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ENVIRONMENTAL SERVICES, INC. 18369 Petroleum Drive Baton Rouge, Louisiana 70809 Phone: (225) 757-0870 • Fax: (225) 757-8855

November 20, 2023

Ms. Bliss Higgins Louisiana Department of Environmental Quality Office of Environmental Services Post Office Box 4313 Baton Rouge, Louisiana 70821-4313

Re: HME Global, LLC dba FusionOne Iberia Parish, LA Agency Interest # 17028 Initial Minor Source Air Permit Application

Ms. Higgins:

On behalf of our client, HME Global, LLC dba FusionOne (FusionOne), Eagle Environmental Services, Inc. (Eagle) is submitting a Minor Source Air Permit Application for a proposed clean fuels facility at the Port of Iberia in Iberia Parish, LA. This site is approximately 3 miles south of New Iberia, Louisiana. A detailed description of the proposed facility is provided in Section 1.0 of this document.

Please feel free to contact me or Barrett Kyle at (225) 757-0870 with any questions concerning this request.

Sincerely,

Charles Brumfield Air Program Lead Eagle Environmental Services, Inc.





HME GLOBAL, LLC DBA FUSIONONE

FUSIONONE NEW IBERIA

AGENCY INTEREST NO. 17028

IBERIA PARISH, LOUISIANA

INITIAL MINOR SOURCE AIR PERMIT APPLICATION

November 2023

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2.0

Application for Approval of Emissions of Air Pollutants from Minor Sources

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Appendix

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Section 1.0 Introduction

1.0 INTRODUCTION

1.1 Background

With this Initial Minor Source Air Permit Application, HME Global, LLC dba FusionOne (FusionOne) seeks approval for the construction and operation of a clean fuels facility at the Port of Iberia in Iberia Parish, Louisiana. This site is approximately 3 miles south of New Iberia, Louisiana. The FusionOne facility's primary feedstocks will consist of waste tires and post consumer and commercial plastic that would otherwise be destined for landfills.

The site consists of approximately 9.4 acres of industrially developed land. The site was previously operated by Cameron Solutions, Inc. (Cameron Solutions) and permitted under Minor Source Air Permit 1260-00131-01. Under Cameron Solutions, the site was used for fabrications and repairs of equipment used in the oil and gas industry. Activities included welding, surface coating, and abrasive blasting. The facility was closed on July 30, 2021, and Permit 1260-00131-01 was rescinded on November 23, 2021. FusionOne will not use any of the previously permitted equipment or conduct any of the previously permitted activities at this site. Figure 1 (Site Location Map) illustrates the location of the proposed facility.

Section 2.0 of this document contains a completed Application for Approval of Emissions of Air Pollutants from Minor Sources for the proposed facility. Regulatory Applicability Tables 1-4 are included in Appendix A. Emissions Inventory Questionnaires (EIQs) are included in Appendix B. Emissions Calculations are included in Appendix C. A Certificate of Good Standing report is provided in Appendix D.

1.2 Facility Description

The proposed FusionOne facility will utilize two separate skid units for the processing of waste tires and diverted plastic respectively. Both units will operate according to similar processes. The individual feedstocks for each skid will be collected and diverted from landfill. Feedstock will enter a pyrolysis reactor alongside cellulosic materials where it will be subjected to high temperatures in a controlled low-to-zero oxygen environment. The long polymer chains of the feedstock will break down into shorter, simpler chains and monomers. The reactor produces a hydrogen rich syngas stream, a pyrolysis oil of heavier compounds that is condensed from the syngas, and a solid char coproduct that is mostly composed of carbon. Energy is extracted from otherwise wasted heat.

Several Block Flow Diagrams for the proposed facility are provided as Figures 3-5.

1.3 Regulatory Applicability

The proposed facility will be located in a parish that is in attainment for all criteria air pollutants. The proposed facility will be a Louisiana State-only Minor Source Air Permit and will be an Area Source with respect to Hazardous Air Pollutants (HAPs). Please see Appendix A for the regulatory applicability Tables 1-4.

1.4 Emission Calculations

Appendix C of this submittal contains emissions calculations and supporting information for emission point sources at the proposed facility.

When available, vendor data and emission factors were used to calculate source air emissions. Otherwise, AP-42 emissions factors for the appropriate source were used. Conservative estimates were used to allow for operational flexibility of each source.

1.5 Listing of Contiguous Sites

In accordance with current LDEQ policy, no contiguous facilities in FusionOne's control are identified within ¼ mile of the FusionOne facility. Figure 1 (Site Location Map) illustrates the location of the proposed facility.

Section 2.0 Application for Approval of Emissions of Air Pollutants from Minor Sources Department of Environmental Quality Office of Environmental Services Air Permits Division P.O. Box 4313 Baton Rouge, LA 70821-4313 (225) 219-3417

LOUISIANA

Application for Approval of Emissions of Air Pollutants from Minor Sources



PLEASE TYPE OR PRINT

Currently Effec	tive Permit Number(s)
Owner)	
given above is a division)	
regulated utility	municipal government
federal government	other, specify
	N/A Owner) given above is a division)

What does this facility produce? Add more rows as necessary. See Section 1.2.

What modifications/changes are proposed in this application? Add more rows as necessary. N/A

Nearest town (in the same parish as the facility): New Iberia			d:
<u>112</u> Texas	212 Arkansas	74 Mississippi	208 Alabama
<u>29</u> Deg	<u>56</u> Min	<u>24</u> Sec	54 Hundredths
<u>-91</u> Deg	<u>50</u> Min	40 Sec	52 Hundredths
	<u>29</u> Deg	Iberia 112 Texas 212 Arkansas 29 Deg 56 Min	Iberia 112 Texas 212 Arkansas 74 Mississippi 29 Deg 56 Min 24 Sec

Add physical address and description of location of the facility below. If the facility has no address, provide driving directions. Add more rows as necessary.

5315 Curtis Lane, New Iberia, Louisiana

Map attached (required per LAC 33:III.517.D.1)

Introduction/Description of the proposed project attached (required per LAC 33:III.517.D.5)

Evidence of compliance with local zoning ordinance for proposed location

(required per LAC 33:III.513.C.1.a; for Portable Facilities only)

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3. Confidentiality [LAC 33.I.Chapter 5]

Are you requesting confidentiality for any information except air pollutant emission rates? Yes No

If "yes," list the sections for which confidentiality is requested below. Add rows as necessary. Confidentiality requests require a submittal that is separate from this application. Information for which confidentiality is requested should not be submitted with this application. Consult instructions.

4. Type of Application [LAC 33:III.517.D]

Check all that apply.

Minor Source Synthetic Minor Source Small Source Portable Facility	
 Minor Source Oil & Gas General Permit (MSOG)* Minor Source Surface Coating and Fabrication General Permit (SCF)* 	
Renewal	
Select one, if applicable:	
Entirely new facility	
Modification or expansion of existing facility (may also include reconciliations) Reconciliation only	
*Additional separate submittal required. See instructions for more details.	

If "Portable Facility" was selected above, please enter the Make, Model, and Serial Number of each portable combustion emissions source to be permitted. Otherwise, leave blank. Do *NOT* list any motor vehicles. Add rows as necessary. Make Model Serial Number

		=	-	_
Does this submittal update or replace an	application currently under review?	Ves Yes	No No	

If yes, provide date that the prior application was submitted:

Select one if this application is for an existing facility that does not have an air quality permit:

Previously Grandfathered (LAC 33:III.501.B.6)

Previously Exempted (e.g., Small Source Exemption; LAC 33:III.501.B.2.d)

Previously Unpermitted

5. Fee Information [LAC 33:III.517.D.17]

Fee Parameter: If the fee code is based on an operational parameter (such as number of employees or capital cost), enter that parameter here.

Industrial Category: Enter the Standard Industrial Classification (SIC) Codes that apply to the facility.

Primary SICC:	5093	Primary NAICS Code:	423930
0 1 0100/1			

Secondary SICC(s):

Project Fee Calculation: Enter fee code, permit type, production capacity/throughput, and fee amount pursuant to LAC 33:III.Chapter 2. Include with the application the amount in the Grand Total blank as the permit application fee.

FEE		EXISTING	EXISTING INCREMENTAL	SURCHARGES			
CODE	TYPE	CAPACITY	CAPACITY INCREASE	MULTIPLIER	NSPS	AIR TOXICS	TOTAL AMOUNT
1590	MIN.			· · · · · · · · · · · · · · · · · · ·			\$4,281.00
							\$
				_			\$
					GRA	ND TOTAL	\$4,281.00

Optional Fee Explanation: Use the space provided to give an explanation of the fee determination displayed above.

Electronic Fund Transfer (EFT): If paying the permit application fee using an Electronic Fund Transfer (EFT), please include the EFT Transaction Number, the Date that the EFT was made, and the total dollar amount submitted in the EFT. If not paying the permit application fee using EFT, leave blank.

EFT Transaction Number ONIGINIS Q8 6. Key Dates Reaf # 54796	Date of Subi 		Total Dollar An \$ <u>4364-</u> 4	ount
6. Key Dates S 9 776 Estimated date construction will commence:	4/1/2024	Estimated date ope	eration will commence:	4/1/2026
7. LAC 33:1.1701 Requirements - renewals - X Yes No	– Answer all	below for new	sources and perr	nit
Does the company or owner have federal or s permit for which you are applying in Louisian partnerships, corporations, or other entities w participate in the environmental management interest in the permit.) \square Yes \boxtimes No	na or other states? who own a control	? (This requirement lling interest of 50%	applies to all individuals or more in your compan	y, or who
If yes, list States:				
Do you owe any outstanding fees or final pen If yes, explain below. Add rows if necessary.	alties to the Depa	ertment? 🗌 Yes 🛛	No	

Is your company a corporation or limited liability company? Xes No If yes, attach a copy of your company's Certificate of Registration and/or Certificate of Good Standing from the Secretary of State. The appropriate certificate(s) should be attached to the end of this application as an appendix.

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8. Certification of Compliance With Applicable Requirements

Statement for Applicable Requirements for Which the Company and Facility Referenced In This Application Is In Compliance

Based on information and belief, formed after reasonable inquiry, the company and facility referenced in this application is in compliance with and will continue to comply with all applicable requirements pertaining to the sources covered by the permit application, as outlined in Tables 1 and 2 in the permit application. For requirements promulgated as of the date of this certification with compliance dates effective during the permit term, I further certify that the company and facility referenced in this application will comply with such requirements on a timely basis and will continue to comply with such requirements.

For corporations only: By signing this form, I certify that, in accordance with the definition of Responsible Official found in LAC 33:III.502, (1) I am a president, secretary, treasurer, or vice-president in charge of a principal business function, or other person who performs similar policy or decision-making functions; or (2) I am a duly authorized representative of such person; am responsible for the overall operation of one or more manufacturing, production, or operating facilities addressed in this permit application; and either the facilities employ more than 250 persons or have gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars); or the delegation of authority has been approved by LDEQ prior to this certification.*

CERTIFICATION: I certify, under provisions in Louisiana and United States law which provide criminal penalties for false statements, that based on information and belief formed after reasonable inquiry, the statements and information contained in this Application for Approval of Emissions of Air Pollutants from Minor Sources, including all attachments thereto and the compliance statement above, are true, accurate, and complete.

Name		
Matthew Emory		
Title		
Executive Vice President		
Company		
HME Global, LLC dba FusionOne		
Suite, mail drop, or division		
Suite 107		
Street or P.O. Box		
110 Travis Street		
City	State	Zip
Lafayette	LA	70501
Business phone		
908-208-2833		
Email Address		
matthew a flusionone.co		

Signature	f responsible official (See LAC 33:III.502):	
Date:	Cullolan	
*Approval	of a delegation of authority can be requested by	-

*Approval of a delegation of 'authority can be requested by completing a Duly Authorized Representative Designation Form (Form_7218) available on LDEQ's website at http://deq.louisiana.gov/page/air-permit-applications

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9. Personnel [LAC 33:III.517.D.1]

Name Matthew Emory	Prin	nary contact
Title Executive Vice Pre	esident	2
Company HME Global, LLC	dba FusionOn	e
Suite, mail drop, or Suite 107	r division	
Street or P.O. Box 110 Travis Street		
City Lafayette	State LA	Zip 70501
Business phone 908-208-2833	Mobile Pho	one
Email address matthew@fusionone		

Name Matthew Emory	Pri	mary contact
Title Executive Vice Presid	dent	
Company HME Global, LLC dba	a FusionOne	
Suite, mail drop, or di Suite 107	vision	
Street or P.O. Box 110 Travis Street		
City Lafayette	State LA	Zip 70501
Business phone 908-208-2833	Mobile	Phone
Email address matthew@fusionone.		

c. Person to contact with	h written corre	spondence
Name Matthew Emory	Prima	ary contact
Title Executive Vice Preside	ent	(e)
Company HME Global, LLC dba	FusionOne	
Suite, mail drop, or divi	sion	
Suite 107		
Street or P.O. Box 110 Travis Street		
City	State	Zip
Lafayette	LA	70501
Business phone		
908-208-2833		
Email address		
matthew@fusionone.co	D	

Name Charles Brumfield	Prim	ary contac
Title		
Company		
Eagle Environmental S	Services, Inc.	
Suite, mail drop, or divi	ision	
Street or P.O. Box		
Street or P.O. Box 18379 Petroleum Drive	•	
Street or P.O. Box 18379 Petroleum Drive City	e State	Zip
18379 Petroleum Drive City		
18379 Petroleum Drive City	State	Zip 70809
18379 Petroleum Drive City Baton Rouge	State	

e. Person to contact about Annual Maintenance Fees		🛛 a 🗋 b 🗋 c	d other (spec	ify below)
Name Primary contact		Suite, mail drop, or di	vision	
Title		Street or P.O. Box		
Company		City	State	Zip
Business Phone		Email Address		

10. Proposed Project Emissions [LAC 33:III.517.D.3]

List the total emissions following the proposed project for this facility or process unit (for process unit-specific permits). Speciate all criteria pollutants, TAP, and HAP for the proposed project.

