



Florida Department of Environmental Protection

Rick Scott
Governor

Carlos Lopez-Cantera
Lt. Governor

Southwest District Office
13051 North Telecom Parkway, Suite 101
Temple Terrace, Florida 33637-0926

Ryan E. Matthews
Interim Secretary

PERMITTEE

Life-Like Acquisitions, Inc.
dba Lifoam Industries, LLC
2601 Anvil Street
St. Petersburg, FL 33710

Air Permit No. 1030214-014-AF
Federally Enforceable State Operation Permit

Lifoam Industries, LLC
Pinellas County, Florida

Authorized Representative:
Mr. Ronald R. Hess, Plant Manager

PROJECT

This is the final Federally Enforceable State Operation Permit, which authorizes the operation of Lifoam Industries, LLC., which is a manufacturer of shape molded expandable polystyrene products (Standard Industrial Classification No. 3086). This project is for the renewal of Air Operation Permit No. 1030214-013-AF, for the polystyrene steam chest molding operation. The facility is located in Pinellas County at 2601 Anvil Street in St. Petersburg, Florida. The UTM coordinates are Zone 17, 328.843 kilometers (km) East, and 3075.77 km North.

This final permit is organized into the following sections: Section 1 (General Information); Section 2 (Administrative Requirements and Facility-wide Specific Conditions); Section 3 (Emissions Unit Specific Conditions); and Section 4 (Appendices). Because of the technical nature of the project, the permit contains numerous acronyms and abbreviations, which are defined in Appendix A of Section 4 of this permit.

Permitting Authority: Applications for air operation permits are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.) and Chapters 62-4 and 62-210 of the Florida Administrative Code (F.A.C.). The Permitting Authority responsible for making a permit determination for this project is the Department of Environmental Protection's Air and Solid Waste Permitting Section in the Southwest District Office. The Permitting Authority's physical address is: 13051 North Telecom Parkway, Suite 101, Temple Terrace, Florida 33637-0926. The Permitting Authority's mailing address is: 13051 North Telecom Parkway, Suite 101, Temple Terrace, Florida 33637-0926. The Permitting Authority's phone number is 813-470-5700.

Petitions. A person whose substantial interests are affected by the proposed decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed (received) in the Department's Office of General Counsel, MS #35, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000, Agency_Clerk@dep.state.fl.us. Petitions filed by the applicant or any of the parties listed below must be filed within 14 days of receipt of this notice. Petitions filed by any other person must be filed within 14 days of receipt of this proposed action. A petitioner must mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

A petition that disputes the material facts on which the Department's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner; the name, address and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the

FINAL PERMIT

proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when each petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate; (e) A concise statement of the ultimate facts alleged, as well as the rules and statutes which entitle the petitioner to relief; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and, (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action. A petition that does not dispute the material facts upon which the permitting authority's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any such final decision of the permitting authority on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

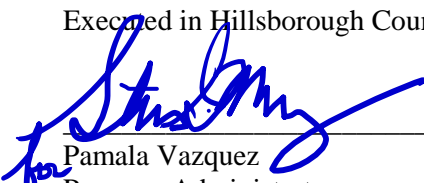
Mediation: Mediation is not available in this proceeding.

Effective Date: This permitting decision is final and effective on the date filed with the clerk of the Permitting Authority unless a petition is filed in accordance with the above paragraphs or unless a request for extension of time in which to file a petition is filed within the time specified for filing a petition pursuant to Rule 62-110.106, F.A.C., and the petition conforms to the content requirements of Rules 28-106.201 and 28-106.301, F.A.C. Upon timely filing of a petition or a request for extension of time, this action will not be effective until further order of the Permitting Authority.

Judicial Review: Any party to this permitting decision (order) has the right to seek judicial review of it under Section 120.68, F.S., by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel, Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000, and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within 30 days after this order is filed with the clerk of the Department.

1030214-014-AF Effective Date: April 28, 2017
Renewal Application Due Date: February 27, 2022
Expiration Date: April 28, 2022

Executed in Hillsborough County, Florida.



Pamala Vazquez
Program Administrator
Permitting & Waste Cleanup Program
Southwest District

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Federally Enforceable State Operation Permit package was sent by electronic mail, or a link to these documents made available electronically on a publicly accessible server, with received receipt requested before the close of business on the date indicated below to the following persons.

