Florida Department of
Environmental Protection
Northeast District
8800 Baymeadows Way, Suite 100
Jacksonville, Florida 32256

Rick Scott
Governor

Herschel T. Vinyard Jr.
Secretary

Sent by Electronic Mail – Received Receipt Requested

PERMITTEE:

Escalade Sports
4600 SW 41st Street
Gainesville, Florida 32608

Air Permit No.: 0010002-008-AF
Issuance Date: November 7, 2013
Expiration Date: November 7, 2018

Authorized Representative:

Mr. Neil Byce, III –Director of Operations

Escalade Sports
FESOP Renewal

This is the final air operating permit which authorizes the renewal of Air Operation Permit No. 0010002-007- AF for Escalade Sports Archery Equipment Manufacturing Facility (Standard Industrial Classification No. 3949). The facility is located in Alachua County at 4600 S.W. 41st, Gainesville, Florida.

The UTM coordinates are Zone 17, 366.0 km East, and 3276.2 km North.

This final permit is organized by the following sections.

Section 1: General Information

Section 2: Administrative Requirements

Section 3: Emissions Unit Specific Conditions

Section 4: Appendices

Appendix A. Citation Formats and Glossary of Common Terms;

Appendix B. General Conditions;

Appendix C. Common Conditions;

Appendix D. Common Testing Requirements;

Appendix E. 40 CFR 60 Subpart VVV – Standards of Performance for Polymeric Coating of Supporting Substrates Facilities

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.

Upon issuance of this final permit, any party to this order has the right to seek judicial review of it under Section 120.68 of the Florida Statutes 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.

Executed in Jacksonville, Florida

November 7, 2013
Date

Richard S. Rachal III, P.G.
Program Administrator
Waste and Air Resource Management Program

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Final Air Permit package (including the Notice and Final Permit) 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 November 7, 2013 , to the persons listed below.

Mr. Neil Byce, III –Director of Operations,- Escalade Sports, nbyce@beararcheryproducts.com
Mr. Bob Baker P.E. Baker Environmental Engineering, Inc., baker@atlantic.net
Ms. Allison Chaires,- Human Resource manager - Escalade Sports
allisonchaires@beararcheryproducts.com

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

(Clerk)

November 7, 2013
(Date)

FACILITY DESCRIPTION

Existing Facility

Escalade Sports operates an Archery Manufacturing Facility, which is comprised of several manufacturing areas for the production, assembly and packaging of archery equipment. The manufacturing process involves woodworking, fiber glassing, machining and painting. The facility is a Synthetic Non-Title V Source with a facility-wide total VOCs cap of 49.0 TPY, HAP emissions with a cap for each HAPs of 9.0 TPY and HAPs emissions with a facility total HAPs cap of 24.0 TPY.

Computer Numerical Control (CNC) Machining Department:

CNC is a process for machining products using a computer program. For compound bows, metal and composite components are machined from aluminum extrusions and composite parts on the CNC milling machines. Other CNC machining operations consist of cutting, drilling and tapping. The entire process is conducted indoors. There are no outside exhausts to the ambient air from this operation.

From the CNC machines the metal and composite pieces are typically sent to "tumbler" machines that use water and stone type material to roughen the surfaces of the pieces. Three (3) of these tumblers are inside the main building and six (6) are located outside. The cam pairs are typically sent off site to be anodized.

Estimated potential annual production is 150,000 handles, 20,000 limb pairs, and 150,000 cams pairs.

Glass Bow Department

Fabrication of solid fiberglass bows and bow limbs is accomplished by drawing fiberglass roving through an epoxy or polyester resin mixture and then heat curing, utilizing a match mold die press. The seven (7) presses are vented to atmosphere through Stack #66. The resin is post-cured in ovens for added strength. Finally the fiberglass parts are machined by cutting, de-flashing and sanding. The exhaust from the four (4) cutting machines is vented to the small cyclone/baghouse system along with the exhaust from a small mixing room. The handles and limb pairs are sent to

the tumblers to roughen their surfaces. Estimated potential annual production is 130,000 limb pairs. This operation is subject to 40 CFR 60 Subpart VVV.

Powder Paint Department

Handles and limb pairs from the CNC and the Glass Bow Departments, after going to the tumblers, are sent to the Powder Paint Department area to be painted prior to going to the Ransburg Department. This process involves dipping the fiberglass parts into a solvent solution to make them hold an electric charge better. These fiberglass parts and the metal handles are then placed on a hanging parts conveyor line. The painting process involves electrostatic coating using a dry powder. The powder paint is catalyzed to a finished coat by heat curing while passing through an oven on a conveyor. This entire painting process is carried out in a separate building located behind the west side of the main building. Excess powder paint is collected in a cyclone/baghouse dust collector system which exhausts inside the building. Estimated potential annual production is 150,000 handles and 150,000 composite limb pairs.

