



DEPARTMENT ORDER

**CPK Manufacturing, LLC  
Kennebec County  
Augusta, Maine  
A-1117-71-E-A**

**Departmental  
Findings of Fact and Order  
Air Emission License  
Amendment #1**

**FINDINGS OF FACT**

After review of the air emission license amendment 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

CPK Manufacturing, LLC (CPK) was issued the Part 70 Air Emission License A-1117-70-D-R/A on September 12, 2022, for the operation of emission sources associated with their fiberglass composites manufacturing facility.

The equipment addressed in this license amendment is located at 681 Riverside Drive, Augusta, Maine.

CPK has requested a minor revision to their license in order to make the following changes:

1. Remove all references to filament winder FW #2 which was never installed;
2. Notate the replacement of Boiler #1 with two new units designated Boilers #2 and #3, which was addressed in NSR A-1117-77-3-A;
3. Lower the annual VOC emission limit; and
4. Reclassify the facility as an area source of HAP.

B. Emission Equipment

The following equipment is addressed in this air emission license amendment:

**Fuel Burning Equipment**

| <b>Equipment</b>   | <b>Max. Heat Input Capacity (MMBtu/hr)</b> | <b>Max. Firing Rate (gal/hr)</b> | <b>Fuel Type</b>       | <b>Manufacture Date</b> | <b>Install. Date</b> | <b>Stack #</b> |
|--------------------|--|----------------------------------|------------------------|-------------------------|----------------------|----------------|
| Boiler #2          | 1.0  | 10.9                             | Propane                | 2023                    | 2023                 | 1              |
| Boiler #3          | 1.0  | 10.9                             | Propane                | 2023                    | 2023                 | 1              |
| Air Heater         | 1.1  | 12.0                             | Propane                | 2007                    | 2007                 | Fugitive       |
| <i>Boiler #1 *</i> | <i>1.7</i>                                 | <i>11.9</i>                      | <i>Distillate fuel</i> | <i>1991</i>             | <i>1991</i>          | <i>1</i>       |

\* This equipment has been removed from the facility.

**Process Equipment**

| Equipment       | Production Rate  | Materials Used in Process                                      | Pollutants      | Primary VOC/HAP |
|-----------------|------------------|--|-----------------|-----------------|
| Resin Gun #1    | 540 lb/hr (each) | Polyester resin,<br>vinyl ester resin,<br>epoxy resin          | VOC, HAP        | Styrene         |
| Resin Gun #2    |                  |  |                 |                 |
| Resin Gun #3    |                  |  |                 |                 |
| Resin Gun #4    |                  |  |                 |                 |
| Resin Gun #5    |                  |  |                 |                 |
| Resin Gun #6    |                  |  |                 |                 |
| Resin Gun #7    |                  |  |                 |                 |
| Resin Gun #8    | 1,800 lb/hr      |  |                 |                 |
| Resin Gun #9    | 540 lb/hr (each) |  |                 |                 |
| Resin Gun #10   |                  |  |                 |                 |
| Resin Gun #11   |                  |  |                 |                 |
| Gel Coat Gun #1 | 450 lb/hr (each) | Gel coat   | VOC, HAP        | Styrene, MMA*   |
| Gel Coat Gun #2 |                  |  |                 |                 |
| Gel Coat Gun #3 |                  |  |                 |                 |
| Gel Coat Gun #4 |                  |  |                 |                 |
| Gel Coat Gun #5 |                  |  |                 |                 |
| Spray Gun #1    | 30 lb/hr (each)  | Polyester resin,<br>vinyl ester resin,<br>epoxy resin          | VOC, HAP        | Styrene         |
| Spray Gun #2    |                  |  |                 |                 |
| Spray Gun #3    |                  |  |                 |                 |
| Spray Gun #4    |                  |  |                 |                 |
| Spray Gun #5    |                  |  |                 |                 |
| Spray Gun #6    |                  |  |                 |                 |
| MMA Gun #1      | 20 lb/min        | MMA adhesive   | VOC, HAP        | MMA             |
| FW #1           | 80 lb/hr         | Polyester resin,<br>vinyl ester resin,<br>epoxy resin          | VOC, HAP        | Styrene         |
| FW #2 **        | 122 lb/hr        | <i>Polyester resin,<br/>vinyl ester resin,<br/>epoxy resin</i> | <i>VOC, HAP</i> | <i>Styrene</i>  |

\* MMA = methyl methacrylate

\*\*This equipment was not installed, so is hereby removed from this license.

