Industrial Plastic Systems, Inc.

Facility ID No. 1050292
Polk County

Title V Air Operation Permit Renewal

Permit No. 1050292-008-AV
Renewal of Title V Air Operation Permit No. 1050292-007-AV)

Permitting Authority:

State of Florida
Department of Environmental Protection
Air Resource Management, Southwest District

13051 North Telecom Parkway
Temple Terrace, Florida 33637-0926

Telephone: (813) 470-5700
Fax: (813) 470-5996

Compliance Authority:

State of Florida
Department of Environmental Protection
Air Resource Management, Southwest District

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Table of Contents

Section **Page Number**

I. Facility Information.
A. Facility Description. 2
B. Summary of Emissions Units. 2
C. Applicable Regulations. 2

II. Facility-wide Conditions. 3

III. Emissions Units and Conditions.
A. EU No. 001 Facility-wide FRP Fabrication Operation. 5

IV. Appendices. 11
Appendix A, Glossary.
Appendix I, List of Insignificant Emissions Units and/or Activities
Appendix NESHAP 40 CFR 63, Subpart A – General Provisions
Appendix NESHAP 40 CFR 63, Subpart WWWW - National Emissions Standards for Hazardous Air Pollutants: Reinforced Plastic Composites Production
Appendix RR, Facility-wide Reporting Requirements
Appendix TV, Title V General Conditions

Referenced Attachments. ..... At End

Statement of Basis
Table H, Permit History
Table 1, Summary of Air Pollutant Standards and Terms
Table 2, Compliance Requirements
UEF Table – (United Emissions Factors for Open Molding of Composites dated July 23, 2001)

DRAFT/PROPOSED PERMIT

PERMITTEE:
Industrial Plastic Systems, Inc.
4225 Drane Field Road
Lakeland, Florida 33811

Permit No. 1050292-008-AV

Facility ID No. 1050292
Title V Air Operation Permit Renewal

The purpose of this permit is to renew the Title V air operation permit for the above referenced facility. The existing Industrial Plastic Systems, Inc. facility is located in Polk County at 4225 Drane Field Road, Florida. UTM Coordinates are: Zone 17, 398.58 East and 3097.37 North. Latitude is: 27° 59' 51.6" North; and, Longitude is: 82° 01' 53.4" West.

The Title V air operation permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, 62-213. The above named permittee is hereby authorized to operate the facility in accordance with the terms and conditions of this permit.

Effective Date: Date, 20xx
Renewal Application Due Date: Exp. Date -225, 20xx
Expiration Date: Eff. Date + 5 years, 20xx

(Draft/Proposed)

_____

Kelley M. Boatwright
District Air Program Administrator
Southwest District

KMB/ras/admin

SECTION I. FACILITY INFORMATION.

Subsection A. Facility Description.

This facility is an open mold composites manufacturer/fabricator which manufactures pipe, vessels, ductwork, hoods, stacks and other custom fabrications. The facility consists of a single building (approximately 170' x 120' x 24' high) with a small material storage building located to the rear. The inside of the building is divided into a molding room, a chopping room, a winding area, and two fabrication/assembly areas.

Other *(insignificant)* miscellaneous activities in this facility include sawing, grinding and sanding operations associated with the fabrication and assembly areas (particulate matter (dust) from these operations is controlled as needed by local interior building dust collectors), small (< 6.0 gallons/day of coating with less than 5% VOC) surface coating activities, and laboratory operations.

Subsection B. Summary of Emissions Units.

EU No.	Brief Description
Regulated Emissions Units	
001	Facility-Wide Fiberglass Reinforced Plastic (FRP) Fabrication Operation
Unregulated Emissions Units and Activities	
N/A	None

Subsection C. Applicable Regulations.

Based on the Title V air operation permit renewal application received 05/09/2014, this facility is a major source of hazardous air pollutants (HAP). A summary of applicable regulations is shown in the following table.

