



DEPARTMENT ORDER

North End Composites LLC
Knox County
Rockland, Maine
A-658-70-E-R

Departmental
Findings of Fact and Order
Part 70 Air Emission License
Renewal

FINDINGS OF FACT

After review of the Part 70 License renewal application, staff investigation reports, and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 Maine Revised Statutes (M.R.S.) § 344 and § 590, the Maine Department of Environmental Protection (Department) finds the following facts:

I. REGISTRATION

A. Introduction

FACILITY	North End Composites LLC (NEC)
LICENSE TYPE	Part 70 License Renewal
NAICS CODES	336612
NATURE OF BUSINESS	Composite Fabrication
FACILITY LOCATION	Merrill Drive, Rockland, Maine

North End Composites (NEC) manufactures sailboats and power boats utilizing molded fiberglass technology.

NEC is licensed to emit less than 50 tpy of volatile organic compounds (VOC); therefore, the source is classified as a minor source for criteria pollutants. However, NEC has the potential to emit 10 tpy or more of a single hazardous air pollutant (HAP) or 25 tpy or more of combined HAP; therefore, the source is classified as a major source for HAP.

B. Emission Equipment

The following emission units are addressed by this Part 70 License:

Fuel Burning Heating Equipment

Equipment	Maximum Heat Input Capacity (MMBtu/hr)	Max. Firing Rate (gal/hr)	Fuel Type, % sulfur	Manufacture Date	Install. Date
Hot Air Furnace	2.19	23.9	Propane, Neg.	2015	2015

Engines

Equipment	Maximum Heat Input Capacity (MMBtu/hr)	Max. Firing Rate (gal/hr)	Fuel Type, % sulfur	Mfr. Date	Install. Date
Fire Pump #1	0.85	6.2	Distillate fuel, 0.0015%	1985	1985
Fire Pump #2	0.73	5.4	Distillate fuel, 0.0015%	1993	1993

Composites Manufacturing Process

NEC utilizes various material spraying equipment as well as manual application methods in their composite manufacturing process. These activities comprise the majority of emissions from this facility, but do not originate from any particular piece of equipment. The composites manufacturing process is covered in detail in the paragraphs below.

NEC has insignificant activities which do not need to be listed in the emission equipment tables above. The list of insignificant activities can be found in the Part 70 license application and in Appendix B of *Part 70 Air Emission License Regulations*, 06-096 C.M.R. ch. 140. The previously licensed Boiler #1 is included in this category and will no longer be directly addressed in this license.

C. Acronyms and Units of Measure

BACT	Best Available Control Technology
BPT	Best Practical Treatment
C.F.R.	Code of Federal Regulations
C.M.R.	Code of Maine Rules
CO	Carbon Monoxide
EPA or US EPA	United States Environmental Protection Agency
gal/hr	gallon per hour
HAP	Hazardous Air Pollutants
lb	pound
lb/hr	pounds per hour
lb/MMBtu	pounds per million British Thermal Units
M.R.S.	Maine Revised Statutes
MMBtu	Million British Thermal Units
MMBtu/hr	million British Thermal Units per hour

NESHAP	National Emissions Standards for Hazardous Air Pollutants
NO _x	Nitrogen Oxides
NSPS	New Source Performance Standards
NSR	New Source Review
PM	Particulate Matter less than 100 microns in diameter
PM ₁₀	Particulate Matter less than 10 microns in diameter
RACT	Reasonably Available Control Technology
RICE	Reciprocating Internal Combustion Engine
SO ₂	Sulfur Dioxide
tpy	ton per year
UEF	Unified Emission Factors
VOC	Volatile Organic Compounds

D. Definitions

Distillate Fuel means the following:

- Fuel oil that complies with the specifications for fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials (ASTM) in ASTM D396;
- Diesel fuel oil numbers 1 or 2, as defined in ASTM D975;
- Kerosene, as defined in ASTM D3699;
- Biodiesel, as defined in ASTM D6751; or
- Biodiesel blends, as defined in ASTM D7467.

Portable Engine means an internal combustion engine which is portable or transportable, meaning designed to be and capable of being carried or moved from one location to another. Indicia of transportability include, but are not limited to, wheels, skids, carrying handles, dolly, trailer, or platform. This definition does NOT include engines which remain or will remain at a location (excluding storage locations) for more than 12 consecutive months or a shorter period of time for an engine located at a seasonal source. A location is any single site at a building, structure, facility, or installation. Any engine that replaces an engine at a location and that is intended to perform the same or similar function as the engine replaced will be included in calculating the consecutive time period.

E. Application Classification

All rules, regulations, or statutes referenced in this air emission license refer to the amended version in effect as of the issued date of this license.

The application for NEC does not include the licensing of increased emissions or the installation of new or modified equipment; therefore, the license is considered to be a

Part 70 License renewal issued under *Part 70 Air Emission License Regulations*, 06-096 Code of Maine Rules (C.M.R.) ch. 140.

F. Facility Description

NEC's current manufacturing process consists of three production areas and six types of production activities referred to as departments. These production areas include NEC Lamination, Sabre Dirigo Assembly, and Back Cove Yachts. Production activities conducted within each of these production areas may include lamination, cutting/grinding, gelcoat finish, assembly, woodworking, and varnishing. The use of infusion lamination has become the primary method of molding in the lamination departments at NEC. The use of infusion technology has greatly reduced emissions when compared to open molding techniques. The emissions from NEC's manufacturing processes are considered fugitive, as there are no specific vents or stacks. A brief description of each current production activity is as follows:

Lamination

Lamination activities take place in both the NEC Lamination and Back Cove Yachts production areas and include the production of hulls, decks, and small part components for all boats using unsaturated polyester, blended vinylester resins, and gelcoats. Lamination includes a gelcoat application, wet-applied fiberglass skin coat, and structural fiberglass and core materials build out using both open molding and infusion techniques. The application of gelcoat and skin coat is done using high volume low pressure (HVLV) spray guns. The balance of resin and putty application in the lamination process is completed by resin infusion or manually through wet lamination. The unsaturated polyester and blended vinylester resins contain a styrene monomer as the linking agent which partially volatilizes during spraying, roll out, and curing processes. Fugitive emissions of volatile organic compounds (VOC) and hazardous air pollutants (HAP) occur during the spraying, roll-out, and curing processes.

There are two adjacent lamination areas at NEC's facility: The Back Cove Yachts lamination area and the NEC Lamination area. Currently, the Back Cove Yachts lamination area produces hulls, decks, and small parts associated with the Back Cove 30', 32', 34', 37', and 41-foot power boat designs. The NEC Lamination area produces parts for some Sabre boats, including the 48', 58', and 66-foot power boats. In addition, some plug and mold construction and refinishing takes place in the NEC Lamination production area.

Cutting/Grinding

Included in NEC Lamination and Back Cove Yachts are the cutting/grinding operations where completed laminated parts are trimmed. Cutting and grinding of all parts take place during this phase of build as well as any secondary fiberglass tabbing and binding of fiberglass parts. Any dust generated by these processes is either captured at the source by tools equipped with vacuum attachments or in particulate filters at all building air exhaust points.

Gelcoat Finish

Gelcoat finish operations also take place in both NEC Lamination and Back Cove Yachts production areas. During this phase of build, cosmetic repairs are made to the gelcoated surfaces of the fiberglass parts as needed prior to entering the assembly phase of build. Work in this department consists mainly of sanding and polishing with orbital sanders and buffing wheels. All finish sanders are attached directly to a vacuum system to capture dust generated at the source. Repair gelcoat is also resprayed, again using HVLP equipment.

Assembly

Assembly operations take place in the Back Cove Yachts and Sabre Dirigo Assembly production areas. Following installation of all interior/cabin furnishing and equipment, the deck is attached to the hull in the assembly phase. Various adhesives, paints, putties, resins, varnishes, and solvents are used in relatively small amounts. In addition, minor cutting/grinding and repairs may be performed during this phase. There are minor VOC and HAP emissions associated with this phase from the use of resins, varnishes, putties, sealers, adhesives, and solvents.

Woodworking

The woodshop for both the Back Cove Yachts and Sabre Dirigo Assembly production areas allows for the on-site cutting and fabrication of boat components as needed. Application of cleanup, patching, or adhesive materials result in fugitive VOC and HAP emissions. The Woodshop contains internally exhausted dust collection equipment.

Varnishing

The varnish rooms for the Back Cove Yachts and Sabre Dirigo Assembly production areas are used to varnish wooden components that are to be installed on the boats. Some of the wood to be varnished is fixed on the boats and as such is varnished in place at various stages in the assembly process. There are fugitive VOC and HAP emissions associated with the varnish rooms as well as in the assembly process. All varnish application is by hand, primarily by brush; there is no spray application.

G. General Facility Requirements

NEC is subject to the following state and federal regulations listed below in addition to the regulations listed for specific units as described further in this license.

Citation	Requirement Title
06-096 C.M.R. ch. 101	Visible Emissions Regulation
06-096 C.M.R. ch. 102	Open Burning
06-096 C.M.R. ch. 103	Fuel Burning Equipment Particulate Emission Standard
06-096 C.M.R. ch. 105	General Process Source Particulate Emission Standard
06-096 C.M.R. ch. 106	Low Sulfur Fuel Regulation
06-096 C.M.R. ch. 110	Ambient Air Quality Standards

Citation	Requirement Title
06-096 C.M.R. ch. 130	Solvent Cleaners
06-096 C.M.R. ch. 137	Emission Statements
06-096 C.M.R. ch. 140	Part 70 Air Emission License Regulations
06-096 C.M.R. ch. 144	National Emission Standards for Hazardous Air Pollutants
06-096 C.M.R. ch. 159	Control of Volatile Organic Compounds from Adhesives and Sealants
06-096 C.M.R. ch. 162	Control for Fiberglass Boat Manufacturing Materials
40 C.F.R. Part 63, Subpart VVVV	National Emission Standards for Hazardous Air Pollutants for Boat Manufacturing
40 C.F.R. Part 63, Subpart ZZZZ	National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines
40 C.F.R. Part 70	State Operating Permit Programs

II. BEST PRACTICAL TREATMENT (BPT) AND EMISSION STANDARDS

A. Introduction

In order to receive a license, the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in *Definitions Regulation*, 06-096 C.M.R. ch. 100. Separate control requirement categories exist for new and existing equipment as well as for those sources located in designated non-attainment areas.

BPT for existing emissions equipment means that method which controls or reduces emissions to the lowest possible level considering:

- the existing state of technology;
- the effectiveness of available alternatives for reducing emissions from the source being considered; and
- the economic feasibility for the type of establishment involved.

B. VOC RACT (Reasonably Available Control Technology)

Reasonably Available Control Technology for Facilities that Emit Volatile Organic Compounds, 06-096 C.M.R. ch. 134 (VOC RACT) is applicable to sources that have the potential to emit quantities of VOC equal to or greater than 40 tons/year from non-exempt equipment. NEC has a licensed VOC limit higher than the 40 tons/year stated in Chapter 134; however, NEC has not had actual annual emissions of VOC higher than 40 tons/year since 1/1/87. Therefore, NEC is not subject to 06-096 C.M.R. ch. 134. At such time that NEC has annual emissions greater than 40 tons/year, they will be subject to all applicable requirements of 06-096 C.M.R. ch. 134.

[06-096 C.M.R. ch. 134 (1)(A)(2)]

C. Mandatory Greenhouse Gas (GHG) Reporting

Federal regulation *Mandatory Greenhouse Gas Reporting*, 40 C.F.R. Part 98, which contains GHG reporting and related monitoring and recordkeeping requirements, is applicable to the owners/operators of any facility which falls into any one of the following three categories, per *General Provisions, Who must report?*, 40 C.F.R. § 98.2.

- (a)(1) A facility that contains any source category that is listed in Table A–3 of this subpart in any calendar year starting in 2010.
- (a)(2) A facility that contains any source category that is listed in Table A–4 of this subpart and that emits 25,000 metric tons CO₂e or more per year in combined emissions from stationary fuel combustion units, miscellaneous uses of carbonate, and all applicable source categories that are listed in Table A–3 and Table A–4 of this subpart.
- (a)(3) A facility that in any calendar year starting in 2010 meets all three of the conditions listed in this paragraph (a)(3). For these facilities, the annual GHG report must cover emissions from stationary fuel combustion sources only.
 - (i) The facility does not meet the requirements of either paragraph (a)(1) or (a)(2) of this section.
 - (ii) The aggregate maximum rated heat input capacity of the stationary fuel combustion units at the facility is 30 MMBtu/hour or greater.
 - (iii) The facility emits 25,000 metric tons CO₂e or more per year in combined emissions from all stationary fuel combustion sources.

NEC does not have fuel burning equipment with an aggregate maximum rated heat input capacity greater than 30 MMBtu/hour. Therefore, NEC is not subject to the recordkeeping and reporting requirements of 40 C.F.R. Part 98.

D. Compliance Assurance Monitoring (CAM)

Compliance Assurance Monitoring, 40 C.F.R. Part 64 is applicable to units at major sources if the unit has emission limits, a control device to meet the limits, and pre-control emissions greater than 100% of the major source threshold (50 tons/year for VOC and 100 tpy for any other pollutant).

NEC does not have any equipment or processes that exceed the applicability threshold of 40 C.F.R. Part 64, so it is therefore not subject to that rule.

