFR 63.7710(b))
74. **Foundry Operations Requirements - (550-E3 and 550-E4) - Monitoring - Startup, Shutdown, and Malfunction Plan - MACT, Subpart EEEEE** - The permittee must develop a written startup, shutdown, and malfunction plan for the electric arc furnaces (Unit Ref. Nos. 550-E3 and 550-E4) according to the provisions in 40 CFR 63.6 (e)(3).
(9 VAC 5-80-110 and 40 CFR 63.7720(c))
75. **Foundry Operations Requirements - (550-C1a) - Monitoring - Continuing Monitoring Requirements - MACT, Subpart EEEEE** - For the cartridge filter system, the permittee must at all times monitor the relative change in PM loading using a bag leak detection system according to the requirements in 40 CFR 63.7741(b) and conduct inspections at their specified frequencies according to the requirements specified in 40 CFR 63.7740(c)(1) through (8), as applicable.
(9 VAC 5-80-110 and 40 CFR 63.7740(c))
76. **Foundry Operations Requirements - (550-C1a) - Monitoring - Monitoring Device Requirements - MACT, Subpart EEEEE** - The cartridge filter system shall be equipped with a bag leak detection system that must be installed, operated, and maintained according to the requirements in 40 CFR 63.7741(b), including, but not limited to, the following:
- The system must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 0.0044 grains per actual cubic foot or less.
 - The bag leak detection system sensor must provide output of relative particulate matter loadings and continuously record the output with a data logger.
 - The system must be equipped with an alarm that will sound when an increase in relative particulate loading is detected over the alarm set point established in the O&M Plan, and the alarm must be located such that it can be heard by the appropriate plant personnel.

- d. The initial adjustment of the system must, at minimum, consist of establishing the baseline output by adjusting the sensitivity (range) and the averaging period of the device, and establishing the alarm set points and the alarm delay time (if applicable).
- e. Following the initial adjustment, the sensitivity or range, averaging period, alarm set point, or alarm delay time should not be adjusted without the approval of the Director, Tidewater Regional Office. Except, once per quarter, the sensitivity of the bag leak detection system may be adjusted to account for seasonal effects including temperature and humidity according to the procedures in the O&M Plan required by 40 CFR 63.7710(b).
- f. The bag leak detector sensor shall be installed downstream of the cartridge filter.
- g. Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.
(9 VAC 5-80-110 and 40 CFR 63.7741(b))

C. Recordkeeping

77. **Foundry Operations Requirements - (All Units) - Recordkeeping** - The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Tidewater Regional Office. These records shall include, but are not limited to:
- a. Annual throughput of metal to the Argon/Oxygen Degassing (AOD) Furnace (Ref. No. 550-E1), calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
 - b. Annual throughput of sand to the Sand Reclaim Operation (Ref. No. 555-E11), calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
 - c. Operation and control device monitoring records for the cartridge filter system (PCD ID No. 550-C1a) and the fabric filter for the Sand Reclaim Operation (PCD ID No. 555-C11), as required by Conditions B.65 and B.68.
 - d. For the stack of the Argon/Oxygen Degassing (AOD) Furnace and Foundry Dry Feed System (Stack No. 550-S1), visible emission evaluation records in accordance with Method 9 (40 CFR 60 Appendix A).
 - e. For the stack of the Steel Shot Abrasive Blasting Operation (Stack No. 550-S20), visible emission observations, and if VEE is performed, records in accordance with Method 9 (40 CFR 60 Appendix A).
 - f. Copies of all required notifications.
 - g. Copies of all required reports.
 - h. All required opacity and PM performance test results.
 - i. Records specified in 40 CFR 63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction.
 - j. Records of the times the cartridge leak detection system alarm sounded, and for each valid alarm, the time you initiated corrective action, the corrective action taken, and the date on which corrective action was completed (40 CFR 63.7743(c)(2)).

- k. Records of all inspections and maintenance of the cartridge filter system as required by 40 CFR 63.7740(c), including all information needed to document conformance with these requirements (40 CFR 63.7743(c)(1)).
- l. Records that document continuous compliance with the work practice standards in 40 CFR 63.7700(b) (40 CFR 63.7744(a)).
- m. Records of monthly inspections, preventive maintenance, site-specific bag leak detection system monitoring, and corrective action to document conformance with the requirements of the O&M Plan (40 CFR 63.7745(a)).
- n. A current copy of the O&M Plan shall be available for inspection upon request. The plans must be kept for the life of the foundry or until the foundry is no longer subject to the requirements of 40 CFR 63 Subpart EEEEE (40 CFR 63.7745(b)).

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years unless otherwise noted.

(9 VAC 5-80-110, 40 CFR 63.7752, Condition 13 of the 3/17/11 NSR Permit, and Condition 17 of the 10/17/14 NSR Permit)

D. Testing

- 78. **Foundry Operations Requirements - (550-E3 and 550-E4) - Testing - MACT, Subpart EEEEE** - The permittee must conduct subsequent performance tests to demonstrate compliance with the applicable PM emission limit in 40 CFR 63.7690(a)(1) for the electric arc furnaces (550-E3 and E4) no less frequently than every 5 years.
(9 VAC 5-80-110 and 40 CFR 63.7731(a))
- 79. **Foundry Operations Requirements - (550-EF1, 550-EF2, and 550-EF5) - Testing - MACT, Subpart EEEEE** - The permittee must conduct subsequent performance tests to demonstrate compliance with the applicable fugitive emission opacity limits in 40 CFR 63.7690(a)(7) no less frequently than once every 6 months (a subsequent performance test is considered timely if conducted anytime within the sixth calendar month following the month the previous test was conducted).
(9 VAC 5-80-110 and 40 CFR 63.7731(b))
- 80. **Foundry Operations Requirements - (550-E3 and 550-E4) - Testing - MACT, Subpart EEEEE** - To determine compliance with the applicable PM emission limit in 40 CFR 63.7690(a)(1) for the electric arc furnaces, the test methods and procedures in 40 CFR 63.7732(b) shall be followed.
(9 VAC 5-80-110 and 40 CFR 63.7732(b))
- 81. **Foundry Operations Requirements - (550-EF1, 550-EF2, and 550-EF5) - Testing - MACT, Subpart EEEEE** - To determine compliance with the opacity limit in 40 CFR 63.7690(a)(7) for fugitive emissions from buildings or structures housing any emission units of the foundry operation, EPA Method 9 (reference 40 CFR 60 Appendix A) shall be conducted by a certified observer, and concurrently with the PM performance tests, as required by 40 CFR 63.7732(d).
(9 VAC 5-80-110 and 40 CFR 63.7732(d))
- 82. **Foundry Operations Requirements - Testing** - The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports shall be provided at the appropriate locations.
(9 VAC 5-40-30, 9 VAC 5-50-30, and 9 VAC 5-80-110)

83. **Foundry Operations Requirements - Testing** - If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the appropriate method(s) in accordance with procedures approved by the DEQ.
(9 VAC 5-80-110)

E. Notifications and Reporting

84. **Foundry Operations Requirements - (550-E3, 550-E4, 550-EF1, 550-EF2, and 550-EF5) - Notifications and Reporting - MACT, Subpart EEEEE** - The permittee shall furnish written notification to the Director, Tidewater Regional Office:
- a. All notifications required by 40 CFR 63.6(h)(4) and (5), 63.7(b) and (c), 63.8(e), 63.8(f)(4) and (6), 63.9(b) through (h), as applicable, by the specified dates.
 - b. The anticipated date of performance tests post-marked at least 60 calendar days prior to such date (40 CFR 63.7750(d)).
 - c. Notification of compliance status post-marked no later than 30 calendar days following each compliance demonstration that does not require a performance test (40 CFR 63.7750(e)(1)).
 - d. Notification of compliance status post-marked no later than 60 calendar days following each compliance demonstration that requires a performance test (40 CFR 63.7750(e)(2)).
- (9 VAC 5-80-110 and 40 CFR 63.7750)
85. **Foundry Operations Requirements - (550-E3, 550-E4, 550-EF1, 550-EF2, and 550-EF5) - Notifications and Reporting - MACT, Subpart EEEEE** - The permittee shall submit semiannual compliance reports to the Director, Tidewater Regional Office, postmarked no later than January 31 or July 31, covering reporting periods from July 1 through December 31, and January 1 through June 30, respectively. The reports shall include the information specified in 40 CFR 63.7751(b). All deviations reported in the MACT EEEEE semiannual compliance reports shall also be addressed in the Title V semiannual monitoring reports required by General Condition XVIII.173 of this permit, along with all other deviations from permit requirements.
(9 VAC 5-80-110, 40 CFR 63.7751(a) and (b), and 40 CFR 63.7751(d))
86. **Foundry Operations Requirements - (550-E3, 550-E4, 550-EF1, 550-EF2, and 550-EF5) - Notifications and Reporting - MACT, Subpart EEEEE** - If a startup, shutdown, or malfunction occurs that was not consistent with the SSM Plan, the permittee must submit an immediate startup, shutdown, and malfunction report according to the requirements of 40 CFR 63.10(d)(5)(ii).
(9 VAC 5-80-110 and 40 CFR 63.7751(c))

VII. Steel Preparation and Fabrication Requirements

A. Limitations

Unit Reference No.	Name/Description of Unit	Pollutants	Description of Applicable Requirement/Emission Limit/Standard/Work Practice	Citation
274-E1 and 275-E5	Abrasive Shot Blasting	PM	7.58 lbs/hour each	9 VAC 5-40-260
274-E1 and 275-E5	Abrasive Shot Blasting	OPACITY	Opacity limited to 20% except for one 6-minute period in each hour in which opacity shall not exceed 60%	9 VAC 5-40-320 referencing 9 VAC 5-40-60 et seq.
276-E3PC	Plasma Cutting	PM	Exempt	9 VAC 5-40-260
276-E3PC	Plasma Cutting	OPACITY	Opacity limited to 20% except for one 6-minute period in each hour in which opacity shall not exceed 60%	9 VAC 5-40-320 referencing 9 VAC 5-40-60 et seq.
288-E1 through E3	Abrasive Blasting	PM	7.58 lbs/hour each	9 VAC 5-40-260
288-E1 through E3	Abrasive Blasting	OPACITY	Opacity limited to 20% except for one 6-minute period in each hour in which opacity shall not exceed 60%	9 VAC 5-40-320 referencing 9 VAC 5-40-60 et seq.

87. **Steel Preparation and Fabrication Requirements - (All Units) - Limitations** - Emissions from each of the steel preparation and fabrication units shall not exceed the limitations specified in Table VII.A. (9 VAC 5-80-110, 9 VAC 5-40-260, and 9 VAC 5-40-320)

B. Monitoring

88. **Steel Preparation and Fabrication Requirements - (All Units) - Monitoring - Visible Emissions Evaluations** - The permittee shall perform a visible emissions evaluation on the stack of each unit in the table at the beginning of Section VII.A at least once per month during daylight hours of operation for at least eighteen minutes in accordance EPA Method 9 (reference 40 CFR 60, Appendix A). If the VEE opacity average for the stack exceeds ten percent (10%), the VEE shall continue for one hour from initiation to determine compliance with the opacity limits. The permittee shall keep records in accordance with EPA Method 9 and maintain the records at the facility for inspection by DEQ for the most recent 5-year period. (9 VAC 5-80-110 E)

C. Recordkeeping

89. **Steel Preparation and Fabrication Requirements - (All Units) - Recordkeeping** - The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Tidewater Regional Office. These records shall include, but are not limited to:

- a. Annual throughput of abrasive blast media (in tons) and hours of operation for each of the Steel Preparation and Fabrication Operations activities listed in Table VI.A. The abrasive blast media throughput (in tons) and hours of operation shall be recorded and maintained in a logbook for each calendar month such that the annual amounts can be calculated monthly as the sum of each consecutive 12-month period.
- b. Visible emission evaluations (VEE) records in accordance with Method 9 (40 CFR 60 Appendix A).

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-80-110)

D. Testing

90. **Steel Preparation and Fabrication Requirements - (All Units) - Testing** - If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the appropriate method(s) in accordance with procedures approved by the DEQ.