Regulation	EU No(s).
Federal Regulations	
40 CFR 63, Subpart A, NESHAP General Provisions	001
40 CFR 63, Subpart WWWW - National Emissions Standards for Reinforced Plastic Composites Production	001
State Regulations	
Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296, and 62-297, F.A.C.	All

The following conditions apply facility-wide to all emission units and activities:

FW1. Appendices - The permittee shall comply with all documents identified in Section IV, Appendices, listed in the Table of Contents. Each document is an enforceable part of this permit unless otherwise indicated. [Rule 62-213.440, F.A.C.]

Emissions and Controls

FW2. **Not federally Enforceable -** Objectionable Odor Prohibited. No person shall cause, suffer, allow or permit the discharge of air pollutants, which cause or contribute to an objectionable odor. An "objectionable odor" means any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance. Rule 62-296.320(2) and 62-210.200(Definitions), F.A.C.]

FW3. General Volatile Organic Compounds (VOC) Emissions or Organic Solvents (OS) Emissions - The permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds or organic solvents without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department. [Rule 62-296.320(1), F.A.C.]

(Permitting Note - Nothing is deemed necessary and ordered at this time}

FW4. General Visible Emissions - No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity equal to or greater than 20% opacity. EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C. This regulation does not impose a specific testing requirement. [Rule 62-296.320(4)(b)1, F.A.C.]

FW5. Unconfined Particulate Matter - No person shall cause, let, permit, suffer or allow the emissions of unconfined particulate matter from any activity, including vehicular movement; transportation of materials; construction; alteration; demolition or wrecking; or industrially related activities such as loading, unloading, storing or handling; without taking reasonable precautions to prevent such emissions. Reasonable precautions to prevent emissions of unconfined particulate matter at this facility include:

a. All parking, loading and unloading activities and finished product storage occurs on clean, paved surfaces.

b. No demolition, wrecking, earth moving or excavation will occur at the facility.

In order to provide reasonable assurance that adequate measures are being taken to control fugitive emissions, visible emissions from any building opening, vent or stack should not exceed 5% opacity. Opacity in excess of this level will not be considered as a violation in and of itself, but shall be an indication that additional control precautions and/or practices beyond those in place may be necessary.

[Rule 62-296.320(4)(c), F.A.C.; Construction Permit No. 1050292-004-AC and, proposed by applicant in Title V air operation permit application received May 09, 2014.]

Annual Reports and Fees

See Appendix RR, Facility-wide Reporting Requirements for additional details.

FW6. Electronic Annual Operating Report and Title V Annual Emissions Fees. The information required by the Annual Operating Report for Air Pollutant Emitting Facility [Including Title V Source Emissions Fee

Calculation] (DEP Form No. 62-210.900(5)) shall be submitted by April 1 of each year, for the previous calendar year, to the Department of Environmental Protection's Division of Air Resource Management. Each Title V source shall submit the annual operating report using the DEP's Electronic Annual Operating Report (EAOR) software, unless the Title V source claims a technical or financial hardship by submitting DEP Form No. 62-210.900(5) to the DEP Division of Air Resource Management instead of using the reporting software. Emissions shall be computed in accordance with the provisions of subsection 62-210.370(2), F.A.C. Each Title V source must pay between January 15 and April 1 of each year an annual emissions fee in an amount determined as set forth in subsection 62-213.205(1), F.A.C. The annual fee shall only apply to those regulated pollutants, except carbon monoxide and greenhouse gases, for which an allowable numeric emission-limiting standard is specified in the source's most recent construction permit or operation permit. Upon completing the required EAOR entries, the EAOR Title V Fee Invoice can be printed by the source showing which of the reported emissions are subject to the fee and the total Title V Annual Emissions Fee that is due. The submission of the annual Title V emissions fee payment is also due (postmarked) by April 1st of each year. A copy of the system-generated EAOR Title V Annual Emissions Fee Invoice and the indicated total fee shall be submitted to: **Major Air Pollution Source Annual Emissions Fee, P.O. Box 3070, Tallahassee, Florida 32315-3070.** Additional information is available by accessing the Title V Annual Emissions Fee On-line Information Center at the following Internet web site: http://www.dep.state.fl.us/air/emission/tvfee.htm. [Rules 62-210.370(3), 62-210.900 & 62-213.205, F.A.C.; and, §403.0872(11), Florida Statutes (2013)]