E. Fuel Sulfur Content Requirements

NEC is licensed to fire distillate fuel which, by definition, has a sulfur content of 0.5% or less by weight. Per 38 M.R.S. § 603-A(2)(A)(3), as of July 1, 2018, no person shall import, distribute, or offer for sale any distillate fuel with a sulfur content greater than 0.0015% by

weight (15 ppm). Therefore, the distillate fuel purchased or otherwise obtained for use at this facility shall not exceed 0.0015% by weight (15 ppm).

F. Hot Air Furnace

The Hot Air Furnace is a hot air heater installed in 2015. The Hot Air Furnace was designed with a heat input capacity of 2.19 MMBtu/hr and combusts propane. The Hot Air Furnace is operated to heat the facility.

1. Control Equipment

There is no control equipment associated with the Hot Air Furnace.

2. New Source Performance Standards (NSPS)

The Hot Air Furnace is not subject to the New Source Performance Standards (NSPS) titled *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units*, 40 C.F.R. Part 60, Subpart Dc. These standards apply to steam generating units with a heat input capacity of 10 MMBtu/hr or more that are constructed after June 9, 1989.

The Hot Air Furnace is below the applicability threshold of 10 MMBtu/hr and does not generate steam.

3. National Emissions Standards for Hazardous Air Pollutants (NESHAP)

The Hot Air Furnace is not subject to *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources*, 40 C.F.R. Part 63, Subpart JJJJJ because it burns only propane and does not create steam or heat water. Furthermore, this Subpart applies to area sources of HAP, and NEC is licensed as a major source of HAP.

The Hot Air Furnace is not subject to *National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters*, 40 C.F.R. Part 63, Subpart DDDDD because it does not create steam or heat water.

4. Emission Limits and Streamlining

a. Criteria Pollutants

For the Hot Air Furnace, a listing of the origin and authority of the standards and applicable emission limits can be found below. Limits are on a 1-hour block average basis unless otherwise stated.

Pollutant	Origin and Authority	Licensed Emission Limits
PM	A-658-70-D-R (5/7/2014), BPT	0.11 lb/hr
PM ₁₀	A-658-70-D-R (5/7/2014), BPT	0.11 lb/hr
SO ₂	A-658-70-D-R (5/7/2014), BPT	0.10 lb/hr
NO _x	A-658-70-D-R (5/7/2014), BPT	0.31 lb/hr
CO	A-658-70-D-R (5/7/2014), BPT	0.18 lb/hr
VOC	A-658-70-D-R (5/7/2014), BPT	0.10 lb/hr

b. Visible Emissions

Visible emissions from Hot Air Furnace shall not exceed 10% opacity on a 6-minute block average basis. [A-658-70-D-R (5/7/2014), BPT]

5. Emission Limit Compliance Methods

Compliance with the emission limits associated with the Hot Air Furnace shall be demonstrated in accordance with the appropriate test methods upon request of the Department.

6. Compliance Assurance Monitoring

CAM is not applicable to the Hot Air Furnace.

7. Periodic Monitoring

NEC shall maintain records of the propane usage for the Hot Air Furnace on a calendar year basis. [06-096 C.M.R. ch. 137]

8. Parameter Monitors

There are no Parameter Monitors required for the Hot Air Furnace.

G. Fire Pumps #1 and #2

NEC operates two fire pumps. The fire pumps are powered by a CAT model 3208 (Fire Pump #1) rated at 0.85 MMBtu/hr, and a Clarke model PDFP-L6YT (Fire Pump #2) rated at 0.73 MMBtu/hr. Both engines fire distillate fuel. The fire pump engines were manufactured in 1985 and 1993 respectively.

These engines have not been previously addressed due to being classified as insignificant under 06-096 C.M.R. ch. 140. The de minimis threshold for engines has been removed from Chapter 140 since the last license renewal; therefore, the engines are subject and will be addressed in this air emission license renewal.

1. Control Equipment

There is no control equipment associated with Fire Pumps #1 and #2.

2. New Source Performance Standards (NSPS)

Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, 40 C.F.R. Part 60, Subpart IIII is not applicable Fire Pumps #1 and #2 since the units were manufactured before April 1, 2006. [40 C.F.R. § 60.4200]

3. National Emissions Standards for Hazardous Air Pollutants (NESHAP)

National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines 40 C.F.R. Part 63, Subpart ZZZZ is applicable to Fire Pumps #1 and #2. The units are considered existing, emergency stationary reciprocating internal combustion engines (RICE) at a major HAP source and are not subject to New Source Performance Standards regulations. EPA's August 9, 2010 memo (*Guidance Regarding Definition of Residential, Commercial, and Institutional Emergency Stationary RICE in the NESHAP for Stationary RICE*) specifically does not exempt these units from the federal requirements.

a. Emergency Engine Designation and Operating Criteria

Under Subpart ZZZZ, a stationary reciprocating internal combustion engine (RICE) is considered an **emergency** stationary RICE (emergency engine) as long as the engine is operated in accordance with the following criteria. Operation of an engine outside of the criteria specified below may cause the engine to no longer be considered an emergency engine under Subpart ZZZZ, resulting in the engine being subject to requirements applicable to **non-emergency** engines.

(1) Emergency Situation Operation (On-Site)

There is no operating time limit on the use of an emergency engine to provide electrical power or mechanical work during an emergency situation. Examples of use of an emergency engine during emergency situations include the following:

- Use of an engine to produce power for critical networks or equipment (including power supplied to portions of a facility) because of failure or interruption of electric power from the local utility (or the normal power source, if the facility runs on its own power production);
- Use of an engine to mitigate an on-site disaster or equipment failure;
- Use of an engine to pump water in the case of fire, flood, natural disaster, or severe weather conditions; and
- Similar instances.

(2) Non-Emergency Situation Operation

An emergency engine may be operated up to a maximum of 100 hours per calendar year for maintenance checks, readiness testing, and other non-emergency situations as described below.

- (i) An emergency engine may be operated for a maximum of 100 hours per calendar year for maintenance checks and readiness testing, provided that the tests are recommended by federal, state, or local government; the manufacturer; the vendor; the regional transmission organization or equivalent balancing authority and transmission operator; or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE more than 100 hours per calendar year.
- (ii) An emergency engine may be operated for up to 50 hours per calendar year for other non-emergency situations. **However, these operating hours are counted as part of the 100 hours per calendar year operating limit described in paragraph (2) and (2) (i) above.**

The 50 hours per calendar year operating limit for other non-emergency situations cannot be used for peak shaving, demand response, or to generate income for a facility by providing power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

Fire Pumps #1 and #2 shall be limited to the usage outlined in 40 C.F.R. § 63.6640(f) and therefore may be classified as existing emergency

stationary RICE as defined in 40 C.F.R. Part 63, Subpart ZZZZ. Failure to comply with all of the requirements listed in 40 C.F.R. § 63.6640(f) may cause these engines to not be considered emergency engines and therefore subject to all applicable requirements for non-emergency engines.

b. 40 C.F.R. Part 63, Subpart ZZZZ Requirements

(1) Operation and Maintenance Requirements
[(40 C.F.R. § 63.6602 and Table 2(c))]

	Operating Limitations
Compression ignition (distillate fuel) units: <i>Fire Pumps #1 and #2</i>	<ul style="list-style-type: none">- Change oil and filter every 500 hours of operation or annually, whichever comes first;- Inspect the air cleaner every 1000 hours of operation or annually, whichever comes first, and replace as necessary; and- Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

The engines shall be operated and maintained according to the manufacturer's emission-related written instructions, or NEC shall develop a maintenance plan which must provide to the extent practicable for the maintenance and operation of each engine in a manner consistent with good air pollution control practice for minimizing emissions. [40 C.F.R. § 63.6625(e)]

(2) Optional Oil Analysis Program

NEC has the option of utilizing an oil analysis program which complies with the requirements of § 63.6625(i) in order to extend the specified oil change requirement. If this option is used, NEC must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for each engine. The analysis program must be part of the maintenance plan for each engine. [40 C.F.R. § 63.6625(i)]

(3) Non-Resettable Hour Meter Requirement

A non-resettable hour meter shall be installed and operated on each engine. [40 C.F.R. § 63.6625(f)]

(4) Startup Idle and Startup Time Minimization Requirements

During periods of startup, the facility must minimize the engine's time spent at idle and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. [40 C.F.R. § 63.6625(h) and 40 C.F.R. Part 63, Subpart ZZZZ Table 2c]

(5) Annual Time Limit for Maintenance and Testing

As emergency engines, the units shall each be limited to 100 hours/year for maintenance checks and readiness testing. Up to 50 hours/year of the 100 hours/year may be used in non-emergency situations (this does not include peak shaving, demand response, or to generate income for a facility by providing power to an electric grid or otherwise supply power as part of a financial arrangement with another entity). [40 C.F.R. § 63.6640(f)]

(6) Recordkeeping

NEC shall keep records that include maintenance conducted on the engines and the hours of operation of each engine recorded through the non-resettable hour meter. Documentation shall include the number of hours each unit operated for emergency purposes, the number of hours each unit operated for non-emergency purposes, and the reason each engine was in operation during each time. [40 C.F.R. § 63.6655(f)]

4. Emission Limits and Streamlining

a. Criteria Pollutants

For Fire Pumps #1 and #2, a listing of potentially applicable emission standards, the origin and authority of the standards, and the applicable emission limits can be found below. Limits are on a 1-hour block average basis unless otherwise stated.

The BPT emission limits for Fire Pumps #1 and #2 are based on the following:

- PM/PM₁₀ - 0.12 lb/MMBtu from 06-096 C.M.R. ch. 103
- SO₂ - combustion of distillate fuel with a maximum sulfur content not to exceed 15 ppm (0.0015% sulfur by weight)
- NO_x - 4.41 lb/MMBtu from AP-42, Chapter 3.3 dated 10/96
- CO - 0.95 lb/MMBtu from AP-42, Chapter 3.3 dated 10/96
- VOC - 0.35 lb/MMBtu from AP-42, Chapter 3.3 dated 10/96
- Visible Emissions - 06-096 C.M.R. ch. 101

Pollutant	Origin and Authority	Fire Pump #1	Fire Pump #2
PM	06-096 C.M.R. ch. 140, BPT	0.10 lb/hr	0.09 lb/hr
PM ₁₀	06-096 C.M.R. ch. 140, BPT	0.10 lb/hr	0.09 lb/hr
SO ₂	06-096 C.M.R. ch. 140, BPT	Negligible	Negligible

Pollutant	Origin and Authority	Fire Pump #1	Fire Pump #2
NO _x	06-096 C.M.R. ch. 140, BPT	3.75 lb/hr	3.23 lb/hr
CO	06-096 C.M.R. ch. 140, BPT	0.81 lb/hr	0.70 lb/hr
VOC	06-096 C.M.R. ch. 140, BPT	0.30 lb/hr	0.26 lb/hr

b. Visible Emissions

Visible emissions from Fire Pumps #1 and #2 shall not exceed 20% opacity each on a six-minute block average basis. During periods of startup NEC may elect to comply with the following work practice standards in lieu of the numerical opacity limit. [06-096 C.M.R. ch. 101, § 3(A)(4)(a)]

- (1) Maintain a log (written or electronic) of the date, time, and duration of all Fire Pump startups.
- (2) Operate the fire pumps in accordance with the manufacturer's emission-related operating instructions.
- (3) Minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations shall apply.
- (4) Operate the fire pumps, including any associated air pollution control equipment, at all times in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Department that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the unit.

5. Emission Limit Compliance Methods

Compliance with the emission limits associated with Fire Pumps shall be demonstrated in accordance with the appropriate test methods upon request of the Department.

6. Compliance Assurance Monitoring

CAM is not applicable to Fire Pumps #1 and #2.

7. Periodic Monitoring

NEC shall maintain the following records for Fire Pumps #1 and #2:

- a. Hours of operating time on a calendar year basis. [06-096 C.M.R. ch. 137]
- b. Log of the duration and reasons for all operating times as they occur.
- c. Records of all maintenance conducted.
- d. Sulfur content of the distillate fuel fired based on fuel receipts from the supplier, certificate of analysis, or testing of the tank containing the fuel to be fired.

8. Parameter Monitors

There are no Parameter Monitors required for Fire Pumps #1 and #2.

9. CEMS and COMS

There are no CEMS or COMS required for Fire Pumps #1 and #2.

H. Portable Engines

NEC may operate portable engines on-site for maintenance and emergency-only purposes. Depending on their size and age, these engines may be subject to *Visible Emissions Regulation*, 06-096 C.M.R. ch. 101 and *Fuel Burning Equipment Particulate Emission Standard*, 06-096 C.M.R. ch. 103.

Any engine which cannot meet the definition of “portable engine” as defined by this license may be subject to additional State and Federal regulations. A license amendment may be necessary for a portable engine to be reclassified as stationary.

I. Boat Building Activities

1. 06-096 C.M.R. ch. 159, *Control of Volatile Organic Compounds from Adhesives and Sealants*

Maine rule 06-096 C.M.R. ch. 159, *Control of Volatile Organic Compounds from Adhesives and Sealants*, limits emissions of VOC from adhesives, sealants, and primers through two basic components: sale and manufacture restrictions that limit the VOC

content of specified adhesives, sealants, and primers sold in the state; and use restrictions that apply primarily to commercial/industrial applications.

