



August 17, 2017

Via Email Only to: dwheiskell@gmail.com

Dan Heiskell
Director of Manufacturing
Advanced Fishing Machines, LLC
727 West Industrial Park Road
Flippin, AR 72634

RE: Application for Registration
AFIN: 45-00251 Registration No.: 2388-A-REG315

Dear Mr. Heiskell:

The Department has reviewed your facility's application for registration for the facility located at 727 West Industrial Park Road, Flippin in Marion County, Arkansas.

The Department has determined that the information certified in the application fulfills the required criteria for registration as specified in Arkansas Air Pollution Control Code (Regulation 18), Section 18.315 and other applicable regulations. Your registration number has been assigned as 2388-A-REG315.

This registration is your authority to construct, operate, and maintain the equipment and/or control apparatus as set forth in your registration request received on August 3, 2017. Advanced Fishing Machines, LLC is required to update this registration should the facility operations or emissions change so that the current registration no longer reflects actual operations.

Please maintain a copy of this letter and the application at the facility.

Sincerely,

Thomas Rheaume, P.E.
Senior Operations Manager
Office of Air Quality

c: Compliance Monitoring

Attachment: Registration Application

ADEQ

Arkansas Department of Environmental Quality

Air Application

for

Registrations,

Minor Source Permits,

or Title V Permits

Form Last Revised June 27, 2017

Warning: Electronically combining pdf files may result in data being overwritten.

Required fields are denoted with an asterisk (*). Additional instructions for completing this form may be found at:

https://portal.adeq.state.ar.us/webfiles/Air/Instructions/air_permit_application_forms_instructions.htm

1. ADEQ Facility Identification Number (AFIN): _____

Section I Applicant Information

Facility Information

Please provide the following information about the Facility.

2. Legal Name - Facility Name:*

Advanced Fishing Machines, LLC.

3. Please provide the North American Industry Classification System (NAICS) codes and descriptions for your facility. (www.census.gov/eos/www/naics/)

(a) Primary NAICS Code and Description:*

336612 Boat Building

(b) Secondary NAICS Code and Description:

336214 Travel Trailer and Camper Manufacturing

(c) Tertiary NAICS Code and Description:

N/A

4. Facility Physical Address

Physical Address:

Street Address or Location (if a street address is not available, please provide directions):*

727 West Industrial Park Road

City:* Flippin Postal Code:* 72634

County:* Marion

Facility Physical Location Latitude and Longitude

Please use the NAD 83 Latitude/Longitude Coordinates. Latitude and Longitude coordinates must be entered in decimal degrees, using a negative value for the longitude (ex. 42.922846, -75.602681).

5. Latitude: * 36.277416 Longitude: * -92.61222

6. Facility Mailing Address

Mailing Contact:

Prefix: Mr. First Name:*Dan Last Name:*Heiskell

Title: Director or Manufacturing

Company Name: Advanced Fishing Machines, LLC.

Phone:* (870) 404-3232 Ext: _____ Fax: _____

Email:* dwheiskell@gmail.com

Mailing Address:

Address Line 1:* 727 West Industrial Park Road

Address Line 2: _____

City:* Flippin Postal Code:* 72634

State:* Arkansas Country:* USA

Billing Information

Please provide the following information for the Billing contact for this application.

NOTE: The Facility Mailing Contact and Address will be used for the Billing Information unless another contact and address are provided below.

7. Billing Information

Billing Contact:

Prefix: Mr. First Name: Dan Last Name: Heiskell

Title: Director of Manufacturing

Company Name: Advanced Fishing Machines, LLC.

Phone: (870) 404-3232 Ext: _____ Fax: _____

Email: dwheiskell@gmail.com

Billing Address:

Address Line 1: 727 West Industrial Park Road

Address Line 2: _____

City: Flippin Postal Code: 72634

State: Arkansas Country: USA

Organizational Information

Please provide the following information for the applicant. If the applicant is a Corporation, Limited Liability Company, or Limited Partnership; your legal name must exactly match the name registered with the Arkansas Secretary of State. The Secretary of State information is not required for Administrative Amendments.

All Corporations, Limited Liability Companies (LLC), and Limited Partnerships (LP, LLP, and LLLP) must be registered and in good standing with the Arkansas Secretary of State and the state of origin (if other than Arkansas).

Follow the link to view the Secretary of State name listing:

http://www.sos.arkansas.gov/corps/search_all.php

8. Legal Organization:*

- Local Government (includes city, county, PID, SWD, SID and school district)
- State Government
- Federal Government
- Solely Owned Proprietorship (includes individual and individual d/b/a company)
- General Partnership (names of partners are required on the Disclosure Statement)
- Limited Partnership (includes LP, LLP, LLLP)
- Limited Liability Company
- Corporation (Domestic or Foreign, includes for-profit, nonprofit, and corporation d/b/a company)
- Cooperative

9. Secretary of State's Filing Number: 811118595

10. If the applicant is registered with the Arkansas Secretary of State, indicate if it is domestic (Arkansas) or foreign (chartered outside of Arkansas).

- Domestic Foreign

11. Attach the Current Proof of Good Standing from the State of Origin (If Not Arkansas)

If foreign (chartered outside of Arkansas), attach proof of current Good Standing from the State of Origin. This can be a current Certificate of Good Standing or other proof such as a currently dated webpage status listing from the State of Origin. The proof is not required for Administrative Amendments.

Proof of Good Standing: Attached Not applicable

Disclosure Statement or Securities and Exchange Commission (SEC) Reports (Required for Initial Permits, Renewals, and any time the Disclosure Statement has Changed)

Arkansas Code Annotated § 8-1-106 requires that all applicants for the issuance or transfer of any permit submit a disclosure statement with their applications. Some exceptions apply (refer to the form for details). The disclosure form is a separate form and can be obtained by using the link below:

https://www.adeg.state.ar.us/ADEQ_Disclosure_Statement.pdf

12. Attach the Disclosure Statement or SEC Annual and Quarterly Reports

For publicly held companies, attach the most recent annual and quarterly Securities and Exchange Commission reports. Other entities, attach the up-to-date disclosure statement. If exempt from submitting either, indicate this and your reason for exemption in the box below.

Disclosure Statement/Reports: Attached Not applicable

Reasons for Exemption:

N/A

13. Responsible Official Information

Provide the information below for the person under whose signature this form will be certified and submitted when completed. This person must be a responsible official. "Responsible Official" is defined on page 20 of this form.

(a) Name of Responsible Official Submitting this Application:*

Dan Heiskell

(b) Title:* Director of Manufacturing

(c) Company:* Advanced Fishing Machines, LLC.

14. Attach the Delegation of Authority Letter

If the Responsible Official has been delegated that authority, attach a copy of the delegation of authority letter. By regulation the letter should be submitted and approved before completing this application.

Delegation of Authority: Attached Not applicable

Section II

General Information

Application Type, Current Registrations or Air Permits, and Changes

Indicate below if this application is for a Registration, Minor Source air permit, or a Title V/Major Source air permit; the type of application; list any active registration or air permit numbers; and clearly and concisely indicate the changes associated with this application.

15. Select the Type of Permit:*

- Registration Minor Source Permit Title V/Major Source Permit

16. Select the Type of Permit Application or Registration:*

- Initial (New) Permit (Includes changes between Minor, Title V, Registrations, and General Permit types)
- Renewal of Existing Permit (Title V Permits Only)
- Significant Modification
- Minor Modifications (Title V Permits Only)
- DeMinimis (Minor Source Permits Only)
- Administrative Amendment
- Initial (New) Registration (Includes changes from Minor, Title V, and General Permit types)
- Registration Modification

17. List All Changes and Revised Sources Associated with this Application or indicate "None":*

Specifically identify all changes requested in this application in the paragraph box below. Identify any physical modifications, including increases in the amount or type of throughputs, fuel use, control equipment, or other factors affecting emissions. Also, specifically identify any other requested changes to the permit or permit conditions, including but not limited to recordkeeping requirements, testing, monitoring, etc. Because of the complexity of permits, any changes not listed in the paragraph box below may not be reviewed or incorporated into the draft permit.

Request for new Registration. Facility not constructed as of filing. All sources impacted.

17. List All Changes and Revised Sources Associated with this Application *(continued)*:

N/A

18. List Current Active Registration or Air Permit Number for the Facility (If Applicable):

N/A

Dates of Construction/Reconstruction

19. If the facility is a new facility or the modifications to the facility involve construction of new emission units or reconstruction, enter the proposed construction or reconstruction and operation dates. If a modification does not involve construction of new emission units or reconstruction, do not enter any dates. [Note: Permits are generally required before any construction may commence. Contact the Office of Air Quality for more information and exceptions.]

(a) Expected Date of Commencement of Construction or Reconstruction: Upon submittal of Registration

(b) Expected Date of Completion of Construction or Reconstruction: 1 Mar 2018

(c) Expected Date of Operation: 1 Apr 2018

Air Application Contact Information

In many cases, the person who prepared and is most knowledgeable about the application is someone other than the person who signed the application. Information in this section should allow the Office of Air Quality to contact this person. If this section is blank and the Office of Air Quality requires additional information, we will contact the person listed as the facility mailing address contact.

20. Air Application Contact Information

Air Application Contact:

Prefix: Mr First Name: Jeff Last Name: Haynes

Title: Engineer

Company Name: ECCI

Phone: (501)975-8100 Ext: _____ Fax: _____

Email: jhaynes@eccci.com

Air Application Contact Address:

Address Line 1 727 West Industrial Park Road

Address Line 2: _____

City: Flippin Postal Code: 72634

State: Arkansas Country: USA

Section III

Registration Information

Complete this section ONLY if applying for a Registration.