CPK operates an aqueous-based parts washer. The cleaning solution contains less than 5% VOC, it does not meet the definition of solvent cleaning machine, and there are no applicable requirements in *Solvent Cleaners*, 06-096 C.M.R. ch. 130. Therefore, it is considered an insignificant activity and mentioned for completeness purposes only.

C. Definitions

Records or Logs mean either hardcopy or electronic records.

Closed molding means a grouping of processes for fabricating composites in a way that HAP-containing materials are not exposed to the atmosphere except during the material loading stage (e.g., compression molding, injection molding, and resin transfer molding). Processes where the mold is covered with plastic (or equivalent material) prior to resin application, and the resin is injected into the covered mold are also considered closed molding.

Filament application means an open molding process for fabricating composites in which reinforcements are fed through a resin bath and wound onto a rotating mandrel. The materials on the mandrel may be rolled out or worked by using nonmechanical tools prior to curing. Resin application to the reinforcement on the mandrel by means other than the resin bath, such as spray guns, pressure-fed rollers, flow coaters, or brushes is not considered filament application.

Open molding means a process for fabricating composites in a way that HAP-containing materials are exposed to the atmosphere. Open molding includes processes such as manual resin application, mechanical resin application, filament application, and gel coat application. Open molding also includes application of resins and gel coats to parts that have been removed from the open mold.

D. Application Classification

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

A stationary source is considered a major or minor source based on whether or not actual or potential emissions exceed the “Significant emissions” levels as defined in the Department’s *Definitions Regulation*, 06-096 Code of Maine Rules (C.M.R.) ch. 100. Through the application submitted by CPK and this licensing action, CPK proposes to reduce their potential annual emissions to levels which are below “Significant emissions” levels as demonstrated in the table below.

| <b>Pollutant</b>  | <b>Current License<br/>(tpy)</b> | <b>Future License<br/>(tpy)</b> | <b>Net Change<br/>(tpy)</b> | <b>Significant<br/>Emission Levels</b> |
|-------------------|----------------------------------|---------------------------------|-----------------------------|--|
| PM                | 0.8                              | 0.7                             | -0.1                        | 100                                    |
| PM <sub>10</sub>  | 0.8                              | 0.7                             | -0.1                        | 100                                    |
| PM <sub>2.5</sub> | 0.8                              | 0.7                             | -0.1                        | 100                                    |
| SO <sub>2</sub>   | 3.8                              | 0.2                             | -3.6                        | 100                                    |
| NO <sub>x</sub>   | 1.7                              | 2.0                             | 0.3                         | 100                                    |
| CO                | 0.7                              | 1.2                             | 0.5                         | 100                                    |
| VOC               | 32.1                             | 24.9                            | -7.2                        | 100                                    |

CPK is amending their air emission license to limit potential annual emission levels to below “significant emissions” levels for all regulated air pollutants, including HAP emissions. Therefore, with this licensing action, CPK is being licensed as a minor source.

E. Facility Classification

With the proposed annual VOC and HAP emission limits associated with the composite manufacturing activities at CPK, the facility is licensed as follows:

- As a synthetic minor source of air emissions for criteria pollutants, because CPK is subject to license restrictions that keep facility emissions below major source thresholds for VOC; and
- As an area source of hazardous air pollutants (HAP), because the licensed emissions are below the major source thresholds for HAP.

Emissions of HAP are licensed above 80% of the major source threshold. Therefore, this facility is classified as an “80% Synthetic Minor” for the purpose of determining the minimum required compliance inspection frequency in accordance with Maine’s Compliance Monitoring Strategy.

**II. BEST PRACTICAL TREATMENT (BPT)**

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.

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. Process Description

1. VOC Emitting Activities

CPK engages in composite manufacturing for a variety of markets. Products range from industrial fiberglass piping and tanks to custom molded items built from polyester, vinyl ester, and epoxy resins and gelcoats. CPK incorporates a range of composite manufacturing processes, including open contact molding, spray-up lamination, filament winding, vacuum infusion, and light resin transfer molding. An emphasis, whenever possible, is placed on incorporating closed molding technology so that styrene emissions are reduced by minimizing the styrene-containing materials' contact with the ambient air prior to polymerization.