NEC is limited in the use of adhesives and sealants with a VOC content not to exceed the values specified in Table 1 of 06-096 C.M.R. ch. 159.

a. Materials

(1) Exemptions

- (i) Adhesives, sealants, adhesive primers, or sealant primers being tested or evaluated in any research and development, quality assurance, or analytical laboratory, provided records are maintained as required in section 4 of Chapter 159;
- (ii) Adhesives, sealants, adhesive primers, and sealant primers that are regulated as consumer products under 06-096 C.M.R. Chapter 152 *Control of Volatile Organic Compounds from Consumer Products*;
- (iii) Adhesives and sealants that contain less than 20 grams of VOC per liter of adhesive or sealant, less water and less exempt compounds, as applied;
- (iv) Cyanoacrylate adhesives;
- (v) Adhesives, sealants, adhesive primers, or sealant primers that are sold or supplied by the manufacturer or supplier in containers with a net volume of 16 fluid ounces or less, or a net weight of one pound or less, except plastic cement welding adhesives and contact adhesives;
- (vi) Contact adhesives that are sold or supplied by the manufacturer or supplier in containers with a net volume of one gallon or less; and
- (vii) Adhesives and sealants that are applied in a dry, powdered form and activated without the use of solvent.

[06-096 C.M.R. ch. 159 (3)(A)]

(2) The VOC content limits in Table 1 for adhesives applied to particular substrates shall apply as follows:

- (i) If an operator uses an adhesive or sealant subject to a specific VOC content limit for such adhesive or sealant in Table 1, such specific limit is applicable rather than an adhesive-to-substrate limit; and

(ii) If an adhesive is used to bond dissimilar substrates together, the applicable substrate category with the highest VOC content shall be the limit for such use.

[06-096 C.M.R. ch. 159 (1)(C)]

(3) While using a surface preparation or cleanup solvent, NEC shall comply with the following:

(i) NEC shall not use materials for surface preparation containing VOC unless the VOC content of the surface preparation solvent is less than 70 grams per liter;

(ii) Except as provided below, NEC shall not use materials containing VOC for the removal of adhesives, sealants, or adhesive or sealant primers from surfaces, other than spray application equipment, unless the composite vapor pressure of the solvent used is less than 45 mm Hg at 20 degrees Celsius; and

(iii) Removal of an adhesive, sealant, adhesive primer, or sealant primer from the parts of spray application equipment shall be performed in accordance with 06-096 C.M.R. ch. 130 *Solvent Cleaners*.

[06-096 C.M.R. ch. 159 (1)(D)]

b. Work Practice Standards

While using adhesives, sealants, adhesive primers, sealant primers, surface preparation solvents, or clean-up solvents subject to Chapter 159, NEC shall store or dispose of all absorbent materials, such as cloth or paper, which are moistened with adhesives, sealants, primers, or solvents subject to this rule, in non-absorbent containers that shall be closed except when placing materials in or removing materials from the container. [06-096 C.M.R. ch. 159 (2)(F)]

c. Recordkeeping

NEC shall demonstrate compliance by maintaining records of the following information:

(1) A list of each adhesive, sealant, adhesive primer, sealant primer, cleanup solvent, and surface preparation solvent in use and in storage;

(2) A data sheet or material list which provides the material name, manufacturer identification, and material application;

(3) Catalysts, reducers, or other components used and the mix ratio;

- (4) The VOC content of each product as supplied;
- (5) The final VOC content or vapor pressure, as applied; and
- (6) The annual volume of each adhesive, sealant, adhesive primer, sealant primer, cleanup solvent, or surface preparation solvent used or purchased.
[06-096 C.M.R. ch. 159 (4)]

The above information shall be maintained for 5 years and shall be made available to the Department within 90 days of a request.
[06-096 C.M.R. ch. 159 (4)(C)]

2. 06-096 C.M.R. ch. 162, *Control for Fiberglass Boat Manufacturing Materials*

As a manufacturer of fiberglass boats with annual VOC emissions in excess of 5,400 lbs, NEC is subject to 06-096 C.M.R. ch. 162 *Control for Fiberglass Boat Manufacturing Materials*. Chapter 162 establishes consistent requirements for testing, evaluating, and limiting VOC emissions from fiberglass boat manufacturing operations.

a. Exemptions

The following operations and/or materials are exempt from the monomer and nonmonomer VOC requirements of Chapter 162:

- (1) Production resins (including skin coat resins) that meet the specification for use in military vessels or are approved by the U.S. Coast Guard for use in the construction of lifeboats, rescue boats, and other lifesaving appliances approved under 46 C.F.R. Subchapter Q, or the construction of small passenger vessels regulated by 46 C.F.R. Subchapter T, including but not limited to vessels for hire of less than 100 tons carrying more than 6 and less than 150 passengers. Production resins that meet these criteria must be applied with nonatomizing resin application equipment in order to qualify for exemption under this subsection;
- (2) Pigmented, clear, and tooling gel coat used for part or mold repair and touch-up. The total gel coat materials included in this exemption must not exceed 1.0 percent by weight of all resins and gel coats used at a facility on a 12-month rolling average basis;

(3) Pure, 100 percent vinylester resin used for skin coats that are applied with nonatomizing resin application equipment and with the total amount of the resin materials not exceeding five percent by weight of all resin used at a facility on a 12-month rolling average basis. This exemption does not apply to blends of vinylester and polyester used for skin coats; and

(4) Any closed molding operation as defined by this Chapter. Open molding resin and gel coat operations such as gel coat or skin coat layers that precede a closed molding operation are not exempt.

[06-096 C.M.R. ch. 162 (1)(D)]

b. Emission Limits

NEC has chosen to comply with the emission limitations of Chapter 162 by using the emissions averaging among different operations option.

(1) NEC shall use Equation 1 to establish a facility-specific monomer VOC mass emission limit on a 12-month rolling average basis:

Equation 1

$$\text{Monomer VOC Limit} = 46(M_R) + 159(M_{PG}) + 291(M_{CG}) + 54(M_{TR}) + 214(M_{TG})$$

Where:

Monomer VOC Limit = total allowable monomer VOC that can be emitted from the open molding operations included in the average, in kilograms per 12-month period.

M_R = mass of production resin used in the past 12 months, excluding any materials that are exempt, in megagrams.

M_{PG} = mass of pigmented gel coat used in the past 12 months, excluding any materials that are exempt, in megagrams.

M_{CG} = mass of clear gel coat used in the past 12 months, excluding any materials that are exempt, in megagrams.

M_{TR} = mass of tooling resin used in the past 12 months, excluding any materials that are exempt, in megagrams.

M_{TG} = mass of tooling gel coat used in the past 12 months, excluding any materials that are exempt, in megagrams.

The numerical coefficients associated with each term on the right side of Equation 1 are the allowable monomer VOC emission rates for that material in units of kilograms of monomer VOC per megagram of material used.

[06-096 C.M.R. ch. 162 (3)(B)(1)]

- (2) NEC shall use Equation 2 to demonstrate that the monomer VOC mass emissions from the operations included in the average do not exceed the emission limit calculated using Equation 1 for the same period. This demonstration shall be conducted at the end of the first 12-month averaging period and at the end of every subsequent month for only those operations and materials included in the average.

Equation 2

$$\text{Monomer VOC emissions} = (PV_R)(M_R) + (PV_{PG})(M_{PG}) + (PV_{CG})(M_{CG}) + (PV_{TR})(M_{TR}) + (PV_{TG})(M_{TG})$$

Where:

Monomer VOC emissions = monomer VOC emissions from open molding operations included in the average, in kilograms per 12-month period.

PV_R = weighted-average monomer VOC emission rate for production resin used in the past 12 months, in kilograms per megagram.

M_R = mass of production resin used in the past 12 months, excluding any materials that are exempt, in megagrams.

PV_{PG} = weighted-average monomer VOC emission rate for pigmented gel coat used in the past 12 months, in kilograms per megagram.

M_{PG} = mass of pigmented gel coat used in the past 12 months, excluding any material that are exempt, in megagrams.

PV_{CG} = weighted-average monomer VOC emission rate for clear gel coat used in the past 12 months, in kilograms per megagram.

M_{CG} = mass of clear gel coat used in the past 12 months, excluding any materials that are exempt, in megagrams.

PV_{TR} = weighted-average monomer VOC emission rate for tooling resin used in the past 12 months, in kilograms per megagram.

M_{TR} = mass of tooling resin used in the past 12 months, excluding any materials that are exempt, in megagrams.

PV_{TG} = weighted-average monomer VOC emission rate for tooling gel coat used in the past 12 months, in kilograms per megagram.

M_{TG} = mass of tooling gel coat used in the past 12 months, excluding any materials that are exempt, in megagrams.

[06-096 C.M.R. ch. 162 (3)(B)(2)]

- (3) NEC shall use Equation 3 to compute the weighted-average monomer VOC emission rate for the previous 12 months for each open molding resin and gel coat operation included in the average for use in Equation 2:

Equation 3

$$PV_{OP} = \frac{\sum_{i=1}^n (M_i PV_i)}{\sum_{i=1}^n (M_i)}$$

Where: PV_{OP} = weighted-average monomer VOC emission rate for each open molding operation (PV_R , PV_{PG} , PV_{CG} , PV_{TR} , and PV_{TG}) included in the average, in kilograms of monomer VOC per megagram of material applied.

M_i = mass of resin or gel coat used within an operation in the past 12 months, in megagrams.

PV_i = the monomer VOC emission rate for resin or gel coat used within an operation in the past 12 months, in kilograms of monomer VOC per megagram of material applied. The equations in Table 1 shall be used to compute PV.

Table 1

Monomer VOC Emission Rate Formulas for Open Molding Resin and Gel Coat

Material	Application Method	Formula
Production resin, tooling resin	a. Atomized	a. $0.014 \times (\text{Resin VOC}\%)^{2.425}$
	b. Atomized, plus vacuum bagging with roll-out	b. $0.01185 \times (\text{Resin VOC}\%)^{2.425}$
	c. Atomized, plus vacuum bagging without roll-out	c. $0.00945 \times (\text{Resin VOC}\%)^{2.425}$
	d. Nonatomized	d. $0.014 \times (\text{Resin VOC}\%)^{2.275}$
	e. Nonatomized, plus vacuum bagging with roll-out	e. $0.011 \times (\text{Resin VOC}\%)^{2.275}$
	f. Nonatomized, plus vacuum bagging without roll-out	f. $0.0076 \times (\text{Resin VOC}\%)^{2.275}$
Pigmented gel coat, clear gel coat, tooling gel coat	All methods	$0.445 \times (\text{Gel Coat VOC}\%)^{1.675}$

- (4) When using a filled production resin or filled tooling resin, NEC shall calculate the emission rate for the filled material on an as-applied basis using Equation 4:

Equation 4

$$PV_F = \frac{PV_U \times (100 - \% \text{ Filler})}{100}$$

- Where: PV_F = The as-applied monomer VOC emission rate for the filled production resin or tooling resin, in kilograms monomer VOC per megagram of filled material.
- PV_U = The monomer VOC emission rate for the neat (unfilled) resin before filler is added, as calculated using the formulas in Table 2 of Section 3(B)(3) of Chapter 162.
- % Filler = The weight-percent of filler in the as-applied filled resin system.
[06-096 C.M.R. ch. 162 (4)(1)]

If the filled resin ...

- (i) Is used as a production resin, then the value of PV_F calculated by Equation 4 shall not exceed 46 kilograms of monomer VOC per megagram of filled resin applied;
- (ii) Is used as a tooling resin, then the value of PV_F calculated by Equation 4 shall not exceed 54 kilograms of monomer VOC per megagram of filled resin applied;
- (iii) Is included in the emissions averaging procedure, then the facility shall use the value of PV_F calculated by Equation 4 for the value of PV_i in Equation 3.
[06-096 C.M.R. ch. 162 (4)(2)]
- (5) Non-Monomer VOC Content
- (i) Up to five percent of the non-monomer VOC content of a resin or gel coat shall be exempt from the VOC content limits of this section.
- (ii) If the non-monomer VOC content limit of a resin or gel coat exceeds five percent, then the excess non-monomer VOC over five percent shall be added to the monomer VOC content. The monomer VOC content of resin and gel coat shall be determined by using the South Coast Air Quality Management District Method 312-9, *Determination of Percent Monomer in Polyester Resins*, revised 1996, unless NEC maintains records from the

manufacturer to document the monomer VOC content of resin and gel coat materials.

[06-096 C.M.R. ch. 162 (5)]

(6) Cleaning Solvent Standards

(i) The volatile organic compound content of cleaning solvents employed for routine application equipment cleaning shall contain a maximum of 5.0 percent VOC by weight, or have a composite vapor pressure of no more than 0.50 mm Hg at 68 degrees Fahrenheit, as determined by the cleaning solvent manufacturer's Safety Data Sheet (SDS) or other appropriate documentation acceptable to the Department and EPA.

(ii) Only non-volatile organic compound solvents shall be used to remove cured resin and gel coat from application equipment.