Total Actual Emissions (Required for Registrations)

21. Enter the total actual emissions from the facility:

(a) PM (tons per year)	0.42
(b) PM ₁₀ (tons per year)	0.42
(c) SO ₂ (tons per year)	0.10
(d) VOC (tons per year)	12.91
(e) CO (tons per year)	3.91
(f) NO _x (tons per year)	4.66
(g) Lead (tons per year)	0.0001
(h) Single Hazardous Air Pollutant (tons per year)	1.32
(i) Total Hazardous Air Pollutants (tons per year)	2.77
(j) Air Contaminants (tons per year)	2.21

Section IV

Title V Information

Complete this section ONLY if applying for a Title V (Major Source) Initial Permit, Title V Modification, Title V Minor Modification, or Title V Renewal.

<p>Neighboring States 22. If the facility location is within fifty miles of a neighboring state, select the applicable states.</p>	<p><input type="checkbox"/> Kansas <input type="checkbox"/> Kentucky <input type="checkbox"/> Louisiana <input type="checkbox"/> Mississippi <input type="checkbox"/> Missouri <input type="checkbox"/> Oklahoma <input type="checkbox"/> Tennessee <input type="checkbox"/> Texas</p>
<p>Compliance Plan and Schedule 23. Compliance Plan and Schedule When you submit this application you will be required to certify that the facility is in compliance or that a compliance schedule is attached. A compliance plan and schedule that meets the requirements of Reg.26.402(B)(8) and (9) is required for all facilities not in compliance with all requirements.</p>	<p><input type="radio"/> Attached <input type="radio"/> Facility is in Compliance</p>
<p>Compliance Assurance Monitoring Plan 24. If any source is subject to the Compliance Assurance Monitoring (CAM) provisions of 40 C.F.R. § 64, attach the CAM plan. Additional information regarding CAM may be found at: https://eportal.adeq.state.ar.us/webfiles/Air/Instructions/Air_Permit_Application_Forms_Instructions.htm#CAM</p>	<p><input type="radio"/> Attached <input type="radio"/> Not applicable</p>
<p>§ 112(g) Applicability - Case by Case MACT Determination</p>	
<p>25. Indicate if the facility will engage in construction or reconstruction that will require a § 112(g) application and attach the § 112(g) application if applicable.</p>	
<p>(a) Will the facility engage in construction or reconstruction that will require a § 112(g) application?</p>	<p><input type="radio"/> Yes <input type="radio"/> No</p>
<p>(b) § 112(g) Application</p>	<p><input type="radio"/> Attached <input type="radio"/> Not applicable</p>
<p>Title VI Applicability (Ozone Depleting Chemicals)</p>	
<p>26. Facilities that deal with ozone depleting chemicals will have additional requirements added to their permit. The items below determine Title VI applicability. Select “yes” or “no” for each item. For the second item, if the refrigeration charge of the unit is unknown, contact the equipment manufacturer or a vendor to obtain this information.</p>	
<p>(a) Does the facility have any air conditioners or refrigeration equipment that uses CFCs, HCFs or other ozone depleting substances?</p>	<p><input type="radio"/> Yes <input checked="" type="radio"/> No</p>

Title VI Applicability (Ozone Depleting Chemicals) (continued)	
(b) Does the air conditioner or refrigeration equipment contain a refrigeration charge greater than 50 pounds per unit? In general, household size refrigerators and air conditioners will have a charge of less than 50 pounds per unit.	<input type="radio"/> Yes <input type="radio"/> No
(c) Do facility personnel maintain, service, repair or dispose of any motor vehicle air conditioners or appliances (as defined in 40 C.F.R. § 82.152)?	<input type="radio"/> Yes <input type="radio"/> No
Accidental Release Applicability	
27. Indicate if the facility is subject to the Accidental Release Prevention requirements of § 112 (r) of the Clean Air Act.	
(a) Is the facility subject to the Accidental Release Prevention requirements of § 112(r) of the Clean Air Act?	<input type="radio"/> Yes <input type="radio"/> No
(b) If yes, is the facility in compliance with the § 112(r) requirements?	<input type="radio"/> Yes <input type="radio"/> No
(c) If the facility is not in compliance, attach a § 112(r) compliance plan.	<input type="radio"/> Attached <input type="radio"/> Not applicable
Acid Rain	
28. If the facility is subject to the Acid Rain provisions, make sure the current permit has the up-to-date applications and plans attached.	
(a) Are the latest Acid Rain Permit Application, Phase II NO _x Compliance Plan, and Phase II NO _x Averaging Plan (if applicable) attached to the current permit?	<input type="radio"/> Yes <input type="radio"/> No
(b) If “no” to the previous question, attach the latest version.	<input type="radio"/> Attached <input type="radio"/> Not applicable
Cross-State Air Pollution Rule/Transport Rule	
29. If the facility is subject to the Cross-State Air Pollution Rule/Transport Rule, make sure the current permit has the up-to-date Description of TR Monitoring Provisions Table attached. A copy of the form can be obtained at: https://eportal.adeg.state.ar.us/webfiles/Air/Forms/Transport_Rule	
(a) Is the latest Description of TR Monitoring Provisions Table attached to the current permit?	<input type="radio"/> Yes <input type="radio"/> No
(b) If “no” to the previous question, attach the latest version.	<input type="radio"/> Attached <input type="radio"/> Not applicable

Section V Prevention of Significant Deterioration (PSD) Information

Indicate the applicability of PSD and provide any required information for PSD review.

<p>PSD Applicability Indicate if the facility will engage in construction, reconstruction, or modification requiring a Prevention of Significant Deterioration (PSD) permit. 30. Will the facility engage in construction, reconstruction, or modification that will require PSD review?*</p>	<p><input type="radio"/> Yes <input checked="" type="radio"/> No</p>
<p>PSD Analyses (Required for PSD Applications) If this application requires PSD review, submit the following information.</p>	
<p>31. Completed Request for Applicability of Class I Area Modeling Analysis Form A copy of this form may be obtained at: https://eportal.adeg.state.ar.us/webfiles/Air/Forms/PSD_Modeling</p>	<p><input type="radio"/> Attached <input checked="" type="radio"/> Not applicable</p>
<p>32. BACT Analysis</p>	<p><input type="radio"/> Attached <input checked="" type="radio"/> Not applicable</p>
<p>33. Other PSD Analyses</p>	<p><input type="radio"/> Attached <input checked="" type="radio"/> Not applicable</p>

Section VI Applicable Federal Regulations

Please identify all 40 C.F.R. §§ 60, 61, and 63 federal regulations that are applicable to this facility. For additional Applicable Federal Regulations please repeat this page.

* Required for All Applications Except Administrative Amendments

34. Identify Each and Every Federal Regulation, 40 C.F.R. § 60 NSPS or 40 C.F.R. §§ 61 or 63 NESHAP, to which the facility is subject; including new or existing sources. List each federal regulation in separate line items or indicate "None". Also, identify whether the indicated federal regulation is applicable only to specific sources or facility-wide. If only to specific sources, identify which source numbers. If the source(s) listed are new or modified, if the subpart is newly applicable, or if this is a renewal application, attach a detailed list of the applicable provisions of the subpart. A copy of the subpart with the applicable sections highlighted or otherwise indicated is preferred.

Applicable Federal Regulation	Affected Sources	Applicable Provisions
NSPS JJJJ	Natural Gas-Emergency Generator, >25 HP<130HP	<input checked="" type="radio"/> Attached <input type="radio"/> Not applicable
		<input type="radio"/> Attached <input type="radio"/> Not applicable
		<input type="radio"/> Attached <input type="radio"/> Not applicable
		<input type="radio"/> Attached <input type="radio"/> Not applicable
		<input type="radio"/> Attached <input type="radio"/> Not applicable
		<input type="radio"/> Attached <input type="radio"/> Not applicable
		<input type="radio"/> Attached <input type="radio"/> Not applicable
		<input type="radio"/> Attached <input type="radio"/> Not applicable
		<input type="radio"/> Attached <input type="radio"/> Not applicable
		<input type="radio"/> Attached <input type="radio"/> Not applicable

Section VII

Process Information

<p>Process Description (Required for All Applications Except Administrative Amendments)</p> <p>35. Process Description</p> <p>A written description of the process by NAICS number must accompany each application. This must include a description of each relevant piece of equipment and process. The description must be in sufficient detail to provide the permit engineer an understanding of the process. The applicant should place special emphasis on any process or equipment with the potential to emit any pollutants to the atmosphere. The process description should describe material flow between processes (if any) and the source (SN) to which each process is vented should be identified in the narrative. The applicant should describe any work practice standards used to control emissions.</p>	<p><input checked="" type="radio"/> Attached</p> <p><input type="radio"/> Not applicable</p>
<p>Process Flow Diagram (Required for All Applications Except Administrative Amendments)</p> <p>36. Process Flow Diagram</p> <p>The process flow diagram must be in sufficient detail to understand the general process. The process flow diagram must clearly identify all relevant processes or pieces of equipment. All points where raw materials and/or chemicals are introduced into the process and all points where intermediate and/or finished products are removed from the process must be clearly identified with quantities of materials shown. The process flow diagram should show material flow between processes (if any) and the applicant should identify the source number (SN) on the diagram.</p>	<p><input checked="" type="radio"/> Attached</p> <p><input type="radio"/> Not applicable</p>

Operating Scenarios (If Any)

*Required for All Applications Except Registrations and Administrative Amendments

Describe in the paragraph box below all alternate operating scenarios the applicant desires for this facility or indicate "none". Submit a complete set of attachments (i.e. process flow diagrams, process description, emission calculations, emission rate tables, etc.) for each desired operating scenario. Note: The permittee may implement any alternative operating scenarios allowed by the permit without incurring a permit modification, thus minimizing delays in production. The permit will allow only those operating scenarios specifically described in the application. Alternate operating scenarios may include the desire to permit two fuels, such as natural gas and No. 2 fuel oil, for a boiler or it may involve the option to produce product X or product Y from the same manufacturing line.