(9 VAC 5-80-110)

VIII. Secondary Lead Processing Requirements

A. Limitations

Unit Reference No.	Name/Description of Unit	Pollutants	Description of Applicable Requirement/ Emission Limit/Standard/Work Practice	Citation
4582-E12	One (1) Lead Casting Furnace and Lead Repair Operation located in bldg 5471 or Bldg 250	OPACITY	Opacity limited to 20% except for one 6-minute period in each hour in which opacity shall not exceed 30%. These limits apply at all times except during startup, shutdown, and malfunction.	9 VAC 5-50-80 and Condition 11 of the 3/17/11 NSR Permit
LS-E1	Lead School (for training) with 3 work stations located in bldg 4698	OPACITY	Opacity limited to 20% except for one 6-minute period in each hour in which opacity shall not exceed 30%. These limits apply at all times except during startup, shutdown, and malfunction.	9 VAC 5-50-80 and Condition 11 of the 3/17/11 NSR Permit

91. **Secondary Lead Processing Requirements - (All Units) - Limitations - Emissions** from each of the secondary lead processing units shall not exceed the limitations specified in Table VIII.A.
(9 VAC 5-80-110 and Condition 11 of the 3/17/11 NSR Permit)
92. **Secondary Lead Processing Requirements - (4582-E12 and LS-E1) - Limitations - Emission Controls -** Particulate and lead emissions from the Secondary Lead Processing units (Unit Ref. Nos. 4582-E12 and LS-E1) shall be controlled by a baghouse (Unit Ref. No. 4582-C2). The baghouse shall be provided with adequate access for inspection and shall be in operation when the Lead Casting Operation, Lead Repair Operation, and Lead School are operating.
(9 VAC 5-80-110 and Condition 3 of the 3/17/11 NSR Permit)
93. **Secondary Lead Processing Requirements - (4582-E12 and LS-E1) - Limitations - Throughput -** The annual throughput of lead through the Secondary Lead Processing units (Unit Ref. Nos. 4582-E12 and LS-E1) shall not exceed 1,500 tons per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
(9 VAC 5-80-110 and Condition 8 of the 3/17/11 NSR Permit)

B. Monitoring

94. **Secondary Lead Processing Requirements - (4582-C2) - Monitoring - Visible Emissions Observations/Evaluations** - The permittee shall observe the baghouse exhaust (Unit Ref. No. 4582-C2) at least once per week (Monday through Sunday) during daylight hours of operation for visible emissions for at least six minutes. If visible emissions are noted from the stack, operational adjustment or maintenance shall be performed to eliminate the visible emissions. If visible emissions continue after maintenance actions, a visible emissions evaluation (VEE) shall be immediately conducted on the stack for at least six minutes in accordance with Method 9 (40 CFR 60, Appendix A). If the VEE opacity average for the stack exceeds ten percent (10%), the VEE shall continue for one hour from initiation to determine compliance with the opacity limit. Results of observations and/or VEEs shall be recorded in an operation log. Records of observations shall include the following:

- The name of the observer,
- Date and time of the observation,
- An indication that the process was operating,
- An indication of the presence or absence of visible emissions, and
- Any corrective action taken to eliminate visible emissions, including the date and time the process was shut down and/or repairs were completed.

If a VEE is conducted, records shall be in accordance with Method 9 (40 CFR 60, Appendix A).
(9 VAC 5-80-110)

C. Recordkeeping

95. **Secondary Lead Processing Requirements - (All Units) - Recordkeeping** - The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Tidewater Regional Office. These records shall include, but are not limited to:
- a. Annual throughput of lead (in tons) for the Secondary Lead Processing units (Unit Ref. Nos. 4582-E12 and LS-E1), calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
 - b. Weekly visible emissions observations, visible emissions evaluations (if performed), and any corrective action taken.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.
(9 VAC 5-80-110 and Condition 13 of the 3/17/11 NSR Permit)

D. Testing

96. **Secondary Lead Processing Requirements - (All Units) - Testing** - If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the appropriate method(s) in accordance with procedures approved by the DEQ.
(9 VAC 5-80-110)

IX. Woodworking Requirements

A. Limitations

Unit Reference No.	Name/Description of Unit	Pollutants	Description of Applicable Requirement/ Emission Limit/Standard/Work Practice	Citation
3-E1	Cutting/Planer/Re-saw	PM	0.05 grains per standard cubic foot of exhaust gas	9 VAC 5-40-2270 B
3-E1	Cutting/Planer/Re-saw	OPACITY	Opacity limited to 20% except for one 6-minute period in each hour in which opacity shall not exceed 60%	9 VAC 5-40-2280 referencing 9 VAC 5-40-60 et seq.
501-E2	Foundry Pattern Shop - wood cutting machines	PM	0.05 grains per standard cubic foot of exhaust gas	9 VAC 5-40-2270 B
501-E2	Foundry Pattern Shop - wood cutting machines	OPACITY	Opacity limited to 20% except for one 6-minute period in each hour in which opacity shall not exceed 60%	9 VAC 5-40-2280 referencing 9 VAC 5-40-60 et seq.
513-E1	Warehouse No. 6 Saws	PM	0.05 grains per standard cubic foot of exhaust gas	9 VAC 5-40-2270 B
513-E1	Warehouse No. 6 Saws	OPACITY	Opacity limited to 20% except for one 6-minute period in each hour in which opacity shall not exceed 60%	9 VAC 5-40-2280 referencing 9 VAC 5-40-60 et seq.

97. **Woodworking Requirements - (All Units) - Limitations** - Emissions from each of the woodworking units shall not exceed the limitations specified in Table IX.A. Compliance shall be based on compliance with the monitoring and recordkeeping provisions of this section.
 (9 VAC 5-80-110)
98. **Woodworking Requirements - (All Units) - Limitations - Emission Controls** - Particulate emissions from Woodworking Operations shall be controlled by the use of cyclones. The cyclones shall be provided with adequate access for inspection and shall be in operation when the process is operating.
 (9 VAC 5-40-2270 and 9 VAC 5-80-110)

B. Monitoring

99. **Woodworking Requirements - (All Units) - Monitoring - Visible Emissions Evaluations** - The permittee shall perform a visible emissions evaluation (VEE) at least once per month during normal operations and daylight hours for at least six minutes, in accordance with Method 9 (40 CFR 60, Appendix A). If the VEE opacity average for the stack exceeds ten percent (10%), the VEE shall continue for one hour from initiation to determine compliance with the opacity limit. The permittee shall keep records in accordance with EPA Method 9 and maintain the records at the facility for inspection by DEQ for the most recent 5-year period.
 (9 VAC 5-80-110)

100. **Woodworking Requirements - (All Units) - Monitoring - Cyclone Inspections** - The permittee shall inspect the cyclones once per month for structural integrity and record the results in a logbook.
(9 VAC 5-80-110)

C. Recordkeeping

101. **Woodworking Requirements - (All Units) - Recordkeeping** - The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Tidewater Regional Office. These records shall include, but are not limited to:

- a. Visible emission evaluations (VEE) records in accordance with Method 9 (40 CFR 60 Appendix A).
- b. All cyclone structural integrity evaluations.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-80-110)

D. Testing

102. **Woodworking Requirements - (All Units) - Testing** - If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the appropriate method(s) in accordance with procedures approved by the DEQ.
(9 VAC 5-80-110)

X. Flame Spray Facility and Powder Coating Operation Requirements

A. Limitations

Unit Reference No.	Name/Description of Unit	Pollutants	Description of Applicable Requirement/ Emission Limit/Standard/Work Practice	Citation
4701-E10 through E13 combined	Flame spray facility units, as described in equipment list (Section II)	VOC	Total VOC emissions from the flame spray facility shall not exceed the following limits: 8 pounds per hour , 40 pounds per day, 7 tons per year.	9 VAC 5-80-110 and Specific Condition 4 of the 2/12/86 NSR Permit
205-C1a through c, 205-C2, 205-C3, and 206-C1	Units in Powder Coating Operation, as described in equipment list (Section II)	PM	PM emissions from the natural gas and propane-fired equipment, combined, shall not exceed 0.5 tons/yr. These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Condition numbers 103, 107, and 108.	Condition 10 of the 9/2/11 NSR Permit
205-C1a through c, 205-C2, 205-C3, and 206-C1	Units in Powder Coating Operation, as described in equipment list (Section II)	NOx (as NO ₂)	NOx emissions from the natural gas and propane-fired equipment, combined, shall not exceed 6.5 tons/yr. These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Condition numbers 103, 107 and 108.	Condition 10 of the 9/2/11 NSR Permit

Unit Reference No.	Name/Description of Unit	Pollutants	Description of Applicable Requirement/ Emission Limit/Standard/Work Practice	Citation
205-C1a through c, 205-C2, 205-C3, and 206-C1	Units in Powder Coating Operation, as described in equipment list (Section II)	CO	CO emissions from the natural gas and propane-fired equipment, combined, shall not exceed 5.4 tons/yr. These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Condition numbers 103, 107 and 108.	Condition 10 of the 9/2/11 NSR Permit
205-C1a through c, 205-C2, 205-C3, and 206-C1	Units in Powder Coating Operation, as described in equipment list (Section II)	OPACITY	Opacity limited to 5% as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This limit applies at all times except during startup, shutdown, and malfunction.	9 VAC 5-50-260 and Condition 11 of the 9/2/11 NSR Permit

103. **Flame Spray Facility and Powder Coating Operation Requirements - (All Units) - Limitations - Emissions** from each of the flame spray and powder coating operations shall not exceed the limitations specified in Table X.A.
 (9 VAC 5-80-110, 40 CFR 63, Subpart II, Condition 4 of the 2/12/86 NSR Permit, and Conditions 10 and 11 of the 9/2/11 NSR Permit)
104. **Flame Spray Facility and Powder Coating Operation Requirements - (All Units) - Limitations - Emissions** - Except where this permit is more restrictive than the applicable requirement, the painting operations shall be operated in compliance with the requirements of 40 CFR 63, Subpart II.
Note: All applicable requirements of 40 CFR 63, Subpart II **may not be** specifically listed in this permit. The permittee should refer to the applicable regulation for additional requirements not included in this permit.
 (9 VAC 5-80-110 and 40 CFR 63, Subpart II)
105. **Flame Spray Facility and Powder Coating Operation Requirements - (206-C1) - Limitations - Emission Controls** - Volatile organic compound (VOC) emissions from the heat cleaning oven (Ref. No. 206-C1) shall be controlled by a direct flame afterburner. The afterburner shall be fired to a minimum temperature of 1,500 degrees Fahrenheit. The heat cleaning oven shall be operated according to the manufacturer's recommended procedures.
 (9 VAC 5-80-110 and Condition 4 of the 9/2/11 NSR Permit)
106. **Flame Spray Facility and Powder Coating Operation Requirements - (205-C1) - Limitations - Emission Controls** - Volatile organic compound (VOC) emissions from the parts washer (Ref. No. 205-C1) shall be controlled by the use of water-based cleaning solutions. A change to solvent-based parts washing solutions may require a permit to modify and operate.
 (9 VAC 5-80-110 and Condition 5 of the 9/2/11 NSR Permit)

107. **Flame Spray Facility and Powder Coating Operation Requirements - (205-C1, 205-C2, and 205-C3) - Limitations - Fuel Throughput** - The throughput of natural gas to Unit Reference Numbers 205-C1, 205-C2, and 205-C3, combined, shall not exceed 123.2×10^6 cubic feet per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
(9 VAC 5-80-110 and Condition 8 of the 9/2/11 NSR Permit)
108. **Flame Spray Facility and Powder Coating Operation Requirements - (206-C1) - Limitations - Fuel Throughput** - The throughput of liquid propane gas to Unit Reference Number 206-C1 shall not exceed 57,442.6 gallons per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
(9 VAC 5-80-110 and Condition 9 of the 9/2/11 NSR Permit)

B. Monitoring

109. **Flame Spray Facility and Powder Coating Operation Requirements - (206-C1) - Monitoring and Recordkeeping - Monitoring Devices** - The heat cleaning oven (Unit Ref. No. 206-C1) shall be equipped with a device to continuously measure temperature inside the direct flame afterburner chamber. The monitoring device shall be installed, maintained, calibrated, and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. The monitoring device shall be provided with adequate access for inspection and shall be in operation when the heat cleaning oven is operating.
(9 VAC 5-80-110 and Condition 6 of the 9/2/11 NSR Permit)
110. **Flame Spray Facility and Powder Coating Operation Requirements - (206-C1) - Monitoring and Recordkeeping - Monitoring Device Observation** - To ensure good performance, the permittee shall observe the temperature readings given by the heat cleaning oven monitoring device once per operation. The permittee shall continuously record temperature measurements from the heat cleaning oven while the oven is in operation.
(9 VAC 5-80-110 and Condition 7 of the 9/2/11 NSR Permit)
111. **Flame Spray Facility and Powder Coating Operation Requirements - (205-C1a through c, 205-C2, 205-C3, and 206-C1) - Monitoring and Recordkeeping** - The permittee shall observe each burner/oven stack of the powder coating operation (Unit Ref. Nos. 205-C1a through c, 205-C2, 205-C3, and 206-C1) at least once per month when in operation for visible emissions for at least 6 minutes. If any visible emissions are noted, corrective action shall be taken to eliminate the visible emissions. Results of observations and any corrective action shall be recorded in an operation log. Records of observations shall include the following:
- The name of the observer,
 - Date and time of the observation,
 - An indication that the process was operating,
 - An indication of the presence or absence of visible emissions, and
 - Any corrective action taken to eliminate visible emissions, including the date and time the process was shut down and/or repairs were completed.
- (9 VAC 5-40-3370, 9 VAC 5-40-50, and 9 VAC 5-80-110 E)