Pollutant	Proposed Emission Rate (tons/yr)
Particulate Matter (PM10)	4.77
Particulate Matter (PM2.5)	4.77
Sulfur dioxide (SO2)	12.52
Nitrogen oxides (NOx)	11.75
Carbon monoxide (CO)	81.55
Total VOC	3.24
Cumene	0.50
Ethyl benzene	0.98
Formaldehyde	0.01
Hexane	0.01
Styrene	0.65
Xylene	1.17
Hydrochloric Acid (HCI)	0.54
Hydrofluoric Acid (HF)	0.19

11. History of Permitted Emissions [LAC 33:III.517.D.18]

List each of the following in chronological order:

- The Permit Number and Date Action Issued for each air quality permit that has been issued to this facility or
 process unit (for process unit-specific permits) within the last ten (10) years.
- All small source exemptions, authorizations to construct, administrative amendments, case-by-case insignificant
 activities, and changes of tank service that have been approved since the currently effective Title V Operating
 Permit or State Operating Permit was issued to this facility or process unit (for process unit-specific permits). It
 is not necessary to list any such activities issued prior to the issuance of the currently effective Title V Operating
 Permit or State Operating Permit, if one exists.

Permit Number	Date Action Issued
N/A	N/A

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12.a. Enforcement Actions [LAC 33:III.517.D.18]- [] Yes X No

If yes, list all federal and state air quality enforcement actions, settlement agreements, and consent decrees received for this facility since the issuance of the currently effective Title V Operating Permit or State Operating Permit. For each action, list the type of action (or its tracking number), the regulatory authority or authorities that issued the action, and the date that the action was issued. Summarize the conditions imposed by the enforcement action, settlement agreement, and consent decree in Section 19, Table 2. It is not necessary to submit a copy of the referenced action. Add rows to table as necessary.

Type of Action or Tracking Number	Issuing Authority	Date Action Issued	Summary of Conditions Included?
			Yes No
			Yes No

12.b. Schedule for Compliance [LAC 33:III.517.D.16] Ves No

If the facility for which application is being made is not in full compliance with all applicable regulations, give a description of how compliance will be achieved, including a schedule for compliance below. Add rows as necessary. See instructions.

13. Letters of Approval for Alternate Methods of Compliance- I Yes No

If yes, list all correspondence with LDEQ, EPA, or other regulatory bodies that provides for or supports a request for alternate methods of compliance with any applicable regulations for this facility. List the date of issuance of the letter and the regulation referenced by the letter. Attach as an appendix a copy of all documents referenced in this table. Letters that are not included may not be incorporated into a final permit. Add rows to table as necessary.

Date Letter Issued	Issuing Authority	Referenced Regulation(s)	Copy of Letter Attached?
			Ves No
			Yes No

14. Initial Notifications and Performance Tests [LAC 33:III.517.D.18] - Yes No

If yes, list any initial notifications that have been submitted or one-time performance tests that have been performed for this facility since the issuance of the currently effective Title V Operating Permit or State Operating Permit in order to satisfy regulatory requirements. Any initial notification or one-time performance test requirements that have not been satisfied should be listed in Section 19, Table 2 of this application. Any notifications or performance tests that recur periodically should also be properly noted in Section 19, Table 2 of this application. Add rows to table as necessary.

Initial Notification or One-time Performance Test?	Regulatory Citation Satisfied	Date Completed/Approved

15. Air Quality Dispersion Modeling [LAC 33:III.517.D.15]

Was Air Quality Dispersion Modeling as required by LAC 33:III performed in support of this permit application? (Air Quality Dispersion Modeling is required when requested by LDEQ.) Yes Solution Yes Solution So

Has Air Quality Dispersion Modeling completed in accordance with LAC 33:III ever been performed for this facility in support of an air permit application previously submitted for this facility or as required by other regulations **AND** approved by LDEQ?

Ves No

If yes, enter the date the most recent Air Quality Dispersion Modeling results as required by LAC 33:III were submitted:

If the answer to either question above is "yes," enter a summary of the most recent results in the following table. If the answer to both questions is "no," enter "none" in the table. Add rows to table as necessary.

Pollutant	Time Period	Calculated Maximum Ground Level Concentration	Louisiana Toxic Air Pollutant Ambient Air Standard or (National Ambient Air Quality Standard {NAAQS})
1.1			

16. General Condition XVII Activities [LAC 33:III.537]- I Yes No

Enter all activities that qualify as Louisiana Air Emissions Permit General Condition XVII Activities.

- Expand this table as necessary to include all such activities.
- See instructions to determine what qualifies as a General Condition XVII Activity.
- Do not include emissions from General Condition XVII Activities in the proposed emissions totals for the permit
 application.
- The "Schedule" blank for each proposed General Condition XVII Activity is a required entry.

Work Activity			Emission Rates – TPY									
	Schedule	PM10	SO ₂	NOx	со	VOC	Other					
	_											

17. Insignificant Activities [LAC 33:III.501.B.5] - Ves No

Enter all activities that qualify as Insignificant Activities.

- Expand this table as necessary to include all such activities.
- For sources claimed to be insignificant based on size or emission rate (LAC 33:III.501.B.5.A), information must be supplied to verify each claim. This may include but is not limited to operating hours, volumes, and heat input ratings.
- If aggregate emissions from all similar pieces of equipment claimed to be insignificant are greater than 5 tons per year for any pollutant, then the activities can not be claimed as insignificant and must be represented as permitted emission sources. Aggregate emissions shall mean the total emissions from a particular insignificant activity or group of similar insignificant activities (e.g., A.1, A.2, etc.) within a permit per year.

Emission Point ID No.	Description	Physical/Operating Data	Citation
		-	

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18. Regulatory Applicability for Commonly Applicable Regulations – Answer all below [LAC 33:III.517.D.10]

Does this facility contain asbestos or asbestos containing materials? Yes No If "yes," the facility or any portion thereof may be subject to 40 CFR 61, Subpart M, LAC 33:III.Chapter 27, and/or LAC 33:III.5151, and this application must address compliance as stated in Section 19 of this application.

Is the facility represented in this permit subject to 40 CFR 68? **Yes Xo**

If "yes," the entire facility is subject to 40 CFR 68 and LAC 33:III.Chapter 59, and this application must address compliance as stated in Section 19 of this application.

Is the facility listed in LAC 33:III.5611?

Table 5 🗌 Yes 🛛 No

Table 6 Yes No

Table 7 🗌 Yes 🛛 No

Does the applicant own or operate commercial refrigeration equipment normally containing more than 50 pounds of refrigerant at this facility? \Box Yes \boxtimes No

If "yes," the entire facility is subject to 40 CFR 82, Subpart F, and this application must address compliance as stated in Section 19 of this application.

19. Applicable Regulations, Air Pollution Control Measures, Monitoring, and Recordkeeping

Important points for Table 1 [LAC 33:III.517.D.10]:

- List in Table 1, by Emission Point ID Number and Descriptive Name of the Equipment, state and federal
 pollution abatement programs and note the applicability or non-applicability of the regulations to each
 source.
- Adjust the headings for the columns in Table 1 as necessary to reflect all applicable regulations, in addition
 to any regulations that do not apply but require an explanation to substantiate this fact.
- For each piece of equipment, enter "1" for each regulation that applies. Enter "2" for each regulation that applies to this type of source, but from which this source of emissions is exempt. Enter "3" for equipment that is subject to a regulation, but does not have any applicable requirements. Also, enter "3" for each regulation that has applicable requirements that apply to the particular emission source, but the regulations currently do not apply due to meeting a specific criterion, such as it has not been constructed, modified, or reconstructed since the regulations have been in place.
- Leave the spaces blank when the regulations clearly would not apply under any circumstances to the source. For example, LAC 33:III.2103 – Storage of Volatile Organic Compounds would never apply to a steam generating boiler, no matter the circumstances.
- Consult instructions.

Important points for Table 2 [LAC 33:III.517.D.10]:

- For each piece of equipment listed in Table 2, include all applicable limitations, recordkeeping, reporting, monitoring, and testing requirements. Also, include any one-time notification or one-time performance test requirements that have not been fulfilled.
- Each of these regulatory aspects (limitations, recordkeeping, reporting, etc.) should be addressed for each regulation that is applicable to each emissions source or emissions point.
- For each regulation that provides a choice regarding the method of compliance, indicate the method of compliance that will be employed. It is not sufficient to state that all compliance options will be employed, though multiple compliance options may be approved as alternative operating scenarios.
- Consult instructions.

Important points for Table 3 [LAC 33:III.517.D.16]:

- Each time a 2 or a 3 is used to describe applicability of a source in Table 1, an entry should be made in Table 3 that explains the exemption or non-applicability status of the regulation to that source.
- Fill in all requested information in the table.
- The exact regulatory citation that provides for the specific exemption or non-applicability determination should be entered into the "Citation Providing for Exemption or Non-applicability" column.
- Consult Instructions.

Important points for Table 4 [LAC 33:III.517.D.18]:

- List any single emission source that routes its emissions to another point where these emissions are
 commingled with the emissions of other sources before being released to the atmosphere. Do not list any
 single emission source in this table that does not route its emissions in this manner.
- List any and all emission sources that are routed as described above. This includes emission sources that
 do not otherwise appear in this permit application.
- Consult instructions.

Regulatory Applicability Tables 1-4 are included as Appendix A.

20. Emissions Inventory Questionnaire (EIQ) Forms [LAC 33:III.517.D.3]

Complete one (1) EIQ for:

- Each emission source. If two emission sources have a common stack, the applicant may submit one EIQ sheet for the common emissions point. Note any emissions sources that route to this common point in Table 4 of the application.
- Each emissions CAP that is proposed, including each source that is part of the CAP.
 - Each alternate operating scenario that a source may operate under. Some common scenarios are:
 - 1. Sources that combust multiple fuels
 - 2. Sources that have startup/shutdown max lb/hr emission rates higher than the max lb/hr for normal operating conditions would need a separate EIQ addressing the startup/shutdown emission rates
- Fugitive emissions releases. One (1) EIQ should be completed for each of the following types of fugitive emissions sources or emissions points:
 - 1. Equipment leaks.
 - 2. Non-equipment leaks (i.e., road dust, settling ponds, etc).

For each EIQ:

- Fill in all requested information.
- Speciate all Toxic Air Pollutants and Hazardous Air Pollutants emitted by the source.
- Use appropriate significant figures.
- Consult instructions.

The EIQ is in Microsoft Word Excel. Visit the following website to get to the EIQ form. http://deq.louisiana.gov/page/air-permit-applications

Emissions Inventory Questionnaires (EIQs) are included as Appendix B.

21. Contiguous/Adjacent Facilities [LAC 33:III.502]

List each facility that is contiguous/adjacent to and under common control with the facility represented in this permit application.

If any contiguous facilities exist, complete all fields for each contiguous/adjacent facility. Emission rates should be represented in tons per year. Add rows as necessary. As the last entry, show the total emission rates of each listed pollutant for all listed contiguous/adjacent facilities. If no contiguous facilities exist, enter "N/A."

Guidance regarding contiguous/adjacent determinations is available at http://deq.louisiana.gov/page/-contiguous-or-adjacent-properties-in-the-oil-and-natural-gas-sector.

	Emission rates in tons per year												
Facility Name	Agency Interest Number	PM10	SO ₂	NOx	СО	VOC	Total HAPs/Total TAPs						
N/A													
	Total												

Emission rates in tons per year

STATE OPERATING PERMIT APPLICATION COMPLETENESS CHECKLIST

LAC 33:III.	Completeness Questions Relative to the State Operating Permit Application	Yes	No	NA	Location Within the Permit Application
517.B.1,2 Certification	Does the Application include a Certification by a Responsible Official or Duly Authorized Representative?	х			Section 2
517.D.1 Identifying Information	Does the Application Include:				
	1. Company Name, Physical and Mailing Address of Facility?	х			Section 2
	2. Map showing Location of the Facility?	X			Figure 1
	3. Owner and Operator Names and Agent?	Х			Section 2
	4. Name and Telephone Number of Plant Manager or Contact?	Х			Section 2
517.D.2 SIC Codes, Source Categories	Does the Application Include a Description of the Source's Processes and Products?	x			Section 1
	Does the Application Include the Source's SIC Code?	X			Section 2
	Does the Application Include EPA Source Category of HAPs if applicable?			х	
517.D.3,6 EIQ Sheets	Has an EIQ Sheet been Completed for each Emission Point whether an Area or Point Source?	x			Appendix B
517.D.4 Monitoring Devices	Does the Application Include Identification and Description of Compliance Monitoring Devices or Activities?			х	
517.D.5 Revisions and Modifications Only	For Revisions or Modifications, Does the Application include a Description of the Proposed Change and any Resulting Change in Emissions?			х	
517.D.7 General Information	Does the Application Include Information Regarding Fuels, Fuel Use, Raw Materials, Production Rates, and Operating Schedules as necessary to substantiate emission rates?	х			Appendix C
517 D.8 Operating Limitations	Has Information Regarding any Limitations on Source Operation or any Applicable Work Practice Standards been Identified?			х	
517.D.9 Calculations	Are Emission Calculations Provided?	х			Appendix C
517.D.10 Regulatory Review	Does the Application Include a Citation and Description of Applicable Louisiana and Federal Air Quality Requirements and Standards?	х			Appendix A
517.D.11 Test Methods	Has a Description of or a Reference to Applicable Test Methods Used to Determine Compliance with Standards been Provided?			х	

Instructions: Complete this checklist and submit with the completed air permit application.