37. Describe the Alternate Operating Scenarios:

N/A

Section VIII

Site Information

<p>Plot Plan (Required for Initial Permits, Renewals, New Equipment, or Moved Equipment) 38. Plot Plan Attach the plot plan that shows the property to scale, indicates the location of the property boundaries with the applicable scale, the location of all sources of any air pollutants (identified by source number), true north direction, and any other information deemed relevant by the applicant.</p>	<p><input type="radio"/> Attached <input checked="" type="radio"/> Not applicable</p>
<p>USGS Area Map (Required for Initial Permits, Renewals, and Modifications Involving New Property) 39. USGS Area Map Attach one U.S. Geological Survey topographic map (7.5-minute series) with the location of the facility indicated.</p>	<p><input type="radio"/> Attached <input checked="" type="radio"/> Not applicable</p>
<p>Property Description (Required for Initial Permits and Renewals) 40. Description of the Property</p>	<p><input type="radio"/> Attached <input checked="" type="radio"/> Not applicable</p>

Section IX

Emission Information

For any new source, modified source, or source affected by this application; provide the information in Items #41 through #44. New/Initial Permit applications and Renewal applications will need to provide this information for the entire facility.

<p>Emission Calculations (Required for All Applications Except Administrative Amendments if No Changes to Emissions) 41. Emission Calculations Provide detailed calculations for the emissions of the pollutants. The calculations must contain a detailed explanation of the source of the emission estimation. Please retain all sources in the emission calculations. While calculations are required for revised sources, calculations for all sources at the facility are preferred. Any calculations included in a spreadsheet format must also include a detailed sample calculation. Additional instructions for the emission calculations may be found at: https://eportal.adeq.state.ar.us/webfiles/Air/Instructions/Emission_Calc_Tips.pdf</p>	<p><input checked="" type="radio"/> Attached <input type="radio"/> Not applicable</p>
<p>Emission Rate Tables (Required for All Applications except Administrative Amendments and Registrations) 42. Completed Emission Rate Tables The applicant must complete an Emission Rate Table form for each significant (i.e., not an insignificant activity) air pollutant emission source located at a facility. An emission source is any point at a facility which emits, or is capable of emitting, an air contaminant into the atmosphere. The definition of an air contaminant is any emission except water vapor, oxygen, or nitrogen. Complete a separate emission rate table for each proposed operating scenario, using the same source number for each emission source. Download the emission rate table form at: https://eportal.adeq.state.ar.us/webfiles/Air/Forms/ERT</p>	<p><input type="radio"/> Attached <input checked="" type="radio"/> Not applicable</p>

<p>HAP Emission Rate Tables (Required for All Applications except Administrative Amendments and Registrations)</p> <p>43. Completed HAP Emission Rate Tables The applicant must complete a Hazardous Air Pollutant (HAP) Emission Rate Table form for each emission source capable of emitting a significant quantity of HAPs. The applicant must complete a separate HAP Emission Rate Table for each emission source. Some listed HAPs are general names for groups of compounds. In such case, list the actual emitted compound. Download the HAP emission rate table form at: https://eportal.adeq.state.ar.us/webfiles/Air/Forms/HAP_ERT</p>	<p><input type="radio"/> Attached</p> <p><input checked="" type="radio"/> Not applicable</p>
<p>Insignificant Activities (Required for All Applications Except for Registrations and Modification Applications that Do Not Involve the Insignificant Activities List)</p> <p>44. Completed Insignificant Activities Form and Calculations (If Applicable) Insignificant activities are sources that emit pollutants but need not be included as specific sources in the permit with specific conditions. There are two types, Group A and Group B insignificant activities. These can be found in Regulation 18 or 19 (identical). Group A activities are required to be included in the permit application and are evaluated by the Department. These will appear in a final permit as a list of Insignificant Activities. Activities listed in Appendix B of these regulations do not generally need to be quantified or included in permit applications. Group A Insignificant Activities cannot have any federal requirements, require any recordkeeping or in general have conditions that need to be tracked. The entire source must be insignificant, i.e. you cannot have part of a source's emissions insignificant and another part subject to permitting. Attach completed forms for the insignificant activities type at your facility and attach calculations for categories that have a maximum emission rate limit. For the insignificant activities categories that have a maximum emission rate limit, the total sum cannot exceed the maximum emission rate. Download the insignificant activities form at: https://eportal.adeq.state.ar.us/webfiles/Air/Forms/Insignificant_Activity</p>	<p><input type="radio"/> Attached</p> <p><input checked="" type="radio"/> Not applicable</p>

Section X

Equipment Forms

New/Initial Permit applications and Renewal applications will need to provide the following information for the entire facility.

Internal Combustion Engine Summary 45. Completed Internal Combustion Engine Summary Forms If you have any new or modified internal combustion engines at your facility, attach the completed Internal Combustion Engine Summary Form. A copy of this form may be found at: https://eportal.adeq.state.ar.us/webfiles/Air/Forms/Engine	<input checked="" type="radio"/> Attached <input type="radio"/> Not applicable
Control Equipment Operating Parameters (Required for All Applications Except Registrations and Administrative Amendments) 46. Completed Control Equipment Operating Parameters Forms If you have any new or modified control equipment, attach the completed Control Equipment Operating Parameters Forms. A copy of this form may be found at: https://eportal.adeq.state.ar.us/webfiles/Air/Forms/Control_Equipment	<input type="radio"/> Attached <input checked="" type="radio"/> Not applicable
Storage Tank Summary 47. Completed Storage Tank Summary Forms Complete the Storage Tank Information Form for all new or modified storage tanks emitting regulated pollutants that are not Insignificant Activities. A copy of this form may be found at: https://eportal.adeq.state.ar.us/webfiles/Air/Forms/Storage_Tank	<input type="radio"/> Attached <input checked="" type="radio"/> Not applicable
Equipment Specifications (Required for All Applications Except Administrative Amendments and Modifications that Do Not Involve New Construction or Do Not Change the Manner in which the Current Process Operates) 48. Equipment Specifications Include engineering drawings, operating parameters, manufacturer's specifications, and other information as requested for each new or modified piece of equipment directly related to the emission of pollutants to the atmosphere. It is not necessary to submit specifications for equipment not relevant to air pollution.	<input checked="" type="radio"/> Attached <input type="radio"/> Not applicable

Section XI

Additional Information

Provide the below additional information as related to this permitting action, where applicable. This is not required for Registrations and Administrative Amendments. New/Initial Permit and Renewal applications will need to provide this information for the entire facility.

Continuous Emissions Monitoring Systems and Testing

List all Continuous Emissions Monitoring Systems (CEMS) currently used for determining compliance with regulatory requirements. Additionally, list all existing periodic testing requirements currently used or proposed for determining compliance with regulatory requirements (for example, EPA Method 7E to be used for testing NO_x emissions annually). This list should contain the appropriate source number for which the CEMS and/or periodic testing requirements pertain, the pollutant(s) for which the requirement is applicable, the required testing frequency or reporting frequency, and any other relevant information.

49. List the Continuous Emissions Monitoring Systems and Testing:

N/A

Suggested Specific Conditions 50. Suggested Specific Conditions If you have any specific conditions that you would like to propose, attach them.	<input type="radio"/> Attached <input checked="" type="radio"/> Not applicable
Other Information 51. Other Information If you have any other information that you would like to submit for review, attach it.	<input type="radio"/> Attached <input checked="" type="radio"/> Not applicable

Section XII Certification of Application

COMPLETE FOR ALL REGISTRATIONS AND APPLICATIONS

“Responsible Official” means one of the following:

- 1) For a corporation: a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:
 - (i) the facilities employ more than 250 persons or have gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars); or
 - (ii) the delegation of authority to such representative is approved in advance by the permitting authority (a copy of this delegation of authority must be attached);
- (2) For a partnership or sole proprietorship: a general partner or the proprietor, respectively;
- (3) For a municipality, State, Federal, or other public agency: either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a Federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of EPA).

I certify under penalty of law that this application and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Dan Heiskell	Director of Manufacturing
typed/printed name of responsible official	title
Signature of responsible official (A copy of any delegation of authority must be attached)	Date
Jeff Haynes	ECCI
Typed/printed name of person preparing application	Firm or company
13000 Cantrell Road, Little Rock, AR 72223	501-975-8100
Address of preparer’s firm	Telephone number (including area code)

Section XIII

Certification of Compliance

REQUIRED FOR ALL TITLE V/MAJOR SOURCE PERMIT APPLICATIONS ONLY

“Responsible official” means one of the following:

- 1) For a corporation: a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:
 - (i) the facilities employ more than 250 persons or have gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars); or
 - (ii) the delegation of authority to such representative is approved in advance by the permitting authority (a copy of this delegation of authority must be attached);
- (2) For a partnership or sole proprietorship: a general partner or the proprietor, respectively;
- (3) For a municipality, State, Federal, or other public agency: either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a Federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of EPA).