C. Recordkeeping

112. **Flame Spray Facility and Powder Coating Operation Requirements - (4701-E10 through E13) - Recordkeeping - Records for the Flame Spray Operation** - The permittee shall maintain daily records of paint and coating usage (in gallons) and VOC content (as applied) per coating for the flame spray operation (Unit Ref. Nos. 4701-E10 through E13). The permittee shall calculate VOC emissions in pounds per hour and pounds per day once per calendar day based on the daily usage and VOC content (as applied) per coating. Daily is defined as the 24-hour period beginning at midnight of each calendar day and ending at 11:59 pm. Utilizing daily VOC emissions calculations, the permittee shall calculate annual VOC emissions in tons per year monthly as the sum of each consecutive 12-month period. Records of emissions calculations shall be maintained at the facility for inspection by DEQ for the most recent 5-year period.
(9 VAC 5-80-110 and Specific Condition 5 of the 2/12/86 NSR Permit)
113. **Flame Spray Facility and Powder Coating Operation Requirements - (205-C1a through c, 205-C2, 205-C3, and 206-C1) - Recordkeeping - Records for the Powder Coating Operation** - The permittee shall maintain records of emissions data and operating parameters for the natural gas and propane-fired units in the powder coating operation (Unit Ref. Nos. 205-C1a through c, 205-C2, 205-C3, and 206-C1) as necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Tidewater Regional Office. These records shall include, but are not limited to:
- Annual throughput of natural gas (in cubic feet), calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
 - Annual throughput of liquid propane gas (in gallons), calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
 - Records of the afterburner temperature when the heat cleaning oven (Unit Ref. No. 206-C1) is in operation (circle or strip chart).
 - Records of all visible emissions observations.
- These records shall be available for inspection by DEQ and shall be current for the most recent 5-year period.
(9 VAC 5-80-110 and Condition 12 of the 9/2/11 NSR Permit)

D. Testing

114. **Flame Spray Facility and Powder Coating Operation Requirements - (205-C1a through c, 205-C2, 205-C3, and 206-C1) - Testing - Emissions Testing** - The permitted facility shall be constructed so as to allow for emissions testing and monitoring upon reasonable notice at any time, using appropriate methods. Sampling ports shall be provided when requested at the appropriate locations and safe sampling platforms and access shall be provided.
(9 VAC 5-80-110 and Condition 13 of the 9/2/11 NSR Permit)

XI. Satellite Blast and Coat Facility Requirements

A. Limitations

Unit Reference No.	Name/Description of Unit	Pollutants	Description of Applicable Requirement/ Emission Limit/Standard/Work Practice	Citation
SBF-E1	Abrasive blasting process equipment, located in an enclosed fabric-covered shelter, custom design	PM-10	PM-10 emissions shall not exceed the following limits: 2.3 lb/hr 0.4 tons/yr These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions 115, 118, and 119.	Condition 10 of the 6/7/10 NSR Permit
SBF-E1	As described above	OPACITY	Opacity from each exhaust stack limited to 5%. This limit applies at all times except during startup, shutdown, and malfunction.	9 VAC 5-50-260 and Condition 12 of the 6/7/10 NSR Permit
SPF-E1	Marine coating process equipment, located in an enclosed fabric-covered shelter, custom design	VOC	VOC emissions shall not exceed the following limits: 218.1 lbs/hr 9.2 tons/yr These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions 115 and 119.	Condition 11 of the 6/7/10 NSR Permit
SPF-E1	As described above	OPACITY	Opacity from each exhaust stack limited to 5%. This limit applies at all times except during startup, shutdown, and malfunction.	9 VAC 5-50-260 and Condition 12 of the 6/7/10 NSR Permit

115. **Satellite Blast and Coat Facility Requirements - (All Units) - Limitations** - Emissions from each Satellite Blast and Coat Facility unit shall not exceed the limitations specified in Table XI.A.
 (9 VAC 5-80-110, 9 VAC 5-50-260, and Conditions 10, 11, and 12 of the 6/7/10 NSR Permit)
116. **Satellite Blast and Coat Facility Requirements - (SBF-E1) - Limitations - Emission Controls** - Particulate emissions from the abrasive blasting equipment in the fabric-covered shelter (Unit Ref. No. SBF-E1) shall be controlled by high efficiency cartridge filters. The cartridge filters shall be provided with adequate access for inspection and shall be in operation when the abrasive blasting process is operating. The fabric-covered shelter shall be kept closed during operation.
 (9 VAC 5-80-110 and Condition 3 of the 6/7/10 NSR Permit)

117. **Satellite Blast and Coat Facility Requirements - (SPF-E1) - Limitations - Emission Controls** - Particulate emissions from the marine coating equipment in the fabric-covered shelter (Unit Ref. No. SPF-E1) shall be controlled by high efficiency cartridge filters. The cartridge filters shall be provided with adequate access for inspection and shall be in operation when the marine coating process is operating. The fabric-covered shelter shall be kept closed during operation.
(9 VAC 5-80-110 and Condition 4 of the 6/7/10 NSR Permit)
118. **Satellite Blast and Coat Facility Requirements - (SBF-E1) - Limitations - Throughput** - The throughput of abrasive blast media shall not exceed 3,000 tons per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
(9 VAC 5-80-110 and Condition 7 of the 6/7/10 NSR Permit)
119. **Satellite Blast and Coat Facility Requirements - (SPF-E1) - Limitations - Throughput** - The throughput of marine coating shall not exceed 6,500 gallons per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
(9 VAC 5-80-110 and Condition 8 of the 6/7/10 NSR Permit)
120. **Satellite Blast and Coat Facility Requirements - (SPF-E1) - Limitations - Requirements by Reference** - Except where this permit is more restrictive than the applicable requirement, the marine coating operation (Unit Ref. No. SPF-E1) shall be operated in compliance with the requirements of 40 CFR 63 Subpart II.
Note: All applicable requirements of 40 CFR 63 Subpart II **may not be** specifically listed in this permit. The permittee should refer to the applicable regulation for additional requirements not included in this permit.
(9 VAC 5-80-110 and Condition 9 of the 6/7/10 NSR Permit)

B. Monitoring

121. **Satellite Blast and Coat Facility Requirements - (SBF-E1 and SPF-E1) - Monitoring - Monitoring Devices** - Each cartridge filter shall be equipped with a device to continuously measure the differential pressure drop across the filter. Each monitoring device shall be installed, maintained, and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when the process is operating.
(9 VAC 5-80-110 and Condition 5 of the 6/7/10 NSR Permit)
122. **Satellite Blast and Coat Facility Requirements - (SBF-E1 and SPF-E1) - Monitoring - Monitoring Device Observation** - To ensure good performance, the monitoring device used to continuously measure the pressure drop across each cartridge filter shall be observed by the permittee with a frequency of not less than once per operating day. The permittee shall keep a log of the monitoring device observations. The log shall include the name of the observer, the date and time the observation was made, an indication that the process was operating, the acceptable pressure drop range, the measured pressure drop, and a description of the corrective actions taken whenever a pressure drop outside the acceptable range was observed, including the date and time repairs were completed.
(9 VAC 5-80-110 and Condition 6 of the 6/7/10 NSR Permit)

123. **Satellite Blast and Coat Facility Requirements - (SBF-E1 and SPF-E1) - Monitoring - Visible Emissions Observations** - The permittee shall observe each exhaust stack of the abrasive blasting and marine coating processes at least once per operating day (Monday-Sunday) during normal operation for visible emissions for at least six minutes. If any visible emissions are noted, corrective action shall be taken to eliminate the visible emissions. Results of observations and any corrective action shall be recorded in an operation log. Records of observations shall include the following:

- The name of the observer,
- Date and time of the observation,
- An indication that the process was operating,
- An indication of the presence or absence of visible emissions, and
- Any corrective action taken to eliminate visible emissions, including the date and time the process was shut down and/or repairs were completed.

(9 VAC 5-80-110 and Condition 13 of the 6/7/10 NSR Permit)

C. Recordkeeping

124. **Satellite Blast and Coat Facility Requirements - (SBF-E1 and SPF-E1) - Recordkeeping** - The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Tidewater Regional Office. These records shall include, but are not limited to:
- a. Annual throughput of abrasive blasting media in tons, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
 - b. Annual throughput of marine coating in gallons, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
 - c. Material Safety Data Sheets (MSDS), Certified Product Data Sheets (CPDS), **or** other vendor information as approved by DEQ showing the VOC content and solids content for each coating used.
 - d. Monthly and annual emissions calculations for VOC from the process stacks using calculation methods approved by the Director, Tidewater Regional Office to verify compliance with the tons/yr emissions limitation in Table XI.A. Annual emissions shall be calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
 - e. Monitoring records for the air pollution control device, as required in Condition B.122.
 - f. Visible emission observation records and any corrective action taken, as required in Condition 0. These records shall be available for inspection by the DEQ and shall be current for the most recent five years.
- (9 VAC 5-80-110 and Condition 14 of the 6/7/10 NSR Permit)

XII. Blast and Coat Facility West Requirements

A. Limitations

Unit Reference No.	Name/Description of Unit	Pollutants	Description of Applicable Requirement/ Emission Limit/Standard/Work Practice	Citation
4730-SBCF-E1	Abrasive blasting process equipment, located in an enclosed fabric-covered shelter, custom design (Bldg 1883)	OPACITY	Opacity limited to 5%. This limit applies at all times except during startup, shutdown, and malfunction.	9 VAC 5-50-260 and Condition 12 of the 11/17/14 NSR Permit
4730-SBCF-E2 and 4730-SBCF-E3	Marine coating process equipment, located in an enclosed fabric-covered shelter, custom design (Bldg 1884 and 1885)	VOC	VOC emissions shall not exceed the following limits: 308.2 lbs/hr 24.1 tons/yr These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions 125 and 129.	9 VAC 5-50-260 and Condition 11 of the 11/17/14 NSR Permit
4730-SBCF-E2 and 4730-SBCF-E3	As described above	OPACITY	Opacity limited to 5%. This limit applies at all times except during startup, shutdown, and malfunction.	9 VAC 5-50-260 and Condition 12 of the 11/17/14 NSR Permit

125. **Blast and Coat Facility West Requirements - (All Units) - Limitations** - Emissions from each Supplemental Blast and Coat Facility unit shall not exceed the limitations specified in Table XII.A.
 (9 VAC 5-80-110 and Conditions 11 and 12 of the 3/16/11 NSR Permit)
126. **Blast and Coat Facility West Requirements - (4730-SBCF-E1) - Limitations - Emission Controls** - Particulate emissions from the abrasive blasting equipment in the fabric-covered shelter (Unit Ref. No. 4730-SBCF-E1) shall be controlled by portable dust collectors with high efficiency cartridge filters. The permittee shall operate a sufficient number of portable dust collectors to prevent visible emissions from escaping the shelter. The portable dust collectors shall be provided with adequate access for inspection. The fabric-covered shelter shall be kept closed during operation of the abrasive blasting process equipment.
 (9 VAC 5-80-110 and Condition 3 of the 11/17/14 NSR Permit)
127. **Blast and Coat Facility West Requirements - (4730-SBCF-E2 and 4730-SBCF-E3) - Limitations - Emission Controls** - Particulate emissions from the marine coating equipment in the fabric-covered shelters (Unit Ref. Nos. 4730-SBCF-E2 and 4730-SBCF-E3) shall be controlled by dry filters. The dry filters shall be provided with adequate access for inspection and shall be in operation when the marine coating process equipment is operating. The fabric-covered shelters shall be kept closed during operation of the marine coating process equipment.
 (9 VAC 5-80-110 and Condition 5 of the 11/17/14 NSR Permit)

128. **Blast and Coat Facility West Requirements - (4730-SBCF-E1) - Limitations - Throughput** - The throughput of abrasive blast media through the abrasive blasting process (Unit Ref. No. 4730-SBCF-E1) shall not exceed 4,000 tons per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months. (9 VAC 5-80-110 and Condition 8 of the 11/17/14 NSR Permit)
129. **Blast and Coat Facility West Requirements - (4730-SBCF-E2 and 4730-SBCF-E3) - Limitations - Throughput** - The throughput of marine coating through the marine coating processed (Unit Ref. Nos. 4730-SBCF-E2 and 4730-SBCF-E3) shall not exceed 15,000 gallons per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months. (9 VAC 5-80-110 and Condition 9 of the 11/17/14 NSR Permit)
130. **Blast and Coat Facility West Requirements - (4730-SBCF-E2 and 4730-SBCF-E3) - Limitations - Requirements by Reference** - Except where this permit is more restrictive than the applicable requirement, the marine coating equipment (Unit Ref. Nos. 4730-SBCF-E2 and 4730-SBCF-E3) shall be operated in compliance with the requirements of 40 CFR 63, Subpart II.
Note: All applicable requirements of 40 CFR 63, Subpart II **may not be** specifically listed in this permit. The permittee should refer to the applicable regulation for additional requirements not included in this permit. (9 VAC 5-80-110 and Condition 10 of the 11/17/14 NSR Permit)