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LAC 33:111.	Completeness Questions Relative to the State Operating Permit Application	Yes	No	NA	Location Within the Permit Application
517.D.12 Major Sources of TAPs	Does the Application include Information Regarding the Compliance History of Sources Owned or Operated by the Applicant (per LAC 33.III.5111)?			х	
517.D.13 Major Sources of TAPs	Does the Application include a Demonstration to show that the Source Meets all Applicable MACT and Ambient Air Standard Requirements?			х	
517.D.16, 18	Has any Additional Information been Provided?			х	
517.D.17 Fees	Has the Fee Code been Identified?	X			Section 2
	Is the Applicable Fee Included with the Application?	X			EFT
517.F Confidentiality	Does the Application Include a Request for Non-Disclosure (Confidentiality)?		х		
525.B. Minor Permit Modifications	Does the Application Include a Listing of New Requirements Resulting for the Change?			х	
	Does the Application Include Certification by the Responsible Official that the Proposed Action Fits the Definition of a Minor Modification as per LAC 33:III.525.A.			х	
	Does the Certification also Request that Minor Modification Procedures be Used?			х	

Figure 1 Site Location Map

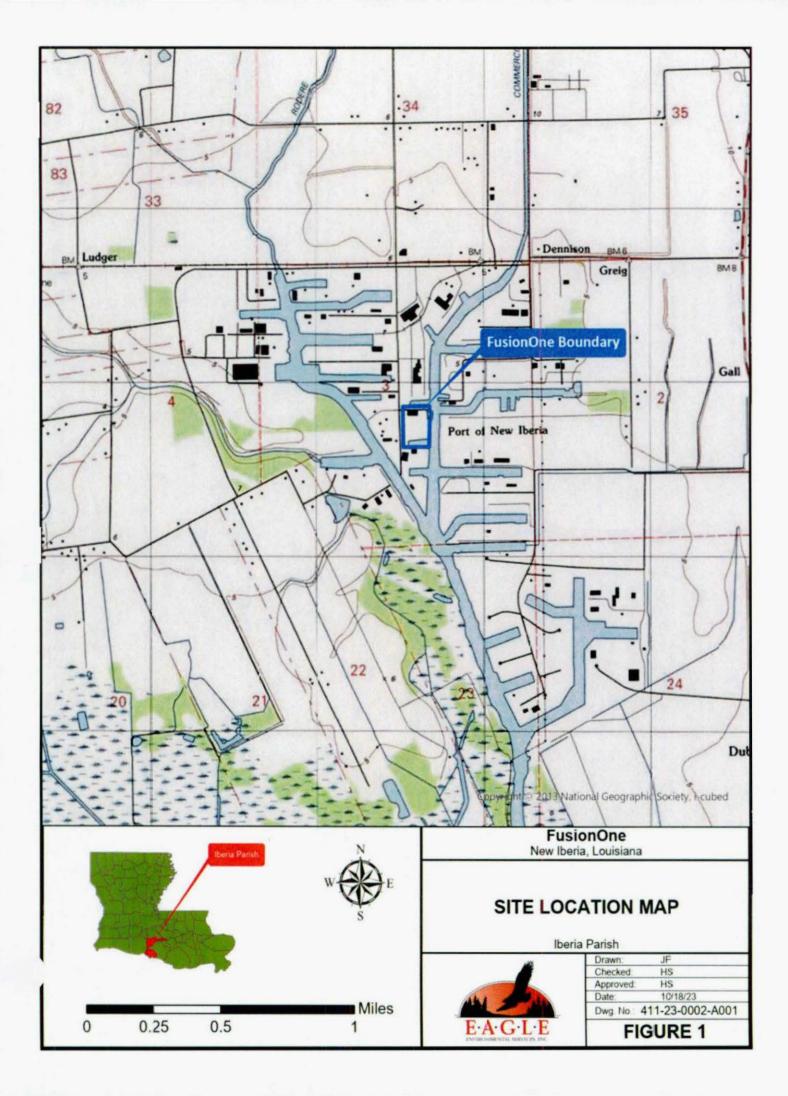


Figure 2 Aerial Photograph

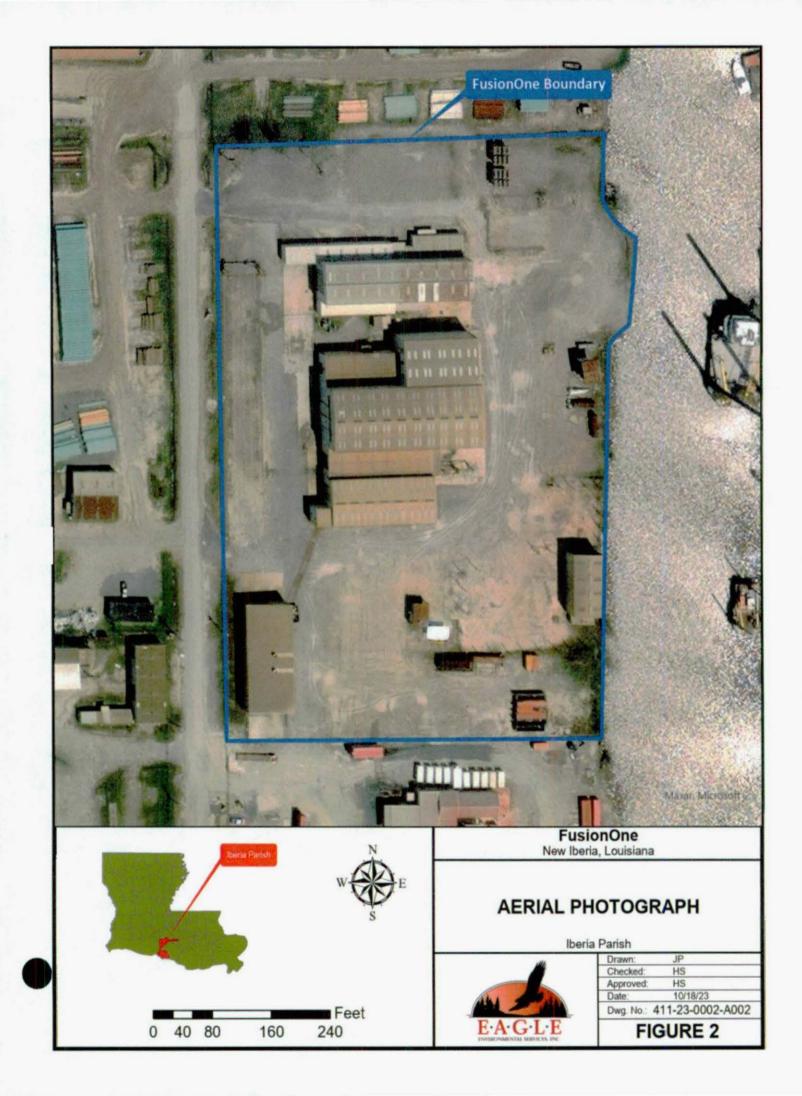
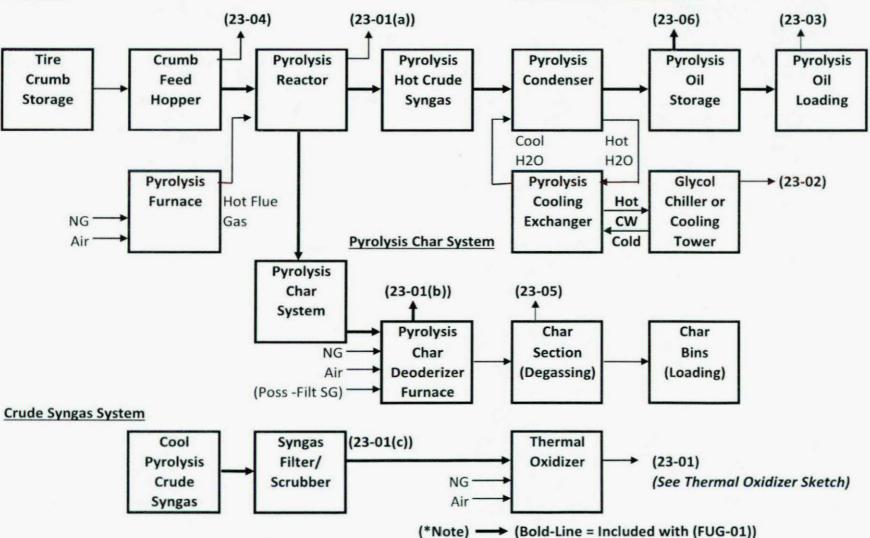


Figure 3 Tire Skid Block Flow Diagram

FusionOne New Iberia Facility Figure 3 - Tire Skid Block Flow Diagram





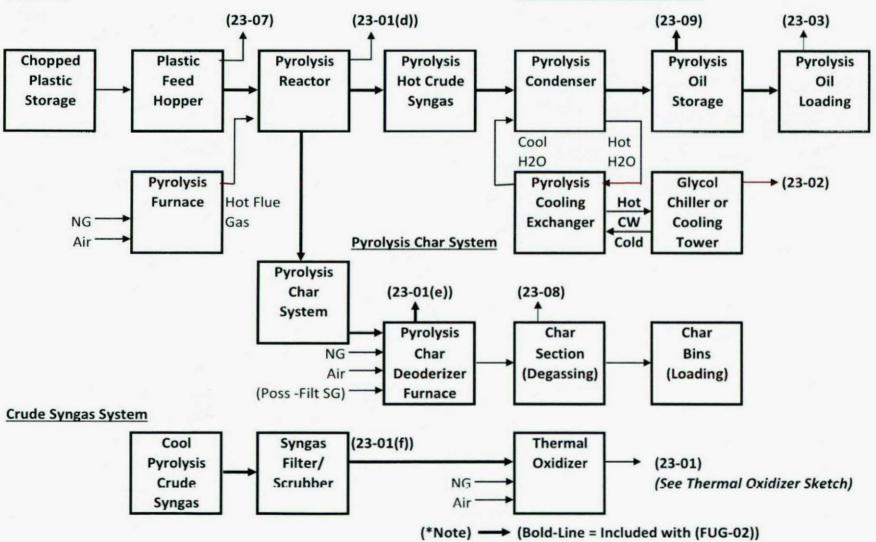


Pyrolysis Condenser System

Figure 4 Plastic Skid Block Flow Diagram

FusionOne New Iberia Facility Figure 4 - Plastic Skid Block Flow Diagram





FUSIONONE

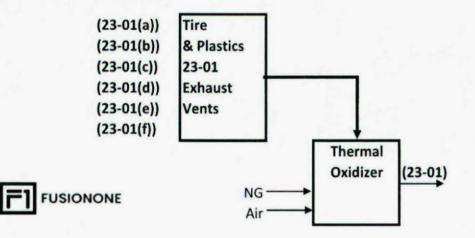
Pyrolysis Condenser System

Figure 5 Thermal Oxidizer Block Flow Diagram

FusionOne

New Iberia Facility

Figure 5 - Thermal Oxidizer Block Flow Diagram



Appendix A Regulatory Applicability Tables 1-4

TABLE 1: APPLICABLE LOUISIANA AND FEDERAL AIR QUALITY REQUIREMENTS

Source	Descriptive Name	LAC 33:III							LAC 33:III.Chapter											
ID No.:	of the Source		2103	2107	2111	2113	2115	2123	5	9	11	13	15	21	29	51	53	56	59	
New	Facility Wide					1	3		1	1	1	1		1	1					
New	23-01, Thermal Oxidizer										1	1	2			2				
New	23-01(a), Tire Skid Pyr Furnace										1	1	2							
New	23-01(b), Tire Skid Char Furnace										1	1	2							
New	23-01(c), Tire Skid Syngas Scrubber																			
New	23-01(d), Plastic Skid Pyr Furnace										1	1	2							
New	23-01(e), Plastic Skid Char Furnace										1	1	2							
New	23-01(f), Plastic Skid Syngas Scrubber																			
New	23-02, Cooling Tower											1								
New	23-03, Loading Emissions			2																
New	23-04, Tire Skid Feed Hopper Purge Vent						3													
New	23-05, Tire Skid Char Storage Purge Vent		v.				3													
New	23-06, Tire Skid Pyr Oil Storage Tank		3																	
New	23-07, Plastic Skid Feed Hopper Purge Vent						3													
New	23-08, Plastic Skid Char Storage Purge Vent						3													
New	23-09, Plastic Skid Pyr Oil Storage Tank		3																	
New	FUG-01, Tire Skid Fugitive Leak Emissions													3						
New	FUG-02, Plastic Skid Fugitive Leak Emissions													3						

TABLE 1: APPLICABLE LOUISIANA AND FEDERAL AIR QUALITY REQUIREMENTS

KEY TO MATRIX

- 1 (Applicable) The regulations have applicable requirements that apply to this particular emissions source. This includes any monitoring, recordkeeping, or reporting requirements.
- 2 (Exempt) The regulations apply to this general type of emission source (i.e. vents, furnaces, towers, and fugitives) but do not apply to this particular emission source.
- 3 (Does Not Apply) The regulations do not apply to this emissions source. The regulations may have applicable requirements that could apply to this emissions source but the requirements do not currently apply to the source due to meeting a specific criterion, such as it has not been constructed, modified or reconstructed since the regulations have been in place.

Blank - The regulations clearly do not apply to this type of emission source.

TABLE 1: APPLICABLE LOUISIANA AND FEDERAL AIR QUALITY REQUIREMENTS

Source	Denini Negatio		40	CFI	R 60	NSP	S				40 C	FR 63			40 CF	R
ID No.:	Descriptive Name of the Source	A	AAAA	Ka	Kb	D	GG	ШІ	А	Q	6V	ZZZZ		61	68	82
New	Facility Wide		2								3				3	
New	23-01, Thermal Oxidizer															
New	23-01(a), Tire Skid Pyr Furnace					-										
New	23-01(b), Tire Skid Char Furnace															
New	23-01(c), Tire Skid Syngas Scrubber															
New	23-01(d), Plastic Skid Pyr Furnace															
New	23-01(e), Plastic Skid Char Furnace															
New	23-01(f), Plastic Skid Syngas Scrubber														E E	
New	23-02, Cooling Tower									2						
New	23-03, Loading Emissions															
New	23-04, Tire Skid Feed Hopper Purge Vent															
New	23-05, Tire Skid Char Storage Purge Vent															
New	23-06, Tire Skid Pyr Oil Storage Tank				3											
New	23-07, Plastic Skid Feed Hopper Purge Vent															
New	23-08, Plastic Skid Char Storage Purge Vent															
New	23-09, Plastic Skid Pyr Oil Storage Tank				3											
New	FUG-01, Tire Skid Fugitive Leak Emissions															
New	FUG-02, Plastic Skid Fugitive Leak Emissions															

TABLE 1: APPLICABLE LOUISIANA AND FEDERAL AIR QUALITY REQUIREMENTS

KEY TO MATRIX

- 1 (Applicable) The regulations have applicable requirements that apply to this particular emissions source. This includes any monitoring, recordkeeping, or reporting requirements.
- 2 (Exempt) The regulations apply to this general type of emission source (i.e. vents, furnaces, towers, and fugitives) but do not apply to this particular emission source.
- 3 (Does Not Apply) The regulations do not apply to this emissions source. The regulations may have applicable requirements that could apply to this emissions source but the requirements do not currently apply to the source due to meeting a specific criterion, such as it has not been constructed, modified or reconstructed since the regulations have been in place.

