Imperial Foam & Insulation Manufacturing Company, Inc.
Imperial Foam & Insulation Manufacturing
Facility ID No. 1270090
Volusia County

Title V Air Operation Permit Renewal

Permit No. 1270090-006-AV
(Renewal of Title V Air Operation Permit No. 1270090-004-AV)

Permitting Authority:

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

3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767

Telephone: (407) 897-2931
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Compliance Authority:

State of Florida
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DRAFT/PROPOSED PERMIT

PERMITTEE:
Imperial Foam & Insulation
Manufacturing Company, Inc.
2360 Old Tomoka Road
Ormond Beach, Florida 32174

Permit No. 1270090-006-AV
Imperial Foam & Insulation Manufacturing
Facility ID No. 1270090
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 Imperial Foam & Insulation Manufacturing is located in Volusia County at 2360 Old Tomoka Road, Ormond Beach, Florida. UTM Coordinates are: Zone 17, 485.35 East and 3236.31 North. Latitude is: 29˚15′20″ North; and, Longitude is: 81˚09′03″ 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: TBD
Renewal Application Due Date: TBD
Expiration Date: TBD

(Draft/Proposed)

_____

Caroline D. Shine
Air Program Administrator
Central District

CDS/jr/ng

Subsection A. Facility Description.

The facility manufactures polystyrene foam and insulation products. The process consists of unexpanded polystyrene beads that are deposited into a weigh hopper and the measured quantity of unexpanded beads is then introduced into the expansion chamber. Typically, one type of polystyrene bead is expanded per batch.

Steam from two (2) onsite boilers (rated at 2.5 and 6.7 MMBtu/hr and burns No. 2 fuel oil) is introduced into the expansion chamber to expand the beads. A sensor in the expansion chamber determines when the beads are fully expanded. The expanded beads are emptied from the expansion chamber to the dryer. Dried expanded beads overflow over a gate and are mixed and separated by an impeller in order to prevent the dried expanded beads from clumping. The beads then fall through a grate and are deposited into a storage area where they are aged for at least 4 to 24 hours.

Aged expanded beads are then deposited into a mold where steam is applied to make the beads adhere to each other. Typically, only one type of expanded bead is used to produce each polystyrene log. Next, a vacuum is applied to the mold to eliminate moisture, cool the beads, and shrink the product. After the molding operation is complete, the polystyrene log is then released from the mold, put into storage, and cured for three (3) days in order to achieve product stability.

Subsection B. Summary of Emissions Units.

EU No.	Brief Description
Regulated Emissions Units	
001	Insulation Board Manufacturing

Subsection C. Applicable Regulations.

Based on the Title V air operation permit renewal application received October 19, 2011, this facility currently is not a major source of hazardous air pollutants (HAP).

Regulation	EU No.
State Rule Citations: 62-4, F.A.C. 62-210, F.A.C. 62-213, F.A.C. 62-296, F.A.C.	-001

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. To comply, procedures to minimize pollutant emissions shall include the following:

a. tightly cover or close all VOC containers when they are not in use,
b. tightly cover, where possible, all open troughs, basins, baths, tanks, etc. when they are not in use,
c. maintain all piping, valves, fittings, etc. in good operating condition,
d. prevent excessive air turbulence across exposed VOC's, and
e. immediately confine and clean up VOC spills and make sure certain wastes are placed in closed containers for reuse, recycling or proper disposal.

[Rule 62-296.320(1), F.A.C.]

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. Maintenance of paved areas as needed;
b. Regular mowing of grass and care of vegetation; and
c. Limited access to plant property by unnecessary vehicles.

[Rule 62-296.320(4)(c), F.A.C.]

Annual Reports and Fees

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

FW6. Annual Operating Report. The permittee shall submit an annual report that summarizes the actual operating rates and emissions from this facility. Annual operating reports shall be submitted to the Compliance Authority by **April 1st** of each year. [Rule 62-210.370(3), F.A.C.]

FW7. Annual Emissions Fee Form and Fee. The annual Title V emissions fees are due (postmarked) by March 1st of each year. The completed form and calculated fee shall be submitted to: Major Air Pollution Source Annual Emissions Fee, P.O. Box 3070, Tallahassee, Florida 32315-3070. The forms are available for download 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. [Rule 62-213.205, F.A.C.]

FW8. 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 (3)(b), F.A.C.]