When open molding or spray-up lamination processes are employed, CPK incorporates a ventilation system that exhausts emissions, consisting primarily of styrene, and provides makeup air within the facility. For a majority of the operations, this system involves inlet ducts that supply outside air and then collection ducts that converge on an exhaust fan and stack. The remainder of the facility incorporates localized wall exhaust fans that include a filter media to capture dust and potential overspray. This system incorporates variable speed fan technology and is adjusted accordingly based on the type of operations being conducted.

2. Non-VOC Emitting Activities

CPK generates fiberglass and wood dust when cutting, drilling, sanding, or grinding cured fiberglass laminates and wooden supports for molds. CPK uses point-of-use dust collection for all fiberglass and wood dust generating activities to minimize emissions of dust to the ambient air. Additionally, CPK utilizes an air filtration system that circulates air from throughout the facility to capture particles that have escaped the point-of-use collection systems. Wall-based exhaust fans incorporate filters and collection boxes to minimize exhaust of any remaining dust particles in the ambient air.

C. Boilers #2 and #3

CPK replaced the existing distillate fuel fired Boiler #1 with two new units designated Boilers #2 and #3 in 2023. Boilers #2 and #3 are each rated at 1.0 MMBtu/hr firing propane. Boilers #2 and #3 combined exhaust vents through the existing Stack #1, which has an inside diameter of 0.8 feet and above ground level (AGL) height of 28 feet.

1. BACT Findings

The BACT emission limits for Boilers #2 and #3 were based on the following:

- PM – 0.05 lb/MMBtu based on 06-096 C.M.R. ch. 115, BACT (A-1117-77-3-A, July 16, 2024)
- SO<sub>2</sub> – 0.054 lb/10<sup>3</sup> gal based on AP-42 Table 1.5-1 dated 7/08
- NO<sub>x</sub> – 13 lb/10<sup>3</sup> gal based on AP-42 Table 1.5-1 dated 7/08
- CO – 7.5 lb/10<sup>3</sup> gal based on AP-42 Table 1.5-1 dated 7/08
- VOC – 1.0 lb/10<sup>3</sup> gal based on AP-42 Table 1.5-1 dated 7/08
- Visible Emissions – 06-096 C.M.R. ch. 115, BACT (A-1117-77-3-A, July 16, 2024)

The BACT emission limits for Boilers #2 and #3 were established in NSR License A-1117-77-3-A and are the following:  
(A-1117-77-3-A, July 16, 2024)

| Unit      | PM (lb/hr) | PM <sub>10</sub> (lb/hr) | PM <sub>2.5</sub> (lb/hr) | SO <sub>2</sub> (lb/hr) | NO <sub>x</sub> (lb/hr) | CO (lb/hr) | VOC (lb/hr) |
|-----------|------------|--------------------------|---------------------------|-------------------------|-------------------------|------------|-------------|
| Boiler #2 | 0.05       | 0.05                     | 0.05                      | 0.01                    | 0.14                    | 0.08       | 0.01        |
| Boiler #3 | 0.05       | 0.05                     | 0.05                      | 0.01                    | 0.14                    | 0.08       | 0.01        |

2. Visible Emissions

Visible emissions from the combined exhaust of Boilers #2 and #3 through Stack #1 shall not exceed 10% opacity on a six-minute block average basis.

3. New Source Performance Standards (NSPS): 40 C.F.R. Part 60, Subpart Dc

Due to their size, Boilers #2 and #3 are not subject to *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units* 40 C.F.R. Part 60, Subpart Dc for units greater than 10 MMBtu/hr manufactured after June 9, 1989. [40 C.F.R. § 60.40c]

4. National Emission Standards for Hazardous Air Pollutants (NESHAP): 40 C.F.R. Part 63, Subpart JJJJJ

Boilers #1 and #2 are not subject to the *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources*, 40 C.F.R. Part 63, Subpart JJJJJ, as the units are considered gas fired and therefore exempt. [40 C.F.R. § 63.11237]

D. Air Heater

The Air Heater is a CaptiveAire Model CAV20 space heater manufactured and installed in 2007. The Air Heater was designed with a maximum heat input capacity of 1.06 MMBtu/hr and combusts propane. The Air Heater is operated to provide building heat, and emissions from the Air Heater are exhausted inside the building.