{Permitting Note: Resources to help you complete your AOR are available on the electronic AOR (EAOR) website at: http://www.dep.state.fl.us/air/emission/eaor. If you have questions or need assistance after reviewing the information posted on the EAOR website, please contact the Department by phone at (850) 717-9000 or email at eaor@dep.state.fl.us.}

{Permitting Note: The Title V Annual Emissions Fee form (DEP Form No. 62-213.900(1)) has been repealed. ***A separate Annual Emissions Fee form is no longer required to be submitted by March 1st each year.****}*

FW7. Annual Statement of Compliance. The permittee shall submit an annual statement of compliance to the compliance authority at the address shown on the cover of this permit within 60 days after the end of each calendar year during which the Title V permit was effective.
[Rules 62-213.440(3)(a)2. & 3. and (b), F.A.C.]

FW8. Prevention of Accidental Releases (Section 112(r) of CAA). If, and when, the facility becomes subject to 112(r), the permittee shall:

a. Submit its Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center. Any Risk Management Plans, original submittals, revisions or updates to submittals, should be sent electronically through EPA's Central Data Exchange system at the following address: https://cdx.epa.gov. Information on electronically submitting risk management plans using the Central Data Exchange system is available at: http://www.epa.gov/osweroe1/content/rmp/index.htm. The RMP Reporting Center can be contacted at: RMP Reporting Center, Post Office Box 10162, Fairfax, VA 22038, Telephone: (703) 227-7650.
b. Submit to the permitting authority Title V certification forms or a compliance schedule in accordance with Rule 62-213.440(2), F.A.C.

[40 CFR 68]

***IMPORTANT NOTES TO PERMITTEE*:**

Permit Renewal - see Appendix TV, Condition No. TV18.
(Note - Renewal application is due 225 days prior to expiration date of this permit.)

Title V Semi-Annual Monitoring Reports - see Appendix RR, Condition No. RR4.

Subsection A. Emissions Unit No. 001 – Facility-Wide FRP Fabrication Operation

The specific conditions in this section apply to the following emissions unit (EU):

EU ID No.	Brief Description
001	Facility-Wide FRP Fabrication Operation

This emissions unit consists of open mold composites manufacturing/fabrication of pipe, vessels, ductwork, hoods, stacks and other custom fabrications. There are three primary types of open molding conducted at this facility:

- non-atomized mechanical spray;
- filament winding spray on process (pipe);
- manual hand molding.

Complex components are fabricated using a hand lay-up process. Additional hand lay-up work involves attaching nozzles, gusset plates, lifting lugs, base supports, etc. to the fabricated materials. The facility consists of a single building (approximately 170' x 120' x 24' high) with a small material storage building located to the rear. The inside of the building is divided into a molding room, a chopping room, a winding area, and two fabrication/assembly areas.

The main pollutant of concern is resin styrene emissions during the spray-on or hand lay-up processes (the gel-coat process is not styrene based). All of the styrene emissions are fugitive in nature from the various work areas inside the building. In order to maintain interior styrene concentrations below recommended levels, the building is currently ventilated by two 28,700 acfm horizontal exhaust wall fans (NE and NW corners of the building), with fresh ventilation air entering the building through open overhead doors. The area of highest styrene concentrations is the northeast corner of the building where the filament winding work is sprayed on the mandrel (with a much lower level of emissions also occurring in the northwest corner where the curing takes place).