B. Monitoring

131. **Blast and Coat Facility West Requirements - (4730-SBCF-E1) - Monitoring - Fugitive Emissions Observations** - To ensure that a sufficient number of portable dust collectors is used to control the particulate emissions from the abrasive blasting process (Unit Ref. No. 4730-SBCF-E1), the permittee shall observe each opening of the fabric-covered shelter housing the abrasive blasting process equipment for fugitive emissions after start-up of the equipment on each operating day. If any fugitive emissions are noted, corrective action shall be taken immediately to eliminate the emissions. Corrective action shall involve the addition of one or more portable dust collectors with high efficiency cartridge filters. Results of observations and corrective actions shall be recorded in an operation log. Records shall include the following:
- The name of the observer,
 - Date and time of the observation,
 - An indication that the abrasive blasting process equipment was operating,
 - An indication of the presence or absence of fugitive emissions,
 - The duration of any fugitive emission incident, and
 - Any corrective action taken to eliminate fugitive emissions.
- (9 VAC 5-80-110 and Condition 4 of the 11/17/14 NSR Permit)

132. **Blast and Coat Facility West Requirements - (4730-SBCF-E1, 4730-SBCF-E2, and 4730-SBCF-E3) - Monitoring - Monitoring Devices** - Each cartridge filter for the abrasive blasting process (Unit Ref. No. 4730-SBCF-E1) and each dry filter for the marine coating processed (Unit Ref. Nos. 4730-SBCF-E2 and 4730-SBCF-E3) shall be equipped with a device to continuously measure the differential pressure drop across the filter. Each monitoring device shall be installed, maintained, and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when the process is operating.
(9 VAC 5-80-110 and Condition 6 of the 11/17/14 NSR Permit)
133. **Blast and Coat Facility West Requirements - (4730-SBCF-E1, 4730-SBCF-E2, and 4730-SBCF-E3) - Monitoring - Monitoring Device Observation** - To ensure good performance, the monitoring devices used to continuously measure the pressure drop across each cartridge filter and dry filter shall be observed by the permittee with a frequency of not less than once per operating day. The permittee shall establish an acceptable pressure drop range based on manufacturer recommendations or good engineering judgment. Prompt corrective action shall be taken whenever the pressure drop is outside the acceptable range. The permittee shall keep a log of the monitoring device observations. The log shall include:
The name of the observer,
The date and time the observation was made,
An indication that the process was operating,
The acceptable pressure drop range,
The measured pressure drop, and
A description of the corrective actions taken whenever a pressure drop outside the acceptable range was observed, including the date and time repairs were completed.
(9 VAC 5-80-110 and Condition 7 of the 11/17/14 NSR Permit)
134. **Blast and Coat Facility West Requirements - (4730-SBCF-E1) - Monitoring - Visible Emissions Observations** - The permittee shall observe the exhaust stack of each portable dust collector for the abrasive blasting process (Unit Ref. No. 4730-SBCF-E1) at least once per week (Monday-Sunday) during normal operation for visible emissions for at least six minutes. If any visible emissions are noted, corrective action shall be taken to eliminate the visible emissions. Results of observations and corrective actions shall be recorded in an operation log. Records shall include the following:
The name of the observer,
Date and time of the observation,
An indication that the abrasive blasting process equipment was operating,
An indication of the presence or absence of visible emissions,
The duration of any visible emission incident, and
Any corrective action taken to eliminate visible emissions.
(9 VAC 5-80-110 and Condition 13 of the 11/17/14 NSR Permit)

C. Recordkeeping

135. **Blast and Coat Facility West Requirements - (4730-SBCF-E1, 4730-SBCF-E2, and 4730-SBCF-E3) - Recordkeeping** - The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Tidewater Regional Office. These records shall include, but are not limited to:
- a. Annual throughput of abrasive blast media through the abrasive blasting process (Unit Ref. No. 4730-SBCF-E1) (in tons), calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
 - b. Annual throughput of marine coating through the marine coating process (Unit Ref. No. 4730-SBCF-E2 and 4730-SBCF-E3) (in gallons), calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
 - c. Material Safety Data Sheets (MSDS), Certified Product Data Sheets (CPDS), **or** other vendor information as approved by DEQ showing the VOC content and solids content for each coating used.
 - d. Monthly and annual emissions calculations for VOC from the spray coating process stacks (Unit Ref. Nos. 4730-SBCF-E2 and 4730-SBCF-E3) using calculation methods approved by the Director, Tidewater Regional Office to verify compliance with the tons/yr emission limitation in Table XII.A. Annual emissions shall be calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
 - e. Fugitive emissions observation records and any corrective action taken, as required in Condition B.131.
 - f. Control device monitoring records for the air pollution control devices, as required in Condition B.133.
 - g. Visible emissions observation records and any corrective action taken, as required in Condition B.134. These records shall be available for inspection by the DEQ and shall be current for the most recent five years. (9 VAC 5-80-110 and Condition 14 of the 11/17/14 NSR Permit)

XIII. Shipyard MACT Requirements

A. Limitations

Unit Reference No.	Name/Description of Unit	Pollutants	Description of Applicable Requirement/ Emission Limit/Standard/Work Practice	Citation
Group P-X33, Group PX-15, P-SHIPSPRAY, P-SHIPBRUSH, SPF-E1, 4730-SBCF-E2, and 4730-SBCF-E3	Units in Ship Painting Operations, as described in equipment list (Section II)	VOC, VOHAP	340 grams VOHAP per liter general use, air flask, inorganic zinc high-build, military exterior, nonskid, rubber camouflage, specialty interior, and undersea weapons systems coatings; 360 grams VOHAP per liter organic zinc coatings; 400 grams VOHAP per liter anti-foulant coatings; 420 grams VOHAP per liter heat resistant, high-gloss, and nuclear coatings; 490 grams VOHAP per liter special marking coatings; 500 grams VOHAP per liter high-temperature coatings; 530 grams VOHAP per liter antenna coatings; 550 grams VOHAP per liter navigational aids and repair and maintenance of thermoplastics coatings; 610 grams VOHAP per liter mist, sealant for thermal spray aluminum, and tack coat coatings; 650 grams VOHAP per liter weld-through preconditioning primer coatings; and 780 grams VOHAP per liter pretreatment wash primer coatings	40 CFR 63 Subpart II- National Emission Standards for Shipbuilding and Ship Repair (Surface Coating), Section 40 CFR 63.783(a)

136. **Shipyard MACT Requirements - (All Units) - Limitations** - Unless otherwise specified, VOC and HAP emissions from marine coatings are subject to the provisions of 40 CFR 63 Subpart II - National Emission Standards for Shipbuilding and Ship Repair (Surface Coating). No owner or operator of any existing or new affected source shall cause or allow the application of any coating to a ship with an as-applied VOHAP content exceeding the applicable limits given in Table 2 of 40 CFR 63 Subpart II, as determined by the procedures described in 40 CFR 63.785 (a), (b), or (c)(1) through (c)(4). For the compliance procedures described in Sec. 63.785 (c)(1) through (c)(3), VOC shall be used as a surrogate for VOHAP, and Method 24 of Appendix A to 40 CFR Part 60 shall be used as the definitive measure for determining compliance. For the compliance procedure described in 40 CFR 63.785(c)(4), an alternative test method capable of measuring independent VOHAP shall be used to determine compliance. The method must be submitted to and approved by DEQ. (9 VAC 5-80-110 B and 40 CFR 63.783(a))

B. Monitoring and Recordkeeping

137. **Shipyards MACT Requirements - (All Units) - Monitoring and Recordkeeping** - For each batch of marine coating that is received by the facility, the permittee shall determine the coating category, the applicable VOHAP limit as specified in 40 CFR 63.783(a), and certify the as-supplied VOC content as specified in 40 CFR 63.785(a)(2) or (b)(1). The permittee may use a certification supplied by the manufacturer for the batch, although the permittee retains liability should subsequent testing reveal a violation. If the permittee performs the certification testing, only one of the containers in which the batch coating was received is required to be tested. In lieu of testing each batch of coating, as applied, the permittee may determine compliance with the VOHAP limits using any combination of the procedures described in 40 CFR 63.785 Paragraphs (c)(1), (c)(2), (c)(3), and (c)(4). The procedure used for each coating shall be determined and documented prior to application. The permittee shall log such data in a logbook to be maintained at the facility for inspection by DEQ for the most recent 5-year period. The results of any compliance demonstration conducted by the permittee or any regulatory agency using Method 24 shall take precedence over the results using the procedures in 40 CFR 63.785 Paragraphs (c)(1), (c)(2), or (c)(3). The results of any compliance demonstration conducted by the permittee or any regulatory agency using an approved test method to determine VOHAP content shall take precedence over the results using the procedures in 40 CFR 63.785 Paragraph (c)(4). (9 VAC 5-80-110 E and 40 CFR 63.785(a) and (b))
138. **Shipyards MACT Requirements - (All Units) - Monitoring and Recordkeeping** - The permittee shall ensure that all handling and transfer of VOC-containing marine coating materials to and from containers, tanks, vats, drums, and piping systems is conducted in a manner that minimizes spills. The permittee shall inspect all containers, tanks, vats, drums, and piping systems once monthly to ensure that they are free of cracks, holes, and other defects. All containers, vats, drums, and piping systems housing VOC-containing marine coating materials shall remain closed unless materials are being added to or removed from them. Such procedures shall be documented in the facility's Shipbuilding and Ship Repair NESHAP Implementation Plan approved on February 4, 2013. (9 VAC 5-80-110 E, 40 CFR 63.783(b)(1) and (b)(2), and the Shipbuilding and Ship Repair NESHAP Implementation Plan submitted to DEQ on January 17, 2013)
139. **Shipyards MACT Requirements - (All Units) - Monitoring and Recordkeeping** - The permittee shall record the total volume of marine coatings applied at the facility to ships. Such records shall be compiled monthly and maintained at the facility for a minimum of 5-years. (9 VAC 5-80-110 F and 40 CFR 63.788(b)(1))
140. **Shipyards MACT Requirements - (All Units) - Monitoring and Recordkeeping** - The permittee shall compile records of marine coatings on a monthly basis and maintain such records for a minimum of 5 years. Such records shall include, at a minimum:
- a. All documentation supporting initial notification;
 - b. A copy of the facility's approved implementation plan;
 - c. The volume of each low-usage-exempt coating applied;
 - d. Identification of the coatings used, their appropriate coating categories, and the applicable VOC limit;
 - e. Certification of the as-supplied VOC content of each batch of coating;
 - f. A determination of whether containers meet the standards as described in 40 CFR 63.783(b)(2);
 - g. The results of any Method 24 (as referenced in 40 CFR 60, Appendix A) or approved VOC measurement test conducted on individual containers of coating, as applied; and

- h. Any additional records as required by 40 CFR 63.788(b)(3) and (b)(4).
(9 VAC 5-80-110 F and 40 CFR 63.788(b)(1) through (b)(4))

C. Testing

141. **Shipyard MACT Requirements - (All Units) - Testing** - For the compliance procedures described in 40 CFR 63.785(c)(1) through (c)(3), Method 24 of 40 CFR Part 60, Appendix A is the definitive method for determining the VOC content of coatings, as supplied or as applied. Compliance with each limitation in Table XIII.A shall be based on compliance with the monitoring, recordkeeping, and reporting provisions of this section.
(9 VAC 5-80-110 B and 40 CFR 63.786(a))
142. **Shipyard MACT Requirements - (All Units) - Testing** - If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the appropriate method(s) in accordance with procedures approved by the DEQ.
(9 VAC 5-80-110)

D. Reporting

143. **Shipyard MACT Requirements - (All Units) - Reporting** - Before the 60th day following completion of each 6-month period after the compliance date specified in 40 CFR 63.784, the permittee shall submit a VOC report on marine coatings to the Director, Tidewater Regional Office for each of the previous 6 months. The report shall include all of the information that must be retained pursuant to 40 CFR 63.788(b)(2) through (b)(3), except for that information specified in 40 CFR 63.788(b)(2)(i) through (ii), (b)(2)(v), (b)(3)(i)(A), (b)(3)(ii)(A), and (b)(3)(iii)(A). If a violation is detected, the permittee shall also report the information specified in 40 CFR 63.788(b)(4) for the reporting period during which the violation(s) occurred. To the extent possible, the report shall be organized according to the compliance procedure(s) followed each month by the permittee.
(9 VAC 5-80-110 F and 40 CFR 63.788(c))