[06-096 C.M.R. ch. 162 (6)]

c. Work Practice Standards

All resin and gel coat containers with a capacity equal to or greater than 208 liters (55.0 gallons), including those used for on-site mixing of putties and polyester resin putties, shall have a cover with no visible gaps in place at all times. This work practice does not apply when materials are being manually added to or removed from a container, or when mixing equipment is being placed in or removed from a container. [06-096 C.M.R. ch. 162 (7)]

d. Monitoring and Recordkeeping Requirements

NEC shall collect and record the following information for each operation subject to Chapter 162 on a monthly basis and shall maintain the information at the facility for a period of five years:

(1) The total quantity of atomized molding production resin, nonatomized production resin, pigmented gel coat, clear gel coat, atomized tooling resin, nonatomized tooling resin, and tooling gel coat used per month and the weighted-average monomer VOC contents for each operation.

(2) All calculations performed pursuant to Chapter 162.

(3) The volatile organic compound content of each non-monomer resin and gel coat employed.

- (4) For each cleaning solvent employed for routine application equipment cleaning, either the volatile organic compound content, by weight percent or the composite vapor pressure, in mmHg; whichever is the applicable requirement selected to comply with the cleaning solvent requirements of Section 4 of Chapter 162.

[06-096 C.M.R. ch. 162 (9)]

e. Reporting Requirements

NEC shall notify the Department of any record maintained in accordance with Section 6(A) of Chapter 162 showing the use of noncomplying materials. A copy of such record shall be sent to the Department within thirty days following the end of the month in which the use of noncomplying materials occurs.

[06-096 C.M.R. ch. 162 (10)]

3. 40 C.F.R. Part 63 Subpart VVVV

NEC is subject to *National Emission Standard for Hazardous Air Pollutants for Boat Manufacturing* (40 C.F.R. Part 63 Subpart VVVV) because the facility has the potential to emit greater than 10 tpy of styrene, a HAP. The NESHAP has three compliance options, one of which is the emissions averaging option. This requires that the affected source demonstrate that the calculated average emissions meets the calculated emission limit.

NEC has chosen to meet the emission limit for resins and gelcoats used in open molding operations by using the emissions averaging option outlined in 40 C.F.R. § 63.5704. Organic HAP emissions are calculated using equations in § 63.5710 and Table 3 and compared to the HAP limit calculated in § 63.5698. Emissions are calculated monthly on a 12-month rolling average basis.

a. Exempt Materials

- (1) Production resins (including skin coat resins) that must meet specifications for use in military vessels or must be approved by the U.S. Coast Guard for use in the construction of lifeboats, rescue boats, and other life-saving appliances approved under 46 C.F.R. Chapter I, Subchapter Q or the construction of small passenger vessels regulated by 46 C.F.R. Chapter I, Subchapter T. Production resins for which this exemption is used must be applied with nonatomizing (non-spray) resin application equipment. A record must be maintained of the resins for which this exemption is being used.

- (2) Pigmented, clear, and tooling gel coat used for part or mold repair and touch up. The total gel coat materials included in this exemption must not exceed 1 percent by weight of all gel coat used at the facility on a 12-month rolling-average basis. A record must be kept of the amount of gel coats used per month for which this exemption is being used and copies of calculations showing that the exempt amount does not exceed 1 percent of all gel coat used.
- (3) Pure, 100 percent vinylester resin used for skin coats. This exemption does not apply to blends of vinylester and polyester resins used for skin coats. The total resin materials included in the exemption cannot exceed 5 percent by weight of all resin used at the facility on a 12-month rolling-average basis. A record must be kept of the amount of 100 percent vinylester skin coat resin used per month that is eligible for this exemption and copies of calculations showing that the exempt amount does not exceed 5 percent of all resin used.

[40 C.F.R. § 63.5698 (d)]

b. Emissions Calculations

- (1) NEC shall limit organic HAP emissions from open molding operations to the limit specified by Equation 1 in § 63.5698 of Part 63, Subpart VVVV shown below, based on a 12-month rolling average:

Equation 5

$$\text{HAP limit} = [46(M_R) + 159(M_{PG}) + 291(M_{CG}) + 54(M_{TR}) + 214(M_{TG})]$$

Where:

HAP Limit = total allowable organic HAP that can be emitted from the open molding operations, kilograms.

M_R = mass of production resin used in the past 12 months, excluding any exempt materials, megagrams.

M_{PG} = mass of pigmented gelcoat used in the past 12 months, excluding any exempt materials, megagrams.

M_{CG} = mass of clear gelcoat used in the past 12 months, excluding any exempt materials, megagrams.

M_{TR} = mass of tooling resin used in the past 12 months, excluding any exempt materials, megagrams.

M_{TG} = mass of tooling gelcoat used in the past 12 months, excluding any exempt materials, megagrams.

[40 C.F.R. § 63.5698 (b)]

- (2) The organic HAP emissions shall be calculated using the equation in § 63.5710 shown below:

Equation 6

$$\text{HAP emissions} = [(PV_R)(M_R) + (PV_{PG})(M_{PG}) + (PV_{CG})(M_{CG}) + (PV_{TR})(M_{TR}) + (PV_{TG})(M_{TG})]$$

Where:

PV_R = Weighted-average MACT model point value for production resin used in the past 12 months.

M_R = mass of production resin used in the past 12 months, excluding any exempt materials, megagrams.

PV_{PG} = Weighted-average MACT model point value for pigmented gelcoat used in the past 12 months.

M_{PG} = mass of pigmented gelcoat used in the past 12 months, excluding any exempt materials, megagrams.

PV_{CG} = Weighted-average MACT model point value for clear gelcoat used in the past 12 months.

M_{CG} = mass of clear gelcoat used in the past 12 months, excluding any exempt materials, megagrams.

PV_{TR} = Weighted-average MACT model point value for tooling resin used in the past 12 months.

M_{TR} = mass of tooling resin used in the past 12 months, excluding any exempt materials, megagrams.

PV_{TG} = Weighted-average MACT model point value for tooling gelcoat used in the past 12 months.

M_{TG} = mass of tooling gelcoat used in the past 12 months, excluding any exempt materials, megagrams.

[40 C.F.R. § 63.5710 (b)]

- (3) At the end of each month, NEC shall use the following equation to compute the weighted-average MACT model point value for each open molding resin and gel coat operation included in the 12- month rolling average.

Equation 7

$$PV_{OP} = \frac{\sum_{i=1}^n (M_i PV_i)}{\sum_{i=1}^n (M_i)}$$

Where:

PV_{OP} = weighted-average MACT model point value for each open molding operation (PV_R , PV_{PG} , PV_{CG} , PV_{TR} , and PV_{TG}) included in the average, kilograms of HAP per megagram of material applied.

M_i = mass of resin or gel coat i used within an operation in the past 12 months, megagrams.

n = number of different open molding resins and gel coats used within an operation in the past 12 months.

PV_i = the MACT model point value for resin or gel coat used within an operation in the past 12 months, kilograms of HAP per megagram of material applied.

[40 C.F.R. § 63.5710 (c)]

NEC shall use the formulas in Table 3 of Subpart VVVV to calculate the MACT model point value (PV_i) for each resin and gel coat used in each operation in the past 12 months.

[40 C.F.R. § 63.5710 (d)]

If the organic HAP emissions, as calculated in Equation 6 of this section, are less than the organic HAP limit calculated in Equation 5 for the same 12-month period, then NEC is considered to be in compliance with the emission limit for those operations and materials included in the average.

[40 C.F.R. § 63.5710 (e)]

c. Work Practice Standards

- (1) All resin and gel coat mixing containers with a capacity equal to or greater than 208 liters, including those used for on-site mixing of putties and polyputties, must have a cover with no visible gaps in place at all times. This does not apply when material is being manually added to or removed from a container, or when mixing or pumping equipment is being placed in or removed from a container.

NEC shall visually inspect all mixing containers subject to this standard at least once per month and keep records of which mixing containers are subject to this standard and the results of inspections including a description of any repairs or corrective actions taken.[40 C.F.R. § 63.5731]

- (2) For routine flushing of resin and gel coat application equipment (e.g., spray guns, flowcoaters, brushes, rollers, and squeegees), NEC shall use a cleaning solvent that contains no more than 5 percent organic HAP by weight. For removing cured resin or gel coat from application equipment, no organic HAP content limit applies. [40 C.F.R. § 63.5734 (a)]
 - (3) NEC shall store organic HAP-containing solvents used for removing cured resin or gel coat in containers with covers. The covers must have no visible gaps and must be in place at all times, except when equipment to be cleaned is placed in or removed from the container. On containers with a capacity greater than 7.6 liters, the distance from the top of the container to the solvent surface must be no less than 0.75 times the diameter of the container. Containers that store organic HAP-containing solvents used for removing cured resin or gel coat are exempt from the requirements of 40 C.F.R. Part 63, Subpart T. Cured resin or gel coat means resin or gel coat that has changed from a liquid to a solid. [40 C.F.R. § 63.5734 (b)]
- d. Recordkeeping and Reporting
- (1) NEC shall keep records of the following for a period of 5 years:
[40 C.F.R. § 63.5770 (b)]
 - (i) HAP content of all materials used that are subject to 40 C.F.R. Part 63, Subpart VVVV. [40 C.F.R. § 63.5704]
 - (ii) Amount of material used per month. [40 C.F.R. § 63.5704]
 - (iii) Application method used for production resin and tooling resin. This record is not required if all production resins and tooling resins are applied with nonatomized technology. [40 C.F.R. § 63.5704]
 - (iv) Calculations performed to demonstrate compliance based on MACT model point values. [40 C.F.R. § 63.5704]
 - (v) NEC shall keep a copy of each notification and report submitted to comply with this subpart. [40 C.F.R. § 63.5704]
 - (vi) NEC shall keep all documentation supporting any notification or report submitted. [40 C.F.R. § 63.5767]
 - (vii) The total amounts of open molding production resin, pigmented gel coat, clear gel coat, tooling resin, and tooling gel coat used per month and the

weighted-average organic HAP contents for each operation, expressed as weight-percent. For open molding production resin and tooling resin, NEC shall also record the amounts of each applied by atomized and nonatomized methods. [40 C.F.R. § 63.5767]

- (2) NEC shall develop an implementation plan to describe the steps taken to bring the open molding operations included in the emissions average into compliance. NEC shall keep the implementation plan on site and provide it to the Administrator when asked. This plan must contain the following: [40 C.F.R. § 63.5707]
 - (i) A description of each operation included in the average.
 - (ii) The maximum organic HAP content of the materials used, the application method used (if any atomized resin application methods are used in the average), and any other methods used to control emissions.
 - (iii) Calculations showing that the operations covered by the plan will comply with the open molding emission limit.
- (3) NEC shall submit to the Department semi-annual compliance reports for the period from January 1 through June 30 and from July 1 through December 31, postmarked no later than 60 days beyond the end of the semi-annual reporting period. The report shall contain the following: [40 C.F.R. § 63.5764]
 - (i) Company name and address.
 - (ii) A statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the report.
 - (iii) The date of the report and the beginning and ending dates of the reporting period.
 - (iv) A description of any changes in the manufacturing process since the last compliance report.
 - (v) A statement or table showing, for each regulated operation, the applicable organic HAP content limit, application equipment requirement, or MACT model point value averaging provision with which you are complying. The statement or table must also show the actual weighted-average organic HAP content or weighted-average MACT model point value (if applicable) for each operation during each of the rolling 12-month averaging periods that end during the reporting period.

- (vi) If NEC was in compliance with the emission limits and work practice standards during the reporting period, NEC shall include a statement to that effect.
- (vii) If NEC deviated from an emission limit or work practice standard during the reporting period, the following information shall be included:
1. A description of the operation involved in the deviation.
 2. The quantity, organic HAP content, and application method (if relevant) of the materials involved in the deviation.
 3. A description of any corrective action taken to minimize the deviation and actions you have taken to prevent it from happening again.
 4. A statement of whether or not NEC was in compliance for the 12-month averaging period that ended at the end of the reporting period.

J. BPT for VOC and HAP Control from Boat Building Activities

NEC was issued Air Emission License A-658-74-A-N on 7/7/1996 which incorporated requirements of Best Available Control Technology (BACT). The VOC BACT findings in Air Emission License A-658-74-A-N have been incorporated as a VOC BPT determination into this Part 70 license renewal.

The Lamination production area is the source of most of the emissions of VOC and HAP. Emissions of styrene, both a VOC and a HAP, are from evaporation of resin or gelcoat overspray and vaporization from the applied resin or gelcoat prior to polymerization. NEC is classified as a major source for HAP and subject to Part 70 due to emitting more than 10 tons/year of a single HAP, styrene.

Not all of the VOC/HAP as delivered is volatilized or emitted. NEC shall calculate VOC emissions from resin and gelcoat application processes using the Unified Emission Factors (UEF) estimation models for open molding of composites which is based on a compilation of research conducted by the Composites Fabricators Association, the National Marine Manufacturing Association, and the United States Environmental Protection Agency. These factors are to be used until the Department determines other factors are applicable.

In addition to requirements of specific state and federal rules as described previously in this license, the following determinations are BPT for this facility:

- NEC shall not emit more than 48 tons/year, on a 12-month rolling total basis, of combined VOC emissions from all departments that make up the composite fabrication

process, based on the closed molding calculations, mass balance equation, and UEFs.