Permitting Note: IMPORTANT REGULATORY CLASSIFICATION - This emission unit is subject to NESHAP 40 CFR 63 Subpart WWWW - National Emission Standards for Reinforced Plastic Composites Production, with a compliance date of April 21, 2006 (the compliance date for existing sources).

Essential Potential to Emit (PTE) Parameters

A.1. Hours of Operation - This emissions unit may operate continuously (8,760 hours/year).
[Rule 62-210.200 (Potential to Emit), F.A.C., Construction Permit No. 1050292-004-AC]

Emission Limitations and Standards

Permitting Note - The attached Table 1, Summary of Air Pollutant Standards, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.)

A.2. Styrene Emission Limitation – Emissions of styrene, a hazardous air pollutant (HAP) shall not exceed 29.8 tons per any consecutive 12-month periods.
[Rule 62-210.200, F.A.C. (Potential to Emit); and Construction Permit 1050292-004-AC]

A.3. Total Volatile Organic Compounds (VOC) Emissions Total emissions of VOC shall not exceed 29.8 tons per any consecutive 12-month periods.
[Rule 62-210.200, F.A.C. (Potential to Emit)]

Recordkeeping and Reporting Requirements

A.4. Resin Recordkeeping - In order to document compliance with Specific Condition No. A.2., the permittee shall maintain records of the following for all resin received at this facility:

A. quantity received (tons);

B. resin styrene content (i.e. weight % styrene in resin). As an alternative to tracking styrene content of all resin received, the permittee may assume that resin has a 50% styrene content and only keep records of the quantity (if any) and styrene content of resin that exceeds that level;

(Note: 50% resin styrene content was the assumed maximum worst case value used by the applicant in the construction application for purposes of calculating potential styrene emissions.)

C. resin type (i.e. vapor-suppressed or non-vapor-suppressed).

[Rule 62-4.070(3), F.A.C.; and Construction Permit 1050292-004-AC]

A.5. Styrene Emission Recordkeeping - In order to document compliance with Specific Condition No. A.2., the permittee shall maintain records of:

A. Monthly resin usage.

B. Breakdown of quantity of resin (pounds or tons) applied by spray and by hand lay-up methods for that month.

C. A calculation of monthly styrene emissions (tons/month) based upon monthly resin usage *(see Specific Condition No. A.6. below)*.

D. A calculation of the total styrene emissions for the most recent 12 consecutive month period (tons/12 consecutive month period)

[Rule 62-4.070(3), F.A.C.; and Construction Permit 1050292-004-AC]

A.6. Determination of Styrene Emissions - Compliance with the styrene limitation contained in Specific Condition No. A.2. shall be determined by a monthly calculation of styrene emissions based on the resin used for that month using the equation shown below. The emission factor used to calculate styrene emissions from resin usage shall be in accordance with the attached Unified Emission Factors for Open Molding of Composites table dated July 23, 2001 *(see attached UEF Table)*. As shown in this table, the emission factor to be used will be based upon the breakdown of the type of resin used *(vapor-suppressed or non-vapor-suppressed)*, the method of layup, and the resin styrene content (*weight % styrene in resin)*.

Styrene emissions = Material Usage Rate (tons) x Styrene Concentration (% styrene by weight) x Emission Factor (pounds/ton) *

** Styrene emission factor determined in accordance with the attached Unified Emission Factors for Open Molding of Composites table dated July 23, 2001.*

[Rule 62-4.070(3), F.A.C.; and Construction Permit 1050292-004-AC]

A.7. VOC Emissions - In order to document compliance with Specific Condition No. A.3., the permittee shall maintain monthly records of VOC emissions at the facility that contain the amount of each VOC based material processed that may emit a VOC. The amount of material processed may be based on beginning and ending inventories, deliverables, shipments, etc., provided that the material is not used in multiple application methods with different emission factors. A log shall be maintained to document the monthly and consecutive 12-month period total emissions. The log shall include, at a minimum, the following information:

A. Facility ID No., Emission Unit ID No. and Description (e.g., 1050292, EU 001- Reinforced Fiberglass Products Manufacturing);

B. Month and Year of record;

C. The monthly total amount of VOC based material processed along with the most recent consecutive 12-month period total amount of VOC based material processed, in tons.