1. BPT Findings

The BPT emission limits for the Air Heater were based on the following:

Propane

- PM/PM<sub>10</sub>/PM<sub>2.5</sub> – 0.05 lb/MMBtu based on 06-096 C.M.R. ch. 115, BPT
- SO<sub>2</sub> – 0.054 lb/1,000 gal based on AP-42 Table 1.5-1 dated 5/10
- NO<sub>x</sub> – 13 lb/1,000 gal based on AP-42 Table 1.5-1 dated 5/10
- CO – 7.5 lb/1,000 gal based on AP-42 Table 1.5-1 dated 5/10
- VOC – 1.0 lb/1,000 gal based on AP-42 Table 1.5-1 dated 5/10
- Visible Emissions – 06-096 C.M.R. ch. 101

The BPT emission limits for the Air Heater are the following:

| Unit       | PM (lb/hr) | PM <sub>10</sub> (lb/hr) | PM <sub>2.5</sub> (lb/hr) | SO <sub>2</sub> (lb/hr) | NO <sub>x</sub> (lb/hr) | CO (lb/hr) | VOC (lb/hr) |
|------------|------------|--------------------------|---------------------------|-------------------------|-------------------------|------------|-------------|
| Air Heater | 0.06       | 0.06                     | 0.06                      | 0.01                    | 0.16                    | 0.09       | 0.02        |

2. Visible Emissions

Visible emissions from the Air Heater shall not exceed 10% opacity on a six-minute block average basis.

3. New Source Performance Standards (NSPS): 40 C.F.R. Part 60, Subpart Dc

The Air Heater is not considered a boiler and is therefore not subject to *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units* 40 C.F.R. Part 60, Subpart Dc for units greater than 10 MMBtu/hr manufactured after June 9, 1989. [40 C.F.R. § 60.40c]

4. National Emission Standards for Hazardous Air Pollutants (NESHAP):  
40 C.F.R. Part 63, Subpart JJJJJ

The Air Heater is not considered a boiler and is therefore 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.  
[40 C.F.R. § 63.11193]

E. Process Equipment

CPK operates 11 resin guns, five gel coat guns, six spray guns, one filament winder, and one MMA gun for mechanical application of fiberglass resins and gel coats. Additionally, CPK engages in manual resin and gel coat application through the use of brushes or rollers.

1. BPT and Pollution Prevention for Process Equipment

- a. The following requirements were established as BACT for VOC and HAP emissions from all process equipment in Air Emission License A-1117-71-A-N (October 24, 2016) and are incorporated into this license as BPT:
- (1) Maintain good housekeeping practices, such as keeping lids on storage containers when the material is not being used;
  - (2) Limit overall facility-wide VOC emissions from process sources (facility-wide VOC emissions minus emissions from Boiler #1 and the Air Heater) to 24.7 tons per year on a 12-month rolling total basis;
  - (3) Limit facility wide HAP emissions to 9.9 tons per year for any single HAP and 24.9 tons per year for total HAP on a 12-month rolling total basis from all sources;
  - (4) Use closed-molding technology whenever feasible for the manufacture of fiberglass piping, tanks, and other custom molded items;
  - (5) Maintain records of the names, types, VOC/HAP contents, quantity purchased, and quantity shipped offsite of all resins, gelcoats, and solvents in use at the facility;
  - (6) Use the factors found in the most recent version of *Unified Emission Factors for Open Molding of Composites (UEF)* for calculating emissions of styrene and methyl methacrylate from open molding;
  - (7) Use the following equations for determining monthly VOC and HAP emissions from fiberglass composite manufacturing processes (excluding open molding



of materials where styrene and methyl methacrylate are the only VOC/HAPs, which are calculated using UEF factors as mentioned above);

(i) Equation 1:

$$\text{Monthly VOC Emissions} = 0.03^* \times \sum_{i=1}^n (\text{A x VOC content}) - (\text{B x VOC content})$$

\*Only used when calculating VOC emissions from closed molding processes

(ii) Equation 2:

$$\text{Monthly HAP Emissions} = 0.03^* \times \sum_{i=1}^n (\text{A x HAP content}) - (\text{B x HAP content})$$

\*Only used when calculating HAP emissions from closed molding processes

Where:

i = Each VOC/HAP containing material used at the facility during the month.

n = The number of VOC/HAP containing materials used at the facility during the month.

A = Monthly facility purchases of VOC and/or HAP containing materials.

B = Quantities of VOC and/or HAP containing materials shipped offsite.