Blank – The regulations clearly do not apply to this type of emission source.

TABLE 2: STATE AND FEDERAL AIR QUALITY REQUIREMENTS

For each Emission Point ID Number:

- List each regulation that applies.
- Arrange the requirements imposed by each regulation according to the headings provided below.
- Repeat this process for each regulation that applies to each source.
- State-only Requirements should be noted as such in the appropriate column.

Emission Point ID No.:	Applicable Requirement	Compliance Method/Provision	Compliance Citation	Averaging Period/Frequency	State Only Requirement
Facility Wide	LAC 33:III Chapter 9: General Regulations on Control of Emissions and Emission Standards	Requirements that specify reports to be submitted — Unauthorized discharges into the atmosphere shall be reported according to LAC 33:1.3925.	LAC 33:III.927	As necessary	Yes
Facility Wide	LAC 33:III Chapter 11 — Control of Emissions of Smoke	Requirements that limit emissions or operations - Emission of smoke which passes onto or across a public road and creates a traffic hazard by impairment of visibility as defined in LAC 33:III.111 or intensifies an existing traffic hazard condition is prohibited.	LAC 33:III.1103	NA	Yes
Facility Wide	LAC 33:III Chapter 13 — Emission Standards for Particulate Matter	Requirements that limit emissions or operations — Emissions of particulate matter which pass onto or across a public road and create a traffic hazard by impairment of visibility or intensify an existing traffic hazard condition are prohibited.	LAC 33:III.1303.B	NA	Yes
Facility Wide	LAC 33:III Chapter 13 — Emission Standards for Particulate Matter	Requirements that limit emissions or operations — All reasonable precautions shall be taken to prevent particulate matter from becoming airborne.	LAC 33:111.1305.A	NA	Yes
Facility Wide	LAC 33:III Chapter 21 — Control of Emission of Organic Compounds	Requirements that limit emissions or operations — Maintain best practical housekeeping and maintenance practices at the highest possible standards to reduce the quantity of organic compounds emissions. Good housekeeping shall include, but not be limited to, the practices listed in LAC 33:III.2113.A.	LAC 33:111.2113.A	NA	Yes

Emission Point ID No.:	Applicable Requirement	Compliance Method/Provision	Compliance Citation	Averaging Period/Frequency	State Only Requirement
Facility Wide	LAC 33:III Chapter 29 — Odor Regulations	Requirements that limit emissions or operations — Discharges of odorous substances at or beyond property lines which cause a perceived odor intensity of six or greater on the specified eight point butanol scale as determined by Method 41 of LAC 33:III.2901.G are prohibited.	LAC 33:III.2901.D	NA	Yes
Facility Wide	LAC 33:III Chapter 29 — Odor Regulations	Requirements that limit emissions or operations — If requested to monitor for odor intensity, take and transport samples in a manner which minimizes alteration of the samples either by contamination or loss of material. Evaluate all samples as soon after collection as possible in accordance with the procedures set forth in LAC 33:III.2901.G.	LAC 33:111.2901.F	NA	Yes
23-01, Thermal Oxidizer; 23-01(a), Tire Skid Pyr Furnace; 23-01(b), Tire Skid Char Furnace; 23-01(d), Plastic Skid Pyr Furnace; 23-01(e), Plastic Skid Char Furnace	LAC 33:III Chapter 11 — Control of Emissions of Smoke	Requirements that limit emissions or operations — Opacity <=20 percent, except during the cleaning of a fire box or building of a new fire, soot blowing or lancing, charging of an incinerator, equipment changes, ash removal or rapping of precipitators, which may have an opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes.	LAC 33:III.1101.B	NA	Yes
23-01, Thermal Oxidizer; 23-01(a), Tire Skid Pyr Furnace; 23-01(b), Tire Skid Char Furnace; 23-01(d), Plastic Skid Pyr Furnace; 23-01(e), Plastic Skid Char Furnace; 23-02, Cooling Tower	LAC 33:III Chapter 13 — Emission Standards for Particulate Matter	Requirements that limit emissions or operations — The emission of particulate matter from any source other than sources covered under Subsection D of this Section shall be controlled so that the shade or appearance of the emission is not denser than 20 percent average opacity (see LAC 33:III.1503.D.2, Table 4); except the emissions may have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes.	LAC 33:III.1311.C	Continuous	Yes

TABLE 2: STATE AND FEDERAL AIR QUALITY REQUIREMENTS

Emission Point ID No:	Requirement	Exempt or Does Not Apply	Explanation	Citation Providing for Exemption or Non- applicability
Facility Wide	LAC 33:III Chapter 21 Waste Gas Disposal	Does Not Apply	The facility does not have the potential to emit greater than 100 tons per year VOCs.	LAC 33:III.2115.A
Facility Wide	40 CFR 60 Subpart AAAA- NSPS for Small Municipal Waste Combustion Units for Which Construction is Commenced After August 30, 1999	Exempt	The proposed facility is a pyrolysis unit located at a rubber recycling unit and does not directly combust any waste.	60.1020(h)
Facility Wide	40 CFR 63 Subpart VVVVV NESHAPs for Chemical Manufacturing Area Sources	Does Not Apply	The facility does not contain a HAP as listed in Table 1.	63.11494(a)(2)
23-01, Thermal Oxidizer; 23-01(a), Tire Skid Pyr Furnace; 23-01(b), Tire Skid Char Furnace; 23-01(d), Plastic Skid Pyr Furnace; 23-01(e), Plastic Skid Char Furnace	LAC 33:III Chapter 15 Emission Standards for Sulfur Dioxide	Exempt	All individual combustion sources burn either a virgin fossil fuel such as Natural Gas or a plant derived fuel gas and will not exceed 5 tpy SOx emissions for any one source.	LAC 33:III.1502.A
23-02, Cooling Tower	NESHAP 40 CFR 63 Subpart Q- Industrial Process Cooling Towers	Exempt	Facility does not use chromium-based water treatment chemicals.	40 CFR 63.400
23-03, Loading Emissions	LAC 33:III Chapter 21 Control of Emission of Organic Compounds	Exempt	The source does not load a VOC with a vapor pressure greater than 1.5 psia.	LAC 33:III.2107.A
23-06, Tire Skid Pyr Oil Storage Tank; 23-09, Plastic Skid Pyr Oil Storage Tank	LAC 33:III Chapter 21 Storage of Volatile Organic Liquids	Exempt	The vessels do not contain a VOC with a vapor pressure greater than 1.5 psia.	LAC 33:III.2103.A

TABLE 3: EXPLANATION FOR EXEMPTION STATUS OR NON-APPLICABILITY OF A SOURCE

TABLE 3: EXPLANATION FOR EXEMPTION STATUS OR NON-APPLICABILITY OF A SOURCE

Emission Point ID No:	Requirement	Exempt or Does Not Apply	Explanation	Citation Providing for Exemption or Non- applicability
23-06, Tire Skid Pyr Oil Storage Tank; 23-09, Plastic Skid Pyr Oil Storage Tank	40 CFR 60 Subpart Kb Volatile Organic Liquid Storage	Does Not Apply	Capacity of storage tank is <19,815 gals therefore, this tank is not subject to NSPS Subpart Kb.	40 CFR 60.110b(a)
FUG-01, Tire Skid Fugitive Leak Emissions; FUG- 02, Plastic Skid Fugitive Leak Emissions	LAC 33:III Chapter 21 Fugitive Emission Control	Does Not Apply	The facility is not a listed affected source for this chapter.	LAC 33:III.2122

The above table provides explanation for either the exemption status or non-applicability of a source cited by 2 or 3 in the matrix presented in Table 1 of this application.

Emission Point ID No:	Description	Construction Date	Routes to:	Operating Rate/Volume	Applicable Requirement(s)?
23-01(a)	Tire Skid Pyr Furnace	2024	23-01	3 MMBTU/hr	Yes No
23-01(b)	Tire Skid Char Furnace	2024	23-01	0.2 MMBTU/hr	Yes No
23-01(c)	Tire Skid Syngas Scrubber	2024	23-01		Yes No
23-01(d)	Plastic Skid Pyr Furnace	2024	23-01	2.5 MMBTU/hr	Yes No
23-01(e)	Plastic Skid Char Furnace	2024	23-01	0.2 MMBTU/hr	Yes No
23-01(f)	Plastic Skid Syngas Scrubber	2024	23-01		Yes No
					Yes No
					Yes No
					Yes No
		1 · · · · · · · · · · · · · · · · · · ·			Yes No
					Yes No
					Yes No
					Ves No
					Ves No
					Yes No
					Yes No
					Yes No
					Yes No
					Ves No
					Ves No
					Yes No
					Ves No
					Ves No

Enter each single emission point that routes its emissions to another source (i.e., a control device) or a common stack, or is part of an Emissions Cap. List the emissions source to which each single emission point is routed or the Cap of which the source is a member, if applicable. Consult instructions.

Appendix B Emissions Inventory Questionnaires (EIQs)

						S	itate of Lo	ouisiana							Date o	f submitt	al
					Emission	s Inventory (Questionn	aire (EIQ)) for Ai	r Pollutants					Nov	20	023
E		oint ID No.		Descriptiv	e Name of the	Emissions Source	(Alt. Name))		A	pproximate Locati	ion of Stack or '	Vent (see i	nstructions)			
	(Design 23-				Thern	nal Oxidizer			Method		Contraction of the local division of the loc	lation - Satellite"	CONTRACTOR OF THE OWNER.		- Charles Colors	WGS84	
Tem	po Subjec	t Item ID No.	1						UTM Zon Latitude	°	56		mE24		09	-	mN
	ТВ	BD							Longitude		50		36		18	<u>hund</u>	lredths
Physica	and Disc I Charact ge? (yes o	teristics D	ameter (ft) ischarge Ar		Height of S Above Grad	and the second		Stack Gas Condition Standard (s, <u>not</u> at	Stack Gas Exit Temperature (°F)	Normal Opera Time (hours per ye	Cor	Date of struction odification	or Thr	oughput	of Annu Throug on Point	h This
	yes		6	ft	50	ft 1.71	ft/sec	2,900	_ft^3/min	<u>302</u> °F	8760	hr/yr		Jan- Mar 25%	Apr- Jun 25%	Jul-Sep	Oct Dec 25%
			28.274	ft ²							1						
		Type of	Fuel Used	and Heat I	nput (see in	structions)					Operating Par	ameters (incl	ude unit	s)			-
uel	Type of Fuel Heat Input (MMBTU/h											Parame	ter		Descript	tion	
	a Natural Gas / Syngas 0.55 b									l Operating Rate/Throughput 0.55 MMBtu/hr um Operating Rate/Throughput 0.55 MMBtu/hr							
	c							Desig	n Capacity/	/olume/Cylinder D	isplacement		N/A				
				Notes				Shell	Height (ft)				N/A				
23-017	Thermal O	xidizer includes of	emissions fro		3-01(b), 23-01	(c), 23-01(d), 23-0	I(e), and	Tank	Diameter (ft	and the second day of the seco			N/A				
				23-01(f).				Tank		Fixed Roof	Floating Roo	of 🗌	Exter			Inte	ernal
									Engine Orde				Engine N	lodel Year			
										Built by Manufactu	the second se				-	-	
								SI En	gines:	Rich Bu		Lean Burn		2 Stroke		4 Strok	e
Emi	ssion Poin	at ID No. (Design 23-01	nation)	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number		Proposed	Emission R	ates	Permitted Emission Rate (Current)	Add, Change, Delete, or	Contin Compli Meth	ance Co		tion in G at Stack	
ollutar	nt						Averag (lb/hr)		aximum lbs/hr)	Annual (tons/yr)	Annual (tons/yr)	Unchanged	Medi	ou .			
	ate matter (107					0.048		0.058	0.21		А				gr/s	td ft3
	ite matter ((PM _{2.5})					0.048		0.058	0.21		A					td ft3
ulfur di							2.849		3.419	12.48		A				ppm	
ALC: NOT	oxides						2.673		3.208	11.71		A				ppm	-
	monoxide						18.380		22.056	80 51		A				ppm	-
		ling those listed b	elow)			000000 00 0	0.040		0.048	0.17		A				ppm	
ormald						00050-00-0	< 0.00		< 0.001	< 0.01		A				ppm	
-Hexan	loric acid					00110-54-3 07647-01-0	0.001		0.002	0.01		A				ppm	-

Emission Point ID No. (Designation) 23-01			HAP / TAP CAS Number	Pro	oposed Emission R	ates	Permitted Emission Rate (Current)	Add, Change, Delete, or	Continuous Compliance	Concentration in Gases Exiting at Stack
Pollutant			1 cm	Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)	Unchanged	Method	and the second second
Hydrofluoric acid			07664-39-3	0.034	0.041	0.15	***	A		ppm by vol

