Title V Air Operation Permit Renewal
Permit No. 0250814-007-AV

APPLICANT

The applicant for this project is Eastern Aero Marine, Inc. The applicant's responsible official and mailing address are: Eloy Leal, Director of Operations and Engineering, Eastern Aero Marine, Inc. facility, 5502 NW 37 Avenue, Miami, FL 33142.

FACILITY DESCRIPTION

The applicant operates the Eastern Aero Marine Inc. facility, which is located at 5502 NW 37 Avenue, Miami, Florida.

This facility consists of the following emissions units:

EU No.	Brief Description
001	**Inflatable Vest and Raft Manufacturing Operations for the Aviation and Marine Industries.** **Vest manufacturing process** Fabric is received from the vendor, and cut into panels for assembly. The panels are then sent to silk screening to print instructions. Screen ink retarder is mixed with IL 111 used as a thinner, and the silk screens are cleaned after use with a mixture of xylene (HAP) and butyl cellusolve (Non-HAP chemical). The panels go to radio frequency (RF) heat sealing for welding on manifolds and oral tubes and then RF heat sealed together to form a vest inflation cell. The vest harness is attached to the cell and the vest is leak tested. The vest goes to the final assembly for installation of the vest lights and inflation system. The vest is inspected, folded and placed into stowage bag. **Raft manufacturing process** Fabric is received from the vendor, and cut into panels for assembly. The panels are then coated with cement. Shore adhesive is used for aviation and black adhesive is used for marine drafts. The panels are assembled into tubes cemented. Toluene is used to activate pre-surfaces. Tubes are inspected by Quality Assurance. Floor and accessories are placed on tubes. Shore adhesive or black adhesive, cement and toluene are used. The rafts are cleaned and inspected. Toluene is used as cleaner. The Rafts are packed for shipment.
002	**One (1) Floor-Type Paint Spray Booth** Manufacturer: Binks Model No: FA87TB Dimensions: 8' W x 7' 6" H x 8' 8" D Fan: One (1) 24" diameter, 1.5 HP motor rated at 7,600 acfm, 1,641 rpm, and face velocity of 138 ft/minute Filter: Two (2) dry arrestor exhaust filters: 8' X 3' each One (1) 2 foot exit diameter exhaust stack. Stack height 7' 6" ft from bottom; 13' – 9" from roof, Type V*

	* Type V – A stack with unobstructed opening discharging in a vertical or nearly vertical direction

The Eastern Aero Marine (EAM), Inc. facility manufactures survival equipment consisting of inflatable vests and rafts for the aviation and marine industries. The EAM facility cuts neoprene rubber-coated nylon fabric material into pieces, cleans the bonding surfaces with solvent, applies adhesive, and aligns and bonds the pieces together during the assembly of personal flotation devices and inflatable rafts. All vests are sealed using radio frequency (RF), and RF heat sealing equipment using between 6 and 40 KV of electrical energy. Inks containing toluene, glycol ether and naphthalene are used in the silk screening operation which is used to print information and instructions on the vest. In addition to the manufacturing, the facility is also a Federal Aviation Administration (FAA) approved repair station, capable of overhauling life rafts, life vests, survival and first aid kits, and evacuation slides. Painting of metal cylinder bottles is conducted in one (1) paint spray booth. Since the painting process is classified as refinishing, and not manufacturing, it is exempt from Rule 62-296.513, F.A.C., the Reasonably Available Control Technology (RACT) Rule on Surface Coating of Miscellaneous Metals Parts and Products. Volatile organic compounds (VOCs) and hazardous air pollutants (HAPs) are emitted from lacquers, thinners, solvents, inks, primers, paints, and adhesives used in the survival equipment manufacturing. The facility has been in operation since prior to 1997.

Also included in this permit are miscellaneous unregulated/insignificant emissions units and/or activities.

PROJECT DESCRIPTION

The purpose of this permitting project is to renew the existing Title V Air Operation Permit for the above referenced facility.

PROCESSING SCHEDULE AND RELATED DOCUMENTS

Application for a Title V Air Operation Permit Renewal received May 12, 2014.

PRIMARY REGULATORY REQUIREMENTS

Title III: The facility is identified as a major source of hazardous air pollutants (HAP).

Title V: The facility is a Title V major source of air pollution in accordance with Chapter 62-213, Florida Administrative Code (F.A.C.).

PSD: The facility is not a source of air pollution for Prevention of Significant Deterioration (PSD) in accordance with Rule 62-212.400, F.A.C.

NSPS: The facility does not operate units subject to the New Source Performance Standards (NSPS) of 40 Code of Federal Regulations (CFR) 60.

NESHAP: The facility does not operate units subject to the National Emissions Standards for Hazardous Air Pollutants (NESHAP) of 40 CFR 63.

CAIR: The facility is not subject to the Clean Air Interstate Rule (CAIR) set forth in Rule 62-296.470, F.A.C.