- To meet the requirements of Subpart VVVV, NEC shall maintain an emission tracking system to demonstrate compliance with the emissions averaging option in 40 C.F.R. § 63.5704.
- NEC shall continue research and manufacturing test trials of pollution prevention technologies (lower styrene resins, closed mold system, etc.). An annual report shall be sent to the Department by January 31st documenting the research and test trial results for the previous year.
- NEC shall continue to use atomized low-pressure spray guns for the application of gelcoats and mechanical non-atomized or manual application techniques for resins.
- NEC shall use manual application methods for open-mold resin processes, when technologically appropriate.
- NEC shall install particulate filters on all forced ventilation points that are located adjacent or above the sanding, cutting and finishing operations. NEC shall properly maintain all dust collection equipment in the facility and make repairs as necessary to prevent system leakage. NEC shall control PM emissions from any cutting, buffing, grinding, or sanding processes that vent to the ambient air via vent or duct through the use of a particulate filter such that opacity will not exceed 10% for any one, six minute block average.
- NEC shall track total VOC emissions using the following methods for each VOC containing material.

1. Mass Balance

$$\text{Monthly VOC emissions} = (\text{Monthly Product Purchases} * \% \text{VOC}) - (\text{Monthly Hazardous Waste Removed from Site} * \% \text{VOC})$$

2. Closed Molding

For materials used in closed molding operations, NEC may assume a 1% release of all VOC and may calculate total VOC emissions using the following equation for each applicable material:

$$\text{Monthly emissions} = (\text{monthly facility purchases by mass}) * (\text{VOC content}) * (0.01)$$

3. Open Molding:

NEC may use the UEF for the calculation of VOC from open molding operations. NEC shall track the amount and type of each resin and gel coat used for open molding operations, and the VOC content of each and apply the most current UEF.

K. Fugitive Particulate Matter Emissions

1. Visible emissions from a fugitive emission source (including stockpiles and roadways) shall not exceed 20% opacity on a 5-minute block average basis. [06-096 C.M.R. ch. 101, § 3(C)]
2. NEC shall reduce the potential for fugitive PM emissions from any process conducted outside by limiting such activity to periods of calm winds or through the use of a shroud or wind curtain. [06-096 C.M.R. ch. 115, BPT and A-658-70-D-R, 5/7/14, BPT]

L. General Process Sources

Visible emissions from any general process source shall not exceed 20% on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 3(B)(4)]

M. Emission Statements

NEC is subject to emissions inventory requirements contained in *Emission Statements*, 06-096 C.M.R. ch. 137. NEC shall maintain the following records in order to comply with this rule:

1. The amount of propane fired in the Hot Air Furnace on a calendar year basis;
2. The sulfur content of the distillate fuel fired in Fire Pumps #1 and #2;
3. Hours of operating time on a calendar year basis of Fire Pumps #1 and #2 each;
4. Calculations of the VOC and HAP emissions from the boat building activities on a calendar year total basis;

In reporting year 2020 and every third year thereafter, NEC shall report to the Department emissions of hazardous air pollutants as required by 06-096 C.M.R. ch. 137, § (3)(C). The Department will use these reports to calculate and invoice for the applicable annual air quality surcharge for the subsequent three billing periods. NEC shall pay the annual air quality surcharge, calculated by the Department based on these reported emissions of hazardous air pollutants, by the date required in Title 38 M.R.S. § 353-A(3). [38 M.R.S. § 353-A(1-A)]

N. Facility Annual Emissions

NEC is licensed for the following annual emissions. The tons per year emissions were calculated based on the following:

- Operating the Hot Air Furnace for 8760hrs/yr;
- Operating Fire Pump #1 and #2 for 100 hrs/yr each;
- The facility's VOC emissions cap.

Total Licensed Annual Emissions for the Facility
Tons/year
(used to calculate the annual license fee)

	PM	PM ₁₀	SO ₂	NO _x	CO	VOC
Hot Air Furnace	0.5	0.5	0.1	1.4	0.8	0.1
Fire Pump #1	Neg.	Neg.	Neg.	0.2	0.1	Neg.
Fire Pump #2	Neg.	Neg.	Neg.	0.2	0.1	Neg.
Boat Building	-	-	-	-	-	48
Total TPY	0.5	0.5	0.1	1.8	1.0	48.1

III. AMBIENT AIR QUALITY ANALYSIS

According to 06-096 C.M.R. ch. 140, an existing Part 70 source shall be exempt from an impact analysis with respect to a regulated pollutant whose allowable emissions do not exceed the following:

Pollutant	Tons/year
PM	25
PM ₁₀	25
SO ₂	50
NO _x	50
CO	250

Based on facility license allowed emissions, NEC is below the emissions level required for modeling and monitoring.

ORDER

Based on the above Findings and subject to conditions listed below, the Department concludes that emissions from this source:

- will receive Best Practical Treatment;
- will not violate applicable emissions standards; and
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants the Part 70 License A-658-70-E-R pursuant to 06-096 C.M.R. ch. 140 and the preconstruction permitting requirements of 06-096 C.M.R. ch. 115 and subject to the standard and specific conditions below.

All federally enforceable and State-only enforceable conditions in existing air licenses previously issued to NEC pursuant to the Department's preconstruction permitting requirements have been incorporated into this Part 70 license, except for such conditions that the Department has determined are obsolete, extraneous, or otherwise environmentally insignificant, as explained in

the Findings of Fact accompanying this Order. As such, the conditions in this license supersede all previously issued air license conditions.

Federally enforceable conditions in this Part 70 license must be changed pursuant to the applicable requirements in *Major and Minor Source Air Emission License Regulations*, 06-096 C.M.R. ch. 115 for making such changes and pursuant to the applicable requirements in 06-096 C.M.R. ch. 140.

For each standard and specific condition which is state enforceable only, state-only enforceability is designated with the following statement: **Enforceable by State-only**.

Severability. The invalidity or unenforceability of any provision of this License or part thereof shall not affect the remainder of the provision or any other provisions. This License shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.

STANDARD STATEMENTS

- (1) Approval to construct shall become invalid if the source has not commenced construction within eighteen (18) months after receipt of such approval or if construction is discontinued for a period of eighteen (18) months or more. The Department may extend this time period upon a satisfactory showing that an extension is justified, but may condition such extension upon a review of either the control technology analysis or the ambient air quality standards analysis, or both. [06-096 C.M.R. ch. 140]
- (2) The Part 70 license does not convey any property rights of any sort, or any exclusive privilege. [06-096 C.M.R. ch. 140]
- (3) All terms and conditions are enforceable by EPA and citizens under the CAA unless specifically designated as state enforceable. [06-096 C.M.R. ch. 140]
- (4) The licensee may not use as a defense in an enforcement action that the disruption, cessation, or reduction of licensed operations would have been necessary in order to maintain compliance with the conditions of the air emission license. [06-096 C.M.R. ch. 140]
- (5) Notwithstanding any other provision in the State Implementation Plan approved by the EPA or Section 114(a) of the CAA, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any statute, regulation, or Part 70 license requirement. [06-096 C.M.R. ch. 140]
- (6) Compliance with the conditions of this Part 70 license shall be deemed compliance with any Applicable requirement as of the date of license issuance and is deemed a permit shield, provided that:

- A. Such Applicable and state requirements are included and are specifically identified in the Part 70 license, except where the Part 70 license term or condition is specifically identified as not having a permit shield; or
- B. The Department, in acting on the Part 70 license application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the Part 70 license includes the determination or a concise summary, thereof.

Nothing in this section or any Part 70 license shall alter or affect the provisions of Section 303 of the CAA (emergency orders), including the authority of EPA under Section 303; the liability of an owner or operator of a source for any violation of Applicable requirements prior to or at the time of permit issuance; or the ability of EPA to obtain information from a source pursuant to Section 114 of the CAA.

The following requirements have been specifically identified as not applicable based upon information submitted by the licensee in an application dated 8/21/2018.

Permit Shield Table

Source	Citation	Description	Basis for Determination
Facility	40 CFR Part 63, Subpart II	NESHAP for Shipbuilding and Ship Repair	This facility manufactures pleasure crafts and is therefore not considered a “ship builder” as defined by 40 C.F.R. § 63.782
Facility	40 CFR Part 63, Subpart JJ	NESHAP for Wood Manufacturing	NEC is not primarily engaged in the manufacture of wood furniture and uses no more than 100 gallons per month of finishing material or adhesives in the manufacturing of wood furniture components.
Facility	Chapter 129	Surface Coating Facilities	NEC does not surface coat cans, fabric, vinyl, metal furniture, or miscellaneous metal parts.
Facility	Chapter 138	NO _x RACT	NEC, at full load, does not have the potential to emit more than 99.9 tons of NO _x per year.
Facility	40 C.F.R. Part 98	Mandatory Greenhouse Gas Reporting	NEC does not have fuel burning equipment with an aggregate maximum rated heat input capacity greater than 30 MMBtu/hour

Source	Citation	Description	Basis for Determination
Facility	40 C.F.R. Part 64	Compliance Assurance Monitoring	NEC does not have any equipment or processes that exceed the applicability threshold of 40 C.F.R. Part 64
Hot Air Furnace	40 C.F.R. Part 63, Subpart JJJJJ	National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources	The unit is below the applicability threshold of 10 MMBtu/hr and does not generate steam
Hot Air Furnace	40 C.F.R. Part 63, Subpart DDDDD	National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters	The unit does not create steam or heat water
Hot Air Furnace	40 C.F.R. Part 60, Subpart Dc	Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units	The unit is below the applicability threshold of 10 MMBtu/hr and does not generate steam

[06-096 C.M.R. ch. 140]

- (7) The Part 70 license shall be reopened for cause by the Department or EPA, prior to the expiration of the Part 70 license, if:
- A. Additional Applicable requirements under the CAA become applicable to a Part 70 major source with a remaining Part 70 license term of three or more years. However, no opening is required if the effective date of the requirement is later than the date on which the Part 70 license is due to expire, unless the original Part 70 license or any of its terms and conditions has been extended pursuant to 06-096 C.M.R. ch. 140;
 - B. Additional requirements (including excess emissions requirements) become applicable to a Title IV source under the acid rain program. Upon approval by EPA, excess emissions offset plans shall be deemed to be incorporated into the Part 70 license;
 - C. The Department or EPA determines that the Part 70 license contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the Part 70 license; or
 - D. The Department or EPA determines that the Part 70 license must be revised or revoked to assure compliance with the Applicable requirements.

The licensee shall furnish to the Department within a reasonable time any information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the Part 70 license or to determine compliance with the Part 70 license.

[06-096 C.M.R. ch. 140]

- (8) No license revision or amendment shall be required, under any approved economic incentives, marketable licenses, emissions trading, and other similar programs or processes for changes that are provided for in the Part 70 license. [06-096 C.M.R. ch. 140]

STANDARD CONDITIONS

- (1) Employees and authorized representatives of the Department shall be allowed access to the licensee's premises during business hours, or any time during which any emissions units are in operation, and at such other times as the Department deems necessary for the purpose of performing tests, collecting samples, conducting inspections, or examining and copying records relating to emissions and this license (38 M.R.S. § 347-C).
- (2) The licensee shall acquire a new or amended air emission license prior to commencing construction of a modification, unless specifically provided for in Chapter 140. [06-096 C.M.R. ch. 140]
- (3) The licensee shall establish and maintain a continuing program of best management practices for suppression of fugitive particulate matter during any period of construction, reconstruction, or operation which may result in fugitive dust, and shall submit a description of the program to the Department upon request. [06-096 C.M.R. ch. 140]
Enforceable by State-only
- (4) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to 38 M.R.S. § 353-A.
- (5) The licensee shall maintain and operate all emission units and air pollution control systems required by the air emission license in a manner consistent with good air pollution control practice for minimizing emissions. [06-096 C.M.R. ch. 140]
Enforceable by State-only
- (6) The licensee shall retain records of all required monitoring data and support information for a period of at least six (6) 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 Part 70 license. The records shall be submitted to the Department upon written request or in accordance with other provisions of this license. [06-096 C.M.R. ch. 140]

- (7) The licensee shall comply with all terms and conditions of the air emission license. The submission of notice of intent to reopen for cause by the Department, the filing of an appeal by the licensee, the notification of planned changes or anticipated noncompliance by the licensee, or the filing of an application by the licensee for the renewal of a Part 70 license or amendment shall not stay any condition of the Part 70 license. [06-096 C.M.R. ch. 140]
- (8) In accordance with the Department's air emission compliance test protocol and 40 C.F.R. Part 60 or other method approved or required by the Department, the licensee shall:
- A. Perform stack testing under circumstances representative of the facility's normal process and operating conditions:
 - 1. Within sixty (60) calendar days of receipt of a notification to test from the Department or EPA, if visible emissions, equipment operating parameters, staff inspection, air monitoring, or other cause indicate to the Department that equipment may be operating out of compliance with emission standards or license conditions;
 - 2. To demonstrate compliance with the applicable emission standards; or
 - 3. Pursuant to any other requirement of this license to perform stack testing.
 - B. Install or make provisions to install test ports that meet the criteria of 40 C.F.R. Part 60, Appendix A, and test platforms, if necessary, and other accommodations necessary to allow emission testing; and
 - C. Submit a written report to the Department within thirty (30) days from date of test completion.

[06-096 C.M.R. ch. 140] **Enforceable by State-only**

- (9) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicates emissions in excess of the applicable standards, then:
- A. Within thirty (30) days following receipt of such test results, the licensee shall re-test the non-complying emission source under circumstances representative of the facility's normal process and operating conditions and in accordance with the Department's air emission compliance test protocol and 40 C.F.R. Part 60 or other method approved or required by the Department; and
 - B. The days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and representative process and operating conditions, except to the extent that the facility

can prove to the satisfaction of the Department that there were intervening days during which no violation occurred or that the violation was not continuing in nature; and

- C. The licensee may, upon the approval of the Department following the successful demonstration of compliance at alternative load conditions, operate under such alternative load conditions on an interim basis prior to a demonstration of compliance under normal and representative process and operating conditions.