XIV. Specialty Shops Requirements

A. Limitations

Unit Reference No.	Name/Description of Unit	Pollutants	Description of Applicable Requirement/ Emission Limit/Standard/Work Practice	Citation
64-E1	Electrical Shop drill press/sander (not used for wood)	PM	$E=4.10P^{0.67}$ where P is the process weight rate in tons/hour and E is the PM emission rate in lbs/hr	9 VAC 5-40-260
64-E2	Electrical Shop saw	PM	$E=4.10P^{0.67}$ where P is the process weight rate in tons/hour and E is the PM emission rate in lbs/hr	9 VAC 5-40-260
64-E9	Grinding metal	PM	$E=4.10P^{0.67}$ where P is the process weight rate in tons/hour and E is the PM emission rate in lbs/hr	9 VAC 5-40-260
60-E2	Grinding operations	PM	$E=4.10P^{0.67}$ where P is the process weight rate in tons/hour and E is the PM emission rate in lbs/hr	9 VAC 5-40-260
114-E1	Saw metals	PM	$E=4.10P^{0.67}$ where P is the process weight rate in tons/hour and E is the PM emission rate in lbs/hr	9 VAC 5-40-260
4896-E1	Melamine Operations (2 Milling Machines, Band Saw, and Lathe)	PM	$E=4.10P^{0.67}$ where P is the process weight rate in tons/hour and E is the PM emission rate in lbs/hr	9 VAC 5-40-260
64-E1, 64-E2, 64-E9, 60-E2, 114-E1, and 4896-E1	As described above	OPACITY	Visible emissions shall not exceed 20 percent opacity except for one 6-minute period in any one hour of not more than 60 percent opacity.	9 VAC 5-40-80
64-E3	Bayco Model BB 288 burn-out oven using propane, 1979	PM	PM emissions from the burn-out oven shall not exceed 0.16 lbs/hr and 0.71 tons/yr	Condition 2 of 10/18/1979 NSR Permit

Unit Reference No.	Name/Description of Unit	Pollutants	Description of Applicable Requirement/ Emission Limit/Standard/Work Practice	Citation
64-E3	As described above	OPACITY	Visible emissions shall not exceed 20 percent opacity except for one 6-minute period in any one hour of not more than 30 percent opacity. These limits apply at all times except during startup, shutdown, and malfunction.	9 VAC 5-50-80
FAC-PW	Facility-wide parts washer operations	VOC	Minimum reduction of 85% by weight of VOCs by use of appropriate control technology guidelines (CTGs) as outlined in 9 VAC 5-40-3290 C	9 VAC 5-40-3280 C

144. **Specialty Shops Requirements - (All Units) - Limitations - Emissions** from each specialty shop unit shall not exceed the limits specified in Table XIV.A.
 (9 VAC 5-80-110, 9 VAC 5-40-260, 9 VAC 5-40-80, 9 VAC 5-50-80, 9 VAC 5-40-3280, and the 10/18/79 NSR Permit)
145. **Specialty Shops Requirements - (64-E3) - Limitations - Emission Controls** - Emissions from the burn-out oven (Unit Ref. No. 64-E3) shall be controlled by an afterburner. The afterburner shall be provided with adequate access for inspection.
 (9 VAC 5-80-110 and the 10/18/79 NSR Permit)
146. **Specialty Shops Requirements - (64-E3) - Limitations - Fuel** - The approved fuel for the burn-out oven is propane. A change in the fuel may require a permit to modify and operate.
 (9 VAC 5-80-110 and Condition 6 of the 10/18/79 NSR permit)
147. **Specialty Shops Requirements - (FAC-PW) - Limitations - Rule 4-24** - Cold cleaning parts washers (Unit Ref. No. FAC-PW) shall be equipped with a control method that will remove, destroy, or prevent the discharge into the atmosphere of at least 85% by weight of volatile organic compound emissions. Achievement of the VOC emission standard shall be achieved by complying with the applicable control requirements and operating requirements in 9 VAC 5-40-3290 C.1 and C.2, respectively.
 (9 VAC 5-40-3290 C and 9 VAC 5-80-110 B)
148. **Specialty Shops Requirements - (FAC-PW) - Limitations - Rule 4-24** - Disposal of waste solvent from the parts washer operations (Unit Ref. No. FAC-PW) should be achieved by reclamation (either by outside services or in-house) or by incineration. Disposal records shall be maintained at the facility for the most recent 5-year period.
 (9 VAC 5-40-3290.D)

149. **Specialty Shops Requirements - (All Units) - Limitations - VOC Disposal** - At all times the disposal of volatile organic compounds shall be accomplished by taking measures, to the extent practicable, consistent with air pollution control practices for minimizing emissions. Volatile organic compounds shall not be intentionally spilled, discarded in sewers which are not connected to a treatment plant, or stored in open containers or handled in any other manner that would result in evaporation beyond that consistent with air pollution control practices for minimizing emissions.
(9 VAC 5-40-20 F and 9 VAC 5-80-110 E)

B. Monitoring

150. **Specialty Shops Requirements - (All Units Except FAC-PW) - Monitoring - Visible Emissions Observations** - The permittee shall monitor each of the units in the Specialty Shop operations except for the parts washers (Unit Ref. No. FAC-PW) at least once per month when in operation for visible emissions for at least six minutes. If visible emissions are noted, corrective action shall be taken to eliminate the visible emissions. If visible emissions continue after corrective actions, a visible emissions evaluation (VEE) shall be immediately conducted on the stack for at least six minutes in accordance with Method 9 (40 CFR 60, Appendix A). If the VEE opacity average for the stack exceeds ten percent (10%), the VEE shall continue for one hour from initiation to determine compliance with the opacity limit. Results of observations and/or VEEs shall be recorded in an operation log. Records of observations shall include the following:

The name of the observer,
Date and time of the observation,
An indication that the process was operating,
An indication of the presence or absence of visible emissions, and
Any corrective action taken to eliminate visible emissions, including the date and time the process was shut down and/or repairs were completed.

If a VEE is conducted, records shall be in accordance with Method 9 (40 CFR 60, Appendix A).
(9 VAC 5-80-110 E)

151. **Specialty Shops Requirements - (FAC-PW) - Monitoring - Rule 4-24** - The permittee shall inspect each parts washer unit once per calendar year to ensure compliance with the control requirements of 9 VAC 5-40-3290 C. If such inspections indicate any condition of non-compliance, appropriate action shall be taken to correct the problem.
(9 VAC 5-40-3290 C and 9 VAC 5-80-110 E)

C. Recordkeeping

152. **Specialty Shops Requirements - (All Units) - Recordkeeping** - The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Tidewater Regional Office. These records shall include, but are not limited to:
- Records of visible emissions observations and visible emission evaluations (VEE), if performed,
 - Records of waste solvent disposal, and
 - Records of parts-washer inspections and corrective actions taken.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.
(9 VAC 5-80-110)

D. Testing

153. **Specialty Shops Requirements - (All Units) - Testing** - If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the appropriate method(s) in accordance with procedures approved by the DEQ.
(9 VAC 5-80-110)

XV. Miscellaneous Activities Requirements

A. Limitations

Unit Reference No.	Name/Description of Unit	Pollutants	Description of Applicable Requirement/Emission Limit/Standard/Work Practice	Citation
205-B1 and 205-B2	Powder Coating Facility steel shot blast units (2)	OPACITY	Visible emissions shall not exceed 20 percent opacity except for one 6-minute period in any one hour of not more than 30 percent opacity. These limits apply at all times except during startup, shutdown, and malfunction.	9 VAC 5-50-80
50-E1, 4730-NB, 4730-SB, 201-E1, PORT-DC, 4701-E1, 1768-E1, 5-E2	See Section II	OPACITY	Visible emissions from existing (pre-March 17, 1972) emission units which vent to the atmosphere shall not exceed 20 percent opacity except for one 6-minute period in any one hour of not more than 60 percent opacity. Visible emissions from new (on or after March 17, 1972) emission units without specific permitted opacity limit which vent to the atmosphere shall not exceed 20 percent opacity except for one 6-minute period in any one hour of not more than 30 percent opacity. This limit applies at all times except during startup, shutdown, and malfunction.	9 VAC 5-40-80 9 VAC 5-50-80
50-E1, 4730-NB, 4730-SB, 201-E1, PORT-DC, 4701-E1, 1768-E1, 5-E2	See Section II	PM	$E=4.10 P^{0.67}$ where P is the process weight rate in tons/hour and E is the PM emission rate in lbs/hr	9 VAC 5-40-260
FAC-REMED	HAP contained in remediation materials removed during all site remediation, as defined in 40 CFR §63.7657	HAP	See Below	40 CFR 63, Subpart GGGGG

154. **Miscellaneous Activities Requirements - (All Units) - Limitations** - Emissions from each miscellaneous activities unit shall not exceed the limitations specified in Table XV.A.
 (9 VAC 5-80-110, 9 VAC 5-50-80, 9 VAC 5-40-80, 9 VAC 5-40-260, and 40 CFR 63, Subpart GGGGG)

155. **Miscellaneous Activities Requirements - (205-B1 and B2) - Limitations - Emission Controls** - Particulate emissions from the Powder Coating Operation steel shot blast units (Unit Ref. Nos. 205-B1 and B2 shall be controlled by cartridge filters. The cartridge filters shall be provided with adequate access for inspection and shall be in operation when the blast units are operating.
(9 VAC 5-80-110, 9 VAC 5-50-260, and Condition 3 of the 9/2/11 NSR Permit)
156. **Miscellaneous Activities Requirements - (FAC-REMED) - Limitations - MACT GGGGG** - Except where this permit is more restrictive than the applicable requirement, Site Remediation Activities at the facility shall be subject to the provisions of 40 CFR 63, Subpart GGGGG - National Emission Standards for Hazardous Air Pollutants: Site Remediation.
Note: All applicable requirements of 40 CFR 63, Subpart GGGGG may not be specifically listed in this permit. The permittee should refer to the applicable regulation for additional requirements not included in this permit.
(9 VAC 5-80-110 and 40 CFR 63, Subpart GGGGG)

B. Monitoring

157. **Miscellaneous Activities Requirements - (205-B1 and B2) - Monitoring - Visible Emissions Observations** - The permittee shall observe the stack/vent of each of the powder coating steel shots blast units (Unit Ref. Nos. 205-B1 and B2) at least once per week (Monday-Sunday) when in operation for visible emissions for at least 6 minutes. If any visible emissions are noted, corrective action shall be taken to eliminate the visible emissions. Results of observations and any corrective action shall be recorded in the operation log.
(9 VAC 5-80-110 E)
158. **Miscellaneous Activities Requirements - (All Units Except 205-B1 and B2 and FAC_REMED) - Monitoring - Visible Emissions Observations** - The permittee shall observe the stack of each unit in the Miscellaneous Activities operations which vent to the atmosphere, other than the powder coating steel shot blast units (Unit Ref. Nos. 205-B1 and B2), at least once per month when in operation for visible emissions for at least six minutes. If visible emissions are noted, corrective action shall be taken to eliminate the visible emissions. If visible emissions continue after corrective actions, a visible emissions evaluation (VEE) shall be immediately conducted on the stack for at least six minutes in accordance with Method 9 (40 CFR 60, Appendix A). If the VEE opacity average for the stack exceeds ten percent (10%), the VEE shall continue for one hour from initiation to determine compliance with the opacity limits. Results of observations and/or VEEs shall be recorded in the operation log. Records of observations shall include the following:

The name of the observer,
Date and time of the observation,
An indication that the process was operating,
An indication of the presence or absence of visible emissions, and
Any corrective action taken to eliminate visible emissions, including the date and time the process was shut down and/or repairs were completed.