- (8) Use high transfer efficiency spray guns such as non-atomizing, airless, or high volume-low pressure (HVLV) spray equipment for the application of gelcoats and resins;
- (9) Provide operator training in the use of controlled spray techniques, including lowest fluid tip pressure techniques, when using mechanical sprayers for the application of gelcoats and resins;
- (10) Use manual application methods for open-mold resin processes when technologically appropriate; and
- (11) Conduct manufacturing and feasibility test trials of pollution prevention technologies such as low styrene resins and water-based or low vapor pressure cleaning solvents as they become commercially available. CPK shall continue to research and develop closed molding applications to increase its use facility-wide. CPK shall document this research and make it available to the Department upon request.

b. The following requirements were established as BACT for PM emissions from all process equipment in Air Emission License A-1117-71-A-N (October 24, 2016) and are incorporated into this license as BPT:

- (1) Control PM emissions from the wall-based exhaust fans and the forced ventilation system such that visible emissions from these sources shall not exceed 10% opacity based on a six-minute block average;
- (2) Regularly inspect and maintain all dust collection and control equipment in good operating condition, and maintain records of all inspection, repair, and maintenance activities performed on this equipment;
- (3) Control PM emissions from any cutting, buffing, grinding, or sanding processes conducted inside the building that vent to the ambient air via vent or duct through the use of a particulate filter such that visible emissions do not exceed 10% opacity based on a six-minute block average;
- (4) Minimize the potential for fugitive PM emissions from any cutting, buffing, grinding, or sanding operations conducted outside by conducting such activities during periods of calm winds or through the use of a shroud or wind curtain; and

c. The following is a new addition to this license:

CPK shall not use cleaning solvents that contain HAP, except that styrene may be used as a cleaner in closed systems, and cleaners containing organic HAP may be used to clean cured resin from application equipment (any equipment that directly contacts resin).

## 2. National Emissions Standards for Hazardous Air Pollutants (NESHAP)

With the reduction of licensed emissions of HAP, CPK is no longer licensed as a major source of HAP. As such, the requirements of 40 C.F.R. Part 63, Subpart WWWW, applicable to major HAP sources, are no longer applicable to the composite manufacturing activities at CPK.

CPK shall submit a notification of the change in applicability of Subpart WWWW to the EPA and the Department within 15 days of the issuance of this license. [40 C.F.R. § 63.9(j)]

CPK shall maintain records and submit all notifications required under Subpart WWWW for any period of time that the facility was still subject to those requirements. [06-096 C.M.R. ch. 115, BPT]

F. Parts Washer

CPK has provided documentation that the cleaning solution being used in the parts washers at their facility contain no HAP or VOC; therefore, the equipment is exempt from *Solvent Cleaners*, 06-096 C.M.R. ch. 130 (Ch. 130) per Section (1)(B).

G. General Process Emissions

Visible emissions from any general process source shall not exceed 20% opacity on a six-minute block average basis.

H. Fugitive Emissions

CPK shall not cause emissions of any fugitive dust during any period of construction, reconstruction, or operation without taking reasonable precautions. Such reasonable precautions shall be included in the facility's continuing program of best management practices for suppression of fugitive particulate matter. See 06-096 C.M.R. ch. 101, § 4(C) for a list of potential reasonable precautions.

CPK shall not cause or allow visible emissions within 20 feet of ground level, measured as any level of opacity and not including water vapor, beyond the legal boundary of the property on which such emissions occur. Compliance with this standard shall be determined pursuant to 40 C.F.R. Part 60, Appendix A, Method 22.

I. Emission Statements

As of the issuance of this license, CPK is no longer subject to *Emission Statements*, 06-096 C.M.R. ch. 137. CPK shall maintain sufficient records and report to the Department emissions for the time period starting on January 1, 2024, until the date of issuance of this license to conclude reporting requirements under this chapter.

J. Annual Emissions

The table below provides an estimate of facility-wide annual emissions for the purposes of calculating the facility's annual air license fee and establishing the facility's potential to emit (PTE). Only licensed equipment is included, i.e., emissions from insignificant activities are excluded. Similarly, unquantifiable fugitive particulate matter emissions are not included except when required by state or federal regulations. Maximum potential emissions were calculated based on the following assumptions:

- Operating Boilers #2 and #3 for 8,760 hr/yr each;
- Operating the Air Heater for 8,760 hr/yr; and
- CPK's maximum allowed process source emissions.

This information does not represent a comprehensive list of license restrictions or permissions. That information is provided in the Order section of this license.