[06-096 C.M.R. ch. 140] **Enforceable by State-only**

- (10) The licensee shall maintain records of all deviations from license requirements. Such deviations shall include, but are not limited to malfunctions, failures, downtime, and any other similar change in operation of air pollution control systems or the emission unit itself that is not consistent with the terms and conditions of the air emission license.
- A. The licensee shall notify the Commissioner within 48 hours of a violation of any emission standard and/or a malfunction or breakdown in any component part that causes a violation of any emission standard, and shall report the probable cause, corrective action, and any excess emissions in the units of the applicable emission limitation;
- B. The licensee shall submit a report to the Department on a quarterly basis if a malfunction or breakdown in any component part causes a violation of any emission standard, together with any exemption requests.

Pursuant to 38 M.R.S.A. § 349(9), the Commissioner may exempt from civil penalty an air emission in excess of license limitations if the emission occurs during start-up or shutdown or results exclusively from an unavoidable malfunction entirely beyond the control of the licensee and the licensee has taken all reasonable steps to minimize or prevent any emission and takes corrective action as soon as possible. There may be no exemption if the malfunction is caused, entirely or in part, by poor maintenance, careless operation, poor design, or any other reasonably preventable condition or preventable equipment breakdown. The burden of proof is on the licensee seeking the exemption under this subsection.

- C. All other deviations shall be reported to the Department in the facility's semiannual report.

[06-096 C.M.R. ch. 140]

- (11) Upon the written request of the Department, the licensee shall establish and maintain such records; make such reports; install, use, and maintain such monitoring equipment; sample such emissions in accordance with such methods, at such locations, at such intervals, and

in such manner as the Department shall prescribe; and provide other information as the Department may reasonably require to determine the licensee's compliance status.
[06-096 C.M.R. ch. 140]

- (12) The licensee shall submit semiannual reports of any required periodic monitoring. All instances of deviations from Part 70 license requirements must be clearly identified in such reports. All required reports must be certified by a responsible official.
[06-096 C.M.R. ch. 140]
- (13) The licensee shall submit a compliance certification to the Department and EPA at least annually, or more frequently if specified in the applicable requirement or by the Department. The compliance certification shall include the following:
- A. The identification of each term or condition of the Part 70 license that is the basis of the certification;
 - B. The compliance status;
 - C. Whether compliance was continuous or intermittent;
 - D. The method(s) used for determining the compliance status of the source, currently and over the reporting period; and
 - E. Such other facts as the Department may require to determine the compliance status of the source.
- [06-096 C.M.R. ch. 140]

SPECIFIC CONDITIONS

(14) **Hot Air Furnace**

A. Allowable Fuels

The Hot Air Furnace is licensed to fire propane. [06-096 C.M.R. ch. 140, BPT]

B. Hot Air Furnace Emission Limits

(Emission limits are on a 1-hour block average basis unless otherwise stated.)

Emissions from the Hot Air Furnace shall not exceed the following limits:

Pollutant	Origin and Authority	lb/hr	Enforceability
PM	A-658-70-D-R (5/7/2014), BPT	0.11 lb/hr	Enforceable by State-only
PM ₁₀	A-658-70-D-R (5/7/2014), BPT	0.11 lb/hr	Enforceable by State-only
SO ₂	A-658-70-D-R (5/7/2014), BPT	0.10 lb/hr	Enforceable by State-only

Pollutant	Origin and Authority	lb/hr	Enforceability
NO _x	A-658-70-D-R (5/7/2014), BPT	0.31 lb/hr	Enforceable by State-only
CO	A-658-70-D-R (5/7/2014), BPT	0.18 lb/hr	Enforceable by State-only
VOC	A-658-70-D-R (5/7/2014), BPT	0.10 lb/hr	Enforceable by State-only

C. Visible Emissions

Visible emissions from the Hot Air Furnace shall not exceed 10% opacity on a 6-minute block average basis. [06-096 C.M.R. ch. 101, § 3(A)(3)]

D. Compliance Methods

Compliance with the emission limits associated with Hot Air Furnace shall be demonstrated in accordance with the appropriate test methods upon request of the Department. [06-096 C.M.R. ch. 140]:

E. Periodic Monitoring

NEC shall maintain records of the following for the Hot Air Furnace.

1. Hours of operation for the Hot Air Furnace on a calendar year basis. [06-096 C.M.R. ch. 137]
2. Propane usage for the Hot Air Furnace on a calendar year basis. [06-096 C.M.R. ch. 137 and 06-096 C.M.R. ch. 140, BPT]

(15) **Fire Pumps #1 and #2**

A. Allowable Operation and Fuels

Fire Pumps #1 and #2 are licensed to fire distillate fuel. [06-096 C.M.R. ch. 140, BPT]

B. Fuel Sulfur Content

1. The distillate fuel sulfur content for Fire Pumps #1 and #2 shall be limited to 0.0015% sulfur by weight. [06-096 C.M.R. ch. 140, BPT]
2. Fuel sulfur content compliance shall be demonstrated by fuel delivery receipts from the supplier, fuel supplier certification, certificate of analysis, or testing of the tank containing the fuel to be fired. [06-096 C.M.R. ch. 140, BPT]

C. Emissions shall not exceed the following limits [06-096 C.M.R. ch. 140, BPT]:

Pollutant	Origin and Authority	Fire Pump #1	Fire Pump #2
PM	06-096 C.M.R. ch. 140, BPT	0.10 lb/hr	0.09 lb/hr
PM ₁₀	06-096 C.M.R. ch. 140, BPT	0.10 lb/hr	0.09 lb/hr
SO ₂	06-096 C.M.R. ch. 140, BPT	Negligible	Negligible
NO _x	06-096 C.M.R. ch. 140, BPT	3.75 lb/hr	3.23 lb/hr
CO	06-096 C.M.R. ch. 140, BPT	0.81 lb/hr	0.70 lb/hr
VOC	06-096 C.M.R. ch. 140, BPT	0.30 lb/hr	0.26 lb/hr

D. Visible Emissions

Visible emissions from Fire Pumps #1 and #2 shall not exceed 20% opacity each on a six-minute block average basis. During periods of startup NEC may elect to comply with the following work practice standards in lieu of the numerical opacity limit. [06-096 C.M.R. ch. 101, § 3(A)(4)(a)]

1. Maintain a log (written or electronic) of the date, time, and duration of all Fire Pump startups.
2. Operate the fire pumps in accordance with the manufacturer's emission-related operating instructions.
3. Minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations shall apply.
4. Operate the fire pumps, including any associated air pollution control equipment, at all times in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Department that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the unit.

E. Compliance Methods

Compliance with the emission limits associated with Fire Pumps shall be demonstrated in accordance with the appropriate test methods upon request of the Department.

F. Fire Pumps #1 and #2 shall meet the applicable requirements of 40 C.F.R. Part 63, Subpart ZZZZ, including the following:

1. NEC shall meet the following operational limitations for each of the compression ignition emergency engines (Fire Pumps #1 and #2):
 - a. Change the oil and filter every 500 hours of operation or annually, whichever comes first;
 - b. Inspect the air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and
 - c. Inspect the hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

Records shall be maintained documenting compliance with the operational limitations.

[40 C.F.R. § 63.6602 and Table 2(c); and 06-096 C.M.R. ch. 140, BPT]

2. Oil Analysis Program Option

NEC has the option of utilizing an oil analysis program which complies with the requirements of § 63.6625(i) in order to extend the specified oil change requirement. If this option is used, NEC must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 C.F.R. § 63.6625(i)]

3. Non-Resettable Hour Meter

A non-resettable hour meter shall be installed and operated on each engine. [40 C.F.R. § 63.6625(f)]

4. Maintenance, Testing, and Non-Emergency Operating Situations

- a. The engines shall each be limited to 100 hours/year for maintenance checks and readiness testing. Up to 50 hours/year of the 100 hours/year may be used in non-emergency situations (this does not include peak shaving, demand response, or to generate income for a facility by providing power to an electric grid or otherwise supply power as part of a financial arrangement with another entity). These limits are based on a calendar year. Compliance shall be

demonstrated by records (electronic or written logs) of all engine operating hours. [40 C.F.R. § 63.6640(f) and 06-096 C.M.R. ch. 140, BPT]

- b. NEC shall keep records that include maintenance conducted on the engines and the hours of operation of each engine recorded through the non-resettable hour meter. Documentation shall include the number of hours each unit operated for emergency purposes, the number of hours each unit operated for non-emergency purposes, and the reason each engine was in operation during each time. [40 C.F.R. §§ 63.6655(e) and (f)]
5. Operation and Maintenance
The engines shall be operated and maintained according to the manufacturer's emission-related written instructions, or NEC shall develop a maintenance plan which provides to the extent practicable for the maintenance and operation of each engine in a manner consistent with good air pollution control practice for minimizing emissions. [40 C.F.R. § 63.6625(e)]
 6. Startup Idle and Startup Time Minimization
During periods of startup, the facility must minimize the engine's time spent at idle and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.
[40 C.F.R. § 63.6625(h) & 40 C.F.R. Part 63, Subpart ZZZZ Table 2c]

(16) **Boat Building Activities**

A. VOC Emissions

NEC shall not emit more than 48 tons/year, on a 12-month rolling total basis, of combined VOC emissions from all departments that make up the composite manufacturing process.

NEC shall track total VOC emissions using the following methods for each VOC containing material.

1. Mass Balance

$$\text{Monthly VOC emissions} = (\text{Monthly Product Purchases} * \% \text{VOC}) - (\text{Monthly Hazardous Waste Removed from Site} * \% \text{VOC})$$

2. Closed Molding

For materials used in closed molding operations, NEC may assume a 1% release of all VOC and may calculate total VOC emissions using the following equation for each applicable material:

Monthly emissions = (monthly facility purchases by mass) (VOC content) (0.01)

3. Open Molding:

NEC may elect to use the UEF for the calculation of VOC from open molding operations. NEC shall track the amount and type of each resin and gel coat used for open molding operations, and the VOC content of each and apply the most current UEF.

[06-096 C.M.R. ch. 140 BPT]

B. 06-096 C.M.R. ch. 159 *Control of Volatile Organic Compounds from Adhesives and Sealants*

1. Materials

a. Exemptions

NEC is exempt from the VOC requirements of 06-096 C.M.R. ch. 159 for the materials and operations listed in 06-096 C.M.R. ch. 159 (3)(A).

[06-096 C.M.R. ch. 159 (3)(A)]

b. The VOC content limits in Table 1 of 06-096 C.M.R. ch. 159 for adhesives applied to particular substrates shall apply as follows:

(1) If an operator uses an adhesive or sealant subject to a specific VOC content limit for such adhesive or sealant in Table 1, such specific limit is applicable rather than an adhesive-to-substrate limit; and

(2) If an adhesive is used to bond dissimilar substrates together, the applicable substrate category with the highest VOC content shall be the limit for such use.

[06-096 C.M.R. ch. 159 (1)(C)]

c. While using a surface preparation or cleanup solvent, NEC shall comply with the following:

- (1) NEC shall not use materials for surface preparation containing VOC, unless the VOC content of the surface preparation solvent is less than 70 grams per liter;
- (2) Except as provided below, NEC shall not use materials containing VOC for the removal of adhesives, sealants, or adhesive or sealant primers from surfaces, other than spray application equipment, unless the composite vapor pressure of the solvent used is less than 45 mm Hg at 20 degrees Celsius; and
- (3) Removal of an adhesive, sealant, adhesive primer, or sealant primer from the parts of spray application equipment shall be performed in accordance with 06-096 C.M.R. ch. 130 *Solvent Cleaners*.
[06-096 C.M.R. ch. 159 (1)(D)]

2. Work Practice Standards

While using adhesives, sealants, adhesive primers, sealant primers, surface preparation solvents, or clean-up solvents subject to Chapter 159, NEC shall store or dispose of all absorbent materials, such as cloth or paper, which are moistened with adhesives, sealants, primers, or solvents subject to this rule, in non-absorbent containers that shall be closed except when placing materials in or removing materials from the container.

[06-096 C.M.R. ch. 159 (2)(F)]

3. Recordkeeping

NEC shall demonstrate compliance by maintaining records of the following information:

- a. A list of each adhesive, sealant, adhesive primer, sealant primer, cleanup solvent, and surface preparation solvent in use and in storage;
- b. A data sheet or material list which provides the material name, manufacturer identification, and material application;
- c. Catalysts, reducers, or other components used and the mix ratio;
- d. The VOC content of each product as supplied;
- e. The final VOC content or vapor pressure, as applied; and

- f. The annual volume of each adhesive, sealant, adhesive primer, sealant primer, cleanup solvent, or surface preparation solvent used or purchased.
[06-096 C.M.R. ch. 159 (4)]

The above information shall be maintained for 5 years and shall be made available to the Department within 90 days of a request.
[06-096 C.M.R. ch. 159 (4)(C)]

C. 06-096 C.M.R. ch. 162, *Control for Fiberglass Boat Manufacturing Materials*

1. Exemptions

NEC shall comply with all applicable requirements of 06-096 C.M.R. ch. 162 and exclude operations and/or materials exempt from the monomer and nonmonomer VOC requirements per 06-096 C.M.R. ch. 162 (1)(D).
[06-096 C.M.R. ch. 162 (1)(D)]

2. Emission Limits

- a. NEC shall use Equation 1 to establish a facility-specific monomer VOC mass emission limit on a 12-month rolling average basis:

Equation 1

$$\text{Monomer VOC Limit} = 46(M_R) + 159(M_{PG}) + 291(M_{CG}) + 54(M_{TR}) + 214(M_{TG})$$

Where: Monomer VOC Limit = total allowable monomer VOC that can be emitted from the open molding operations included in the average, in kilograms per 12-month period.