D. The monthly total VOC emissions along with the most recent consecutive 12-month period total of VOC emissions, in tons.

E. VOC emissions shall be calculated from the amount of material processed by using the equation shown below:

VOC emissions = Material Usage Rate (tons) x Total VOC emissions (tons) x Emission Factor (pounds/ton)

Supporting documentation such as VOC/HAP content, MSDS sheets, purchase orders, etc. shall be kept for each material processed with includes sufficient information to determine emissions. These records shall be maintained at the facility for a minimum of the most recent five (5) year period at the facility and made available to the Department upon request.
[Rule 62-4.070(3), F.A.C.]

(Note: Emissions of MMA (methyl methacrylate) from gelcoating shall be calculated using the MMA Emission factors shown on the attached Unified Emission Factors for Open Molding of Composites table.)

A.8. General Recordkeeping Requirements - Documentation of each chemical reclaimed will use a mass balance method to determine usage/emissions (amount used minus amount collected for disposal or recycle). Supporting documentation such as Styrene/HAP/VOC content, Styrene/HAP/VOC emission factors used, MSDS sheets, purchase orders, "As Supplied" data sheets, etc. shall be kept for each chemical and associated products, which includes sufficient information to determine emissions. The monthly logs shall be completed within 30 days after the end of each month. These records shall be available to the Department upon request. These records shall be recorded in a permanent form suitable for inspection by the Department upon request, and shall be retained at the facility for at least a five (5) year period.
[Rules 62-4.070(3), and 62-213.440(b), F.A.C.; and Construction Permit 1050292-004-AC]

A.9. Other Reporting Requirements - See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.
[Rule 62-4.070(3), F.A.C.]

Other Requirements

A.10. Federal Rule Requirements - In addition to the specific conditions listed above, this emissions unit is also subject to the applicable requirements contained in 40 CFR 63 Subpart WWWW - *National Emission Standards for Hazardous Air Pollutants (NESHAP): Reinforced Plastic Composites Production*, as adopted and incorporated by reference in Rule 62-204.800(11)(b), F.A.C., contained in the attached Appendix NESHAP 40 CFR 63, Subpart WWWW - National Emissions Standards for Hazardous Air Pollutants: Reinforced Plastic Composites Production, which is a part of this permit.

(NESHAP Compliance Note: In accordance with 40 CFR 63.5800, 63.5840 and Table 2 to Subpart WWWW of Part 63, the compliance date for this emission unit to be in compliance with this NESHAP was April 21, 2006 (the compliance date for existing sources.))*

The following applicability references are based on the Title V Air Operation Permit application received on May 9, 2014. Therefore, any change in operation may change the applicable provisions.

What This Subpart Covers

§**63.5780** What is the purpose of this subpart?
§**63.5785** Am I subject to this subpart?
§**63.5790** What parts of my plant does this subpart cover?
§**63.5795** How do I know if my reinforced plastic composites production facility is a new affected source or an existing affected source?

Calculating Organic HAP Emissions Factors for Open Molding and Centrifugal Casting

§**63.5796** What are the organic HAP emissions factor equations in Table 1 to this subpart and how are they used in this subpart?
§**63.5797** How do I determine the organic HAP content of my resins and gel coats?
§**63.5798** What if I want to use, or I manufacture, an application technology (new or existing) whose organic HAP emissions characteristics are not represented by the equations in Table 1 to this subpart?
§**63.5799** How do I calculate my facility's organic HAP emissions on a tpy basis for purposes of determining which paragraphs of §63.5805 apply?
§63.5799(b) and (c)

Compliance Dates and Standards

§**63.5800** When do I have to comply with this subpart?
§**63.5805** What standards must I meet to comply with this subpart?
§63.5805(b) and (g)

Options for Meeting Standards

§**63.5810** What are my options for meeting the standards for **open molding and centrifugal casting** operations at new and existing sources?