Mr. Ronald R. Hess, Lifoam Industries, LLC., rhess@lifoam.com

Lon Bartoli, Lifoam Industries, LLC., lbartoli@lifoam.com

Sherill Culliver, Environmental Program Coordinator Pinellas County, sculliver@pinellascounty.org

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to Section 120.52(7), Florida Statutes, with the designated agency clerk, receipt of which is hereby acknowledged.



April 28, 2017

(Clerk)

(Date)

SECTION 1. GENERAL INFORMATION

FACILITY DESCRIPTION

The facility manufactures molded expandable polystyrene (EPS) sheets, forms, and containers. Expandable polystyrene beads (EPS) are first processed through one (1) bead pre-expander machines, in which steam is used to pre-expand the beads. The pre-expanded beads are then conveyed to a fabric holding bag for aging prior to entering the steam chest molding machines. Upon entering one of ten (10) steam chest molding machines, the pre-expanded beads are fed into the cavity of the mold. Steam is introduced into the molding machines, further expanding the pre-expanded polystyrene beads. Expansion compressive forces mold the expanded beads into a final product. Pentane gas contained in the polystyrene beads (EPS) is released to the atmosphere during the expansion, aging, molding, and product storage processes.

The steam for the pre-expanders and steam chest molding machines is produced by a natural gas fired process steam boiler (see Exempt Emission Units/Activities below).

The existing facility consists of the following emissions units (EU)*.

EU No.	Emission Unit Description
001	Polystyrene Bead Expansion and Molding Process

*(*EU Note – EU No. 003 was previously assigned to the process steam boiler at this facility. This boiler is exempt from air permitting by rule (see Exempt Emission Units/Activities below), and has been removed from the permitted emission unit section of the permit.)*

NOTE - Please reference the Permit No., Facility ID, and Emission Unit ID in all correspondence, test report submittals, applications, etc.

EXEMPT EMISSION SOURCES/ACTIVITIES

The emission from the following emission sources at this facility are deemed insignificant and exempt from permitting:

- VOC emissions from the usage of equipment cleanup solvents (expected to be less than 250 pounds/year), exempt from permitting per Rule 62-4.040(1)(b), F.A.C.*;
- four (4) Lawson IMP Printers, exempt from permitting per Rule 210.300(3)(b), F.A.C.;
- two (2) double pass electric dry tunnels, exempt from permitting per Rule 210.300(3)(b), F.A.C.; and
- a 400 HP (16.324 MMBtu/hour) Cleaver-Brooks Model CBLE700-400-150 process steam boiler (Boiler No. 2 (this boiler replaced the previous Boiler No. 1)), equipped with low-NOx burners and fired exclusively on natural gas, exempt from permitting per Rule 62-210.300(3)(a)34., F.A.C. (conditional exemption for fossil fuel fired steam generators).

(Boiler Federal Rule Applicability Note - This boiler is subject to Federal NSPS 40 CFR 60 Subpart Dc – (Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units), as it applies to boiler fired with natural gas only. Subpart Dc contains only fuel recordkeeping requirements for natural gas fired boilers.)

**Note - Exemptions under Rule 62-4.040(1)(b), F.A.C. (insignificant emissions), may be revoked if the installation is substantially modified or the basis for the exemption is determined to be materially incorrect.*

SECTION 1. GENERAL INFORMATION

FACILITY REGULATORY CLASSIFICATION

- The facility is not a major source of hazardous air pollutants (HAP).
- The facility has no units subject to the acid rain provisions of the Clean Air Act (CAA).
- The facility is not a Title V major source of air pollution in accordance with Chapter 62-213, F.A.C.
- The facility is not a major stationary source in accordance with Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality.
- This facility is a synthetic non-Title V source for the pollutant volatile organic compounds (VOC). The emissions limitations for pentane will ensure that the facility's VOC emissions will be below the threshold for a Title V source.

PERMIT HISTORY/AFFECTED PERMITS

This permit replaces Operation Permit No. 1030214-13-AF.

SECTION 2. ADMINISTRATIVE REQUIREMENTS AND FACILITY-WIDE SPECIFIC CONDITIONS

ADMINISTRATIVE REQUIREMENTS

1. Permitting Authority: The permitting authority for this project is the Southwest District of the Department of Environmental Protection (Department). The mailing address, phone number and e-mail address is:

Florida Department of Environmental Protection
Southwest District Office
Air and Solid Waste Permitting Program
13051 North Telecom Parkway, Suite 101
Temple Terrace, Florida 33637-0926
Telephone: 813-470-5700
E-mail: SWD_Air_Permitting@dep.state.fl.us

All documents related to applications for permits to operate an emissions unit shall be submitted to the above e-mail address and/or address.