FW9. 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 to: 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]

Subsection A. Insulation Board Manufacturing

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

EU No.	Brief Description
-001	Expanded polystyrene manufacturing operation that includes a steam-heated expander utilized to expand polystyrene beads to produce polystyrene logs that are cut into three(3) different finished product: Option 1: Standard Cut - The polystyrene log is placed on continuous conveyor belts where it is cut to a specific size. Two conveyor belts are used in this process. The polystyrene log is placed on the first continuous conveyor belt, where horizontal cuts are made using hot wire then placed on the second conveyor belt, where a vertical cut is made using a hot wire. Option 2: Custom Cut - The polystyrene log is sent to the custom cutting department where it is placed on a wooden platform and hot wire is used to custom cut it. Option 3: Packaging Cut - Polystyrene logs or scrap are sent to a station where they are cut, using hot wire, into smaller blocks.

Essential Potential to Emit (PTE) Parameters

A.1. Permitted Capacity. The maximum facility-wide bead usage rate is not limited. [Rule 62-210.200, (PTE), F.A.C.; Permit No. 1270090-003-AC]

A.2. Hours of Operation. This emissions unit may operate continuously (8,760 hours/year). [Rule 62-210.200(PTE), F.A.C.; Permit No. 1270090-003-AC]

Emission Limitations and Standards

A.3. Visible Emissions. The visible emissions from each particulate emitting source at this facility are limited to less than 20 percent opacity. [Rule 62-296.320(4), F.A.C.]

A.4. VOC Emissions. The maximum facility-wide emissions limitations are as follows:

Pollutant	Emissions (tons per any consecutive 12-month period)
Total VOCs	Less than 245.0
Total HAPs	Less than 245.0

VOC and HAP emissions shall be updated monthly, as requested by the applicant.

If there are no HAP emissions for a particular month, then HAP emissions do not need to be recorded in the monthly log for that particular month.

[Rule 62-210.200(PTE), F.A.C.; Permit No. 1270090-003-AC]

Recordkeeping and Reporting Requirements

A.5. Reporting Schedule. In order to demonstrate compliance with specific condition number **A.4.,** the permittee shall maintain a monthly log at the facility for a period of at least five (5) years from the date the data is recorded. The log, at a minimum, shall contain the following:

Monthly
a) Date (month/year);
b) Consecutive 12-month total of bead usage for emission calculations;
c) The percent of pentane in each lot of beads;
d) Manufacturer's certification of pentane content in each lot of beads;
e) Quarterly test for pentane by manufacturer of each type of bead; and
f) Consecutive 12-month total of Total VOC emissions.
g) Consecutive 12-month total of Total HAP emissions.
[Rules 62-4.070(3) and 62-213.440(1)(b)2., F.A.C.]

If there are no HAP emissions for a particular month, then HAP emissions do not need to be recorded in the monthly log for that particular month.

Note: A consecutive 12 month total is equal to the total for the month in question plus the totals for the eleven months previous to the month in question. A consecutive 12 month total treats each month of the year as the end of a 12 month period. A 12 month total is not a year-to-date total. Facilities that have not been operating for 12 months should retain 12 month totals using whatever number of months of data are available until such a time as a consecutive 12-month total can be maintained each month.

A.6. VOC emission rate deduction for pentane that leaves the facility within the insulation can be calculated under the following concepts. Supporting documentation (chemical usage tracking logs, MSDS sheets, purchase orders, EPA "As Supplied" data sheets, EPA Method 24, etc.) shall be kept for each chemical and associated products, which includes sufficient information to determine usage rates and emissions. These records shall be made available to the Department upon request. Documentation of each chemical reclaimed will use a mass balance method to determine usage/emissions (amount used minus amount collected for disposal or recycle). The log and documents shall be kept at the facility for at least five years (5) and made available to the Department. Daily logs shall be completed within seven business days and the monthly logs shall be completed by the end of the following month. [Rules 62-4.070(3), F.A.C.]

A.7. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.

A.8. Additional Recordkeeping Requirements: Records specified in Specific Condition No. **A.6.** (previous condition) must document the method, calculations, and formulas used in determining the usage rate and the emission rate. All calculations, including those used to derive emissions, must be clearly documented, and may be presented in the form of a template of sample calculations and available for review on site by the Department. [Rule 62-4.070(3), F.A.C.]

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 RR, Facility-wide Reporting Requirements.
Appendix TV, Title V General Conditions.