General Compliance Requirements

§**63.5835** What are my general requirements for complying with this subpart?
§63.5835(a) and (c)

Testing and Initial Compliance Requirements

§**63.5840** By what date must I conduct a performance test or other initial compliance demonstration?

§**63.5860** How do I demonstrate initial compliance with the standards?

§63.5860(a)

Emissions Factor, Percent Reduction, and Capture Efficiency Calculation Procedures for Continuous Lamination/Casting Operations

(sections not applicable)

Continuous Compliance Requirements

§**63.5895** How do I monitor and collect data to demonstrate continuous compliance?

§63.5895(c)

§**63.5900** How do I demonstrate continuous compliance with the standards?

§63.5900(a)(2) through (4)

§63.5900(b)

§63.5900(c)*(as it relates to malfunctions)*

Notifications, Reports, and Records

§**63.5905** What notifications must I submit and when?

§**63.5910** What reports must I submit and when?

§63.5910(a) through (c)(5)

§63.5910(d)

§63.5910(f) through (i)

§**63.5915** What records must I keep?

§63.5915(a), (c) and (d)

§**63.5920** In what form and how long must I keep my records?

Other Requirements and Information

§**63.5925** What parts of the General Provisions apply to me?

§**63.5930** Who implements and enforces this subpart?

§**63.5935** What definitions apply to this subpart?

Tables to Subpart WWWW of Part 63

Table 1 to Subpart WWWW of Part 63 - Equations to Calculate Organic HAP Emissions Factors for Specific Open Molding and Centrifugal Casting Process Streams

Table 2 to Subpart WWWW of Part 63 - Compliance Dates for New and Existing Reinforced Plastic Composites Facilities

Table 3 to Subpart WWWW of Part 63 - Organic HAP Emissions Limits for Existing Open Molding Sources, New Open Molding Sources Emitting Less Than 100 TPY of HAP, and New and Existing Centrifugal Casting and Continuous Lamination/Casting Sources That Emit Less Than 100 TPY of HAP

Table 4 to Subpart WWWW of Part 63 - Work Practice Standards

Table 7 to Subpart WWWW of Part 63 - Options Allowing Use of the Same Resin Across Different Operations That Use the Same Resin Type

Table 8 to Subpart WWWW of Part 63 - Initial Compliance With Organic HAP Emissions Limits

Table 9 to Subpart WWWW of Part 63 - Initial Compliance With Work Practice Standards.

Table 13 to Subpart WWWW of Part 63 - Applicability and Timing of Notifications

Table 14 to Subpart WWWW of Part 63 - Requirements for Reports

Table 15 to Subpart WWWW of Part 63 - Applicability of General Provisions (Subpart A) to Subpart WWWW of Part 63

[Rule 62-204.800(11)(b)1, F.A.C.; 40 CFR 63 Subpart WWWW (40 CFR 63.5780- 63.5935)]

SECTION IV. APPENDICES.

The Following Appendices Are Enforceable Parts of This Permit:

Appendix A, Glossary

Appendix I, List of Insignificant Emissions Units and/or Activities

Appendix NESHAP 40 CFR 63, Subpart A – General Provisions

Appendix NESHAP 40 CFR 63, Subpart WWWW - National Emissions Standards for Hazardous Air Pollutants: Reinforced Plastic Composites Production

Appendix RR, Facility-wide Reporting Requirements

Appendix TV, Title V General Conditions

REFERENCED ATTACHMENTS.

The Following Attachments Are Included for Applicant Convenience:

Statement of Basis

Table H, Permit History

Table 1, Summary of Air Pollutant Standards and Terms

Table 2, Compliance Requirements

UEF Table – (United Emissions Factors for Open Molding of Composites dated July 23, 2001)