Traditional Bow Press Department

A traditional wooden bow (composite bow) is constructed by gluing several layers of wood and fiberglass together and heat pressing the bows into desired shapes. A two-part epoxy is used and the parts are then heat-cured in a press. There are twelve (12) heat presses and approximately forty six (46) sanding, grinding and cutting machines that are vented to the Main Baghouse. Nine (9) of these machines are used on the fiberglass limbs from the Glass Bow Department.

The composite bows are sent to the Ransburg Department for painting and clear coating. Estimated potential annual production is 25,000 traditional bow and various other parts.

Ransburg Department

The Ransburg Department is composed of the following areas:

- DIP PROCESS

  The dip process consists of a long open tank filled with water. A film, which contains the desired design (camouflage, etc.), is laid on top of the water and a release solvent is sprayed on the film. The handles and limb pairs are hand-dipped onto the film which transfers the film coating to the handle or limb. The vapors from the release solvent are

exhausted to atmosphere through Stack #204 with a small amount of vapors remaining in the tank water. Therefore, the water has to be aerated for several hours to strip off the remaining organics prior to being discharged to the regional sewer system. These aerated vapors are also exhausted through Stack #204. Estimated potential annual production is 150,000 handles and 150,000 composite limb pairs.

WATERFALL PAINT SPRAY BOOTH & PAINT MIX ROOM

The paint room contains the waterfall spray booth and is used to store and mix the paints used in the Ransburg Department. The waterfall paint spray booth uses water to catch the paint overspray during the painting operation. The booth is not used on a regular basis.

ELECTROSTATIC PAINT BOOTH & OVEN

The handles and limbs are covered with color or clear coat paints. This process involves dipping the fiberglass parts into a solvent solution to make them hold an electric charge better. These fiberglass parts and the metal handles are then placed on a hanging parts conveyor line. The parts are coated and oven baked. The electrostatic paint spray booth is a spinning disk spray with paint filters. Estimated potential annual production is 150,000 handles and 150,000 limb pairs.

BINKS PAINT PRAY BOOTHS

There are three (3) Binks paint spray booths with paint filters. These booths are used to coat the Traditional bows and other parts with color or clear coat paints. One (1) Binks spray booth is located adjacent to the electrostatic paint spray booth and oven. The other two (2) Binks spray booths are in the painting room adjacent to the first spray booth. One of the booths has been modified to just to exhaust the air in the painting room. Estimated potential annual production is 25,000 traditional bow and various other parts.

Screw Machines

Metal (aluminum, brass, steel) and plastic rods are machined by twelve (12) screw machines (3 Brown and Sharp machines and 9 active Davenport machines with 3 out of service Davenport machines) into small pieces for attaching arrows, etc. This operation uses the following:

Oil to lubricate tools and cool parts
A solvent washer for the oily parts

A detergent/hot water parts washer and rinse

A chip and oil separator for recycling the oil

There are several ventilation wall fans in the area but none of the equipment has an exhaust.

Cable Department

Fabrication and assembly of strings and cables for the compound bows and components is done in the Cable Department. Water-soluble release agent, various lubricants, and an adhesive are also used in the cable assembly. There are no exhausts from this department other than an electric oven that is used to heat treat the cables.

Silk Screening

Silk Screening is conducted in the Cable Department. Names and logos are silk screened on to the bows and handles using inks. There are no exhausts from this operating.

Compound Assembly Department

After fabricating and painting, the bow components are assembled in the Compound Assembly Department. Cables, cams, and various small parts are put into bows. The assembled bows are labeled, boxed, stacked on pallets and sent to the warehouse for shipment. Estimated potential annual production is 150,000 compound bows, and 25,000 traditional (composite) bows.