2. Compliance Authority - All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Pinellas County Air Quality Division. The mailing address, phone number and e-mail address of the Local Air Program is:

Pinellas County Air Quality Division
509 East Avenue South, Suite 138
Clearwater, Florida 33756
Telephone: 727-464-4422
E-mail: Airquality@pinellascounty.org

3. Appendices: The following Appendices are attached as a part of this permit: Appendix A (Citation Formats and Glossary of Common Terms); Appendix B (General Conditions); Appendix C (Common Conditions); Appendix D (Common Testing Requirements) and Appendix E (Best Available Control Technology (BACT) Determination)
4. Applicable Regulations, Forms and Application Procedures: Unless otherwise specified in this permit, the construction and operation of the subject emissions units shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403, F.S.; and Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296 and 62-297, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations.
5. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time.
[Rule 62-4.080, F.A.C.]
6. Modifications: No new emissions unit shall be constructed and no existing emissions unit shall be modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification.
[Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]
7. Renewal. Prior to sixty (60) days before the expiration date of this permit, the permittee shall apply for a renewal of the permit. A renewal application shall be timely and sufficient. If the application is submitted prior to sixty (60) days before expiration of the permit, it will be considered timely and sufficient. If the

SECTION 2. ADMINISTRATIVE REQUIREMENTS AND FACILITY-WIDE SPECIFIC CONDITIONS

renewal application is submitted at a later date, it will not be considered timely and sufficient unless it is submitted and made complete prior to the expiration of the operation permit. When the application for renewal is timely and sufficient, the existing permit shall remain in effect until the renewal application has been finally acted upon by the Department. To properly apply for an operation permit, the applicant shall submit the following:

- a. the appropriate permit application form (*see current version of Rule 62-210.900, F.A.C. (Forms and Instructions), and/or FDEP Division of Air Resource Management website at: <http://www.dep.state.fl.us/air/>*);
- b. the appropriate operation permit application fee from Rule 62-4.050(4)(a), F.A.C.;
- c. copies of the most recent month of records/logs specified in Specific Condition No(s). A.5.

[Rules 62-4.090, 62-210.300(2), and 62-210.900, F.A.C.]

8. **Annual Operating Report (AOR):** The information required by the Annual Operating Report for Air Pollutant Emitting Facility (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 (DEP) District Office. All synthetic non-Title V sources should submit a completed DEP Form 62-210.900(5) unless the annual operating report is submitted using the DEP's electronic annual operating report software. Emissions shall be computed in accordance with the provisions of subsection 62-210.370(2), F.A.C.

[Rule 62-210.370(3), F.A.C.]

{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.}

FACILITY-WIDE REQUIREMENTS

9. **General Standards: Volatile Organic Compounds (VOC) and Organic Solvents (OS) Emissions:** The permittee shall comply with the following:
 - a. Maintain tightly fitting covers, lids, etc., on all containers of VOC and organic solvents (OSs) when they are not being handled, tapped, etc.
 - b. Prevent excessive air turbulence across exposed VOC/OS.
 - c. Where possible and practical, procure/fabricate a tightly fitting cover for any open tough, basin, bath, etc., of VOC/OS so that it can be covered when not in use.
 - d. All fittings, valve lines, etc. utilizing VOC/OS materials shall be properly maintained.
 - e. All solvents from equipment clean up shall be directed into containers that prevent evaporation into the atmosphere.
 - f. All VOC/OS spills shall be attended to immediately and the waste properly disposed of, recycled, etc.

[Rule 62-296.320(1)(a), F.A.C.; Construction Permit 1030214-005-AC]

10. **General Standards: Objectionable Odor:** No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor. An objectionable odor is 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.

SECTION 2. ADMINISTRATIVE REQUIREMENTS AND FACILITY-WIDE SPECIFIC CONDITIONS

[Rules 62-296.320(2) and 62-210.200 (Definition of Objectionable Odor), F.A.C.; Pinellas County Code, Section 58-178]

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

B. EU No. 001 - Polystyrene Bead Expansion and Molding Process

This section of the permit addresses the following emissions unit.