The methods used for determining compliance, including a description of monitoring, recordkeeping, and reporting requirements and test methods, are attached to this form. A schedule for submission of compliance certifications during the permit term (no less frequently than annually) is attached. These attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Check One

- I certify that this facility is in compliance with all applicable requirements, including any applicable enhanced monitoring and compliance certification requirements and will continue to comply with such requirements. For applicable requirements that will become effective during the permit term, the source will meet such requirements on a timely basis.
- Attached is a compliance plan and compliance schedule that meets the requirements of Regulation 26.402(B)(8) and (9).

Typed/printed name of responsible official

Title

Signature of responsible official

Date

(A copy of any delegation of authority must be attached)

Section XIV Certification of Minor Modification
REQUIRED FOR TITLE V/MAJOR SOURCE MINOR MODIFICATION
PERMIT APPLICATIONS ONLY

“Responsible official” means one of the following:

- 1) For a corporation: a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:
 - (i) the facilities employ more than 250 persons or have gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars); or
 - (ii) the delegation of authority to such representative is approved in advance by the permitting authority (a copy of this delegation of authority must be attached);
- (2) For a partnership or sole proprietorship: a general partner or the proprietor, respectively;
- (3) For a municipality, State, Federal, or other public agency: either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a Federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of EPA).

I certify that this proposed modification meets the criteria for use of minor permit modification procedures and further request that such procedures be used. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

 Typed/printed name of responsible official

 Title

 Signature of responsible official

 Date

(A copy of any delegation of authority must be attached)

AIR REGISTRATION (REGULATION 18.315) APPLICATION

**Advanced Fishing Machines, LLC
727 West Industrial Park Road
Flippin, Arkansas 72634**

JULY 2017

Prepared by:



13000 Cantrell Road
Little Rock, Arkansas 72223
Telephone (501) 975-8100 • Facsimile (501) 975-6789



TABLE OF CONTENTS

COVERLETTER

1.0	APPLICABLE FEDERAL REGULATIONS	2
2.0	EMISSIONS CALCULATIONS	5
3.0	PROCESS FLOW DIAGRAM	16
4.0	PROCESS DESCRIPTION.....	18
5.0	INTERNAL COMBUSTION ENGINE SUMMARY FORM.....	23
6.0	EQUIPMENT SPECIFICATIONS	19
7.0	DISCLOSURE STATEMENT	22
8.0	CERTIFICATE OF GOOD STANDING	31



13000 Cantrell Road • Little Rock, Arkansas 72223 • Phone 501.975.8100 • Fax 501.975 6789 • www.ecci.com

June 25, 2016

Arkansas Department of Environmental Quality
Attention: Air Division
5301 Northshore Drive
North Little Rock, Arkansas 72118-5317

Subject: **Air Registration Application**
 Advanced Fishing Machines, LLC
 Flippin, Arkansas
Re: AFIN: not assigned

Dear Sir / Ma'am:

Advanced Fishing Machines, LLC, (AFM), plans to construct and operate a recreational metal boat manufacturing facility in Flippin, Arkansas that will operate below Minor Source permitted thresholds.

Please find enclosed one (1) Arkansas Department of Environmental Quality (ADEQ) Air Registration Application package with supporting documentation.

If you have any questions, or require any additional information please feel free to contact either Mr. Dan Heiskell of Advanced Fishing Machines, LLC, at (870) 404-3232, or me at (501) 975-8100. Thank you for your consideration of the enclosed.

Sincerely,
ECCI

A handwritten signature in black ink, appearing to read "J. Haynes", written in a cursive style.

Jeff Haynes, MS, REM, CSEM
Environmental Scientist

pc: Mr. Dan Heiskell – Advanced Fishing Machines, LLC

1.0 APPLICABLE FEDERAL REGULATIONS

New Source Performance Standards (NSPS) - 40 CFR Part 60

The federal NSPS regulations contained in 40 CFR Part 60 applies to certain categories of new, reconstructed and modified stationary sources of air pollution. The standards set emission limits for specific pollutants for each emission source category. ADEQ has been authorized to administer certain NSPS subparts. The NSPS regulations were reviewed to determine applicability relative to the facility.

Subpart JJJJ – Standards of Performance for Stationary Spark Ignition Internal Combustion Engines

Determination: The facility proposes to install and operation a natural gas fired reciprocal internal combustion engine (RICE) as part of a backup electrical generator system, with a construction date after 2013 and with a horsepower (hp) rating greater than 25 hp, but less than 130 hp. This genset will be subject to the following provisions NSPS JJJJ.

- 60.4234
- 60.4243 (a)(1), (a)(2), (d), (e)
- 60.4245 (a)(1)
- 60.4245 (a)(2)

National Emission Standards for Hazardous Air Pollutants (NESHAP) - 40 CFR Parts 61 and 63 and Section 112 of the Federal Clean Air Act

The federal NESHAP regulations, 40 CFR Parts 61 and 63, apply to certain categories of stationary sources both new and existing, that emit air pollutants designated as hazardous under Section 112 (Title III) of the federal CAA. 40 CFR Part 61 is the existing NESHAP regulation; 40 CFR Part 63 includes the Maxi-

imum Achievable Control Technology (MACT) standards; and Section 112 of the CAA pertains to the promulgation of the list of regulated HAPs.

Based on the estimated emissions from the AFM facility falling below Major Source thresholds, thus designating the facility as an Area Source of HAP emissions the following NESHAP Rules were considered:

NESHAP XXXXXX – Area Source Standards for Nine Metal Fabrication and Finishing Source Categories

It was determined that the facility will not be primarily engaged in manufacturing or fabricating a product listed in one of the nine metal fabrication and finishing categories regulated by the rule, where this production represents at least 50% of the production at the facility, and is therefore not subject to the rule.

NESHAP ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

It was determined that since the facility plans to purchase new, or recently constructed, support equipment the rule will not apply (note: See NSPS)

Prevention of Significant Deterioration

According to the federal Prevention of Significant Deterioration (PSD) requirements of 40 CFR 52.21, all major new or modified sources of air emissions regulated under the 1997 CAAA and located in an attainment area, must be reviewed and approved by the EPA or by the state agency, but only if PSD review authority has been granted to a particular state. In general, a facility is defined as a “major stationary source” and thus, subject to a PSD review of its emissions of any criteria pollutant (i.e., particulate matter, carbon monoxide, nitrogen oxides, sulfur dioxides, VOCs and lead): 1) exceed 100 tpy, if the source is included in any of the 28 named Source Categories specified in 40 CFR 52.21;

or 2) exceed 250 tpy, if the source is not included in any of the aforementioned named source categories.

AFM will be registered below Minor Source thresholds, which is below the 250 tpy “major stationary threshold” trigger level. Thus, AFM is not considered a PSD “major stationary source.”

Protection of Stratospheric Ozone

40 CFR 82 imposes limits on the production and consumption of certain ozone depleting substances related to the manufacture and maintenance of these substances. AFM will use air conditioning systems that contain these substances, but will not manufacture or service such systems, and will not therefore be subject to the rule.

Compliance Assurance Monitoring Program - 40 CFR Parts 51, 52, 60, 61 and 64

The Compliance Assurance Monitoring is intended to establish procedures at Title V sources for control equipment that will demonstrate continuous compliance with applicable emission standards. AFM will not employ equipment, or processes subject to the rule.

2.0 EMISSIONS CALCULATIONS

2.1 Coatings, Solvents, and Cleaners

The boat and trailer manufacturing operations consume various raw materials that generate emissions that can effectively be estimated using simple mass-balance equations based on raw-materials throughput, and assuming 100% evaporation of the volatile component (if not otherwise adjusted using accepted emissions factors). The information below is provided on a plant-wide basis assuming a maximum annual boat and trailer production rate of four (4) units per day and 1200 units per year. Emissions estimates that incorporate emissions factors are footnoted for clarity.

Table with columns for PAI Number, Material Name, VOC, and various chemical emissions (Acetone, MEK, MDI, Hexamethylenediacetate, etc.). Includes a summary table at the bottom right with rows for Registration Threshold, Minor Source Threshold, and Reg. Threshold for various pollutants.

The information below is provided as clarity for the emissions factors employed in the Coatings, Solvents, and Cleaners calculations.