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

|                   | PM         | PM <sub>10</sub> | PM <sub>2.5</sub> | SO <sub>2</sub> | NO <sub>x</sub> | CO         | VOC         |
|-------------------|------------|------------------|-------------------|-----------------|-----------------|------------|-------------|
| Boilers #1 and #2 | 0.5        | 0.5              | 0.5               | 0.1             | 1.3             | 0.8        | 0.1         |
| Air Heater        | 0.2        | 0.2              | 0.2               | 0.1             | 0.7             | 0.4        | 0.1         |
| Process Sources   | -          | -                | -                 | -               | -               | -          | 24.7        |
| <b>Total TPY</b>  | <b>0.7</b> | <b>0.7</b>       | <b>0.7</b>        | <b>0.2</b>      | <b>2.0</b>      | <b>1.2</b> | <b>24.9</b> |

| Pollutant  | Tons/year |
|------------|-----------|
| Single HAP | 9.9       |
| Total HAP  | 24.9      |

**III. AMBIENT AIR QUALITY ANALYSIS**

The level of ambient air quality impact modeling required for a minor source is determined by the Department on a case-by-case basis. In accordance with 06-096 C.M.R. ch. 115, an ambient air quality impact analysis is not required for a minor source if the total licensed annual emissions of any pollutant released do not exceed the following levels and there are no extenuating circumstances:

| Pollutant         | Tons/Year |
|-------------------|-----------|
| PM <sub>10</sub>  | 25        |
| PM <sub>2.5</sub> | 15        |
| SO <sub>2</sub>   | 50        |
| NO <sub>x</sub>   | 50        |
| CO                | 250       |

The total licensed annual emissions for the facility are below the emission levels contained in the table above and there are no extenuating circumstances; therefore, an ambient air quality impact analysis is not required as part of this license amendment.

This determination is based on information provided by the applicant regarding licensed emission units. If the Department determines that any parameter (e.g., stack size, configuration, flow rate, emission rates, nearby structures, etc.) deviates from what was included in the application, the Department may require CPK to submit additional information and may require an ambient air quality impact analysis at that time.

**ORDER**

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

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

The Department hereby grants Air Emission License Amendment A-1117-71-E-A subject to the following conditions.

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

**The following shall replace all Conditions in Air Emission License A-1117-70-D-R/A.**

**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 (38 M.R.S. § 347-C).
- (2) The licensee shall acquire a new or amended air emission license prior to beginning actual construction of a modification, unless specifically provided for in Chapter 115. [06-096 C.M.R. ch. 115]
- (3) 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. 115]
- (4) 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. 115]
- (5) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 M.R.S. § 353-A. [06-096 C.M.R. ch. 115]

- (6) The license does not convey any property rights of any sort, or any exclusive privilege. [06-096 C.M.R. ch. 115]
- (7) The licensee shall maintain and operate all emission units and air pollution 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. 115]
- (8) The licensee shall maintain sufficient records to accurately document compliance with emission standards and license conditions and shall maintain such records for a minimum of six (6) years. The records shall be submitted to the Department upon written request. [06-096 C.M.R. ch. 115]
- (9) The licensee shall comply with all terms and conditions of the air emission license. 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 a renewal of a license or amendment shall not stay any condition of the license. [06-096 C.M.R. ch. 115]
- (10) 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. 115]
- (11) 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 to demonstrate compliance with the applicable emission standards 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; or
    2. 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. 115]

- (12) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicate emissions in excess of the applicable standards, then:
- A. Within thirty (30) days following receipt of the written test report by the Department, or another alternative timeframe approved by the Department, 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. 115]
- (13) Notwithstanding any other provisions 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 license requirement. [06-096 C.M.R. ch. 115]
- (14) The licensee shall maintain records of malfunctions, failures, downtime, and any other similar change in operation of air pollution control systems or the emissions unit itself that would affect emissions and that is not consistent with the terms and conditions of the air emission license. The licensee shall notify the Department within two (2) days or the next state working day, whichever is later, of such occasions where such changes result in an increase of emissions. The licensee shall report all excess emissions in the units of the applicable emission limitation. [06-096 C.M.R. ch. 115]
- (15) Upon written request from 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 a 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. 115]

- (16) The licensee shall notify the Department within 48 hours and submit a report to the Department on a quarterly basis if a malfunction or breakdown in any component causes a violation of any emission standard (38 M.R.S. § 605). [06-096 C.M.R. ch. 115]