							State of Lou	isiana							Date of	of submitte	d
					Emission	is Inventory	Questionnai	ire (EIQ) i	for Air	Pollutants					Nov	20	23
E		Point ID No. nation)	T	Descriptiv	e Name of the	Emissions Source	ce (Alt. Name)			A	oproximate Locat	ion of Stack or	Vent (see	instructions)		
		-02			Coo	ling Tower		M	lethod		20,"Interpo	lation - Satellite			Datum	WGS84	
-	~ • • •		_					1.1	TM Zone	29 °		611598	mE	Vertical			mN
Ten	ipo Subje	ct Item ID No.							atitude ongitude	91 °	56	-	25			5 hundi 2 hundi	
	TI	BD							ongnude					-		2 nundi	eutus
Stack	k and Disc	harge I	Diameter (ft) or Stack	Height of S	tack Stack	Gas Exit S	Stack Gas Flo	w at	Stack Gas Exit	Normal Opera	ating	Date of	T	Percent	of Annu	al
1.1.1.1.2.4.4	al Charac		Discharge A	Area (ft ²)	Above Grad	le (ft) Vel	ocity (Conditions, <u>n</u>	ot at	Temperature	Time	Co	onstruction	or Th		Through	
Chai	nge? (yes	or no)					S	Standard (ft ³ /	min)	(°F)	(hours per ye	ar) N	Aodificatio	n	Emiss	ion Point	
				8									1	Jan	- Apr-	Jul-Sep	Oct
	yes			ft		ft	ft/sec	ft	^3/min	77 °F	8760	hr/yr		Ma			Dec
				ft ²										259	6 25%	25%	25%
		Туре о	f Fuel Use	ed and Heat I	nput (see in	structions)					Operating Par	ameters (inc	lude unit	ts)			
uel		1	Type of Fuel	I	Heat	input (MMBTU/	hr)					Param	Piccar a		Descrip	tion	
	a	the second second	N/A			N/A		Normal Operating Rate/Throughput					and the second se	gpm			
	b							Maximun	n Operati	ng Rate/Throughpu	ıt		500	gpm	_		
	c							Design C	apacity/V	olume/Cylinder Di	splacement		N/A				
	-			Notes				Shell Hei	ght (ft)				N/A				
									meter (ft)				N/A				
								Tanks:		Fixed Roof	Floating Ro	of 🗌	Exte			Inte	rnal
								Date Eng					Engine M	Model Year	_		
										Built by Manufactu		1		2.61-1		1.6	
					6			SI Engin	es:	Rich Bu		Lean Burn		2 Stroke	<u> </u>	4 Strok	e
Em	ISSION POI	nt ID No. (Desi 23-02	gnation)	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	1	Proposed Em	nission R	ates	Permitted Emission Rate (Current)	Add, Change, Delete, or	Contin Compl Met	liance	and the second se	tion in G g at Stack	2.0-20 (P-27)
Polluta	nt						Average (lb/hr)	Maxi (lbs/		Annual (tons/yr)	Annual (tons/yr)	Unchanged	Mea	nou			
	ate matter	300					1.031	2.0	a la construcción de la construc	4.52		А				gr/st	
articul	ate matter	(PM _{2.5})					1.031	2.0	63	4.52		A				gr/st	
-													-				by vol
	-							-					-			ppm b	-
								-					-			ppm b	-
																ppm t	-
																ppm t	-
																ppm b	_

							State of Loui	isiana						Date of	f submittal
					Emission	is Inventory	Questionnaii	re (EIQ) for A	ir Pollutants					Nov	2023
E	(Desig	Point ID No. (nation) 1-03		Descriptiv		Emissions Sourc	e (Alt. Name)	Method			lation - Satellite'			and the state of t	WGS84
Теп		ect Item ID No.						UTM Zo Latitude Longitud	29 °	5 Horizontal 56 50	-	mE 23 " 39 "	Vertical	331	- Contraction of the second
Physic	k and Disc al Charac nge? (yes	teristics	Diameter (ft Discharge /	1	Height of S Above Grad	and the second sec	ocity C	tack Gas Flow at conditions, <u>not</u> at tandard (ft ³ /min)	Stack Gas Exit Temperature (°F)	Normal Opera Time (hours per ye	Co	Date of nstruction or lodification		ughput	of Annual Through T on Point
	yes			_fi _ft ²		ń	_ft/sec	ft^3/min	<u>77</u> °F	8760	hr/yr		Jan- Mar 25%	Apr- Jun 25%	Jul-Sep 0 1 25% 2
		Туре о	f Fuel Use	ed and Heat I	nput (see in	structions)		1	1	Operating Par	ameters (incl	ude units)	_		44
uel		1	Type of Fuel	1	Heat	nput (MMBTU/I	hr)				Parame	ter	1	Descript	ion
	a b		N/A			N/A		Maximum Opera	g Rate/Throughput ting Rate/Throughp Volume/Cylinder D			0,000,000 gal 0,000,000 gal N/A			
				Notes				Shell Height (ft)	volume/Cynnder D	rsplacement		N/A			
				indica				Tank Diameter (ft)			N/A			
								Tanks:		Floating Ro	of 🗌	External			Interna
								Date Engine Ord	ered			Engine Mode	el Year		
								and the second se	Built by Manufact	urer				-	
								SI Engines:	C Rich B		Lean Burn	2 2 5	troke		4 Stroke
Em	ission Poi	int ID No. (Desi 23-03	gnation)	Control Equipment Code	Control Equipment Efficiency	HAP/TAP CAS Number	P	Proposed Emission	Rates	Permitted Emission Rate (Current)	Add, Change, Delete, or	Continuou Complianc	Con		tion in Gase at Stack
olluta	nt						Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)	Unchanged	Method			
_		ding those listed	below)				0.032	0.038	0.14		A				ppm by
umen						00098-82-8	0.014	0.017	0.06		A			-	ppm by
-	enzene					00100-41-4	0.027	0.032	0.12		A		-		ppm by
lyrene		amara)				00100-42-5	0.018	0.021	0.08		A				ppm by
ylene	(mixed isc	omers)				#N/A	0.032	0.038	0.14		A		-		ppm by
-															ppm by
															ppm by
													-		ppm by

					S	State of Louis	siana						Date o	f submitta	al
				Emission	is Inventory (Questionnair	e (EIQ) for Ai	r Pollutants					Nov	20)23
ł	Emission Point ID N (Designation)	lo.	Descriptiv	e Name of the	Emissions Source	e (Alt. Name)		А	pproximate Locat	ion of Stack or	Vent (see	instructions)	1		
	23-04		,	Tire Skid Feed	Hopper Purge V	ent	Method		20,"Interpo	lation - Satellite"			Datum	WGS84	ł
							UTM Zor			611619	mE	Vertical			mN
Ten	npo Subject Item II	No.					Latitude	29° e -91°	56	-	29	-			
	TBD						Longitud	-91						<u>nunu</u>	eau
hysic	k and Discharge al Characteristics nge? (yes or no)		(ft) or Stack e Area (ft ²)	Height of S Above Grad		city Co	ack Gas Flow at onditions, <u>not</u> at andard (ft ³ /min)	Stack Gas Exit Temperature (°F)	Normal Opera Time (hours per ye	Cor	Date of astruction odificatio	or Thr	oughput	of Annua Through ion Point	h Th
	yes	0	25 ft	30	ft 0.07	7 ft/sec 0	.196 ft^3/min	208 °F	8760	hr/yr		Jan- Mar	Apr- Jun	Jul-Sep	Oc De
		0.0	<u>49</u> ft ²									25%	25%	25%	25
	T	pe of Fuel U	sed and Heat I	nput (see in	structions)			-	Operating Par	ameters (incl	ude unit	s)			
uel		Type of Fu	uel	Heat	nput (MMBTU/h	r)				Parame	ter		Descrip	tion	
	а	N/A			N/A		Normal Operating	rmal Operating Rate/Throughput 1.18 tons							
	b						Maximum Opera	ting Rate/Throughp	ut		1.30	tons/hr			
	c						Design Capacity/	Volume/Cylinder D	Displacement		N/A				
		والمحجود ومعاومة المحدور والمتراقية	Notes				Shell Height (ft)				N/A				
							Tank Diameter (f	t)			N/A	1			
							Tanks:	Fixed Roof	Floating Ro	of 🗌	Exter	rnal		Inte	rnal
							Date Engine Ord	ered			Engine N	Aodel Year	-		
							Date Engine Was	Built by Manufact		-					
							SI Engines:	Rich Bu	urn 🗆	Lean Burn		2 Stroke		4 Strok	e
Em	uission Point ID No. 23-04	(Designation)	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	P	roposed Emission I	Rates	Permitted Emission Rate (Current)	Add, Change, Delete, or	Contin Compl Meth	iance Co		tion in G at Stack	
olluta	int					Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)	Unchanged					
	late matter (PM ₁₀)					< 0.001	< 0.001	< 0.01		A				gr/st	d ft ³
	late matter (PM _{2.5})				and the second second second	< 0.001	< 0.001	< 0.01		A				gr/st	_
	dioxide					< 0.001	< 0.001	< 0.01		A				ppm t	
-	en oxides					< 0.001	< 0.001	< 0.01		A	-		-	ppm t	
	monoxide	listed by low?				0.152	0.182	0.67		A				ppm t	
	OC (including those	insted below)			07(17.01.0	< 0.001	< 0.001	< 0.01		A				ppm t	-
-	hloric acid				07647-01-0	< 0.001	< 0.001	< 0.01		A				ppm b	
yurot	luoric acid			A State of the second state of the	07664-39-3	< 0.001	< 0.001	< 0.01		A	1			ppm t	JY V

						State of Loui	siana						Date of	submittal
				Emission	is Inventory	Questionnai	re (EIQ) for Ai	ir Pollutants					Nov	2023
F	Emission Point ID No. (Designation) 23-05				Emissions Sour		Method	Α	pproximate Locat	ion of Stack or lation - Satellite"			Datum	WGS84
Ten	npo Subject Item ID N TBD	0.		in contra contra	Storage Funge		UTM Zo Latitude Longitud	29 °	Contraction of the American Statement of t	611612		ertical	3312 99 57	2821 mN hundredth
Physic	k and Discharge al Characteristics nge? (yes or no)	Diameter (ft Discharge		Height of S Above Grad	1000 C	locity C	tack Gas Flow at conditions, <u>not</u> at candard (ft ³ /min)	Stack Gas Exit Temperature (°F)	Normal Opera Time (hours per ye	Cor	Date of istruction or odification	Throu	ighput '	f Annual Fhrough Th n Point
	yes	0.2	-	30	ft	02 ft/sec (0.049 ft^3/min	<u>120</u> °F	8760	_hr/yr		Jan- Mar 25%	Apr- Jun 25%	Jul-Sep Oc Do 25% 25
-	Туре	of Fuel Use	ed and Heat I	nput (see in	structions)		1	1	Operating Par	rameters (incl	ude units)			
uel						/hr)				Parame	ter	D	escripti	on
	a b	N/A			N/A		Maximum Opera	g Rate/Throughput ting Rate/Throughp			0.09 tons 0.10 tons N/A			
			Notes				Shell Height (ft)	Volume/Cylinder D	rsplacement		N/A			
			Holes				Tank Diameter (1	ft)			N/A			
							Tanks:		Floating Ro	of 🗌	External			Internal
							Date Engine Ord	ered			Engine Model	Year		
							Date Engine Wa	s Built by Manufact	urer					
							SI Engines:	Rich B		Lean Burn	2 St	roke		4 Stroke
Em	aission Point ID No. (De 23-05	esignation)	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	I	roposed Emission	Rates	Permitted Emission Rate (Current)	Add, Change, Delete, or	Continuous Compliance	Con		on in Gases at Stack
Polluta	int					Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)	Unchanged	Method			
	late matter (PM ₁₀)					< 0.001	< 0.001	< 0.01		A		_		gr/std ft3
-	late matter (PM _{2.5})					< 0.001	< 0.001	< 0.01		A		-		gr/std ft3
_	dioxide					< 0.001	< 0.001	< 0.01		A				ppm by vo
-	en oxides					< 0.001	< 0.001	< 0.01		A		-		ppm by vo
	monoxide	ad halam)				< 0.001	< 0.001	< 0.01		A		-		ppm by vo
	OC (including those list chloric acid	ed below)			07647-01-0	< 0.001	< 0.001	< 0.01		A				ppm by vo
	luoric acid				07647-01-0	< 0.001	< 0.001	< 0.01		A		-		ppm by vo
iyuruli	nuone actu				0/004-39-3	× 0.001	~0.001	~0.01		A				ppin by ve

						State of Loui							Date o	f submittal	1
				Emission	is Inventory	Questionnai	re (EIQ) for Ai	r Pollutants					Nov	202	3
1	Emission Point II (Designation)	a and a second	Descriptiv	ve Name of the	Emissions Sour	ce (Alt. Name)			pproximate Locat	ion of Stack or	Vent (see	instructions)			_
	23-06			Tire Skid Py	r Oil Storage Ta	ink	Method		20,"Interpo	lation - Satellite			Datum	WGS84	
-							UTM Zo	ne 1: 29 °		611636	mE	Vertical			mN
Ten	npo Subject Item	ID No.					Latitude		56		22		6	-	
	TBD						Longado	<u> </u>	50					- nunare	au
Stac	k and Discharge	Diameter	(ft) or Stack	Height of S	tack Stack	Gas Exit St	tack Gas Flow at	Stack Gas Exit	Normal Opera	ating	Date of		Percent	of Annual	1
	al Characteristic nge? (yes or no)	S Discharg	e Area (ft ²)	Above Grad	le (ft) Ve		onditions, <u>not</u> at andard (ft ³ /min)	Temperature (°F)	Time (hours per ye	100 C	nstruction lodificatio	and the second se	and the state of the state of the	Through on Point	TI
	yes	0	0.33 ft	24	ft 0	19 ft/sec	1 ft^3/min	95 °F	8760	hr/yr	1	Jan- Mar	Apr- Jun		0
			086 ft ²								1	25%	25%		2:
		Type of Fuel U	sed and Heat I	nput (see in	structions)				Operating Par	rameters (inc	lude unit	s)	1	1	_
uel		Type of F	uel	Heat	Input (MMBTU)	hr)				Param			Descript	tion	
	a	N/A			N/A			g Rate/Throughput			10,000,000	and the second sec			
	D							ting Rate/Throughp			10,000,000	gal/yr			_
	c							Volume/Cylinder E	Displacement		N/A				_
_			Notes				Shell Height (ft)				21	and the second design of the s	1		_
							Tank Diameter (f	ATT OTHER DESIGNATION.	Election De		11		-		
							Tanks:		Floating Ro	of 🗌	Exter	*********		Interr	na
							Date Engine Ord	The second se			Engine N	1odel Year	-		_
							SI Engines:	Built by Manufact	the second s	Lean Burn		2 Stroke		4 Stroke	_
Em	nission Point ID N 23-00		Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	P	roposed Emission I		Permitted Emission Rate (Current)	Add, Change, Delete, or	Contin Compli	uous Co	ncentra	tion in Gas	-
olluta	int					Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)	Unchanged	Meth	bod			
otal V	OC (including the	ose listed below)				0.189	0.189	0.83		A				ppm by	y v
umen					00098-82-8	0.086	0.086	0.38		A				ppm by	y v
-	enzene				00100-41-4	0.161	0.161	0.70		A				ppm by	-
tyrene	and the second designed in the second designe				00100-42-5	0.105	0.105	0.46		A	-			ppm by	-
ylene	(mixed isomers)		-		#N/A	0.189	0.189	0.83		A			-	ppm by	-
-											-	_	-	ppm by	-
						-					-			ppm by	-
_														ppm by	-