Trailer Coating - Polymer (MDI Emissions)

(Note: Trailer Coating - Polymer (MDI Emissions) are accounted for in Plantwide Coatings, Solvents, and Cleaner Emissions above, however, considered individually, these emissions would be considered "Insignificant")

The trailer coatings process involves the usage of a polymer mixture coating which includes diphenylmethane-4,4-diisocyanate (MDI). Calculations are supported by the Alliance for the Polyurethanes Industry (API), in their publication titled "MDI/Polymeric MDI Emissions Reporting Guidelines For the Polyurethane Industry" copyright 1999 (May 2012). The facility plans to achieve a production rate of four (4) trailers coated per day.

$$W = (25.4) \times (P_{\text{part}}) \times (M) / (T) \times (U)^{0.78} \times (A) \times (TT)$$

$$W = 25.4 * VPMDI * (Mw / T_{\text{proc}}) * (u)^{0.78} * SA * tTF$$

Where:

- W = vapor generation rate (gr/ day)
- M = molecular weight MDI = 254.4
- U = windspeed (m/s) = 0.5 m/s (1.6 ft/s, 1.1 mph)
- A = area of exposed surface (m²/ day)
- P_{vap} = vapor pressure of MDI at liquid temperature (atm)
= 0.23 mmHG = 3.03 E-04 atm
- P_{part} = partial pressure of MDI (atm)
= (P_{vap}) x (mol fraction MDI) = (3.03 E-04 atm) x (0.10) = 3.03 E-05 atm
- T = temperature of the liquid (K) = 275 °F = 408 K
- TT = tack-free time of coating = 5 seconds

and:

9 gal/hr coating mixture, 4.5 gal/hr MDI containing coating,
4 trailers/hr = 2.25 gal coating/trailer
Mol fraction MDI = 10% as applied (20% on MSDS)
0.125 inch coating thickness (125 mil)

Area is implicitly found from usage of coatings per trailer

$$A = (2.25 \text{ gal/trailer})(1/7.48 \text{ ft}^3/\text{gal})(1/0.125 \text{ in}^{-1})(12 \text{ in}/\text{ft})(1/10.76 \text{ m}^2/\text{ft}^2) \\ (4 \text{ trailers/hr})(24 \text{ hr/day}) = 258 \text{ m}^2/\text{day}$$

$$W = (25.4)(3.03 \text{ E-}05 \text{ atm})(254.4)(1/408 \text{ K}^{-1})(0.5)^{0.78}(258 \text{ m}^2/\text{day})(5 \text{ sec}) \\ = 0.31 \text{ gr/day}$$

$$(0.31 \text{ gr/day})(\text{day}/(12 \text{ hr}))(\text{lb}/7000 \text{ gr}) = 0.0000037 \text{ lb/hr} \\ (0.0000037 \text{ lb/hr})(\text{hr}/4 \text{ trailers}) = 0.00000093 \text{ lb/trailer} \\ (0.00000093 \text{ lb/trailer})(2000 \text{ trailers/yr})(\text{ton}/2000 \text{ lb}) = 0.00000093 \text{ ton per trailer}$$

Expandable Foam (MDI Emissions)

(Note: Expandable Foam (MDI Emissions) are accounted for in Plantwide Coatings, Solvents, and Cleaner Emissions above, however, considered individually, these emissions would be considered "Insignificant")

AFM plans to use a two-part spray foam to fill spaces within the hulls on some of its models. This foam is a closed cell foam containing Methylenebis (phenyl isocyanate)(MDI), a compound that is regulated as a volatile hazardous air pollutant (VHAP) under the Clean Air Act. The emissions estimates presented below assume a 20 cubic foot area to be filled per boat and a maximum of 1200 boats per year produced. Calculations are supported by the Alliance for the Polyurethanes Industry (API), in their publication titled "MDI/Polymeric MDI Emissions Reporting Guidelines For the Polyurethane Industry" copyright 1999 (May 2012). The calculations most representative of the AFM process were found in the "Spray Foam" section (beginning on page 5-44) of the above-cited publication. The publication cited above is used throughout the boat manufacturing industry and is universally accepted as the most scientifically sound method of estimating MDI emissions.

AFM managers estimate that on an annual basis they will use 24,000 ft³ (43,200 pounds) per-year of spray foam (foam "A" and foam "B" combined). The density of this type foam is estimated to be 1.8 pounds-per-cubic foot (1.8 lb/ft³).

$(1200 \text{ boats/yr})(20 \text{ ft}^3/\text{boat}) = 24,200 \text{ ft}^3 \text{ foam used}$

$(24,000 \text{ ft}^3)(1.8 \text{ lb/ft}^3) = 43,200 \text{ lb foam used}$

The following process parameters apply:

Annual Volume of Displaced Air 24,000 ft³

Process Temperature: 78° (f) or 298.7° K (per API)

Vapor Pressure for MDI @ 298.7° K: 1.071 x 10⁻⁵ mm (per API)

Molecular Weight of MDI: 254.38

*Adjustment Factor: 0.33

(*A blend of Part B catalyst (50% MDI) mixed at a ratio of 1/1 of part A to part B yields a composition of 25% MDI, therefore, the adjustment factor for MDI @ 298.7° K and 25% MDI is 0.33 as taken from the chart found in "Appendix B" of the above-cited publication

Annual Emissions:

The formula for estimating annual MDI emissions is as follows:

$$\text{MDI emissions} = (V_{\text{air}})(1/359)(273.15^{\circ}\text{K}/T_{\text{proc}})(\text{VP MDI}/760)(M_w)(\text{KMDI})$$

Where:

V_{air} = Annual volume of displaced air

T_{proc} = Process temperature in ° K

VP MDI = vapor pressure of MDI in mm Hg at process Temperature

M_w = 254.38

KMDI = adjustment factor to the vapor pressure that is a function of MDI concentration in the raw materials used and the process temp

So:

$$\text{Annual MDI emissions} = (24,000 \text{ ft}^3)(1/359)(273.15^{\circ} \text{ K} / 298.7^{\circ} \text{ K})$$

$$(1.071 \times 10^{-5} \text{ mm} / 760)(254.38)(0.33) = 0.00008 \text{ lb MDI/yr}$$

$$(0.00008 \text{ lb MDI/yr})(\text{yr}/2000 \text{ boats}) = 0.00000004 \text{ lb MDI per boat}$$

Table 2.1 Coatings, Solvents, and Cleaner Emissions

Source	Description	Pollutant	lb/hr	tpy
Coatings, Solvents and Cleaners	n/a	VOC	n/a	*12.6
		Single HAP	n/a	*1.22
		Combined HAP	n/a	*2.68
		Air Contaminant	n/a	*2.2
*Plantwide emissions to be monitored using mass-balance recordkeeping				

2.2 Booth Operations

The facility plans to install and operate five (5) atmospherically exhausting booths to apply various coatings to the fabricated boats and trailers. The raw materials will be applied using pneumatic hand-held application equipment with each booth being equipped with its own dedicated exhaust system. The VOC, HAP, and Air Contaminant emissions associated with the Booths are accounted for in the Coatings, Solvents, and Cleaners emissions. The booths will not be equipped with control equipment. Two (2) booths will share the same air makeup unit (AMU), resulting in four (4) total natural gas fired AMUs with a maximum energy input rating of 2 MMBTU per hour each for a total input of 8 MMBTU per hour. The emissions associated with natural gas consumption are accounted for at 3.6 below (Fuel Burning Equipment).

Table 2.2 Booth Operations

Source	Description	Pollutant	lb/hr	tpy
Booth Operations	n/a	VOC	n/a	*
		Single HAP	n/a	*
		Combined HAP	n/a	*
		Air Contaminant	n/a	*
*Emissions are accounted for at Coatings, Solvents, and Cleaners and Fuel Burning Equipment sources				

2.3 Fabrication

Particulates (PM, PM-10) from the cutting, routing, grinding, and sanding of the parts will be controlled by one (1) fixed dust control system (dust room) which is 99.97% efficient at controlling particulates. This system exhaust inside the plant and is assumed to be 100% efficient at capturing the waste stream due to its close proximity to the sources. The system will be capable of processing up to 3,000 cubic feet per minute. Using the EPA supplied average of the typical inlet pollutant loading *(0.5 to 10.0 gr/scf) of 4.75 gr/scf and the efficiency data of the equipment, the following particulate air emissions are estimated.

Hourly Rate:

$$(3,000 \text{ scf/min}) (60 \text{ min/hr}) (4.75 \text{ gr/scf}) (1 \text{ lb}/7000\text{gr})(1.00000-0.99999) = 0.002 \text{ lb/hr PM/PM10}$$

Annual Rate:

$$(0.002 \text{ lb/hr})(8,760 \text{ hrs/yr})(1 \text{ ton}/2,000\text{lbs}) = 0.01 \text{ TPY PM/PM10}$$

Table 2.3 Fabrication

Source	Description	Pollutant	lb/hr	tpy
Cutting, Routing, Grinding, Sawing and Sanding	n/a	PM	n/a	0.01
		PM10	n/a	0.01
		Single HAP	n/a	n/a
		Combined HAP	n/a	n/a
		Air Contaminant	n/a	n/a
*Plantwide emissions to be monitored using raw mass-balance recordkeeping				

2.4 Plasma Arc Cutting Table

The facility plans to install/operate one (1) Plasma Arc Cutting table in the plant with an integrated particulate control system rated at 99.97% efficient, that will exhaust outside the plant. Emissions have been estimated assuming a 100% waste stream capture efficiency on smoke/fumes generated due to the proximity of the control equipment to the source. The Plasma Arc Cutting Table is assumed to operate 8760 hours per year for regulatory purposes. Emissions factors have been used from the document: AP 42, Fifth Edition Compilation of Air Pollutant Emission Factors, Volume 1: Stationary Point and Area Sources, Chapter 12: Metallurgical Industry; "Emission of Fume, Nitrogen Oxides and Noise in Plasma Cutting of Stainless and Mild Steel - by Broman B. et al, The Swedish Institute of Production Engineering Research".