ESCALADE SPORTS
STACKS AND VENTS

Stack ID	Equipment	Comments
Exempt:		
2003-1	Several Drill presses	No Stack - Vents Inside Building
2003-3	3 Wet Tumblers for fiberglass and metal parts	No Stack - Vents Inside Building
2003-4	9 Davenport Screw Machines	No Stack - Vents Inside Building
2003-5	3 Brown & Sharp Screw Machines	No Stack - Vents Inside Building
2003-6	Centifuge Machine for de-oiling metal chips	No Stack - Vents Inside Building
2003-7	Wash /Hot Rinse to clean metal parts	No Stack - Vents Inside Building
2003-8	Mineral Spirits Parts Washer	No Stack - Vents Inside Building
2003-9	Alkaline Parts Washer	No Stack - Vents Inside Building
2013-1	2 Acetone Solar Stills	No Stack - Vents Outside Building
2013-2	Small Grit Blasting Machine	Bag Filter - No Stack - Vents Outside Building
2013-3	6 Wet Tumblers for fiberglass and metal parts	No Stack - Vents Outside Building
2013-4	Silk Screening	No Stack - Vents Inside Building
2013-5	3 Touch up stations	No Stack - Vents Inside Building
2013-6	17 CNC Machines	No Stack - Vents Inside Building
42	Space Heaters	Natural Gas
43	Space Heaters	Natural Gas
44	Space Heaters	Natural Gas
45	Space Heaters	Natural Gas
46	Space Heaters	Natural Gas
47	Space Heaters	Natural Gas
48	Space Heaters	Natural Gas
49	Space Heaters	Natural Gas
50	Space Heaters	Natural Gas
52	Space Heaters	Out of Service
63	Post Cure Oven	Electric
64	Post Cure Oven	Electric
65	Oven in Cable Department	Electric
66	Glass Bow Press Exhaust	Exhaust changed to vent inside of building
70	Welding Exhaust	Maintenance Department
76	F.G. Burn Out Oven	Electric
82	Ransburg Exhaust W	2,600,000 BTU/hr Natural Gas

83	Ransburg Exhaust E	
85	Prep Tank	Pre painting dip tank
87	Ransburg Spray Booth (Electrostatic)	Painting
89	Water Fall Spray Booth	Painting
90	Ransburg Exhaust - No Fan	
91	Paint Mix Room	
113	Hook Oven w/Afterburner	2 burners-500,000 BTU/hr Each Natural Gas
114	Mag Bldg. Dip Tank	Pre painting dip tank
115	Mag Oven N	
116	Mag Oven S	
117	Mag Building Oven	0.809 MM BTU/hr Natural Gas
119	Barrel Storage Heater	200,000 BTU/hr
Venting inside Buildings		
	Cyclone/Baghouse Trad. Bow Sanding	Sanders; No Stack Vents Inside Building
	Cyclone/Baghouse Powder Painting	Powder Painting Spray Booth; No Stack Vents Inside Building
Others:		
204	Dip Process	Exhaust from Film Dip Process

This facility is subject to regulation under: Rule 62-296.320(1)(a), F.A.C. – VOC Emissions; 40 CFR 60 General Provisions; 40 CFR 60.740(b), 60.744(b) and 60.747(b),(c), Subpart VVV; Rule 62-297.310(7)(a)3.F.A.C. and 62-297.620(4)., F.A.C.

The existing facility consists of the following emission unit.

Facility ID No. 0010002	
EU No.	**Emission Unit Description**
001	Archery Manufacturing Facility

FACILITY REGULATORY CLASSIFICATION

- The facility **is not** major source of hazardous air pollutants (HAP).
- The facility **has no** units subject to the acid rain provisions of the Clean Air Act.
- The facility **is not** a Title V major source of air pollution in accordance with Chapter 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.

RELEVANT DOCUMENTS

The documents listed below are the basis of the permit. They are specifically related to this permitting action. These documents are on file with the Department.

FESOP Renewal Application received October 07, 2013

1. Permitting Authority: The permitting authority for this project is the Northeast District Air Program, Florida Department of Environmental Protection (Department). The Northeast District's mailing address is 8800 Baymeadows Way W., Suite 100, Jacksonville, Florida 32256-7590. All documents related to applications for permits to operate an emissions unit shall be submitted to the Northeast District.

2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the North East District Office. The mailing address and phone number of the District Office is: 8800 Baymeadows Way W., Suite 100, Jacksonville, Florida 32256. The Permitting Authority's telephone number is 904/256-1700.

3. Appendices: The following Appendices are attached as part of this permit:

    a. Appendix A. Citation Formats and Glossary of Common Terms;
    b. Appendix B. General Conditions;
    c. Appendix C. Common Conditions;
    d. Appendix D. Common Testing Requirements;
    e. Appendix E. 40 CFR 60 Subpart VVV – Standards of Performance for Polymeric Coating of Supporting Substrates Facilities

4. Applicable Regulations, Forms and Application Procedures: Unless otherwise specified in this permit, the 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, 62-296 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: The permittee shall notify the Compliance Authority upon commencement of construction. 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. A completed **Application for Non Title V Air Permit Renewal** [DEP Form No. 62-210.900(4)] shall be submitted to the Department at least 60 days prior to the expiration date of this operation permit. To properly apply for an operation permit, the permittee shall submit the appropriate application form, processing fee, and compliance test reports as required by this permit.