If a VEE is conducted, records shall be in accordance with Method 9 (40 CFR 60, Appendix A).
(9 VAC 5-80-110 E)
159. **Miscellaneous Activities Requirements - (FAC-REMED) - Monitoring - MACT GGGGG** - The permittee shall monitor the total quantity of the HAPs listed in table 1 of 40 CFR 63 Subpart GGGGG that is contained in the remediation material excavated, extracted, pumped, or otherwise removed during all of the site remediations conducted at the facility to show that it is less than 1 megagram annually and the facility is exempt from the requirements of 40 CFR 63 Subpart GGGGG.
(9 VAC 5-80-110 and 40 CFR 63.7881(c)(1))

C. Recordkeeping

160. **Miscellaneous Activities Requirements - (All Units) - Recordkeeping** - The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Tidewater Regional Office. These records shall include, but are not limited to:
- a. Records of visible emissions observations, any corrective action taken, and visible emission evaluations using EPA Method 9 (reference 40 CFR 60, Appendix A), if performed.
 - b. Records of written documentation to support the determination that the total HAP quantity in the remediation materials is less than 1 megagram per year from all remediation activities at your facility as required by 40 CFR 63.7881(c)(2) to qualify for exemption from the requirements of 40 CFR 63 Subpart GGGGG. The documentation must include a description of your methodology and data used for determining the total HAP content of the remediation material.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-80-110, Condition 7 of the 9/2/94 NSR Permit, and 40 CFR 63.7881(c))

D. Testing

161. **Miscellaneous Activities Requirements - (All Units) - Testing** - If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the appropriate method(s) in accordance with procedures approved by the DEQ.
(9 VAC 5-80-110)

XVI. Insignificant Emission Units

162. **Insignificant Emission Units** - The following emission units at the facility are identified in the application as insignificant emission units under 9 VAC 5-80-720:

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9VAC5-80-720B)	Rated Capacity (9VAC5-80-720C)
4620-EPT	Electroplating tanks in Bldg 4620	9VAC5-80-720B	Metallic oxides and non-HAP inorganic acids, alkalis, and salts	N/A
509-E1	Natural gas-fired hot water boiler	9VAC5-80-720C	N/A	0.48 MMBtu/hr
4619-E1	Sludge dryer - electric	9VAC5-80-720B	N/A	N/A
HEATERS-SPACE	Space heaters for comfort heating located throughout the shipyard, stationary and portable	9VAC5-80-720A	N/A	N/A
205-PDR	Nordson Powder Booth - powder coating booth in Bldg 205 (closed loop system with no exhaust to the atmosphere)	9VAC5-80-720B	PM	N/A
PORTENG-CI	All portable Compression Ignition engine (non-road) driven equipment	Not stationary sources	N/A	1-127 hp
PORTENG-SI	All portable Spark Ignition engine (non-road) driven equipment	Not stationary sources	N/A	1-20 hp
29-PT	Pickling Tank, 6,400 gal	9VAC5-80-720B	H ₂ SO ₄	N/A
161-PT	Four Pickling Tanks, each 3,240 gal	9VAC5-80-720B	H ₂ SO ₄	N/A
5664 / 4677-SHT	Special Hull Treatment	9VAC5-80-720B	VOC	N/A
BLDG-VENTS	General ventilation exhausts from shipyard buildings (fugitive and small tool/machine local ventilation emissions)	9VAC5-80-720B	PM, VOC	N/A
518-E1	Nitrogen/Oxygen Cylinder Purge & Clean Operation	9VAC5-80-720B	TCE, VOC	N/A
550-E10	Abrasive Saw, #5453	9VAC5-80-720B	PM	N/A
5-E1	Metal grinder, 0.1 Lb/Hr	9VAC5-80-720B	PM	N/A
A210	Diesel Tank, 1,000 gallons	9VAC5-80-720B	VOC	N/A
A211	Diesel Tank, 180 gallons	9VAC5-80-720B	VOC	N/A
A213	Diesel Tank on the Floating Dry Dock Vessel, 1,600 gallons	9VAC5-80-720B	VOC	N/A
A214	Diesel Tank on the Floating Dry Dock Vessel, 8,000 gallons	9VAC5-80-720B	VOC	N/A
A215	Diesel Tank on the Floating Dry Dock Vessel, 570 gallons	9VAC5-80-720B	VOC	N/A

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9VAC5-80-720B)	Rated Capacity (9VAC5-80-720C)
A216	Diesel Tank on the Floating Dry Dock Vessel, 800 gallons	9VAC5-80-720B	VOC	N/A
A217	Diesel Tank on the Floating Dry Dock Vessel, 570 gallons	9VAC5-80-720B	VOC	N/A
A218	Diesel Tank, 3,000 gallons	9VAC5-80-720B	VOC	N/A
A219	Diesel Tank, 1,000 gallons	9VAC5-80-720B	VOC	N/A
A220	Diesel Tank, 2,200 gallons	9VAC5-80-720B	VOC	N/A
A221	Diesel Tank, 1,000 gallons	9VAC5-80-720B	VOC	N/A
A222	Diesel Tank, 1,500 gallons	9VAC5-80-720B	VOC	N/A
A223	Diesel Tank, 4,000 gallons	9VAC5-80-720B	VOC	N/A
A224	Diesel Tank, 1,000 gallons	9VAC5-80-720B	VOC	N/A
A225	Diesel Tank, 8,000 gallons	9VAC5-80-720B	VOC	N/A
A226	Diesel Tank, 6,000 gallons	9VAC5-80-720B	VOC	N/A
A227	Diesel Tank, 633 gallons	9VAC5-80-720B	VOC	N/A
A229	Diesel Tank, 300 gallons	9VAC5-80-720B	VOC	N/A
A230	Diesel Tank, 270 gallons	9VAC5-80-720B	VOC	N/A
A231	Diesel Tank, 250 gallons	9VAC5-80-720B	VOC	N/A
A232	Diesel Tank, 700 gallons	9VAC5-80-720B	VOC	N/A
A233	Diesel Tank, 329 gallons	9VAC5-80-720B	VOC	N/A
A234	Diesel Tank, 200 gallons	9VAC5-80-720B	VOC	N/A
A301	Recycled Oil Tank, 39,194 gallons	9VAC5-80-720B	VOC	N/A
A302	Recycled Oil Tank, 39,194 gallons	9VAC5-80-720B	VOC	N/A
A401	Wastewater Tank, 66,975 gallons	9VAC5-80-720B	VOC	N/A
A402	Oily Waste Tank, 66,973 gallons	9VAC5-80-720B	VOC	N/A
A403	Waste Tank, 8,300 gallons	9VAC5-80-720B	VOC	N/A
A404	Wastewater Tank, 10,000 gallons	9VAC5-80-720B	VOC	N/A
A405	Wastewater Tank, 25,000 gallons	9VAC5-80-720B	VOC	N/A
A407	Wastewater Tank, 2,000 gallons	9VAC5-80-720B	VOC	N/A
A408	Oily Wastewater Tank, 1,000 gallons	9VAC5-80-720B	VOC	N/A
A409	Oily Wastewater Tank, 1,000 gallons	9VAC5-80-720B	VOC	N/A
A411	Lead Wastewater Tank, 5,000 gallons	9VAC5-80-720B	VOC	N/A
A412	Oily Wastewater Tank, 8,300 gallons	9VAC5-80-720B	VOC	N/A
A413	Oily Wastewater Tank, 8,300 gallons	9VAC5-80-720B	VOC	N/A
A414	Wastewater Tank, 6,000 gallons	9VAC5-80-720B	VOC	N/A

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9VAC5-80-720B)	Rated Capacity (9VAC5-80-720C)
A415	Wastewater Tank, 2,000 gallons	9VAC5-80-720B	VOC	N/A
A416	Wastewater Tank, 10,012 gallons	9VAC5-80-720B	VOC	N/A
A417	Wastewater Tank, 275 gallons	9VAC5-80-720B	VOC	N/A
A418	Wastewater Tank, 275 gallons	9VAC5-80-720B	VOC	N/A
A419	Wastewater Tank, 225 gallons	9VAC5-80-720B	VOC	N/A
A420	Wastewater Tank, 225 gallons	9VAC5-80-720B	VOC	N/A
A421	Wastewater Tank, 1,000 gallons	9VAC5-80-720B	VOC	N/A
A508	Diesel Tank, 530 gallons	9VAC5-80-720B	VOC	N/A
A509	Diesel Tank, 530 gallons	9VAC5-80-720B	VOC	N/A
A510	Diesel Tank, 530 gallons	9VAC5-80-720B	VOC	N/A
A511	Diesel Tank, 270 gallons	9VAC5-80-720B	VOC	N/A
A512	Diesel Tank, 270 gallons	9VAC5-80-720B	VOC	N/A
A513	Diesel Tank, 270 gallons	9VAC5-80-720B	VOC	N/A
A514	Jet-Fuel Tank (JP-5), 2,000 gallons	9VAC5-80-720B	VOC	N/A
A515	Jet-Fuel Tank (JP-5), 2,310 gallons	9VAC5-80-720B	VOC	N/A
A516	Jet-Fuel Tank (JP-5), 2,310 gallons	9VAC5-80-720B	VOC	N/A
A601	Wastewater Tank, 910 gallons	9VAC5-80-720B	VOC	N/A
A602	Oily Wastewater Tank, 910 gallons	9VAC5-80-720B	VOC	N/A
A603	Wastewater Tank, 910 gallons	9VAC5-80-720B	VOC	N/A
A604	Oily Wastewater Tank, 910 gallons	9VAC5-80-720B	VOC	N/A
A605	Wastewater Tank, 910 gallons	9VAC5-80-720B	VOC	N/A
A606	Wastewater Tank, 910 gallons	9VAC5-80-720B	VOC	N/A
A607	Wastewater Tank, 910 gallons	9VAC5-80-720B	VOC	N/A
A608	Oily Wastewater Tank, 910 gallons	9VAC5-80-720B	VOC	N/A
A609	Wastewater Tank, 910 gallons	9VAC5-80-720B	VOC	N/A
A610	Wastewater Tank, 910 gallons	9VAC5-80-720B	VOC	N/A
A611	Wastewater Tank, 910 gallons	9VAC5-80-720B	VOC	N/A
A612	Wastewater Tank, 910 gallons	9VAC5-80-720B	VOC	N/A
A613	Wastewater Tank, 910 gallons	9VAC5-80-720B	VOC	N/A
A614	Oily Wastewater, 910 gallons	9VAC5-80-720B	VOC	N/A
A615	Wastewater Tank, 910 gallons	9VAC5-80-720B	VOC	N/A
A617	Oily Wastewater Tank	9VAC5-80-720B	VOC	N/A
A701	Waste Oil Tank, 532 gallons	9VAC5-80-720B	VOC	N/A

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9VAC5-80-720B)	Rated Capacity (9VAC5-80-720C)
A702	Used Waste Oil Tank	9VAC5-80-720C	N/A	225 gallons
A703	Used Waste Oil Tank	9VAC5-80-720C	N/A	185 gallons
A704	Used Waste Oil Tank	9VAC5-80-720C	N/A	519 gallons
A801	Motor Oil Tank, 500 gallons	9VAC5-80-720B	VOC	N/A
A802	Motor Oil Tank, 500 gallons	9VAC5-80-720B	VOC	N/A
A803	Motor Oil Tank, 500 gallons	9VAC5-80-720B	VOC	N/A
A804	Hydraulic Oil Tank, 500 gallons	9VAC5-80-720B	VOC	N/A
A805	Hydraulic Oil Tank 500 gallons	9VAC5-80-720B	VOC	N/A
A806	Transmission Fluid Tank, 500 gallons	9VAC5-80-720B	VOC	N/A
A901	No. 6 Fuel Oil Tank, 93,744 gallons	9VAC5-80-720B	VOC	N/A
A902	No. 6 Fuel Oil Tank, 93, 744 gallons	9VAC5-80-720B	VOC	N/A
A903	No. 6 Fuel Oil Tank, 60,303 gallons	9VAC5-80-720B	VOC	N/A
A904	No. 6 Fuel Oil Tank, 60,303 gallons	9VAC5-80-720B	VOC	N/A
A905	No. 6 Fuel Oil Tank, 124,059 gallons	9VAC5-80-720B	VOC	N/A
A906	No. 6 Fuel Oil Tank, 124,059 gallons	9VAC5-80-720B	VOC	N/A
NL706	Diesel Tank on the Nancy Lee vessel, 500 gallons	9VAC5-80-720B	VOC	N/A
NL707	Oily Waste Tank on the Nancy Lee vessel, 10,000 gallons	9VAC5-80-720B	VOC	N/A
U232	Diesel Tank, 1,000 gallons	9VAC5-80-720B	VOC	N/A
U306	Gasoline Tank, 10,000 gallons	9VAC5-80-720B	VOC	N/A
U503	No. 6 Oil Tank, Powerhouse, 521,304 gallons	9VAC5-80-720B	VOC	N/A
U504	No. 6 Oil Tank, B1744, 171,400 gallons	9VAC5-80-720B	VOC	N/A
U505	No. 6 Oil Tank, B1744, 171,400 gallons	9VAC5-80-720B	VOC	N/A
U508	No. 6 Oil Tank, 10,000 gallons	9VAC5-80-720B	VOC	N/A
U510	Oily Water Tank, 500 gallons	9VAC5-80-720B	VOC	N/A
U511	Oily Water Tank, 48,000 gallons	9VAC5-80-720B	VOC	N/A
U512	Oily Water Tank, 20,000 gallons	9VAC5-80-720B	VOC	N/A
U513	Oily Water Tank, 20,000 gallons	9VAC5-80-720B	VOC	N/A
U514	Oily Water Tank, 30,000 gallons	9VAC5-80-720B	VOC	N/A
U600	Car Wash Tank, 8,000 gallons	9VAC5-80-720B	VOC	8,000 gallons
SG401-424	Aqueous Cleaning Chemicals Tanks, 18,000 gallons each	9VAC5-80-720B	none	N/A
SG425	H ₂ O ₂ Tank, 2,000 gallons	9VAC5-80-720B	none	N/A
SG426	Overflow Tank, 1,200 gallons	9VAC5-80-720B	none	N/A