Hourly Rate:

$$(26 \text{ g PM/PM}_{10} / \text{min})(60 \text{ min/hr}) (1 \text{ lb}/453.7 \text{ g})(1.0000-0.9997) \\ = 0.0011 \text{ lb/hr PM/PM}_{10}$$

Annual Rate:

$$(0.0011 \text{ lb/hr})(8,760 \text{ hrs/yr})(1 \text{ ton}/2,000\text{lbs}) = 0.0049 \text{ TPY PM/PM}_{10}$$

NO_x

Hourly Rate:

$$(5.5 \text{ L} / \text{min})(\text{ft}^3/28.317 \text{ L})(0.12 \text{ lb NO}_x/\text{ft}^3 \text{ NO}_x)(60 \text{ min/hr})(1.0000-0.9997) \\ = 0.00042 \text{ lb/hr NO}_x$$

Annual Rate:

$$(0.00042 \text{ lb/hr})(8,760 \text{ hrs/yr})(1 \text{ ton}/2,000\text{lbs}) = 0.0019 \text{ TPY NO}_x$$

Table 2.4 Plasma Arc Cutting Emissions Summary

Source	Description	Pollutant	lb/hr	tpy
Plasma Arc Cutting	n/a	PM	n/a	0.0049
		PM10	n/a	0.0049
		SOx	n/a	0
		VOC	n/a	0
		CO	n/a	0
		NOx	n/a	0.0019
		Single HAP	n/a	0
		Combined HAP	n/a	0
		Air Contaminant	n/a	0

2.5 Welding Operations

The facility plans to install/operate several Tungsten Inert Gas (TIG) and Metal Inert Gas (MIG) stations throughout the plant. The particulates generated will be controlled by up to six (6) portable dust control devices (aka Smoke Eaters) rated at 99.97% efficient, that will exhaust inside the plant. Emissions have been estimated assuming a 100% waste stream capture efficiency on smoke/fumes generated due to the proximity of the equipment to the source(s). It is conservatively assumed that up to 1% of emissions generated will migrate to the atmosphere via wall vents and open doors.

Welding Emissions																						
Part Number / MSDS Number	Notes:	UOM:	*Plant Usage / Boat and/or trailer	Number Boats/trailers Projected / Year	12-Month Rolling	Density	VOC [%]	Type Welding	*PM10	**CR	**CR(V)	*Co	**Ni	**Mn	**Pb	Total (Combined)		Criteria (PM10)	HAP			
			(Or g Units)	(GAL)	(gal)	(lb/gal)	(%)	(note 1)	AP-42	emiss/yr	AP-42	emiss/yr	AP-42	emiss/yr	AP-42	emiss/yr	AP-42	emiss/yr	AP-42	emiss/yr	TPY	TPY
PAINT PRODUCT:									N/A	7440-47-3	ND00	7440-48-4	7440-02-0	7439-98-6	7439-02-1							
Pro Star MIG Weld ng Rod (R-4043)		OUNDS	16	1200.00	19200.00	n/a	n/a	GMAW	24.10	482.72	5.28	101.38	0.10	1.82	0.01	0.20	2.28	43.40	3.48	86.44	0.00	0.00
Pro Star TIG Welding Wire (R-4043)		OUNDS	16	1200.00	19200.00	n/a	n/a	GMAW	24.10	482.72	5.28	101.38	0.10	1.82	0.01	0.20	2.28	43.40	3.48	86.44	0.00	0.00
OS Dix. Weld ng Wire Alloy 705-6		OUNDS	3	1200.00	3600.00	n/a	n/a	GMAW	24.10	98.78	5.28	19.01	0.10	0.38	0.01	0.04	2.28	8.14	3.48	12.48	0.00	0.00
Rolling 12-Month Total (tpy)(Uncontrolled)									0.51	0.12	0.01	0.01	0.05	0.06	0.00	0.0001	0.0001					
Capture Efficiency (% of waste stream generated)																						
Control Efficiency (%)																						
Roll ng 12-Month Total (tpy)(Controlled)																						
No ling 12-Month Total (tpy)(1% assumed to reach atmosphere through open doors)																						

Note 1: EPA (AP-42) recognizes 4x types of Arc Welding: Shielded metal arc welding (SMAW), Gas metal arc welding (GMAW), Flux cored arc welding (FCAW), and Submerged arc welding (SAW).
 * Worst Case AP-42 factor per type electrode used / lb of fume generated per 1000 lbs electrode consumed
 ** Section 353 Chemical / Also Regulated as HAP due to named chemical component

Table 2.5 Welding Operations Emissions Summary

Source	Description	Pollutant	lb/hr	tpy
Welding Operations	n/a	PM	n/a	0.000001
		PM10	n/a	0.000001
		SOx	n/a	0
		VOC	n/a	0
		CO	n/a	0
		NOx	n/a	0
		Single HAP	n/a	0.000001
		Combined HAP	n/a	0.000001
		Air Contaminant	n/a	0

2.6 Fuel Burning Equipment

The facility plans to install/operate up to eleven (11) natural gas fired space heaters with a maximum energy input capacity of up to 250,000 BTU per hour for a total of 2.8 MMBTU per hour. This equipment will consume pipeline quality natural gas and will not exhaust to the atmosphere.

The facility also plans to install and operate five (5) spray booths. The booths will not be equipped with pollution control equipment. Two (2) booths will share the same air makeup unit (AMU), resulting in four (4) total natural gas fired AMUs with a maximum energy input rating of 2 MMBTU per hour each for a total throughput of 8 MMBTU per hour. The booths are assumed to operate 8760 hours per year for fuel consumption regulatory purposes, however actual operating hours will be far less.

Nat Gas Emissions

Natural Gas HHV*		1020	Btu/scf											
*Foot note a in AP-42 Table 1.4-1														
Source Description	Source No.	Input Duty [MMBtu/hr]	scf/hr	Hours										
Nat Gas Space Heaters	Insig Heaters (11x @ 250k btu/hr ea)	2.8	2696.08	8 760										
Air Makeup Units for Booths (4x @ 2MMBTU)	Booth AMUs	8.0	7843.14	8 760										
Not used	N/A		0.00											
Not used	N/A		0.00											
Not used	N/A		0.00											
Criteria Pollutant	Emission Factor** (lb/MMscf)	Emission Factor (lb/MMBtu)	Insig Heaters (11x @ 250k btu/hr ea)		Booth AMUs		N/A		N/A		N/A		Totals	
			lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	TPY	
PM*	7.6	0.0075	0.03	0.14	0.06	0.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.41
PM10	7.6	0.0075	0.03	0.14	0.06	0.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.41
SOx	0.6	0.0006	0.01	0.05	0.01	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10
VOC	5.5	0.0054	0.02	0.09	0.05	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.31
CO	84.0	0.0824	0.23	1.01	0.66	2.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.91
NOx	100.0	0.0980	0.27	1.19	0.79	3.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.66

* PM assumed equal to PM10
 ** AP-42 Emission Factors for Small Boilers (<100 MMBtu/hr)