M_R = mass of production resin used in the past 12 months, excluding any materials that are exempt, in megagrams.

M_{PG} = mass of pigmented gel coat used in the past 12 months, excluding any materials that are exempt, in megagrams.

M_{CG} = mass of clear gel coat used in the past 12 months, excluding any materials that are exempt, in megagrams.

M_{TR} = mass of tooling resin used in the past 12 months, excluding any materials that are exempt, in megagrams.

M_{TG} = mass of tooling gel coat used in the past 12 months, excluding any materials that are exempt, in megagrams.

The numerical coefficients associated with each term on the right side of Equation 1 are the allowable monomer VOC emission rates for that material in units of kilograms of monomer VOC per megagram of material used.
[06-096 C.M.R. ch. 162 (3)(B)(1)]

- b. NEC shall use Equation 2 to demonstrate that the monomer VOC mass emissions from the operations included in the average do not exceed the emission limit calculated using Equation 1 for the same period. This demonstration shall be conducted at the end of the first 12-month averaging period and at the end of every subsequent month for only those operations and materials included in the average.

Equation 2

$$\text{Monomer VOC emissions} = (PV_R)(M_R) + (PV_{PG})(M_{PG}) + (PV_{CG})(M_{CG}) + (PV_{TR})(M_{TR}) + (PV_{TG})(M_{TG})$$

Where:

Monomer VOC emissions = monomer VOC emissions from open molding operations included in the average, in kilograms per 12-month period.

PV_R = weighted-average monomer VOC emission rate for production resin used in the past 12 months, in kilograms per megagram.

M_R = mass of production resin used in the past 12 months, excluding any materials that are exempt, in megagrams.

PV_{PG} = weighted-average monomer VOC emission rate for pigmented gel coat used in the past 12 months, in kilograms per megagram.

M_{PG} = mass of pigmented gel coat used in the past 12 months, excluding any material that are exempt, in megagrams.

PV_{CG} = weighted-average monomer VOC emission rate for clear gel coat used in the past 12 months, in kilograms per megagram.

M_{CG} = mass of clear gel coat used in the past 12 months, excluding any materials that are exempt, in megagrams.

PV_{TR} = weighted-average monomer VOC emission rate for tooling resin used in the past 12 months, in kilograms per megagram.

M_{TR} = mass of tooling resin used in the past 12 months, excluding any materials that are exempt, in megagrams.

PV_{TG} = weighted-average monomer VOC emission rate for tooling gel coat used in the past 12 months, in kilograms per megagram.

M_{TG} = mass of tooling gel coat used in the past 12 months, excluding any materials that are exempt, in megagrams.

[06-096 C.M.R. ch. 162 (3)(B)(2)]

- c. NEC shall use Equation 3 to compute the weighted-average monomer VOC emission rate for the previous 12 months for each open molding resin and gel coat operation included in the average for use in Equation 2:

Equation 3

$$PV_{OP} = \frac{\sum_{i=1}^n (M_i PV_i)}{\sum_{i=1}^n (M_i)}$$

Where: PV_{OP} = weighted-average monomer VOC emission rate for each open molding operation (PV_R , PV_{PG} , PV_{CG} , PV_{TR} , and PV_{TG}) included in the average, in kilograms of monomer VOC per megagram of material applied.

M_i = mass of resin or gel coat used within an operation in the past 12 months, in megagrams.

PV_i = the monomer VOC emission rate for resin or gel coat used within an operation in the past 12 months, in kilograms of monomer VOC per megagram of material applied. The equations in Table 1 shall be used to compute PV.

Table 1

Monomer VOC Emission Rate Formulas for Open Molding Resin and Gel Coat

Material	Application Method	Formula
Production resin, tooling resin	a. Atomized	a. $0.014 \times (\text{Resin VOC}\%)^{2.425}$
	b. Atomized, plus vacuum bagging with roll-out	b. $0.01185 \times (\text{Resin VOC}\%)^{2.425}$
	c. Atomized, plus vacuum bagging without roll-out	c. $0.00945 \times (\text{Resin VOC}\%)^{2.425}$
	d. Nonatomized	d. $0.014 \times (\text{Resin VOC}\%)^{2.275}$
	e. Nonatomized, plus vacuum bagging with roll-out	e. $0.011 \times (\text{Resin VOC}\%)^{2.275}$
	f. Nonatomized, plus vacuum bagging without roll-out	f. $0.0076 \times (\text{Resin VOC}\%)^{2.275}$
Pigmented gel coat, clear gel coat, tooling gel coat	All methods	$0.445 \times (\text{Gel Coat VOC}\%)^{1.675}$

[06-096 C.M.R. ch. 162 (3)(B)(3)]

- d. When using a filled production resin or filled tooling resin, the NEC shall calculate the emission rate for the filled material on an as-applied basis using Equation 4:

Equation 4

$$PV_F = \frac{PV_U \times (100 - \% \text{ Filler})}{100}$$

- Where: PV_F = The as-applied monomer VOC emission rate for the filled production resin or tooling resin, in kilograms monomer VOC per megagram of filled material.
- PV_U = The monomer VOC emission rate for the neat (unfilled) resin before filler is added, as calculated using the formulas in Table 2 of Section 3(B)(3) of Chapter 162.
- $\% \text{ Filler}$ = The weight-percent of filler in the as-applied filled resin system.
[06-096 C.M.R. ch. 162 (4)(1)]

If the filled resin...

- (1) Is used as a production resin, then the value of PV_F calculated by Equation 4 shall not exceed 46 kilograms of monomer VOC per megagram of filled resin applied;
- (2) Is used as a tooling resin, then the value of PV_F calculated by Equation 4 shall not exceed 54 kilograms of monomer VOC per megagram of filled resin applied;
- (3) Is included in the emissions averaging procedure, then the facility shall use the value of PV_F calculated by Equation 4 for the value of PV_i in Equation 3.

[06-096 C.M.R. ch. 162 (4)(2)]

- e. Non-Monomer VOC Content

- (1) Up to five percent of the non-monomer VOC content of a resin or gel coat shall be exempt from the VOC content limits of this section.
- (2) If the non-monomer VOC content limit of a resin or gel coat exceeds five percent, then the excess non-monomer VOC over five percent shall be added to the monomer VOC content. The monomer VOC content of resin and gel coat shall be determined by using the South Coast Air Quality

Management District Method 312-9, *Determination of Percent Monomer in Polyester Resins*, revised 1996, unless NEC maintains records from the manufacturer to document the monomer VOC content of resin and gel coat materials.

[06-096 C.M.R. ch. 162 (5)]

f. Cleaning Solvent Standards

(1) The volatile organic compound content of cleaning solvents employed for routine application equipment cleaning shall contain a maximum of 5.0 percent VOC by weight, or have a composite vapor pressure of no more than 0.50 mm Hg at 68 degrees Fahrenheit, as determined by the cleaning solvent manufacturer's Safety Data Sheet (SDS) or other appropriate documentation acceptable to the Department and EPA.

(2) Only non-volatile organic compound solvents shall be used to remove cured resin and gel coat from application equipment.

[06-096 C.M.R. ch. 162 (6)]

3. Work Practice Standards

All resin and gel coat containers with a capacity equal to or greater than 208 liters (55.0 gallons), including those used for on-site mixing of putties and polyester resin putties, shall have a cover with no visible gaps in place at all times. This work practice does not apply when materials are being manually added to or removed from a container, or when mixing equipment is being placed or removed from a container.

[06-096 C.M.R. ch. 162 (7)]

4. Monitoring and Recordkeeping Requirements

NEC shall collect and record the following information for each operation subject to Chapter 162 on a monthly basis and shall maintain the information at the facility for a period of five years:

- a. The total quantity of atomized molding production resin, nonatomized production resin, pigmented gel coat, clear gel coat, atomized tooling resin, nonatomized tooling resin, and tooling gel coat used per month and the weighted-average monomer VOC contents for each operation.
- b. All calculations performed pursuant to Chapter 162.
- c. The volatile organic compound content of each non-monomer resin and gel coat employed.

- d. For each cleaning solvent employed for routine application equipment cleaning, either the volatile organic compound content, by weight percent or the composite vapor pressure, in mmHg; whichever is the applicable requirement selected to comply with the cleaning solvent requirements of Section 4 of this Chapter.

[06-096 C.M.R. ch. 162 (9)]

5. Reporting Requirements

NEC shall notify the Department of any record maintained in accordance with Section 6(A) of Chapter 162 showing the use of noncomplying materials. A copy of such record shall be sent to the Department within thirty days following the end of the month in which the use of noncomplying materials occurs.

[06-096 C.M.R. ch. 162 (10)]

D. 40 C.F.R. Part 63 Subpart VVVV

1. Exempt Materials

- a. Production resins (including skin coat resins) that must meet specifications for use in military vessels or must be approved by the U.S. Coast Guard for use in the construction of lifeboats, rescue boats, and other life-saving appliances approved under 46 C.F.R. Chapter I, Subchapter Q or the construction of small passenger vessels regulated by 46 C.F.R. Chapter I, Subchapter T. Production resins for which this exemption is used must be applied with nonatomizing (non-spray) resin application equipment. A record shall be maintained of the resins for which this exemption is being used.
- b. Pigmented, clear, and tooling gel coat used for part or mold repair and touch up. The total gel coat materials included in this exemption must not exceed 1 percent by weight of all gel coat used at your facility on a 12-month rolling-average basis. A record shall be maintained of the amount of gel coats used per month for which this exemption is being used, and copies of calculations showing that the exempt amount does not exceed 1 percent of all gel coat used.

- c. Pure, 100 percent vinylester resin used for skin coats. This exemption does not apply to blends of vinylester and polyester resins used for skin coats. The total resin materials included in the exemption cannot exceed 5 percent by weight of all resin used at the facility on a 12-month rolling-average basis. A record shall be kept of the amount of 100 percent vinylester skin coat resin used per month that is eligible for this exemption and copies of calculations showing that the exempt amount does not exceed 5 percent of all resin used.
[40 C.F.R. § 63.5698 (d)]

2. Emissions Calculations

- a. NEC shall limit organic HAP emissions from open molding operations to the limit specified by Equation 1 in § 63.5698 of Part 63, Subpart VVVV shown below, based on a 12-month rolling average:

Equation 5

$$\text{HAP limit} = [46(M_R) + 159(M_{PG}) + 291(M_{CG}) + 54(M_{TR}) + 214(M_{TG})]$$

Where:

HAP Limit = total allowable organic HAP that can be emitted from the open molding operations, kilograms.

M_R = mass of production resin used in the past 12 months, excluding any exempt materials, megagrams.

M_{PG} = mass of pigmented gelcoat used in the past 12 months, excluding any exempt materials, megagrams.

M_{CG} = mass of clear gelcoat used in the past 12 months, excluding any exempt materials, megagrams.

M_{TR} = mass of tooling resin used in the past 12 months, excluding any exempt materials, megagrams.

M_{TG} = mass of tooling gelcoat used in the past 12 months, excluding any exempt materials, megagrams.

[40 C.F.R. § 63.5698 (b)]

- b. The organic HAP emissions shall be calculated using the equation in § 63.5710 shown below:

Equation 6

$$\text{HAP emissions} = [(PV_R)(M_R) + (PV_{PG})(M_{PG}) + (PV_{CG})(M_{CG}) + (PV_{TR})(M_{TR}) + (PV_{TG})(M_{TG})]$$

Where:

PV_R = Weighted-average MACT model point value for production resin used in the past 12 months.

M_R = mass of production resin used in the past 12 months, excluding any exempt materials, megagrams.

PV_{PG} = Weighted-average MACT model point value for pigmented gelcoat used in the past 12 months.

M_{PG} = mass of pigmented gelcoat used in the past 12 months, excluding any exempt materials, megagrams.

PV_{CG} = Weighted-average MACT model point value for clear gelcoat used in the past 12 months.

M_{CG} = mass of clear gelcoat used in the past 12 months, excluding any exempt materials, megagrams.

PV_{TR} = Weighted-average MACT model point value for tooling resin used in the past 12 months.

M_{TR} = mass of tooling resin used in the past 12 months, excluding any exempt materials, megagrams.

PV_{TG} = Weighted-average MACT model point value for tooling gelcoat used in the past 12 months.

M_{TG} = mass of tooling gelcoat used in the past 12 months, excluding any exempt materials, megagrams.

[40 C.F.R. § 63.5710 (b)]

- c. At the end of each month, NEC shall use the following equation to compute the weighted-average MACT model point value for each open molding resin and gel coat operation included in the 12-month rolling average.