						State of Lou	isiana							Date of	f submitta	al
				Emission	is Inventory	Questionnai	re (EIQ) f	for Air	Pollutants					Nov	20	023
E	mission Point ID No. (Designation)		Descriptiv	e Name of the	Emissions Sour	rce (Alt. Name)			Α	pproximate Locat	ion of Stack or	Vent (see	instructions)			_
	23-07		Р	lastic Skid Fee	d Hopper Purg	e Vent	1.00	fethod		the second second second second second second second	lation - Satellite	the second se			WGS84	
Ten	npo Subject Item ID N	lo.					L	JTM Zon atitude ongitude	<u>29</u> °	Horizontal56 50	-	-mE 29 35	- 1	2	12859 1 hundi 6 hundi	
	TBD							Augnuce			-		-		<u>o</u> nunu	cuits
Physic	k and Discharge al Characteristics age? (yes or no)	Diameter (f Discharge	2	Height of S Above Grad		elocity C	tack Gas Flo Conditions, <u>no</u> tandard (ft ³ /1	ot at	Stack Gas Exit Temperature (°F)	Normal Opera Time (hours per ye	Co	Date of nstruction lodification	1977 D	roughput	of Annua Through ion Point	h This
	yes	0.2	<u>5</u> ft	30	fi 0.	04 ft/sec	0.123 ft	t^3/min	208 °F	8760	hr/yr		Jan Mai 25%	Jun	Jul-Sep	Oct- Dec 25%
		0.04	<u>9</u> ft ²										25%	25%	25%	25%
	Туре	e of Fuel Use	ed and Heat I	nput (see in	structions)					Operating Par	ameters (inc	ude unit	ts)			
uel		Type of Fue	1	Heat	nput (MMBTU	//hr)					Parame	ter	Í	Descrip	tion	
	a	N/A			N/A		Normal O	Operating	Rate/Throughput			1.18	tons/hr			
	b						Maximun	n Operati	ng Rate/Throughp	ut		1.30	tons/hr			
_	c						Design Ca	apacity/V	olume/Cylinder D	isplacement		N/A				
			Notes				Shell Hei	ight (ft)				N/A				
							Tank Dia	meter (ft))			N/A				
							Tanks:		Fixed Roof	Floating Ro	of 🗌	Exte	rnal		Inte	ernal
							Date Engi	ine Orde	red			Engine N	Model Year			
							Date Engi	ine Was	Built by Manufactu	arer						
							SI Engine	les:	Rich Bu	irn 🗆	Lean Burn		2 Stroke		4 Strok	e
Em	ission Point ID No. (D 23-07	esignation)	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number		Proposed Em	nission R	ates	Permitted Emission Rate (Current)	Add, Change, Delete, or	Contin Compl Met	iance		tion in G at Stack	
Polluta	nt					Average (lb/hr)	Maxin (lbs/		Annual (tons/yr)	Annual (tons/yr)	Unchanged	Met	iou			
	ate matter (PM ₁₀)					< 0.001	< 0.0	AND NO P	< 0.01		A				gr/st	td ft ³
	ate matter (PM _{2.5})					< 0.001	< 0.(< 0.01		A	-				td ft ³
	lioxide					< 0.001	< 0.0		< 0.01		A					by vol
	n oxides					< 0.001	< 0.0		< 0.01		A	-				by vol
	monoxide		-			0.080	0.0		0.35		A				ppm l	-
	OC (including those list	ted below)				< 0.001	< 0.0	and the second sec	< 0.01		A				ppm l	-
	hloric acid		-		07647-01-0	< 0.001	< 0.0		< 0.01		A	-			ppm l	
lydrofl	uoric acid				07664-39-3	< 0.001	< 0.0	001	< 0.01		A					by vol
															ppm l	by ve

						State of Louis	siana						Date o	f submitta	d
				Emission	is Inventory	Questionnair	e (EIQ) for Ai	r Pollutants					Nov	20	23
E	mission Point (Designation	A STATISTICS .	Descriptiv	e Name of the	Emissions Sourc	e (Alt. Name)		А	pproximate Locat	ion of Stack or	Vent (see	instructions)			_
	23-08		P	lastic Skid Cha	ar Storage Purge	Vent	Method			lation - Satellite"	the second s			WGS84	
Tom	po Subject Iter	m ID No					UTM Zon Latitude	ne 15 29 °	Horizontal 56	611611	E27	Vertical	331	Contraction of the second second	mN
Ten	po subject te	in 117 140.					Longitude		50	-	36	- C	6	-	
	TBD						B			-		-			
	and Discharge		(ft) or Stack	Height of S	tack Stack C	Gas Exit Sta	ack Gas Flow at	Stack Gas Exit	Normal Opera	ating	Date of		Percent	of Annua	al
	al Characterist age? (yes or no	L'ischar	ge Area (ft ²)	Above Grad	le (ft) Velo		onditions, <u>not</u> at andard (ft ³ /min)	Temperature (°F)	Time (hours per ye	100 C	odification	CHINE CONT.		Through on Point	
	yes		0.25 ft	20			040 0421-1	120.05	0760		1	Jan-	Apr- Jun	Jul-Sep	Oct
			<u>0.25</u> ft	30	n <u>0.0</u> .	2 ft/sec0	049 ft^3/min	<u>120</u> °F	8760	_hr/yr	1	Mar 25%	25%	25%	25%
		0	.049 ft ²												
		Type of Fuel	Used and Heat I	nput (see in	structions)				Operating Par	rameters (incl	ude unit	s)			
uel		Type of l	Fuel	Heat	nput (MMBTU/ł	ir)				Parame	ter		Descript	tion	
	a	N/A			N/A		Normal Operating	g Rate/Throughput			0.09	tons/hr			
	b	A Dr. And Market					Maximum Operat	ing Rate/Throughp	ut		0.10	tons/hr			
_	c						the second se	Volume/Cylinder D	isplacement		N/A				
			Notes				Shell Height (ft)				N/A				
							Tank Diameter (fi	t)			N/A		a start		
							Tanks:	Fixed Roof	Floating Ro	of 🗌	Exter	mal		Inte	rnal
							Date Engine Orde	ered			Engine N	Aodel Year			
						1.00	Date Engine Was	Built by Manufact	urer						
							SI Engines:	Rich Bu	ırn 🗆	Lean Burn		2 Stroke		4 Strok	e
Em	ission Point ID 23-	No. (Designation)	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Pi	roposed Emission R	lates	Permitted Emission Rate (Current)	Add, Change, Delete, or	Contin Compl Meth	iance		tion in G	
Polluta	nt					Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)	Unchanged	Met	lou			
	ate matter (PM1	47.				< 0.001	< 0.001	< 0.01		A				gr/st	d ft ³
	ate matter (PM2	5)				< 0.001	< 0.001	< 0.01		A				gr/st	
	lioxide					< 0.001	< 0.001	< 0.01		A			_	ppm b	-
	n oxides					< 0.001	< 0.001	< 0.01		A				ppm t	-
	monoxide					< 0.001	< 0.001	< 0.01		A	-			ppm t	-
Contraction and a		hose listed below)			00/10 00 0	< 0.001	< 0.001	< 0.01		A				ppm t	-
-	nloric acid				07647-01-0	< 0.001	< 0.001	< 0.01		A				ppm b	and the second se
1000001	uoric acid				07664-39-3	< 0.001	< 0.001	< 0.01		A				ppm t	y vol

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				Emission	is Inventory	Questionnair	re (EIQ) for A	r Pollutants				1	Nov	2023
E	mission Point ID No. (Designation) 23-09				Emissions Sourc yr Oil Storage Ta		Method	Aj	20,"Interpo	ion of Stack or lation - Satellite"			Datum	WGS84
Ten	npo Subject Item ID No TBD	0.					UTM Zo Latitude Longitud	<u>29</u> °	Horizontal 56 50		WE V V VV VV	ertical _ _ _	3312 78 99	
Physics	s and Discharge al Characteristics nge? (yes or no)	Diameter (f Discharge	1.57	Height of S Above Grac		city C	ack Gas Flow at onditions, <u>not</u> at andard (ft ³ /min)	Stack Gas Exit Temperature (°F)	Normal Opera Time (hours per ye	Cor	Date of struction or odification	Throu	ghput '	f Annual Fhrough T n Point
	yes	-	33 ft 36 ft ²	24	ft 0.19	9 ft/sec	_1ft^3/min	<u>95</u> °F	8760	hr/yr		Jan- Mar 25%	Apr- Jun 25%	Jul-Sep C I 25% 2
	Туре	of Fuel Us	ed and Heat I	nput (see in	structions)		1		Operating Par	ameters (incl	ude units)			
uel		Type of Fu	and the second se		input (MMBTU/h	ir)				Parame		De	scripti	on
	a	N/A			N/A		Normal Operatin	g Rate/Throughput		10	0,000,000 gal/y	r		
	b						Maximum Opera	ting Rate/Throughpu	ıt	10	0,000,000 gal/y	r		
	c						Design Capacity	Volume/Cylinder Di	splacement		N/A			
			Notes				Shell Height (ft)				21 ft			
							Tank Diameter (t)			11 ft			
							Tanks:	Fixed Roof	Floating Roo	of 🗌	External			Interna
							Date Engine Ord	ered			Engine Model	Year		
							Date Engine Wa	Built by Manufactu	rer					
							SI Engines:	Rich Bu	rn 🗆	Lean Burn	2 Str	oke		4 Stroke
Em	ission Point ID No. (Do 23-09	esignation)	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Р	roposed Emission	Rates	Permitted Emission Rate (Current)	Add, Change, Delete, or	Continuous Compliance Method			on in Gase at Stack
Polluta	nt					Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)	Unchanged	wiethod			
_	OC (including those list	ed below)				0.189	0.189	0.83		Α				ppm by v
umene	and the second se		-		00098-82-8	0.086	0.086	0.38		A				ppm by v
	enzene				00100-41-4	0.161	0.161	0.70		A				ppm by v
lyrene	(mixed isomers)				00100-42-5 #N/A	0.105	0.105	0.46		A				ppm by v
yiene	(mixed isomers)				#IN/A	0.189	0.189	0.85		A		-		ppm by v
-												-		ppm by v
-														ppm by v
														ppm by v

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				Emission	is Inventory	Questionnair	e (EIQ) for Ai	r Pollutants					Nov	2023
E	mission Point ID No. (Designation) FUG-01				Emissions Sourc		Method	Aj	oproximate Locati			nstructions)		WCERA
Tem	po Subject Item ID Not	D.		Fire Skid Fug	itive Leak Emissi	ons	UTM Zor Latitude Longitude	<u>29</u> °	second second in the last of the local distribution of the second		mE 26			
Physica	and Discharge al Characteristics age? (yes or no)	Diameter (ft Discharge /		Height of S Above Grad		ocity C	ack Gas Flow at onditions, <u>not</u> at andard (ft ³ /min)	Stack Gas Exit Temperature (°F)	Normal Opera Time (hours per ye	Co	Date of nstruction lodification	or Thro	ughput	of Annual Through Th on Point
	yes		_ft _ft ²		fi	_ft/sec	ft^3/min	<u>77</u> °F	8760	hr/yr		Jan- Mar 25%	Apr- Jun 25%	Jul-Sep O D 25% 25
	Туре	of Fuel Use	ed and Heat I	nput (see in	structions)			L	Operating Par	ameters (inc	lude units	i)		
uel		Type of Fue	1	Heat	Input (MMBTU/I	nr)				Param	eter	1	Descript	ion
	a b	N/A			N/A		Maximum Opera	g Rate/Throughput ting Rate/Throughpu			N/A N/A			
	c					-		Volume/Cylinder Di	splacement		N/A			
			Notes			-	Shell Height (ft)				N/A			
							Tank Diameter (1	The second se	Floating Roo	of \Box	N/A Extern	al.		Internal
							Date Engine Ord		Fibiting Ko		Engine M			Internal
								Built by Manufactu			Engine M	odel Year		
							SI Engines:	Rich Bu	and the second se	Lean Burn		2 Stroke		4 Stroke
Emi	ssion Point ID No. (Do FUG-01	esignation)	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Р	roposed Emission I		Permitted Emission Rate (Current)	Add, Change, Delete, or	Continu Complia	ious ance Cor	acentrat	ion in Gases at Stack
Pollutar	nt					Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)	Unchanged	Metho	ba		
otal VO	OC (including those list	ed below)				0.212		0.93		A			_	ppm by ve
											-	_		ppm by vo
														ppm by ve
														ppm by vo
											-			ppm by ve
														ppm by vo
														ppm by vo
														ppm by vo

					5	State of Louis	iana						Date of	submittal	
				Emission	s Inventory	Questionnair	e (EIQ) for Ai	r Pollutants					Nov	202	3
E	mission Point I (Designation FUG-02	Contraction of the second s			Emissions Sourc		Method		the second s	lation - Satellite				WGS84	
Ten	npo Subject Iter TBD	n ID No.					UTM Zon Latitude Longitude	°	Horizontal5650	-	<u>26</u> " 37 "	Vertical	331 48 00	hundre	
Physic	k and Discharge al Characteristi nge? (yes or no)	ics Discl	eter (ft) or Stack harge Area (ft ²)	Height of S Above Grad	and the second s	city Co	nck Gas Flow at anditions, <u>not</u> at andard (ft ³ /min)	Stack Gas Exit Temperature (°F)	Normal Opera Time (hours per ye	Co	Date of nstruction or lodification		ughput	of Annual Through on Point	
	yes	-	ft ft ²		ñ	_ft/sec	ft^3/min	<u>77</u> °F	8760	_hr/yr		Jan- Mar 25%	Apr- Jun 25%	Jul-Sep	Oct- Dec 25%
-		Type of Fu	el Used and Heat I	nput (see in	structions)			1	Operating Par	ameters (inc	lude units)				
uel		Туре	of Fuel	Heat I	nput (MMBTU/h	r)				Param	eter	I	Descript	ion	
	a b c	N	I/A		N/A		Maximum Operat	g Rate/Throughput ing Rate/Throughp Volume/Cylinder D			N/A N/A N/A				
			Notes				Shell Height (ft) Tank Diameter (ft				N/A N/A				
							Tanks:	Fixed Roof	Floating Ro	of 🗌	Externa			Inter	nal
							Date Engine Orde				Engine Mo	del Year			
							SI Engines:	Built by Manufactu		Lean Burn	2	Stroke		4 Stroke	
Em	ission Point ID FUG		ion) Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Pr	oposed Emission R		Permitted Emission Rate (Current)	Add, Change, Delete, or	Continuo Compliar	ous Ice Cor	icentrat	ion in Ga	
Polluta	nt			_		Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)	Unchanged	Method				
otal V	OC (including th	nose listed belo	w)			0.212		0.93		A				ppm by	
_							-					_		ppm by	
-												-		ppm by	-
												-		ppm by	
														ppm by	-
														ppm by	
														ppm by	-
														ppm by	-

Appendix C Air Emission Calculations

Thermal Oxidizer Emission Point No.: 23-01

Description of Source

Various exhaust and syngas streams from the Tire Skid and Plastic Skid units are routed to a thermal oxidizer.