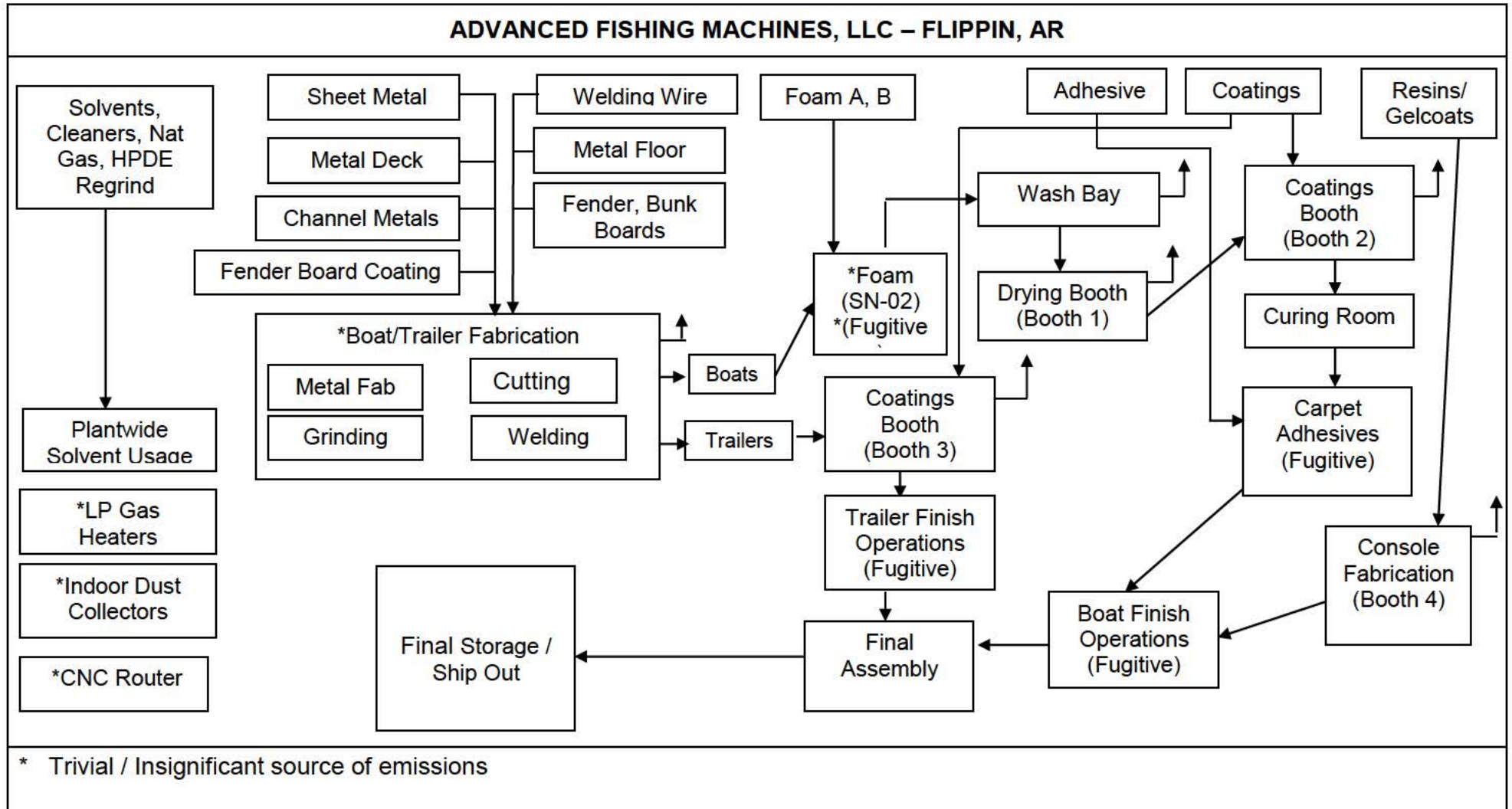
Table 2.6 Fuel Burning Equipment

Source	Description	Pollutant	lb/hr	tpy
Fuel Burning Equipment	n/a	**PM10	n/a	0.41
		**PM10	n/a	0.41
		SOx	n/a	0.10
		VOC	n/a	0.31
		CO	n/a	3.91
		NOx	n/a	4.66
		Lead	n/a	0.0001
		Single HAP	n/a	0.09
		Combined HAP	n/a	0.09
		Air Contaminant	n/a	0.09
*Plantwide emissions to be monitored using raw mass-balance recordkeeping				
**Incorporates emissions controls at a rating of XX%				

Table 2.7 Summary of Plantwide Emissions

Source	Description	Pollutant	lb/hr	tpy
Plantwide	n/a	PM	n/a	0.42
Plantwide	n/a	PM10	n/a	0.42
Plantwide	n/a	SO2	n/a	0.10
Plantwide	n/a	VOC	n/a	12.91
Plantwide	n/a	CO	n/a	3.91
Plantwide	n/a	NOx	n/a	4.66
Plantwide	n/a	Lead	n/a	0.0001
Plantwide	n/a	Single HAP	n/a	1.32
Plantwide	n/a	Combined HAP	n/a	2.77
Plantwide	n/a	Air Contaminant	n/a	2.21

3.0 **PROCESS FLOW DIAGRAM**



4.0 PROCESS DESCRIPTION

Advanced Fishing Machines, LLC plans to manufacture recreational boats at its Flippin, Arkansas facility. The facility will be divided into two (2) primary manufacturing spaces for the construction of both boats (NAICS: 336612 / Pleasure boats manufacturing) and trailers (NAICS: 336214 / Travel Trailer and Camper Manufacturing). The boat manufacturing process begins when aluminum alloy metal is brought into the plant in rolls or pre-formed shapes and profiles. The metal is then cut, bent and ground to form the boat hulls, floors and decks, which are then joined through welding and mechanical fastening to form the boats (Boat and Trailer Fabrication Source). Some boats receive a two (2) part spray expandable foam (Expandable Foam Source) to aid in flotation and as an insulating factor. The formed boats are then sanded, cleaned, and a variety of coatings are applied via pneumatic spray equipment to protect and enhance the aesthetics of the finished boats (Booth Operations Source). Some boats may receive pre-manufactured carpeting which is manually cut and bonded to the hulls using hand applied rollers and brushes as well as pneumatic spray equipment (Carpet Adhesive Source). The boats are then moved to the final boat assembly (Final Assembly Source) area where they are fitted and rigged with engines, electronics, decals, and various other items before being mated to a trailer. The trailer manufacturing process begins when steel is brought into the fabrication portion of the plant and cut, bent and ground to form the trailer frame parts, which are then joined through welding and mechanical fastening to form the trailer frames (Boat and Trailer Fabrication Source). The formed trailers are then sanded, cleaned, and a variety of coatings are applied via pneumatic spray equipment (Booth Operations Source) to protect and enhance the aesthetics of the finished trailers. The trailers are then moved to the final trailer (Final Assembly Source) assembly area where they are fitted with axles, front hitch tubes, tongue jacks, electrical wiring, and lights before being mated to a boat. The finished boat/trailer combination may be stored inside or outside the plant before final loadout.

5.0 INTERNAL COMBUSTION ENGINE SUMMARY FORM

Source Number:	n/a	Description:	Natural gas-fired backup generator	
Engine Manufacturer:	Koehler		Model:	CH1000 4-Cycle
Engine Type: (check one)	Compression Ignition <input type="checkbox"/> 2 Stroke <input type="checkbox"/> 4 Stroke	Spark Ignition <input type="checkbox"/> 2 Stroke <input checked="" type="checkbox"/> 4 Stroke	Model Year:	2017
			Serial Number:	
Maximum Rated Output: (bhp)	23	Engine Displacement (cc): 999		
Date Engine Ordered:	TBD	Maximum Engine Speed (RPM):	3600	
Date of Engine Installation:		Displacement Per Cylinder (L/cylinder):		
Air Fuel Ratio: (check one)	<input type="checkbox"/> Rich Burn		<input checked="" type="checkbox"/> Lean Burn	
Primary Use:	<input checked="" type="checkbox"/> Electrical Generation	<input type="checkbox"/> Cogeneration	<input type="checkbox"/> Pump Driver	
	<input type="checkbox"/> Compressor Driver	<input type="checkbox"/> Fire Pump Driver	<input type="checkbox"/> Black Start	
	<input type="checkbox"/> Other (specify): _____			
Is the engine an emergency engine?		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Is the engine limited use (<100hrs/year)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Add on Control:	<input type="checkbox"/> Diesel Particulate Filter	<input type="checkbox"/> Oxidation catalyst	<input type="checkbox"/> Selective catalytic reduction (SCR)	
	<input type="checkbox"/> Non-selective catalytic reduction (NSCR)		<input type="checkbox"/> Other (specify): _____	
Is the engine certified?	If yes, list certification standard. Meets emission regulations for U.S. Environmental Protection Agency (EPA) with both natural gas and LPG. Note: CARB does not regulate emergency standby generators with outputs less than 50 HP. UL 2200 listed (60 Hz model). CSA certification available (60 Hz model). _____			
	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
Is the engine classified as Commercial/Residential/Institutional? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No				
Does the engine provide electricity back to the grid? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
Is this engine subject to NSPS or NESHAPS? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No				
If yes , include a detailed list of the applicable sections of the subpart NSPS JJJJ (See application)				

6.0 EQUIPMENT SPECIFICATIONS

The facility does not have final specification on equipment that will be installed, however the operating parameters of the future equipment have been detailed and are described below.

Fuel Burning/ Combustion Sources

Heating, Ventilation and Air Condition (HVAC):

The facility plans to employ 11 direct-fired HVAC units that will consume natural gas only. The max combined rating of these units will not exceed 2.8 MMBtu. The units will consume only pipeline quality natural gas and will not exhaust directly to the atmosphere.

Booths:

The facility plans to employ five (5) booths which will exhaust to the atmosphere. The booths will not be equipped with pollution control equipment and will be equipped with natural gas fired air makeup units with a maximum fuel consumption capacity of up to 2.0 MMBTU per hour.

Emergency Generator (Natural Gas Fired):

The facility plans to employ one (1) natural gas-fired emergency generator. The generator will supply up to 14 kVa of power in emergency situation and will be greater than 25 hp but less than 130 hp. The generator will be no older than a 2015 model.

* Check
require

Pollution Control Equipment - Non-Atmospheric Exhaust

The facility plans to employ three (3) inside particulate control devices 99.97% designed to manage the dust generated from its sanding and grinding processes. The control devices will exhaust inside the building.

Plasma Cutting Table

The facility plans to employ one (1) 30' plasma cutting table that will be equipped with a particulate control devices that is 99.97% efficient at controlling particulates generated from the process. The control device will exhaust to the atmosphere via roof vent.

Welding - Smoke Eaters / Non-Atmospheric Exhaust

The facility plans to employ six (6) portable particulate control devices known as "smoke eaters", which are 99.97% efficient at controlling particulates from welding processes. These control devices will exhaust inside the building.