Equation 7

$$PV_{OP} = \frac{\sum_{i=1}^n (M_i PV_i)}{\sum_{i=1}^n (M_i)}$$

Where:

PV_{OP} = weighted-average MACT model point value for each open molding operation (PV_R , PV_{PG} , PV_{CG} , PV_{TR} , and PV_{TG}) included in the average, kilograms of HAP per megagram of material applied.

M_i = mass of resin or gel coat i used within an operation in the past 12 months, megagrams.

n = number of different open molding resins and gel coats used within an operation in the past 12 months.

PV_i = the MACT model point value for resin or gel coat used within an operation in the past 12 months, kilograms of HAP per megagram of material applied.

[40 C.F.R. § 63.5710 (c)]

- d. NEC shall use the formulas in Table 3 of Subpart VVVV to calculate the MACT model point value (PV_i) for each resin and gel coat used in each operation in the past 12 months.

[40 C.F.R. § 63.5710 (d)]

If the organic HAP emissions, as calculated in Equation 6 of this section, are less than the organic HAP limit calculated in Equation 5 for the same 12-month period, then NEC is considered to be in compliance with the emission limit for those operations and materials included in the average.

[40 C.F.R. § 63.5710 (e)]

3. Work Practice Standards

- a. All resin and gel coat mixing containers with a capacity equal to or greater than 208 liters, including those used for on-site mixing of putties and polyputties, must have a cover with no visible gaps in place at all times. This does not apply when material is being manually added to or removed from a container, or when mixing or pumping equipment is being placed in or removed from a container.

NEC shall visually inspect all mixing containers subject to this standard at least once per month and keep records of which mixing containers are subject to this standard and the results of inspections including a description of any repairs or corrective actions taken.

[40 C.F.R. § 63.5731]

- b. For routine flushing of resin and gel coat application equipment (e.g., spray guns, flowcoaters, brushes, rollers, and squeegees), NEC shall use a cleaning solvent that contains no more than 5 percent organic HAP by weight. For removing cured resin or gel coat from application equipment, no organic HAP content limit applies.

[40 C.F.R. § 63.5734 (a)]

- c. NEC shall store organic HAP-containing solvents used for removing cured resin or gel coat in containers with covers. The covers must have no visible gaps and must be in place at all times, except when equipment to be cleaned is placed in or removed from the container. On containers with a capacity greater than

7.6 liters, the distance from the top of the container to the solvent surface must be no less than 0.75 times the diameter of the container. Containers that store organic HAP-containing solvents used for removing cured resin or gel coat are exempt from the requirements of 40 C.F.R. Part 63, Subpart T. Cured resin or gel coat means resin or gel coat that has changed from a liquid to a solid. [40 C.F.R. § 63.5734 (b)]

4. Recordkeeping and Reporting

a. NEC shall keep records of the following for a period of 5 years:

- (1) HAP content of all materials used that are subject to 40 C.F.R. Part 63, Subpart VVVV. [40 C.F.R. § 63.5704]
- (2) Amount of material used per month. [40 C.F.R. § 63.5704]
- (3) Application method used for production resin and tooling resin. This record is not required if all production resins and tooling resins are applied with nonatomized technology. [40 C.F.R. § 63.5704]
- (4) Calculations performed to demonstrate compliance based on MACT model point values. [40 C.F.R. § 63.5704]
- (5) NEC shall keep a copy of each notification and report submitted to comply with this subpart. [40 C.F.R. § 63.5704]
- (6) NEC shall keep all documentation supporting any notification or report submitted. [40 C.F.R. § 63.5767]
- (7) The total amounts of open molding production resin, pigmented gel coat, clear gel coat, tooling resin, and tooling gel coat used per month and the weighted-average organic HAP contents for each operation, expressed as weight-percent. For open molding production resin and tooling resin, NEC shall also record the amounts of each applied by atomized and nonatomized methods. [40 C.F.R. § 63.5767]
[40 C.F.R. § 63.5770 (b)]

b. NEC shall develop an implementation plan to describe the steps taken to bring the open molding operations included in the emissions average into compliance. NEC shall keep the implementation plan on site and provide it to the Administrator when asked. This plan must contain the following:

- (1) A description of each operation included in the average.
 - (2) The maximum organic HAP content of the materials used, the application method used (if any atomized resin application methods are used in the average), and any other methods used to control emissions.
 - (3) Calculations showing that the operations covered by the plan will comply with the open molding emission limit.
[40 C.F.R. § 63.5707]
- c. NEC shall submit to the Department semi-annual compliance reports for the period from January 1 through June 30 and from July 1 through December 31, postmarked no later than 60 days beyond the end of the semi-annual reporting period. The report shall contain the following:
- (1) Company name and address.
 - (2) A statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the report.
 - (3) The date of the report and the beginning and ending dates of the reporting period.
 - (4) A description of any changes in the manufacturing process since the last compliance report.
 - (5) A statement or table showing, for each regulated operation, the applicable organic HAP content limit, application equipment requirement, or MACT model point value averaging provision with which you are complying. The statement or table must also show the actual weighted-average organic HAP content or weighted-average MACT model point value (if applicable) for each operation during each of the rolling 12-month averaging periods that end during the reporting period.
 - (6) If NEC was in compliance with the emission limits and work practice standards during the reporting period, NEC shall include a statement to that effect.
 - (7) If NEC deviated from an emission limit or work practice standard during the reporting period, the following information shall be included:
 - (i) A description of the operation involved in the deviation.

(ii) The quantity, organic HAP content, and application method (if relevant) of the materials involved in the deviation.

(iii) A description of any corrective action taken to minimize the deviation and actions you have taken to prevent it from happening again.

(iv) A statement of whether or not NEC was in compliance for the 12-month averaging period that ended at the end of the reporting period.

[40 C.F.R. § 63.5764]

E. Additional Requirements

1. NEC shall continue research and manufacturing test trials of pollution prevention technologies (lower styrene resins, closed mold system, etc.) for VOC control. An annual report shall be sent to the Department by January 31st documenting the research and test trial results for the previous year. [A-658-70-D-R (5/7/14), BPT]
2. NEC shall develop and implement a procedure to promote “good housekeeping” practices (close lids, proper storage of open containers, etc.) and ensure that all VOC materials are handled properly to minimize emissions. NEC shall ensure that all VOC containers are properly sealed when not in immediate use, and that all VOC containers are handled in a manner to reduce the chance of spills.
[A-658-70-D-R (5/7/14), BPT]
3. NEC shall install particulate filters on all forced ventilation points that are located adjacent or above the sanding, cutting and finishing operations. NEC shall properly maintain all dust collection equipment in the facility and make repairs as necessary to prevent system leakage. NEC shall control PM emissions from any cutting, buffing, grinding, or sanding processes that vent to the ambient air via vent or duct through the use of a particulate filter such that opacity will not exceed 10% for any one, six-minute block average.
[A-658-70-D-R (5/7/14), BPT]
4. NEC shall continue to use atomized spray guns for the application of resins that are applied simultaneously with fiberglass (“chopping”) and use non-atomized spray guns, resin infusion, or manual methods for all other resin and gelcoat application.
[A-658-70-D-R (5/7/14), BPT]
5. NEC shall use controlled spray techniques, including lowest fluid tip pressure which produces an acceptable spray pattern and operator training, when using mechanical sprayers for the application of gelcoats and resins. NEC shall use manual application methods for open-mold resin processes, when technologically appropriate.
[A-658-70-D-R (5/7/14), BPT]

6. Purchase records of VOC containing resins, gelcoats, and putties shall be kept on a 12-month rolling total for compliance purposes. The % VOC shall be obtained from supplier or SDS sheets.
[A-658-70-D-R (5/7/14), BPT]
7. NEC shall use manual application methods for open-mold resin processes, when technologically appropriate.
[A-658-70-D-R (5/7/14), BPT]

(17) **Fugitive Emissions**

- A. Visible emissions from a fugitive emission source (including stockpiles and roadways) shall not exceed 20% opacity on a 5-minute block average basis.
[06-096 C.M.R. ch. 101, § 3(C)]
- B. NEC shall reduce the potential for fugitive PM emissions from any process conducted outside by limiting such activity to periods of calm winds or through the use of a shroud or wind curtain. [A-658-70-D-R (5/7/14), BPT]

(18) **General Process Sources**

Visible emissions from any general process source shall not exceed 20% on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 3(B)(4)]

(19) **Semiannual Reporting** [06-096 C.M.R. ch. 140]

- A. The licensee shall submit to the Bureau of Air Quality semiannual reports which are due on **January 31st** and **July 31st** of each year. The facility's designated responsible official must sign this report.
- B. The semiannual report shall be considered on-time if the postmark of the submittal is before the due date or if the report is received by the Department within seven calendar days of the due date.
- C. Each semiannual report shall include a summary of the periodic monitoring required by this license.
- D. All instances of deviations from license requirements and the corrective action taken must be clearly identified and provided to the Department in summary form for each six-month interval.

(20) **Annual Compliance Certification**

NEC shall submit an annual compliance certification to the Department and EPA in accordance with Standard Condition (13) of this license. The annual compliance certification is due **January 31st** of each year. The facility's designated responsible official must sign this report.

The annual compliance certification shall be considered on-time if the postmark of the submittal is before the due date or if the report is received by the Department within seven calendar days of the due date. Certification of compliance is to be based on the stack testing or monitoring data required by this license. Where the license does not require such data, or the license requires such data upon request of the Department and the Department has not requested the testing or monitoring, compliance may be certified based upon other reasonably available information such as the design of the equipment or applicable emission factors. [06-096 C.M.R. ch. 140]

(21) **Annual Emission Statement**

A. In accordance with *Emission Statements*, 06-096 C.M.R. ch. 137, NEC shall annually report to the Department, in a format prescribed by the Department, the information necessary to accurately update the State's emission inventory. The emission statement shall be submitted as specified by the date in 06-096 C.M.R. ch. 137.

B. NEC shall keep the following records in order to comply with 06-096 C.M.R. ch. 137:

1. The amount of propane fired in the Hot Air Furnace on an calendar year basis;
2. The sulfur content of the distillate fuel fired in Fire Pumps #1 and #2;
3. Hours of operating time on a calendar year basis of Fire Pumps #1 and #2 each;
4. Calculations of the VOC and HAP emissions from the boat building activities on a calendar year total basis;
[06-096 C.M.R. ch. 137]

C. In reporting year 2020 and every third year thereafter, NEC shall report to the Department emissions of hazardous air pollutants as required by 06-096 C.M.R. ch. 137, § (3)(C). NEC shall pay the annual air quality surcharge, calculated by the Department based on these reported emissions of hazardous air pollutants, by the date required in Title 38 M.R.S. § 353-A(3).
[38 M.R.S. § 353-A(1-A)]

(22) **General Applicable State Regulations**

The licensee is subject to the State regulations listed below.

Origin and Authority	Requirement Summary	Enforceability
06-096 C.M.R. ch. 102	Open Burning	-
06-096 C.M.R. ch. 109	Emergency Episode Regulation	-
06-096 C.M.R. ch. 110	Ambient Air Quality Standard	-
06-096 C.M.R. ch. 116	Prohibited Dispersion Techniques	-
38 M.R.S. § 585-B, §§5	Mercury Emission Limit	Enforceable by State-only

(23) **Units Containing Ozone Depleting Substances**

When repairing or disposing of units containing ozone depleting substances, the licensee shall comply with the standards for recycling and emission reduction pursuant to 40 C.F.R. Part 82, Subpart F, except as provided for motor vehicle air conditioning units in Subpart B. Examples of such units include refrigerators and any size air conditioners that contain CFCs. [40 C.F.R. Part 82, Subpart F]

(24) **Asbestos Abatement**

When undertaking Asbestos abatement activities, NEC shall comply with the *Standard for Asbestos Demolition and Renovation*, 40 C.F.R. Part 61, Subpart M.

(25) **Expiration of a Part 70 license**

- A. NEC shall submit a complete Part 70 renewal application at least six but no more than 18 months prior to the expiration of this air license.
- B. Pursuant to Title 5 M.R.S. §10002, and 06-096 C.M.R. ch. 140, the Part 70 license shall not expire and all terms and conditions shall remain in effect until the Department takes final action on the renewal application of the Part 70 license. An existing source submitting a complete renewal application under 06-096 C.M.R. ch. 140 prior to the expiration of the Part 70 license will not be in violation of operating without a Part 70 license. **Enforceable by State-only**

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(26) **New Source Review**

NEC is subject to all previous New Source Review (NSR) requirements summarized in this Part 70 air emission license, and the NSR requirements remain in effect even if this 06-096 C.M.R. ch. 140 Air Emissions License, A-658-70-E-R, expires.

DONE AND DATED IN AUGUSTA, MAINE THIS 7th DAY OF JULY, 2020.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY:  for
GERALD D. REID, COMMISSIONER

The term of this license shall be five (5) years from the signature date above.

[Note: If a complete renewal application, as determined by the Department, is submitted at least six but no more than 18 months prior to expiration of the facility's Part 70 license, then pursuant to Title 5 M.R.S. §10002, all terms and conditions of the Part 70 license shall remain in effect until the Department takes final action on the Part 70 license renewal application.]

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 8/30/18

Date of application acceptance: 8/31/18

Date filed with the Board of Environmental Protection:

This Order prepared by Chris Ham, Bureau of Air Quality.

FILED
JUL 07, 2020
State of Maine
Board of Environmental Protection