Annual Operation: 8,760 hrs/yr

	Emission			Emissions	
Pollutant	Rate ⁽¹⁾ (lbs/hr)	Control Efficiency (%)	Average ⁽²⁾ (lbs/hr)	Maximum ⁽³⁾ (lbs/hr)	Annual ⁽⁴⁾ (:ons/yr)
Particulate Matter (PM ₁₀)	0.044		0.048	0.058	0.21
Particulate Matter (PM _{2.5})	0.044		0.048	0.058	0.21
Sulfur dioxide (SO ₂)	2.849		2.849	3.419	12.48
Nitrogen oxides (NO _x)	2.646		2.673	3.208	11.71
Carbon monoxide (CO)	916.744	98%	18.380	22.056	80.51
Total VOC	1.230	97%	0.040	0.048	0.17
Formaldehyde	0.000	97%	0.000	0.000	0.00
Hexane	0.010	97%	0.001	0.002	0.01
Hydrochloric Acid (HCI)	0.115		0.115	0.138	0.50
Hydrofluoric Acid (HF)	0.034		0.034	0.041	0.15

⁽¹⁾ Emission rates are derived from vendor data and AP-42 1.4.

(2) Calculated as: Emission Rate (lbs/hr) X (1 - Control Efficiency) + Average Natural Gas Combustion Emissions (lbs/hr)

⁽³⁾ Calculated as: Average Operating Rate (tons/hr) X 1.2

(4) Calculated as: Average hourly emissions (lbs/hr) X Annual Operation (hrs/yr) + 2,000 lbs/ton.

Annual Operation: Total Natural Gas Usage: 8,760 hrs/yr 0.55 MMBtu/hr

23-01 Thermal Oxidizer Natural Gas Combustion Emissions

	Emission			Emissions	
Pollutant	Factor ⁽¹⁾ (lbs/MMBtu)	Control Efficiency	Average ⁽²⁾ (lbs/hr)	Maximum ⁽³⁾ (lbs/hr)	Annual ⁽⁴⁾ (tons/yr)
Particulate Matter (PM ₁₀)	0.0075		0.004	0.005	0.02
Particulate Matter (PM _{2.5})	0.0075		0.004	0.005	0.02
Sulfur dioxide (SO ₂)	0.0006		0.000	0.000	0.00
Nitrogen oxides (NO _x)	0.0490		0.027	0.032	0.12
Carbon monoxide (CO)	0.0824		0.045	0.054	0.20
Total VOC	0.0054		0.003	0.004	0.01
Formaldehyde	0.0001		0.000	0.000	0.00
Hexane	0.0018		0.001	0.001	0.00

⁽¹⁾ Emission factors are from AP-42 1.4.

²⁾ Calculated as: Emission Factor (lbs/MMBtu) X Total Fuel Gas Usage (MMBtu/hr) X (1- Control Efficiency)

⁽³⁾ Calculated as: Average (lbs/hr) X 1.2

⁽⁴⁾ Calculated as: Average hourly emissions (lbs/hr) X Annual Operation (hrs/yr) ÷ (2,000 lbs/ton)

Thermal Oxidizer Emission Point No.: 23-01

Annual Operation: Total Natural Gas Usage:

8,760 hrs/yr 3.0 MMBtu/hr

23-01(a) Tire Skid Pyr Furnace

	Emission			Emissions	
Pollutant	Rate ⁽¹⁾ (lbs/hr)	Control Efficiency (%)	Average ⁽²⁾ (lbs/hr)	Maximum ⁽³⁾ (lbs/hr)	Annual ⁽⁴⁾ (tons/yr)
Particulate Matter (PM10)	0.022		0.022	0.027	0.10
Particulate Matter (PM25)	0.022		0.022	0.027	0.10
Sulfur dioxide (SO ₂)	1.044		1.044	1.253	4.57
Nitrogen oxides (NO _x)	0.783		0.783	0.940	3.43
Carbon monoxide (CO)	0.391	***	0.391	0.470	1.71
Total VOC	0.039		0.039	0.047	0.17
Formaldehyde	0.000		0.000	0.000	0.00
Hexane	0.005		0.005	0.006	0.02
Hydrochloric Acid (HCI)	0.026		0.026	0.031	0.11
Hydrofluoric Acid (HF)	0.008		0.008	0.009	0.03

(1) Emission rates are derived from vendor data. PM, Formaldehyde, and Hexane emissions are derived from AP-42 1.4.

(2) Calculated as: Emission Rate (lbs/hr) X (1 - Control Efficiency)

⁽³⁾ Calculated as: Average Operating Rate (tons/hr) X 1.2

⁽⁴⁾ Calculated as: Average hourly emissions (lbs/hr) X Annual Operation (hrs/yr) ÷ 2,000 lbs/ton.

Annual Operation: Total Natural Gas Usage: 8,760 hrs/yr 0.2 MMBtu/hr

23-01(b) Tire Skid Char Furnace

	Emission			Emissions	
Pollutant	Rate ⁽¹⁾ (lbs/hr)	Control Efficiency (%)	Average ⁽²⁾ (lbs/hr)	Maximum ⁽³⁾ (lbs/hr)	Annual ⁽⁴⁾ (tons/yr)
Particulate Matter (PM ₁₀)	0.001		0.001	0.002	0.01
Particulate Matter (PM _{2.5})	0.001		0.001	0.002	0.01
Sulfur dioxide (SO ₂)	0.099		0.099	0.118	0.43
Nitrogen oxides (NO _x)	0.074		0.074	0.089	0.32
Carbon monoxide (CO)	0.037		0.037	0.044	0.16
Total VOC	0.004		0.004	0.004	0.02
Formaldehyde	0.000		0.000	0.000	0.00
Hexane	0.000	***	0.000	0.000	0.00
Hydrochloric Acid (HCI)	0.002		0.002	0.003	0.01
Hydrofluoric Acid (HF)	0.001		0.001	0.001	0.00

(1) Emission rates are derived from vendor data. PM, Formaldehyde, and Hexane emissions are derived from AP-42 1.4.

(2) Calculated as: Emission Rate (lbs/hr) X (1 - Control Efficiency)

(3) Calculated as: Average Operating Rate (tons/hr) X 1.2

⁽⁴⁾ Calculated as: Average hourly emissions (lbs/hr) X Annual Operation (hrs/yr) ÷ 2,000 lbs/ton.

Annual Operation:

8,760 hrs/yr

	Emission			Emissions	
Pollutant	Rate ⁽¹⁾ (lbs/hr)	Control Efficiency (%)	Average ⁽²⁾ (lbs/hr)	Maximum ⁽³⁾ (lbs/hr)	Annual ⁽⁴⁾ (tons/yr)
Particulate Matter (PM ₁₀)	0.000		0.000	0.000	0.00
Particulate Matter (PM25)	0.000		0.000	0.000	0.00
Sulfur dioxide (SO ₂)	13.660	98%	0.273	0.328	1.20
Nitrogen oxides (NO _x)	0.205		0.205	0.246	0.90
Carbon monoxide (CO)	473.076		473.076	567.691	2072.07
Total VOC	0.512		0.512	0.615	2.24
Hydrochloric Acid (HCI)	0.007		0.007	0.008	0.03
Hydrofluoric Acid (HF)	0.002		0.002	0.002	0.01

23-01(c) Tire Skid Syngas Scrubber

(1) Emission rates derived from vendor data.

(2) Calculated as: Emission Rate (lbs/hr) X (1 - Control Efficiency)

⁽³⁾ Calculated as: Average Operating Rate (tons/hr) X 1.2

⁽⁴⁾ Calculated as: Average hourly emissions (lbs/hr) X Annual Operation (hrs/yr) ÷ 2,000 lbs/ton.

Annual Operation: Total Natural Gas Usage: 8,760 hrs/yr 2.5 MMBtu/hr

23-01(d) Plastic Skid Pyr Furnace

	Emission			Emissions	
Pollutant	Rate ⁽¹⁾ (lbs/hr)	Control Efficiency (%)	Average ⁽²⁾ (lbs/hr)	Maximum ⁽³⁾ (lbs/hr)	Annual ⁽⁴⁾ (tons/yr)
Particulate Matter (PM ₁₀)	0.019		0.019	0.022	0.08
Particulate Matter (PM _{2.5})	0.019		0.019	0.022	0.08
Sulfur dioxide (SO ₂)	1.388		1.388	1.666	6.08
Nitrogen oxides (NO _x)	1.388		1.388	1.666	6.08
Carbon monoxide (CO)	1.041		1.041	1.249	4.56
Total VOC	0.104		0.104	0.125	0.46
Formaldehyde	0.000		0.000	0.000	0.00
Hexane	0.004		0.004	0.005	0.02
Hydrochloric Acid (HCI)	0.069		0.069	0.083	0.30
Hydrofluoric Acid (HF)	0.021		0.021	0.025	0.09

(1) Emission rates are derived from vendor data. PM, Formaldehyde, and Hexane emissions are derived from AP-42 1.4.

⁽²⁾ Calculated as: Emission Rate (lbs/hr) X (1 - Control Efficiency)

⁽³⁾ Calculated as: Average Operating Rate (tons/hr) X 1.2

(4) Calculated as: Average hourly emissions (lbs/hr) X Annual Operation (hrs/yr) ÷ 2,000 lbs/ton.

Thermal Oxidizer Emission Point No.: 23-01

Annual Operation: Total Natural Gas Usage: 8,760 hrs/yr 0.2 MMBtu/hr

23-01(e) Plastic Skid Char Furnace

	Emission		Emissions		
Pollutant	Rate ⁽¹⁾ (lbs/hr)	Control Efficiency (%)	Average ⁽²⁾ (lbs/hr)	Maximum ⁽³⁾ (lbs/hr)	Annual ⁽⁴⁾ (tons/yr)
Particulate Matter (PM10)	0.001		0.001	0.002	0.01
Particulate Matter (PM2.5)	0.001		0.001	0.002	0.01
Sulfur dioxide (SO ₂)	0.045		0.045	0.054	0.20
Nitrogen oxides (NO _x)	0.045		0.045	0.054	0.20
Carbon monoxide (CO)	0.034		0.034	0.040	0.15
Total VOC	0.003		0.003	0.004	0.01
Formaldehyde	0.000		0.000	0.000	0.00
Hexane	0.000		0.000	0.000	0.00
Hydrochloric Acid (HCI)	0.002		0.002	0.003	0.01
Hydrofluoric Acid (HF)	0.001		0.001	0.001	0.00

(1) Emission rates are derived from vendor data. PM, Formaldehyde, and Hexane emissions are derived from AP-42 1.4.

⁽²⁾ Calculated as: Emission Rate (lbs/hr) X (1 - Control Efficiency)

⁽³⁾ Calculated as: Average Operating Rate (tons/hr) X 1.2

^[4] Calculated as: Average hourly emissions (lbs/hr) X Annual Operation (hrs/yr) ÷ 2,000 lbs/ton.

Annual Operation:

8,760 hrs/yr

23-01(f) Plastic Skid Syngas Scrubber

	Emission		Emissions		
Pollutant	Rate ⁽¹⁾ (lbs/hr)	Control Efficiency (%)	Average ⁽²⁾ (lbs/hr)	Maximum ⁽³⁾ (lbs/hr)	Annual ⁽⁴⁾ (tons/yr)
Particulate Matter (PM10)	0.000		0.000	0.000	0.00
Particulate Matter (PM2.5)	0.000		0.000	0.000	0.00
Sulfur dioxide (SO ₂)	0.000	98%	0.000	0.000	0.00
Nitrogen oxides (NO _x)	0.151		0.151	0.182	0.66
Carbon monoxide (CO)	442.164		442.164	530.597	1936.68
Total VOC	0.567		0.567	0.681	2.48
Hydrochloric Acid (HCI)	0.008		0.008	0.009	0.03
Hydrofluoric Acid (HF)	0.002		0.002	0.003	0.01

(1) Emission rates derived from vendor data.

(2) Calculated as: Emission Rate (lbs/hr) X (1 - Control Efficiency)

(3) Calculated as: Average Operating Rate (tons/hr) X 1.2

(4) Calculated as: Average hourly emissions (lbs/hr) X Annual Operation (hrs/yr) ÷ 2,000 lbs/ton.

Description of Source

A cooling tower provides cooling water for the facility.

Hours of Operation:	8,760	hrs
Circulating Water:	500	gpm
Circulating Water:	30,000	gph
Dissolved Solids ⁽¹⁾ :	0.172	lb/gal
Drift Emission Factor ⁽¹⁾ :	0.0200%	

	Emission Rates ⁽¹⁾				
Pollutant	Avg (lb/hr)	Max (lb/hr)	Annual (tons/yr)		
Particulate Matter (PM ₁₀)	1.031	2.063	4.52		
Particulate Matter (PM _{2.5})	1.031	2.063	4.52		

⁽¹⁾ Calculated per methodology from AP-42 13.4, Wet Cooling Towers.

Cooling Tower Emission Point No.: 23-02

Description of Source

Pyrolysis Oil will be loaded onto both tank trucks and railcars. Exact composition of Pyrolysis oil may vary, so worst case emisssions are provided. Anticipated TAPs are included; however, other non-TAP VOCs will be emitted.