Advance Fishing Machines

Coatings, Solvents and Cleaners

PAINT PRODUCT:	Part Number / MSDS Number	Notes:	UOM:	*Usage / Boat and/or trailer	*Usage / Boat	Number Boats/trailers Projected / Year (Note 5)	12-Month Rolling
				(Orig Units)	(Conv to Gal)		
FLNA95816 Autocoat BT LV650 Topcoat		Note 6	GALLON		0.00	1200	0.00
Generic LV650 Topcoat		Note 6	GALLON	0.61	0.61	1200	732.00
DTM Acrylic, Ultradeep Base			GALLON	0.25	0.25	1200	300.00
ADHESIVES:							
906 Adhesive			GALLON	0.5	0.50	1200	600.00
EXP 160			GALLON	0.04	0.04	1200	48.00
RESINS / GELCOATS:							
Clear Gel (961XK111-DL Marine Clear)		Note 7	POUNDS	9.6	1.10	1200	1319.59
Black Gel (LHM3527)		Note 7	POUNDS	3.6	0.36	1200	427.73
MISCELLANEOUS:							
Autocoat BT LV 260 Primer Epoxy Gray			GALLON	0.75	0.75	1200	900.00
Autocoat LV260 Hardener EP			GALLON	0.004	0.00	1200	4.80
Autocoat BT LV 260 Reducer Slow			GALLON	0.25	0.25	1200	300.00
Autocoat BT LV 650 Hardener		Note 9	GALLON	0.393	0.39	1200	471.60
Autocoat BT LV 650 Reducer 2PK (Slow)		Note 6	GALLON	0.151	0.15	1200	181.20
Autocoat BT LV 650 Reducer Medium		Note 6	GALLON		0.00	1200	0.00
Autofroth 9300A		Note 2, Note 4, Note 9	POUNDS	18	1.77	1200	2123.90
Autofroth 9300B		Note 2, Note 4	POUNDS	18	2.01	1200	2413.41
M600 Surface Cleaner			GALLON	0.25	0.25	1200	300.00
Technoclean			OUNCE (FL)	28	0.22	1200	262.50
Gatorhyde MMP Primer part A		Note 9	GALLON	0.125	0.13	1200	150.00
Gatorhyde MMP Primer part B			GALLON	0.125	0.13	1200	150.00
Gatorhyde ARC Part A		Note 9	GALLON	1	1.00	1200	1200.00
Gatorhyde ARC Part B		Note 8	GALLON	1	1.00	1200	1200.00
ACETONE			GALLON	1	0.50	1200	600.00

Mont
Rolling
Registratic
Regis
Minor Sourc
Regis

Footnotes

* as applicable (some raw materials ordered in lbs therefore no unit conversion required)

Note 1: Vendor supplied VOC/HAP data due to missing info on SDS

Note 2: MDI not emitted at significant levels at process temperatures employedsee MDI Emissions Reporting Guidelines for the Polyurethane Industry, Issue AX173, July 2011, reprinted May 2012)

Note 3: Only converted to gallons for liquid raw materials for calculations purposes

Note 4: Foam used per boat as estimated by AFM Managers = (20 ft3 foam/boat)(1.8 lb/ft3 foam)= 36 lb/boat (18 lb Part A, 18 lb Part B)

Note 5: Number of boats/trailers produced/year projected by AFM managers

Note 6: "Worse case" emissions scenario created by assuming chemical profile of similar coatings representing different colors. Worse case regulated profile combined for emissions calculations, actual emissions will be less.

Note 7: Monomer (Styrene & MMA) emissions factors applied for "closed molding", 45%, max styrene for Gelcoats, controlled spray (AP-42 4.4 Polyester Resin Plastic Products Fabrication, Table 4.4-2)

Note 8: SDS supplied by vendor indicates "0" % volatile and does not list any air-regulated chemicals - verification required

Note 9: Individual MDI emissions factor generated by dividing total annual calculated MDI emissions by number of boats/trailers produced annually (See Calculations Section of Application)

Note 10: MDI not emitted at significant levels at process temperatures employed (approx 0.0000033 lb MDI emitted / ton foam used...w/ boat Foam averaging 1.8 lb/ft3see MDI Emissions Reporting Guidelines for the Polyurethane Industry, Issue AX173, July 2011)

Density (lb/gal)	VOC [%]	VOC		Acetone			MEK			MDI			Hexamethylene-1,6-diisocyanate			Xylene			Etf
				67-64-1			78-98-3			101-68-8			822-06-0			1330-20-7			
				(%)	[lb/mo]	[lb/yr]	(%)	[lb/mo]	[lb/yr]	(%)	[lb/mo]	[lb/yr]	(%)	[lb/mo]	[lb/yr]	(%)	[lb/mo]	[lb/yr]	
8.54	39.79%	n/a	0	4.00%	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	
8.55	64.82%	n/a	4056.82	4.00%	n/a	250.344	n/a	0	n/a	0	n/a	0	n/a	0	31.00%	n/a	1940.17	8.00%	
9.56	1.40%	n/a	40.152		n/a	0	n/a	0	n/a	0	n/a	0	n/a	0		n/a	0		
9.60	3.80%	n/a	218.88		n/a	0	n/a	0	n/a	0	n/a	0	n/a	0		n/a	0		
9.10	0.20%	n/a	0.8736		n/a	0	n/a	0	n/a	0	n/a	0	n/a	0		n/a	0		
8.73	47.60%	n/a	5483.53		n/a	0	n/a	0	n/a	0	n/a	0	n/a	0		n/a	0	1.00%	
10.10	33.00%	n/a	1425.62		n/a	0	n/a	0	n/a	0	n/a	0	n/a	0		n/a	0		
14.7	21.25%	n/a	2811.38		n/a	0	n/a	0	n/a	0	n/a	0	n/a	0		n/a	0		
7.85	74.95%	n/a	28.2412		n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	10.00%	n/a	3.768		
7.29	100.00%	n/a	2187		n/a	0	n/a	0	n/a	0	n/a	0	n/a	0		n/a	0		
9.1	15.00%	n/a	643.734		n/a	0	n/a	0	n/a	0	1.00%	n/a	0.0000006		n/a	0			
6.87	100.00%	n/a	1244.84		n/a	0	n/a	0	n/a	0	n/a	0	n/a	0		n/a	0		
6.82	100.00%	n/a	0		n/a	0	n/a	0	n/a	0	n/a	0	n/a	0		n/a	0		
10.17	1.00%	n/a	216.001		n/a	0	n/a	0	50.00%	n/a	0.0000001		n/a	0		n/a	0		
8.95	10.00%	n/a	2160		n/a	0	n/a	0	n/a	0	n/a	0	n/a	0		n/a	0		
6.3	100.00%	n/a	1890		n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	5.00%	n/a	94.5	1.00%	
9.22	100.00%	n/a	2420.25		n/a	0	n/a	0	n/a	0	n/a	0	n/a	0		n/a	0		
10.00	10.00%	n/a	150		n/a	0	n/a	0	n/a	0	20.00%	n/a	0.0000006		n/a	0			
10.00	2.42%	n/a	36.3		n/a	0	n/a	0	n/a	0	n/a	0	n/a	0		n/a	0	0.50%	
9.10	0.00%	n/a	0		n/a	0	n/a	0	n/a	0	20.00%	n/a	0.0000006		n/a	0			
8.80	0.00%	n/a	0		n/a	0	n/a	0	n/a	0	n/a	0	n/a	0		n/a	0		
6.6	0.00%	n/a	0	100.00%	n/a	3960	n/a	0	n/a	0	n/a	0	n/a	0		n/a	0		
Monthly Total [lb/month]		0.0			0.0		0.0			0.0			0.0			0.0			
12-Month Total [tpy]			12.51			2.11		0.00			0.01			0.01			1.02		
Annual Threshold [ton/yr]			25.0			n/a		n/a			1.0			1.0			1.0		
Exceedance Threshold [yes/no]			NO			NO		NO			NO			NO			YES		
Annual Threshold [ton/yr]			40.0			25.0		25.0			2.0			2.0			2.0		
Exceedance Threshold [yes/no]			NO			NO		NO			NO			NO			NO		

MIBK			EG			MMA			Hydrofluoric Acid			EGMPE			Total HAP	
108-10-1			107-21-1			80-62-6			7664-39-3			2807-30-9				
[lb/mo]	[lb/yr]	(%)	[lb/mo]	[lb/yr]	(%)	[lb/mo]	[lb/yr]	(%)	[lb/mo]	[lb/yr]	(%)	[lb/mo]	[lb/yr]		Max HAP	Total HAP
n/a	0		n/a	0		n/a	0		n/a	0		n/a	0			
n/a	0		n/a	0		n/a	0		n/a	0		n/a	0			
n/a	0		n/a	0		n/a	0		n/a	0		n/a	0			
n/a	0		n/a	0		n/a	0		n/a	0		n/a	0			
n/a	0		n/a	0		n/a	0		n/a	0		n/a	0			
n/a	0		n/a	0	10.00%	n/a	34.5601		n/a	0		n/a	0			
n/a	0		n/a	0	4.00%	n/a	5.18409		n/a	0		n/a	0			
n/a	0		n/a	0		n/a	0		n/a	0		n/a	0			
n/a	0		n/a	0		n/a	0		n/a	0		n/a	0			
n/a	0		n/a	0		n/a	0		n/a	0		n/a	0			
n/a	0		n/a	0		n/a	0		n/a	0		n/a	0			
n/a	0		n/a	0		n/a	0		n/a	0		n/a	0			
n/a	0		n/a	0		n/a	0		n/a	0		n/a	0			
n/a	0		n/a	0		n/a	0		n/a	0		n/a	0			
n/a	0		n/a	0		n/a	0		n/a	0		n/a	0			
n/a	0		n/a	0		n/a	0	5.00%	n/a	121.013		n/a	0			
n/a	0		n/a	0		n/a	0		n/a	0		n/a	0			
n/a	0		n/a	0		n/a	0		n/a	0		n/a	0			
n/a	0		n/a	0		n/a	0		n/a	0		n/a	0			
n/a	0		n/a	0		n/a	0		n/a	0		n/a	0			
n/a	0		n/a	0		n/a	0		n/a	0		n/a	0			
0.0			0.0			0.0			0.0			0.0			1.22	
	0.00			0.00			0.02			0.07			0.00			2.68
	1.0			1.0			1.0			1.0			1.0		1.0	3.0
	NO			NO			NO			NO			NO		YES	NO
	2.0			2.0			2.0			2.0			2.0		2.0	5.0
	NO			NO			NO			NO			NO		NO	NO