CAM: Compliance Assurance Monitoring (CAM) does not apply.

PROJECT REVIEW

Specific changes were made to the previous Title V Air Operation Permit No. 0250814-005-AV, and are in this FINAL Title V Air Operation Permit Renewal. Such changes include FDEP reformatting of the entire permit document, replacement of TV-6 with new Appendix TV, streamlining of EU sections by moving common conditions to the new appendices, etc.

For example, some of the recordkeeping, and testing requirements that were previously listed under TV-6, (i.e. administrative permit corrections, deviation reports, etc.) and the Facility-Wide Conditions, and Specific Conditions under the previous Title V permit (i.e. certification by responsible official, testing, submittal of monitoring reports, statement of compliance, etc.) are now listed under the new Appendix RR – Facility-Wide Reporting Requirements, and Appendix TR – Facility-Wide Testing Requirements.

Additionally, recent organizational changes have occurred within the Miami-Dade County Government and the Department of Environmental Resources Management (DERM) was merged with two (2) other departments. The consolidated name is now the Department of Regulatory and Economic Resources (RER), Division of Environmental Resources Management, Air Quality Management. As a result, references to DERM in the permit have been changed to RER.
Items numbered 1 – 4 below represent the changes to the previous Title V Air Operation Permit. Underline text indicates additions. ~~Strikethrough indicates text removed~~.

1. Changes in Section III – Subsection A, Emissions Unit and Specific Conditions, Emissions Units 001 & 002 – Inflatable Vest & Raft Manufacturing/Paint Spray Booth.

The Eastern Aero Marine (EAM), Inc. facility stated in the previous Title V Air Operation Permit application that that it coated or applied adhesive to neoprene rubber-coated nylon fabric that is used in the manufacture of personal flotation devices and inflatable rafts. EAM contended that the neoprene rubber-coated nylon fabric material was not a plastic material but an elastomer, and their surface coating process was not subject to the requirements of 40 CFR 63 Subpart PPPP – National Emission Standards for Hazardous Air Pollutants (NESHAP) for Surface Coating of Plastic Parts and Products.

In an attempt to further verify if this MACT would apply, the RER contacted the Environmental Protection Agency (EPA) staff member in charge of 40 CFR 63 Subpart PPPP, Mr. Len Lazarus on September 30, 2008. A copy of the facility's process description was forwarded to the EPA and was discussed with Mr. Lazarus. The EAM facility also submitted documents to Mr. Lazarus for review. On April 20, 2009, Mr. Lazarus informed the RER via phone discussion and e-mail that due to multiple levels of review required, the final response may be delayed for some months.

In a letter dated March 27, 2013 from the EPA to the EAM facility, the EPA stated that it found EAM's surface coating, or application of adhesive to neoprene rubber-coated nylon fabric used in the manufacture of personal flotation devices and inflatable rafts is not subject to the requirements of Subpart PPPP. The EPA further stated that EAM's surface coating of neoprene rubber coated nylon fabric pieces would be subject to the requirements of Subpart PPPP only if the pieces have been "formed from one or more resins."

At the time of issuance of the current permit No. 0250814-005-AV, the RER was awaiting a determination from the EPA whether or not the provisions of 40 CFR 63 Subpart PPPP would apply to the Eastern Aero Marine facility. As a result, the following Specific Condition was placed in the permit regarding the pending EPA applicability determination. Since the EPA made a determination that the facility was not subject to the provisions of 40 CFR 63 Subpart PPPP, this Specific Condition is no longer needed, and will be removed as follows:

2. Changes in Section III – Subsection A, Emissions Unit and Specific Conditions, Emissions Units 001 & 002 – Inflatable Vest & Raft Manufacturing/Paint Spray Booth. Specific Condition A.6. has been removed because it is now addressed under condition RR3 of Appendix RR – Facility-wide Reporting Requirements.

3. Changes in Section III – Subsection A, Emissions Unit and Specific Conditions, Emissions Units 001 & 002 – Inflatable Vest & Raft Manufacturing/Paint Spray Booth. To keep with the FDEP reformatting of the entire permit document, the following specific conditions addressing excess emissions have been added:

A.3. Excess Emissions Allowed: Excess emissions resulting from malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration.
[Rule 62-210.700(1), F.A.C.]

A.4. Excess Emissions Allowed: Excess emissions resulting from startup or shutdown shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized.
[Rule 62-210.700(2), F.A.C.]

A.5. Excess Emissions Prohibited: Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited.
[Rule 62-210.700(4), F.A.C.]

4. Other changes: The facility description has been revised to accurately reflect the facility's operations. Also, minor corrections to typographical errors, etc. have been made.

CONCLUSION

This project renews Title V air operation permit No. 0250814-005-AV, which was issued on January 7, 2010. This Title V air operation permit renewal is issued under the provisions of Chapter 403, Florida Statues (F.S.), and Chapters 62-4, 62-210 and 62-213, F.A.C.