   [Rules 62-4.055, F.A.C.]

This section of the permit addresses the following emissions unit.

Emissions Unit	Emissions Unit Description
001	Archery Manufacturing Facility
Emissions Points	
01	Main Baghouse # 200 Wooden Bow Production Area
02	Baghouse # 201Fiberglass Production Area

ESSENTIAL POTENTIAL TO EMIT (PTE) PARAMETERS

1. **Hours of Operation:** The hours of operation are not restricted, 24 H/D; 7 D/W; 52 W/Y (8,760 H/Y).

   [Rule 62-210.200(PTE), F.A.C., Definitions- Potential to Emit (PTE)]

EMISSION LIMITATIONS AND PERFORMANCE STANDARDS

2. **Facility-wide Emissions Cap**: The maximum facility-wide emissions rate of each pollutant are limited as listed in the table below and shall not be exceeded without prior Department approval.

ID	Materials	POLLUTANT	Emissions Limit	
			LBS/HR	TPY
EU 001	Materials containing VOC[1] or HAP[2]	VOC	---	49.0[3]
		HAP	---	9.0[4]
		HAPs[6]	---	24.0[5]

[1]VOC - Volatile Organic Compounds
[2]HAP - Hazardous Air Pollutant
[3]Basis: Requested facility cap for total VOCs.
[4]Basis: Requested cap for each HAP.
[5]HAPs - more than one HAP.
[6]Basis: Requested facility cap for total HAPs.

[Rule 62-297.310(7)(a)3.,F.A.C.; Air Permit No:. 0010002-001-AC Applicant request September 24, 2008]

3. **Visible Emissions Baghouses Ept 01 & 02 (200 and 201)**: Visible emissions shall not exceed 5 percent opacity.

   [Air Permit No: 0010002-001-AC Applicant request September 24, 2008]

COMPLIANCE MONITORING AND TESTING REQUIREMENTS

4. **Visible Emissions Testing Frequency**: A visible emissions test shall be conducted every 5 years prior to obtaining a renewed operation permit.

   [Rule 62-297.310(7)(a)3.,F.A.C.; Air Permit No:. 0010002-001-AC]

5. **Test Notification**: The permittee shall notify the air compliance section of this office in writing at least 15 days prior to any required tests. Tests shall be conducted in accordance with the applicable requirements specified in Appendix D (Common Testing Requirements) of this permit.

   [Rule 62-297.310(7)(a)9., F.A.C.]

6. **Test Report Submittal**: Test result reports shall be prepared and submitted in accordance with the requirements specified in Appendix D (Common Testing Requirements) of this permit. Reports of the required compliance tests shall be filed with the air compliance section of this office as soon as practical but no later than 45 days after the last test is completed.

   [Rule 62-297.310(8)(b), F.A.C.]

7. **Test Method (VE):** The test method for visible emissions shall be shall be EPA Method 9, incorporated and adopted by reference in Chapter 62-297, F.A.C. The test shall be conducted by an observer certified in accordance with the requirements of Rule 62-297.320, F.A.C. – Standards for Persons Engaged in Visible Emissions Observations (specified in Subsection D). The above method is described in Appendix A of 40 CFR 60 and are adopted by reference in Rule 62-204.800, F.A.C.

   [Air Permit No: 0010002-007-AF]

8. **Testing Duration**: the required minimum period of observation for a compliance test shall be thirty (30) minutes (6 minute average opacity values).

   [Air Permit No: 0010002-001-AC Rule 62-297.310(4)(a)2, F.A.C.]

9. **Subpart VVV Monitoring:**
   - Make semiannual estimates of the projected annual amount of VOC to be used for the manufacture of polymeric coated substrate at the affected coating operation in that year.
   - Maintain records of actual VOC use.

   [40 CFR 60, Subpart VVV, Section 60.744(b)(1) and (2)]

10. **Annual Operating Report**: The Permittee shall complete and submit the Annual Operating Report for Air Pollutant Emitting Facility (DEP Form No. 62-210.900(5)) each year to the NED air program office by April 1 of the following year. Emissions shall be computed in accordance with Specific Condition 2.

    If the report is submitted using the Department's electronic annual operating report software, there is no requirement to submit a copy to the NED local air program office.

    [Rule 62-210.370(3)(a)2., and (c), F. A.C.]