**SPECIFIC CONDITIONS**

(17) **Boilers #2 and #3**

- A. Boilers #2 and #3 are licensed to fire propane. [06-096 C.M.R. ch. 115, BACT (A-1117-77-3-A, July 16, 2024)]
- B. Emissions shall not exceed the following [06-096 C.M.R. ch. 115, BACT (A-1117-77-3-A, July 16, 2024)]:

| Emission Unit | PM (lb/hr) | PM <sub>10</sub> (lb/hr) | PM <sub>2.5</sub> (lb/hr) | SO <sub>2</sub> (lb/hr) | NO <sub>x</sub> (lb/hr) | CO (lb/hr) | VOC (lb/hr) |
|---------------|------------|--------------------------|---------------------------|-------------------------|-------------------------|------------|-------------|
| Boiler #2     | 0.05       | 0.05                     | 0.05                      | 0.01                    | 0.14                    | 0.08       | 0.01        |
| Boiler #3     | 0.05       | 0.05                     | 0.05                      | 0.01                    | 0.14                    | 0.08       | 0.01        |

- C. Visible emissions from Stack #1 shall not exceed 10% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 115, BACT (A-1117-77-3-A, July 16, 2024)]

(18) **Air Heater**

- A. The Air Heater is licensed to fire propane. [06-096 C.M.R. ch. 115, BPT]
- B. Emissions shall not exceed the following [06-096 C.M.R. ch. 115, BPT]:

| Emission Unit | PM (lb/hr) | PM <sub>10</sub> (lb/hr) | PM <sub>2.5</sub> (lb/hr) | SO <sub>2</sub> (lb/hr) | NO <sub>x</sub> (lb/hr) | CO (lb/hr) | VOC (lb/hr) |
|---------------|------------|--------------------------|---------------------------|-------------------------|-------------------------|------------|-------------|
| Air Heater    | 0.05       | 0.05                     | 0.05                      | 0.01                    | 0.15                    | 0.09       | 0.01        |

- C. Visible emissions from the Air Heater shall not exceed 10% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 4(A)(3)]

(19) **Process Equipment**

- A. Process Emissions
1. CPK shall maintain good housekeeping practices (close lids, proper storage of all VOC/HAP containing containers, etc.) and shall limit VOC emissions from process sources to less than 24.7 tons/year and facility wide HAP emissions to less than 9.9 tons/year of any single HAP and 24.9 tons/year of total HAPs from all sources.



2. CPK shall calculate these emissions on a monthly and 12-month rolling total basis, based on the following methods:
- a. CPK shall record the name, type, VOC/HAP content, quantity purchased, and quantity shipped offsite of all resins, gelcoats, and solvents in use at the facility.
  - b. Emissions of styrene and methyl methacrylate from open molding of composites shall be calculated using the factors found in the most recent version of *Unified Emission Factors for Open Molding of Composites (UEF)*, and shall be added to the VOC and HAP totals from closed molding operations found using the method in subpart (c) of this Specific Condition, and the VOC and HAP totals found using the mass balance equations in subpart (c) of this Specific Condition to demonstrate compliance with the tons per year limits for VOC and HAPs from all process sources.
  - c. The mass balance equations described below shall be used to determine monthly VOC and HAP emissions from fiberglass composite manufacturing processes (excluding open molding of materials where styrene and methyl methacrylate are the only VOCs/HAPs, which are covered by subpart (b) of this Specific Condition, above) utilizing the data collected in accordance with Subpart (a) of this Specific Condition and any other applicable data:

$$\text{Monthly VOC Emissions} = 0.03 * \sum_{i=1}^n (A \times \text{VOC content}) - (B \times \text{VOC content})$$

\*Only used when calculating VOC emissions from closed molding processes

$$\text{Monthly HAP Emissions} = 0.03 * \sum_{i=1}^n (A \times \text{HAP content}) - (B \times \text{HAP content})$$

\*Only used when calculating HAP emissions from closed molding processes

Where:

i = Each VOC/HAP containing material used at the facility during the month.

n = The number of VOC/HAP containing materials used at the facility during the month.

A = Monthly facility purchases of VOC and/or HAP containing materials.

B = Quantities of VOC and/or HAP containing materials shipped offsite.