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9VAC5-80-720B)	Rated Capacity (9VAC5-80-720C)
SG427	NH ₄ OH Tank, 2,400 gallons	9VAC5-80-720B	ammonia	N/A
SG428	Overflow Tank, 250 gallons	9VAC5-80-720B	ammonia	N/A
SG429-431	Aqueous Cleaning Chemicals Tanks, 6,000 gallons each	9VAC5-80-720B	none	N/A
SG432	Aqueous Cleaning Chemicals Tank, 9,000 gallons	9VAC5-80-720B	none	N/A
SG433-434	Aqueous Cleaning Chemicals Tanks, 18,000 gallons each	9VAC5-80-720B	none	N/A
SG435-438	Aqueous Cleaning Chemicals Tanks, 4,000 gallons each	9VAC5-80-720B	none	N/A
SG439-440	Overflow Tanks, 1,250 gallons each	9VAC5-80-720B	none	N/A
SG441	Overflow Tanks, 250 gallons each	9VAC5-80-720B	none	N/A
SG442	Overflow Tanks, 100 gallons each	9VAC5-80-720B	none	N/A
SG443-446	Phosphate Water Tanks, 18,000 gallons each	9VAC5-80-720B	none	N/A
SG447-449	Portable PO ₄ Water Tanks, 18,000 gallons each	9VAC5-80-720B	none	N/A
SG452	DI/DEOX Water/Chilled Water Tank, 22,500 gal	9VAC5-80-720B	none	N/A
SG453-455	DI/DEOX Water Tanks, 18,000 gallons each	9VAC5-80-720B	none	N/A
SG456	Underfloor Collection Tank, 1,000 gallons	9VAC5-80-720B	none	N/A
SG457	Dead Leg Collection Tank, 250 gallons	9VAC5-80-720B	none	N/A
SG458	Bleed Tank, 18,000 gallons	9VAC5-80-720B	none	N/A
NL700	No. 6 Oil Tank on the Nancy Lee vessel, 124,203 gallons	9VAC5-80-720B	VOC	N/A
NL701	No. 6 Oil Tank on the Nancy Lee vessel, 124,203 gallons	9VAC5-80-720B	VOC	N/A
NL702	No. 6 Oil Tank on the Nancy Lee vessel, 93,884 gallons	9VAC5-80-720B	VOC	N/A
NL703	No. 6 Oil Tank on the Nancy Lee vessel, 93,884 gallons	9VAC5-80-720B	VOC	N/A
NL704	No. 6 Oil Tank on the Nancy Lee vessel, 60,373 gallons	9VAC5-80-720B	VOC	N/A
NL705	No. 6 Oil Tank on the Nancy Lee vessel, 60,373 gallons	9VAC5-80-720B	VOC	N/A
T2B	Treated Water Tank, 60,000 gallons	9VAC5-80-720B	None	N/A
T2A	Treated Water Tank, 60,000 gallons	9VAC5-80-720B	None	N/A
T4138	Treated Water Tank, 60,000 gallons	9VAC5-80-720B	None	N/A
PT-OW	Portable Oily Wastewater Tanks (totes), 900 gallons	9VAC5-80-720B	VOC	N/A

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9VAC5-80-720B)	Rated Capacity (9VAC5-80-720C)
PT-NOW	Portable Non-Oily Wastewater Tanks (totes), various < 900 gallons	9VAC5-80-720B	none	N/A

These emission units are presumed to be in compliance with all requirements of the federal Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping, or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

XVII. Permit Shield & Inapplicable Requirements

163. **Permit Shield & Inapplicable Requirements** - Compliance with the provisions of this permit shall be deemed compliance with all applicable requirements in effect as of the permit issuance date as identified in this permit. This permit shield covers only those applicable requirements covered by terms and conditions in this permit and the following requirements which have been specifically identified as being not applicable to this permitted facility:

Citation	Title of Citation	Description of Applicability
40 CFR 60 Subpart AA	Standards of Performance for Steel Plants: Electric Arc Furnaces Constructed After October 21, 1974, and On or Before August 17, 1983	The Electric Arc Furnaces were installed prior to the applicability date for this NSPS (installed ca. 1950).
40 CFR 60 Subpart Kb	Standards of Performance for Volatile Organic Liquid Storage Vessels for Which Construction, Reconstruction, or Modification commenced after July 23, 1984	VOL storage tanks, capacity 20,000 to < 40,000 gal with maximum true vapor pressure ≥ 15 kPa (2.16 psi), and capacity $\geq 40,000$ gal with maximum true vapor pressure ≥ 3.5 kPa (0.5 psi). Facility's tanks with the cited capacities have maximum true vapor pressure less than the cited thresholds.
40 CFR 60 Subpart CCCC	Standards of Performance for Commercial and Industrial Solid Waste Incineration Units	The source does not operate any equipment meeting the definition of "commercial and industrial solid waste incineration (CISWI) unit" under this subpart.
40 CFR 60 Subpart DDDD	Emission Guidelines and Compliance Times for Commercial and Industrial Solid Waste Incineration Units	The source does not operate any equipment meeting the definition of "commercial and industrial solid waste incineration (CISWI) unit" under this subpart.
40 CFR 60 Subpart JJJJ	Standards of Performance for Stationary Spark Ignition Internal Combustion Engines (SI ICE)	All of the facility's SI ICE are portable (nonroad engines) and, therefore, are not subject to this regulation.
40 CFR 61 Subpart C	National Emission Standards for Beryllium	The foundry and machine shops do not process beryllium products.
40 CFR 61 Subpart H	National Emission Standards for Emissions of Radionuclides Other Than Radon From Department of Energy Facilities	The source is not an applicable source under this subpart. It is not owned or operated by the Department of Energy.
40 CFR 61 Subpart I	National Emission Standards for Radionuclide Emissions from Federal Facilities Other Than Nuclear Regulatory Commission Licensees and Not Covered by Subpart H	The source is not an applicable source under this subpart. It is not owned or operated by the Department of Energy.

Citation	Title of Citation	Description of Applicability
40 CFR 63 Subpart N	National Emission Standards for Chromium Emissions From Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks	The chromium electroplating process is permanently shutdown. The source is no longer subject to this subpart.
40 CFR 63 Subpart R	National Emission Standards for Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations)	The source does not meet the definition of "bulk gasoline terminal" or "pipeline breakout station" under this subpart.
40 CFR 63 Subpart T	National Emission Standards for Halogenated Solvent Cleaning	Solvent cleaning machines containing certain halogenated solvents which are not used at the facility.
40 CFR 63 Subpart X	National Emission Standards for Hazardous Air Pollutants from Secondary Lead Smelting	This subpart applies to secondary lead smelters using lead-bearing scrap metals. The source uses pure lead ingots.
40 CFR 63 Subpart KK	National Emission Standards for the Printing and Publishing Industry	The source does not operate any publication rotogravure, product and packaging rotogravure, or wide-web flexographic printing processes which would be subject to this subpart.
40 CFR 63 Subpart VVVV	National Emission Standards for Hazardous Air Pollutants for Boat Manufacturing	The source does not meet the definition of "boat manufacturing facility" under this subpart.
40 CFR 63 Subpart WWWW	National Emission Standards for Hazardous Air Pollutants: Reinforced Plastic Composites Production	The source does not meet the definition of "reinforced plastic composites production facility" under this subpart.
40 CFR 63 Subpart DDDDD	National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters	Only with respect to Emission Units FTSE-E1 and FTSE-E2 by action of §63.7491(c).
40 CFR 63 Subpart BBBBBB	National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities	The source is not an area source of HAP, nor does it meet the definition of "gasoline distribution bulk terminal," "bulk plant," or "pipeline facility" under this subpart.
40 CFR 63 Subpart CCCCCC	National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities	The source is not an area source of HAP.
9 VAC 5-40-3410 et seq. (Rule 4-25)	Emission Standards For Volatile Organic Compound Storage and Transfer Operations	Non-petroleum liquid storage tanks, 40,000 gal capacity or larger, located in a VOC control area (9 VAC 5-20-206). The facility's larger tanks contain petroleum liquids.

Citation	Title of Citation	Description of Applicability
9 VAC 5-40-4760 et seq. (Rule 4-34)	Emission Standards For Miscellaneous Metal Parts and Products Coating Application Systems	The source received a determination from DEQ on August 22, 1997 stating that it is not subject to Rule 4-34 for the coating of received metal plates used to build new ships. The rule is intended for operations that involve the coating of miscellaneous parts in the manufacturing or assembly of a product. The source does not use the received metal plates to manufacture the end product at the time of the coating operation; the plates are coated at the time of delivery to provide pre-assembly protection against the elements for an extended period of storage and for later use in the construction of new ships.

Nothing in this permit shield shall alter the provisions of §303 of the federal Clean Air Act, including the authority of the administrator under that section, the liability of the owner for any violation of applicable requirements prior to or at the time of permit issuance, or the ability to obtain information by (i) the administrator pursuant to §114 of the federal Clean Air Act, (ii) the Board pursuant to §10.1-1314 or §10.1-1315 of the Virginia Air Pollution Control Law or (iii) the Department pursuant to §10.1-1307.3 of the Virginia Air Pollution Control Law.
 (9 VAC 5-80-140)

XVIII. General Conditions

164. **General Conditions - Federal Enforceability** - All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable.
(9 VAC 5-80-110 N)
165. **General Conditions - Permit Expiration** - This permit has a fixed term of five years. The expiration date shall be the date five years from the date of issuance. Unless the owner submits a timely and complete application for renewal to the Department consistent with the requirements of 9 VAC 5-80-80, the right of the facility to operate shall be terminated upon permit expiration.
(9 VAC 5-80-80 B, C, and F, 9 VAC 5-80-110 D, and 9 VAC 5-80-170 B)
166. **General Conditions - Permit Expiration** - The owner shall submit an application for renewal at least six months but no earlier than eighteen months prior to the date of permit expiration.
(9 VAC 5-80-80 B, C, and F, 9 VAC 5-80-110 D, and 9 VAC 5-80-170 B)
167. **General Conditions - Permit Expiration** - If an applicant submits a timely and complete application for an initial permit or renewal under this section, the failure of the source to have a permit or the operation of the source without a permit shall not be a violation of Article 1, Part II of 9 VAC 5 Chapter 80, until the Board takes final action on the application under 9 VAC 5-80-150.
(9 VAC 5-80-80 B, C, and F, 9 VAC 5-80-110 D, and 9 VAC 5-80-170 B)
168. **General Conditions - Permit Expiration** - No source shall operate after the time that it is required to submit a timely and complete application under subsections C and D of 9 VAC 5-80-80 for a renewal permit, except in compliance with a permit issued under Article 1, Part II of 9 VAC 5 Chapter 80.
(9 VAC 5-80-80 B, C, and F, 9 VAC 5-80-110 D, and 9 VAC 5-80-170 B)
169. **General Conditions - Permit Expiration** - If an applicant submits a timely and complete application under section 9 VAC 5-80-80 for a permit renewal but the Board fails to issue or deny the renewal permit before the end of the term of the previous permit, (i) the previous permit shall not expire until the renewal permit has been issued or denied and (ii) all the terms and conditions of the previous permit, including any permit shield granted pursuant to 9 VAC 5-80-140, shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.
(9 VAC 5-80-80 B, C, and F, 9 VAC 5-80-110 D, and 9 VAC 5-80-170 B)
170. **General Conditions - Permit Expiration** - The protection under subsections F 1 and F 5 (ii) of section 9 VAC 5-80-80 F shall cease to apply if, subsequent to the completeness determination made pursuant section 9 VAC 5-80-80 D, the applicant fails to submit by the deadline specified in writing by the Board any additional information identified as being needed to process the application.
(9 VAC 5-80-80 B, C, and F, 9 VAC 5-80-110 D, and 9 VAC 5-80-170 B)