EU No.	Emission Unit Description
001	<p>The facility manufactures molded expandable polystyrene (EPS) sheets, forms, and containers. Expandable polystyrene beads (EPS), approximately 0.025 inches in diameter, are first processed through one (1) bead pre-expander machines, in which steam from an exempt process steam boiler is used to pre-expand the beads to approximately 0.066 inches in diameter. The pre-expanded beads are then conveyed to a fabric holding bag for aging prior to entering the steam chest molding machines. The facility includes ten (10) steam chest molding machines. Upon entering one of the steam chest molding machines, the pre-expanded beads are fed into the cavity of the mold. Steam is introduced into the molding machines, further expanding the pre-expanded polystyrene beads. Expansion compressive forces mold the expanded beads into a final product. Pentane gas contained in the polystyrene beads is released to the atmosphere during the expansion, aging, molding, and product storage processes.</p> <p>Emissions from the manufacturing building are vented to the atmosphere through twelve 42"-diameter coaxial exhausters.</p>

PERFORMANCE RESTRICTIONS

- A.1 Permitted Operating Hours: The hours of operation are not limited (i.e., permitted for 8,760 hours per year).
[Rule 62-210.200 (Definition of Potential to Emit), F.A.C.; Construction Permit 1030214-005-AC]
- A.2 Dispersion of Air Pollutants: In order to provide reasonable dispersion of air pollutants, there shall be no device that:
- reduces the vertical momentum of the exhaust gas from the building vents; or
 - reduces the vertical dispersion of the exhaust gas from the building vents.
- [Rule 62-4.070(3), F.A.C.; Construction Permit 1030214-005-AC]

EMISSIONS STANDARDS

- A.3 Pentane (VOC) Emission Limitation: The maximum total emissions of pentane (a volatile organic compound (VOC)) from the usage of expandable polystyrene beads (EPS) shall not exceed 93.0 tons per any consecutive 12-month period. This limitation is based on the following calculation and that no more than two (2) expanders are operating:

$3,800,000 \text{ lbs. of beads/year} \times 0.0544 (\% \text{ pentane}) \times 0.9 (10\% \text{ residual pentane contained in the product}) \times (1 \text{ ton}/2,000 \text{ lbs.}) = 93.0 \text{ tons/year.}$

(Pentane Limitation Note - Since the percentage of pentane in the polystyrene beads may vary, the maximum total usage of polystyrene beads may change based on a linear relationship. A constant value of "10%" residual pentane is considered to be contained in the product and shall be used in determining pentane emissions. Also, the VOC emissions from the exempt boiler are expected to be less than 1 ton/year.)

[Rule 62-210.200 (Definition of Potential to Emit), F.A.C.; Construction Permit 1030214-005-AC]

- A.4 Volatile Organic Compound (VOC) Emission Limitation: The only VOC authorized to be released from this emissions unit is pentane.

(Title V Applicability Note - There will be no emissions of any Hazardous Air Pollutants (HAPs) as defined in Rule 62-210.200, F.A.C.)

[Rule 62-210.200, (definitions of Title V Source), F.A.C.; Construction Permit 1030214-005-AC]

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

B. EU No. 001 - Polystyrene Bead Expansion and Molding Process

RECORDS AND REPORTS

- A.5 Recordkeeping Requirements: In order to document compliance with Specific Condition No. A.3., the permittee shall maintain the following logs/records:
- a. for each day polystyrene beads are used, document or record the lot number of the beads used, the pounds of each lot number used, the "as received" pentane content of each lot number used, and the pounds and tons of pentane emitted per lot number used;
 - b. monthly calculate and record the total quantity of polystyrene beads used, in pounds, along with the associated pentane content;
 - c. monthly calculate and record the most recent consecutive 12-month period total of polystyrene beads used, in tons;
 - d. monthly calculate and record the total pentane emissions in pounds and tons, from the usage of polystyrene beads and their associated pentane content, and assuming 10% of the pentane is retained in the product; and
 - e. monthly calculate and record the most recent consecutive 12-month period total of pentane emissions, in tons.

These records shall be kept at the facility for a minimum of three (3) years and made available to the Department and Pinellas County Air Quality Division upon request. Daily records shall be completed within three (3) business days. The monthly records shall be completed by the end of the following month. Where appropriate, the monthly values recorded in "lbs." shall be converted to "tons" in order to demonstrate compliance. The permittee shall also maintain documentation, such as all Material Safety Data Sheets, purchasing records, etc. for all polystyrene beads, which includes sufficient information to determine pentane emissions.

[Rule 62-4.070(3), F.A.C.; Construction Permit 1030214-005-AC]