[06-096 C.M.R. ch. 115, BPT]

- B. CPK shall use closed-molding technology whenever feasible for the manufacture of fiberglass piping, tanks, and other custom molded items.  
[06-096 C.M.R. ch. 115, BPT]
- C. CPK shall use high transfer efficiency spray guns, such as non-atomizing, airless, or high volume-low pressure (HVLP) spray equipment for the application of gelcoats and resins. [06-096 C.M.R. ch. 115, BPT]

- D. CPK shall train spray gun operators to use controlled spray techniques, including lowest fluid tip pressure techniques, when using mechanical sprayers for the application of gelcoats and resins and use manual application methods for open-mold resin processes when technologically appropriate. CPK shall maintain records which document the name of the person being trained, the date, and the topics covered in the training. [06-096 C.M.R. ch. 115, BPT]
- E. CPK shall conduct manufacturing and feasibility test trials of pollution prevention technologies such as low styrene resins and water-based or low vapor pressure cleaning solvents as they become commercially available. CPK shall continue to research and develop closed molding applications to increase its use facility-wide. CPK shall document this research and make it available to the Department upon request. [06-096 C.M.R. ch. 115, BPT]
- F. CPK shall control PM emissions from all wall-based exhaust fan filters and the forced ventilation system such that visible emissions from each of those sources do not exceed 10% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 115, BPT]
- G. CPK shall regularly inspect and maintain all dust collection and control equipment in good operating condition, and maintain records of all inspection, repair, and maintenance activities performed on this equipment. [06-096 C.M.R. ch. 115, BPT]
- H. CPK shall control PM emissions from any cutting, buffing, grinding, or sanding processes conducted inside the building that vent to the ambient air via vent or duct through the use of a particulate filter and a visible emissions limit of no more than 10% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 115, BPT]
- I. CPK shall not use cleaning solvents that contain HAP, except that styrene may be used as a cleaner in closed systems, and cleaners containing organic HAP may be used to clean cured resin from application equipment (any equipment that directly contacts resin). [06-096 C.M.R. ch. 115, BPT]
- J. *NESHAP: Reinforced Plastic Composites Production*, 40 C.F.R. Part 63, Subpart WWWW
  - 1. CPK shall submit a notification of the change in applicability of Subpart WWWW to the EPA and the Department within 15 days of the issuance of this license. [40 C.F.R. § 63.9(j)]
  - 2. CPK shall maintain records and submit all notifications required under Subpart WWWW for any period of time that the facility is still subject to those requirements. [06-096 C.M.R. ch. 115, BPT]

(20) **General Process Sources**

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

(21) **Fugitive Emissions**

1. CPK shall not cause emissions of any fugitive dust during any period of construction, reconstruction, or operation without taking reasonable precautions. Such reasonable precautions shall be included in the facility's continuing program of best management practices for suppression of fugitive particulate matter. See 06-096 C.M.R. ch. 101, § 4(C) for a list of potential reasonable precautions.
2. CPK shall not cause or allow visible emissions within 20 feet of ground level, measured as any level of opacity and not including water vapor, beyond the legal boundary of the property on which such emissions occur. Compliance with this standard shall be determined pursuant to 40 C.F.R. Part 60, Appendix A, Method 22.  
[06-096 C.M.R. ch. 101, § 4(C)]

(22) **Annual Emission Statements**

In accordance with *Emission Statements*, 06-096 C.M.R. ch. 137, CPK shall maintain sufficient records and report to the Department emissions for the time period starting on January 1, 2024, until the date of issuance of this license. CPK shall comply with the reporting requirements of 06-096 C.M.R. ch. 137 for the time period that the facility was still subject to that rule. CPK shall maintain all records in accordance with Standard Condition (8) of this Air Emission License. [06-096 C.M.R. ch. 137]

- (23) If the Department determines that any parameter value pertaining to construction and operation of the emissions units, including but not limited to stack size, configuration, flow rate, emission rates, nearby structures, etc., deviates from what was submitted in the application or ambient air quality impact analysis for this air emission license, CPK may be required to submit additional information. Upon written request from the Department, CPK shall provide information necessary to demonstrate AAQS will not be exceeded, potentially including submission of an ambient air quality impact analysis or an application to amend this air emission license to resolve any deficiencies and ensure compliance with AAQS. Submission of this information is due within 60 days of the Department's written request unless otherwise stated in the Department's letter.  
[06-096 C.M.R. ch. 115, § 2(O)]

DONE AND DATED IN AUGUSTA, MAINE THIS 18<sup>th</sup> DAY OF JULY, 2024.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY:  for  
MELANIE LOYZIM, COMMISSIONER

**This Air Emission License shall expire on September 12, 2027.**

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 12/5/23

Date of application acceptance: 12/5/23

Date filed with the Board of Environmental Protection:

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