171. **General Conditions -Recordkeeping and Reporting** - All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:
- a. The date, place as defined in the permit, and time of sampling or measurements.
 - b. The date(s) analyses were performed.
 - c. The company or entity that performed the analyses.
 - d. The analytical techniques or methods used.
 - e. The results of such analyses.
 - f. The operating conditions existing at the time of sampling or measurement.
- (9 VAC 5-80-110 F)
172. **General Conditions -Recordkeeping and Reporting** - Records of all monitoring data and support information shall be retained for at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.
- (9 VAC 5-80-110 F)
173. **General Conditions -Recordkeeping and Reporting** - The permittee shall submit the results of monitoring contained in any applicable requirement to DEQ no later than **March 1** and **September 1** of each calendar year. This report must be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:
- a. The time period included in the report. The time periods to be addressed are January 1 to June 30 and July 1 to December 31.
 - b. All deviations from permit requirements. For purpose of this permit, deviations include, but are not limited to:
 - i. Exceedance of emissions limitations or operational restrictions;
 - ii. Excursions from control device operating parameter requirements, as documented by continuous emission monitoring, periodic monitoring, or Compliance Assurance Monitoring (CAM) which indicates an exceedance of emission limitations or operational restrictions; or,
 - iii. Failure to meet monitoring, recordkeeping, or reporting requirements contained in this permit.
 - c. If there were no deviations from permit conditions during the time period, the permittee shall include a statement in the report that “no deviations from permit requirements occurred during this semi-annual reporting period.”
- (9 VAC 5-80-110 F)

174. **General Conditions - Annual Compliance Certification** - Exclusive of any reporting required to assure compliance with the terms and conditions of this permit or as part of a schedule of compliance contained in this permit, the permittee shall submit to EPA and DEQ no later than March 1 each calendar year a certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices for the period ending December 31. The compliance certification shall comply with such additional requirements that may be specified pursuant to §114(a)(3) and §504(b) of the federal Clean Air Act. The permittee shall maintain a copy of the certification for five (5) years after submittal of the certification. This certification shall be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:
- The time period included in the certification. The time period to be addressed is January 1 to December 31.
 - The identification of each term or condition of the permit that is the basis of the certification.
 - The compliance status.
 - Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance.
 - Consistent with subsection 9 VAC 5-80-110 E, the method or methods used for determining the compliance status of the source at the time of certification and over the reporting period.
 - Such other facts as the permit may require to determine the compliance status of the source.
 - One copy of the annual compliance certification shall be submitted to EPA in electronic format only. The certification document should be sent to the following electronic mailing address:
R3_APD_Permits@epa.gov
(9 VAC 5-80-110 K.5)
175. **General Conditions - Permit Deviation Reporting** - The permittee shall notify the Director, Tidewater Regional Office (TRO) within four daytime business hours after discovery of any deviations from permit requirements which may cause excess emissions for more than one hour, including those attributable to upset conditions as may be defined in this permit. In addition, within 14 days of the discovery, the permittee shall provide a written statement explaining the problem, any corrective actions or preventative measures taken, and the estimated duration of the permit deviation. Owners subject to the requirements of 9 VAC 5-40-50 C and 9 VAC 5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9 VAC 5-40-40 and 9 VAC 5-50-40. The occurrence should also be reported in the next semi-annual compliance monitoring report pursuant to Condition 173 of this permit. (9 VAC 5-80-110 F.2 and 9 VAC 5-80-250)
176. **General Conditions - Failure/Malfunction Reporting** - In the event that any affected facility or related air pollution control equipment fails or malfunctions in such a manner that may cause excess emissions for more than one hour, the owner shall, as soon as practicable but no later than four daytime business hours after the malfunction is discovered, notify the Director, Tidewater Regional Office (TRO) by facsimile transmission, telephone or telegraph of such failure or malfunction and shall within 14 days of discovery provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. Owners subject to the requirements of 9 VAC 5-40-50 C and 9 VAC 5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9 VAC 5-40-40 and 9 VAC 5-50-40. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the Director, Tidewater Regional Office (TRO). (9 VAC 5-20-180 C)

177. **General Conditions - Severability** - The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit.
(9 VAC 5-80-110 G.1)
178. **General Conditions - Duty to Comply** - The permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is ground for enforcement action; for permit termination, revocation and reissuance, or modification; or, for denial of a permit renewal application.
(9 VAC 5-80-110 G.2)
179. **General Conditions - Need to Halt or Reduce Activity not a Defense** -It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
(9 VAC 5-80-110 G.3)
180. **General Conditions - Permit Modification** -A physical change in, or change in the method of operation of, this stationary source may be subject to permitting under State Regulations 9 VAC 5-80-50, 9 VAC 5-80-1100, 9 VAC 5-80-1605, or 9 VAC 5-80-2000 and may require a permit modification and/or revisions except as may be authorized in any approved alternative operating scenarios.
(9 VAC 5-80-190 and 9 VAC 5-80-260)
181. **General Conditions - Property Rights** - The permit does not convey any property rights of any sort, or any exclusive privilege.
(9 VAC 5-80-110 G.5)
182. **General Conditions - Duty to Submit Information** - The permittee shall furnish to the Board, within a reasonable time, any information that the Board may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Board copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the Board along with a claim of confidentiality.
(9 VAC 5-80-110 G.6)
183. **General Conditions - Duty to Submit Information** - Any document (including reports) required in a permit condition to be submitted to the Board shall contain a certification by a responsible official that meets the requirements of 9 VAC 5-80-80 G.
(9 VAC 5-80-110 K.1)
184. **General Conditions - Duty to Pay Permit Fees** - The owner of any source for which a permit under 9 VAC 5-80-50 through 9 VAC 5-80-300 was issued shall pay permit fees consistent with the requirements of 9 VAC 5-80-310 through 9 VAC 5-80-350. The actual emissions covered by the permit program fees for the preceding year shall be calculated by the owner and submitted to the Department by April 15 of each year. The calculations and final amount of emissions are subject to verification and final determination by the Department.
(9 VAC 5-80-110 H and 9 VAC 5-80-340 C)

185. **General Conditions - Fugitive Dust Emission Standards** - During the operation of a stationary source or any other building, structure, facility, or installation, no owner or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited to, the following:
- a. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land;
 - b. Application of asphalt, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; the paving of roadways and the maintaining of them in a clean condition;
 - c. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty material. Adequate containment methods shall be employed during sandblasting or similar operations;
 - d. Open equipment for conveying or transporting material likely to create objectionable air pollution when airborne shall be covered or treated in an equally effective manner at all times when in motion; and
 - e. The prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion.
- (9 VAC 5-40-90 and 9 VAC 5-50-90)
186. **General Conditions - Startup, Shutdown, and Malfunction** - At all times, including periods of startup, shutdown, soot blowing, and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.
- (9 VAC 5-50-20 E and 9 VAC 5-40-20 E)
187. **General Conditions - Alternative Operating Scenarios** - Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions under each such operating scenario. The terms and conditions of each such alternative scenario shall meet all applicable requirements including the requirements of 9 VAC 5 Chapter 80, Article 1.
- (9 VAC 5-80-110 J)
188. **General Conditions - Inspection and Entry Requirements** - The permittee shall allow DEQ, upon presentation of credentials and other documents as may be required by law, to perform the following:
- a. Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.
 - b. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.
 - c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.
 - d. Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.
- (9 VAC 5-80-110 K.2)

189. **General Conditions - Reopening For Cause** - The permit shall be reopened by the Board if additional federal requirements become applicable to a major source with a remaining permit term of three years or more. Such reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9 VAC 5-80-80 F. The conditions for reopening a permit are as follows:
- a. The permit shall be reopened if the Board or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
 - b. The permit shall be reopened if the administrator or the Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
 - c. The permit shall not be reopened by the Board if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9 VAC 5-80-110 D. (9 VAC 5-80-110 L)
190. **General Conditions - Permit Availability** - Within five days after receipt of the issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to DEQ upon request. (9 VAC 5-80-150 E)
191. **General Conditions - Transfer of Permits** - No person shall transfer a permit from one location to another, unless authorized under 9 VAC 5-80-130, or from one piece of equipment to another. (9 VAC 5-80-160)
192. **General Conditions - Transfer of Permits** - In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the Board of the change in ownership within 30 days of the transfer and shall comply with the requirements of 9 VAC 5-80-200. (9 VAC 5-80-160)
193. **General Conditions - Transfer of Permits** - In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the Board of the change in source name within 30 days of the name change and shall comply with the requirements of 9 VAC 5-80-200. (9 VAC 5-80-160)
194. **General Conditions - Malfunction as an Affirmative Defense** - A malfunction constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations if the requirements of Condition 195 are met. (9 VAC 5-80-250)
195. **General Conditions - Malfunction as an Affirmative Defense** - The affirmative defense of malfunction shall be demonstrated by the permittee through properly signed, contemporaneous operating logs, or other relevant evidence that show the following:
- a. A malfunction occurred and the permittee can identify the cause or causes of the malfunction.
 - b. The permitted facility was at the time being properly operated.

- c. During the period of the malfunction the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit.
 - d. The permittee notified the Board of the malfunction within two working days following the time when the emission limitations were exceeded due to the malfunction. This notification shall include a description of the malfunction, any steps taken to mitigate emissions, and corrective actions taken. The notification may be delivered either orally or in writing. The notification may be delivered by electronic mail, facsimile transmission, telephone, or any other method that allows the permittee to comply with the deadline. This notification fulfills the requirements of 9 VAC 5-80-110 F.2.b to report promptly deviations from permit requirements. This notification does not release the permittee from the malfunction reporting requirement under 9 VAC 5-20-180 C.
(9 VAC 5-80-250)
196. **General Conditions - Malfunction as an Affirmative Defense** - In any enforcement proceeding, the permittee seeking to establish the occurrence of a malfunction shall have the burden of proof.
(9 VAC 5-80-250)
197. **General Conditions - Malfunction as an Affirmative Defense** - The provisions of Conditions 194-196 are in addition to any malfunction, emergency or upset provision contained in any applicable requirement.
(9 VAC 5-80-250)
198. **General Conditions - Permit Revocation or Termination for Cause** - A permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of 9 VAC 5 Chapter 80 Article 1. The Board may suspend, under such conditions and for such period of time as the Board may prescribe any permit for any grounds for revocation or termination or for any other violations of these regulations.
(9 VAC 5-80-190 C and 9 VAC 5-80-260)
199. **General Conditions - Duty to Supplement or Correct Application** - Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrections. An applicant shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit.
(9 VAC 5-80-80 E)
200. **General Conditions - Stratospheric Ozone Protection** - If the permittee handles or emits one or more Class I or II substances subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F.
(40 CFR Part 82, Subparts A-F)
201. **General Conditions - Asbestos Requirements** - The permittee shall comply with the requirements of National Emissions Standards for Hazardous Air Pollutants (40 CFR 61) Subpart M, National Emission Standards for Asbestos as it applies to the following: Standards for Demolition and Renovation (40 CFR 61.145), Standards for Insulating Materials (40 CFR 61.148), and Standards for Waste Disposal (40 CFR 61.150).
(9 VAC 5-60-70 and 9 VAC 5-80-110 A.1)

202. **General Conditions - Accidental Release Prevention** - If the permittee has more, or will have more than a threshold quantity of a regulated substance in a process, as determined by 40 CFR 68.115, the permittee shall comply with the requirements of 40 CFR Part 68.
(40 CFR Part 68)
203. **General Conditions - Changes to Permits for Emissions Trading** - No permit revision shall be required under any federally approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.
(9 VAC 5-80-110 I)
204. **General Conditions - Emissions Trading** - Where the trading of emissions increases and decreases within the permitted facility is to occur within the context of this permit and to the extent that the regulations provide for trading such increases and decreases without a case-by-case approval of each emissions trade:
- a. All terms and conditions required under 9 VAC 5-80-110, except subsection N, shall be included to determine compliance.
 - b. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions that allow such increases and decreases in emissions.
 - c. The owner shall meet all applicable requirements including the requirements of 9 VAC 5-80-50 through 9 VAC 5-80-300.
(9 VAC 5-80-110 I)

XIX. State-Only Enforceable Requirements

205. **State-Only Enforceable Requirements** - The following terms and conditions are not required under the federal Clean Air Act or under any of its applicable federal requirements, and are not subject to the requirements of 9 VAC 5-80-290 concerning review of proposed permits by EPA and draft permits by affected states.
- 9 VAC 5, Chapter 40, Part II, Article 2: Existing Source Standards for Odor (Rule 4-2)
- 9 VAC 5, Chapter 60, Part II, Article 4: Existing Source Standards for Toxic Pollutants
(Rule 6-4)
- 9 VAC 5, Chapter 50, Part II, Article 2: New and Modified Source Standards for Odor
(Rule 5-2)
- 9 VAC 5, Chapter 60, Part II, Article 5: New and Modified Source Standards for Toxic
Pollutants (Rule 6-5)
- (9 VAC 5-80-110 N and 9 VAC 5-80-300)