Railcar Loading Fugitive Emissions⁽¹⁾

saturation factor (S) ⁽²⁾	1.45
temperature of bulk liquid loaded (7)	77 °F
temperature of bulk liquid loaded (7)	537 °R
collection efficiency (eff) ⁽²⁾	98.7 %

Product Throughput (gal/yr)		Vapor Pressure (P) (psia)	Vapor Molecular Weight (<i>M</i>) (Ib/Ibmol)	Emission Factor ⁽³⁾ (Ib/10 ³ gal)	Total Emission Rates		
					Avg (ib/hr)	Max (lb/hr)	Annual (tons/yr)
Total VOC ⁽⁴⁾	20,000,000	0.301	106.15	0.01396	0.032	0.038	0.14
Cumene		0.121	120.19	0.00634	0.014	0.017	0.06
Ethyl benzene	***	0.255	106.17	0.01185	0.027	0.032	0.12
Styrene		0.170	104.15	0.00776	0.018	0.021	0.08
Xylene		0.301	106.16	0.01396	0.032	0.038	0.14

⁽¹⁾ Pyrolysis oil will be loaded onto tank trucks and railcars for shipment offsite. Loading will occur under vapor balance service.

(2) Factors are taken from AP-42 Chapter 5.2, Transportation And Marketing Of Petroleum Liquids (6/08).

(3) Emission Factor Calculated according to methodology of AP-42 Chapter 5.2, Transportation And Marketing Of Petroleum Liquids (6/08).

⁽⁴⁾ Xylene is the highest emitting component of all the anticipated components of the Pyrolysis oil. Total VOC emissions assume 100% xylene as worst case.

Tire Skid Feed Hopper Purge Vent Emission Point No.: 23-04

Description of Source

The feed hopper to the Tire Skid is purged with inert Nitrogen. Trace amounts of various pollutants are emitted during the purge.

Annual Operation:	8,760 hrs/yr
Average Operating Rate Tire Feed Tons:	1.18 tons/hr
Maximum Operating Rate Tire Feed Tons:	1.30 tons/hr

Summary of Emissions

	Emission	Emissions			
Pollutant	Factor ⁽¹⁾ (lbs/ton)	Average ⁽²⁾ (lbs/hr)	Maximum ⁽³⁾ (lbs/hr)	Annual ⁽⁴⁾ (tons/yr)	
Particulate Matter (PM ₁₀)	0.00E+00	0.000	0.000	0.00	
Particulate Matter (PM _{2.5})	0.00E+00	0.000	0.000	0.00	
Sulfur dioxide (SO ₂)	7.46E-05	0.000	0.000	0.00	
Nitrogen oxides (NO _x)	5.60E-05	0.000	0.000	0.00	
Carbon monoxide (CO)	1.29E-01	0.152	0.182	0.67	
Total VOC	1.40E-04	0.000	0.000	0.00	
Hydrochloric Acid (HCl)	1.70E-06	0.000	0.000	0.00	
Hydrofluoric Acid (HF)	5.65E-07	0.000	0.000	0.00	

⁽¹⁾ Emission factors derived from vendor data.

(2) Calculated as: Emission Factor (lbs/ton) X Average Operating Rate (tons/hr)

⁽³⁾ Calculated as: Emission Factor (lbs/ton) X Maximum Operating Rate (tons/hr)

⁽⁴⁾ Calculated as: Average hourly emissions (lbs/hr) X Annual Operation (hrs/yr) ÷ 2,000 lbs/ton.

Tire Skid Char Storage Purge Vent Emission Point No.: 23-05

Description of Source

M

The char storage vessel of the Tire Skid is purged with inert Nitrogen. Trace amounts of various pollutants are emitted during the purge.

Annual Operation:	8,760 hrs/yr
Average Operating Rate Tire Char Tons:	0.09 tons/hr
Maximum Operating Rate Tire Char Tons:	0.10 tons/hr

Summary of Emissions

	Emission	Emissions			
Pollutant	Factor ⁽¹⁾ (lbs/ton)	Average ⁽²⁾ (lbs/hr)	Maximum ⁽³⁾ (lbs/hr)	Annual ⁽⁴⁾ (tons/yr)	
Particulate Matter (PM ₁₀)	0.00E+00	0.000	0.000	0.00	
Particulate Matter (PM _{2.5})	0.00E+00	0.000	0.000	0.00	
Sulfur dioxide (SO ₂)	0.00E+00	0.000	0.000	0.00	
Nitrogen oxides (NO _x)	9.19E-05	0.000	0.000	0.00	
Carbon monoxide (CO)	2.76E-04	0.000	0.000	0.00	
Total VOC	1.38E-05	0.000	0.000	0.00	
Hydrochloric Acid (HCI)	1.84E-05	0.000	0.000	0.00	
Hydrofluoric Acid (HF)	5.51E-06	0.000	0.000	0.00	

(1) Emission factors derived from vendor data.

(2) Calculated as: Emission Factor (lbs/ton) X Average Operating Rate (tons/hr)

(3) Calculated as: Emission Factor (lbs/ton) X Maximum Operating Rate (tons/hr)

(4) Calculated as: Average hourly emissions (lbs/hr) X Annual Operation (hrs/yr) ÷ 2,000 lbs/ton.

Tire Skid Pyr Oil Storage Tank Emission Point No.: 23-06

Description of Source

A storage tank recieves Pyrolysis oil from the Tire Skid unit prior to tank/railcar loading. Exact composition of Pyrolysis oil may vary, so worst case emisssions are provided. Anticipated TAPs are included; however, other non-TAP VOCs will be emitted.

	Emission Rates ⁽¹⁾				
Pollutant	Avg (lb/hr)	Max (lb/hr)	Annual (tons/yr)		
Total VOC ⁽²⁾	0.189	0.189	0.83		
Cumene	0.086	0.086	0.38		
Ethyl benzene	0.161	0.161	0.70		
Styrene	0.105	0.105	0.46		
Xylene	0.189	0.189	0.83		

(1) AP-42 Chapter 7.1 (11/19): Section 7.1.3.1 - Routine Losses From Fixed Roof Tanks

⁽²⁾ Xylene is the highest emitting component of all the anticipated components of the Pyrolysis oil. Total VOC emissions assume 100% xylene as worst case.

Solar Insolation

Tire Skid Pyr Oil Storage Tank - Cumene Emission Point No.: 23-06

Tank l	nformation	
Туре	Vertical Fixed-Roof	
Shell Diameter	11	ft
Shell Height	21	ft
Average Height of Liquid	10.5	ft
Maximum Height of Liquid	21	ft
Throughput	10,000.000	gallons/year
Maximum Liquid Volume	14928.85	gallons
Turnovers	703.28	turnovers/year
Nearest City	Baton Rouge	
Insulation	Uninsulated	
Tar	nk Paint	
Roof Color	Gray (Light)	
Roof Condition	New	
Shell Color	Gray (Light)	
Shell Condition	New	
Tar	nk Roof	
Туре	Dome	
Cone Slope (If Applicable)		ft/ft
Dome Radius (If Applicable)		ft
Vent	Settings	
Breather Vent Pressure Setting	0.03	psig
Breather Vent Vacuum Setting	-0.03	psig
Tank Pressure	0	psig
Co	ontents	
Tank Contents	Cumene (isopropylber	izene)
Co	nstants	
Ideal Gas Constant R	10.731	psia * ft3/(Ib-mole * °R)
Paint Solar Absorptance a _R	0.54	
Paint Solar Absorptance as	0.54	
		my word as a li

Emissions Summary				
Total Losses	L	752.09	lb/yr	
Total Losses	L	0.086	lb/hr	
Total Losses	L	0.38	ton/yr	

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1428.00 Btu/(ft² * day)

Tire Skid Pyr Oil Storage Tank - Cumene Emission Point No.: 23-06

Standing Losses	Ls	48.18	lb/yr
Min Daily Ambient Temp.	TAN	517.67	°R
Max Daily Ambient Temp.	TAX	537.47	°R
Avg. Daily Ambient Temp.	TAA	527.57	°R
Liquid Bulk Temp.	TB	554.67	°R
Average Vapor Temperature	Tv	536.92	°R
Daily Vapor Temp. Range	ΔT_V	28.79	°R
Avg. Daily Liq. Surface Temp.	TLA	545.79	°R
Min Daily Liq. Surface Temp.	TLN	538.60	°R
Max Daily Liq. Surface Temp.	TLX	552.99	°R
Atmospheric Pressure	PA	14.7	psia
Vent Pressure Range	ΔPB		psia
Vapor Pressure at TLA	PVA	0.121	psia
Vapor Pressure at TLN	PVN	0.095	psia
Vapor Pressure at TLX	P _{VX}	0.152	psia
Daily Vapor Press. Range	ΔPv	0.058	psia
Vapor Molecular Weight	Mv	120.19	lb/lb-mole
Vapor Space Exp. Factor	KE	0.05	
Vapor Saturation Factor	Ks	0.93	
Stock Vapor Density	Wv	0.003	lb/ft ³
Vapor Space Outage	Hvo	11.25	ft
Shell Height	Hs	21.00	ft
Liquid Height	HL	10.50	ft
Roof Height	HR	1.47	ft
Cone Roof Slope	SR	0.06	ft/ft
Shell Radius	Rs	5.50	ft
Dome Roof Radius	R _R	11.00	ft
Roof Outage	H _{RO}	0.75	ft
Working Losses	L _w	703.91	lb/yr
Vapor Molecular Weight	Mv	120.19	lb/lb-mole
Vapor Pressure at TLA	PVA	0.12	psia

Working Losses	Lw	703.91	lb/yr	
Vapor Molecular Weight	M _V	120.19	lb/lb-mole	
Vapor Pressure at TLA	PVA	0.12	psia	
Turnovers	N	703.28		
Sum of Increases in Liquid Level	ΣHQI	14065.54	ft/yr	
Max Height of Liquid	HLX	21	ft	
Net Working Loss Throughput	Va	1336693.40	ft ³ /yr	
Stock Vapor Density	Wv	0.003	Ib/ft ³	
L _w Turnover Factor	KN	0.21		
L _w Product Factor	Kp	1.00		
Vent Correction Factor	KB	1.00		
Tank Pressure	PI	0.00	psig	
Vent Pressure Setting	PBP	0.03	psig	

Notes:

AP-42 Chapter 7.1 (11/19): Section 7.1.3.1 - Routine Losses From Fixed Roof Tanks

Solar Insolation

Tire Skid Pyr Oil Storage Tank - Ethyl benzene Emission Point No.: 23-06

	Tank Ir	formation	
	Туре	Vertical Fixed-Roof	
Shell	Diameter	11	ft
Sh	ell Height	21	ft
Average Height	t of Liquid	10.5	ft
Maximum Height	t of Liquid	21	ft
T	nroughput	10,000,000	gallons/year
Maximum Liqui	d Volume	14928.85	gallons
1	Furnovers	703.28	turnovers/year
Ne	arest City	Baton Rouge	
	Insulation	Uninsulated	
	Tan	k Paint	
R	oof Color	Gray (Light)	
Roof	Condition	New	
S	hell Color	Gray (Light)	
Shell	Condition	New	
	Tan	k Roof	
	Туре	Dome	
Cone Slope (If A	pplicable)		ft/ft
Dome Radius (If A	pplicable)		ft
	Vent	Settings	
Breather Vent Pressu	re Setting	0.03	psig
Breather Vent Vacuu	m Setting	-0.03	psig
Tank	Pressure	0	psig
	Co	ntents	
Tank	Contents	Ethyl benzene	
	Cor	istants	
deal Gas Constant	R	10.731	psia * ft ³ /(lb-mole * °R)
aint Solar Absorptance	aR	0.54	
aint Solar Absorptance			

Emissions Summary				
Total Losses	L	1406.00	lb/yr	
Total Losses	Lt	0.161	lb/hr	
Total Losses	L	0.70	ton/yr	

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1428.00 Btu/(ft² * day)

Tire Skid Pyr Oil Storage Tank - Ethyl benzene Emission Point No.: 23-06

Standing Losses	Ls	89.97	lb/yr
Min Daily Ambient Temp.	T _{AN}	517.67	°R
Max Daily Ambient Temp.	T _{AX}	537.47	°R
Avg. Daily Ambient Temp.	TAA	527.57	°R
Liquid Bulk Temp.	TB	554.67	°R
Average Vapor Temperature	Tv	536.92	°R
Daily Vapor Temp. Range	ΔT _V	28.79	°R
Avg. Daily Liq. Surface Temp.	TLA	545.79	°R
Min Daily Liq. Surface Temp.	TLN	538.60	°R
Max Daily Liq. Surface Temp.	TLX	552.99	°R
Atmospheric Pressure	PA	14.7	psia
Vent Pressure Range	ΔPB	0.06	psia
Vapor Pressure at TLA	PVA	0.255	psia
Vapor Pressure at T _{LN}	PVN	0.204	psia
Vapor Pressure at T _{LX}	Pvx	0.317	psia
Daily Vapor Press. Range	ΔPv	0.114	psia
Vapor Molecular Weight	Mv	106.17	lb/lb-mole
Vapor Space Exp. Factor	KE	0.06	
Vapor Saturation Factor	Ks	0.87	
Stock Vapor Density	Wv	0.005	Ib/ft ³
Vapor Space Outage	Hvo	11.25	ft
Shell Height	Hs	21.00	ft
Liquid Height	HL	10.50	ft
Roof Height	H _R	1.47	ft
Cone Roof Slope	SR	0.06	ft/ft
Shell Radius	Rs	5.50	ft
Dome Roof Radius	RR	11.00	ft
Roof Outage	H _{RO}	0.75	ft
Working Losses	Lw	1316.03	lb/yr
Vapor Molecular Weight	My		lb/lb-mole
Vapor Pressure at TLA	PVA		psia
Turnovers	N	703.28	
Sum of Increases in Liquid Level	ΣHQI	14065.54	ft/vr
Max Height of Liquid	H	21	

Vapor Molecular Weight	Mv	106.17	lb/lb-mole
Vapor Pressure at TLA	PVA	0.26	psia
Turnovers	N	703.28	
Sum of Increases in Liquid Level	ΣHQI	14065.54	ft/yr
Max Height of Liquid	HLX	21	ft
Net Working Loss Throughput	Va	1336693.40	ft ³ /yr
Stock Vapor Density	Wv	0.005	lb/ft ³
L _w Turnover Factor	KN	0.21	
L _w Product Factor	Kp	1.00	
Vent Correction Factor	KB	1.00	
Tank Pressure	PI	0.00	psig
Vent Pressure Setting	PBP	0.03	psig

Notes:

¹ AP-42 Chapter 7.1 (11/19): Section 7.1.3.1 - Routine Losses From Fixed Roof Tanks

Tire Skid Pyr Oil Storage Tank - Styrene Emission Point No.: 23-06

Tank In	formation	
Туре	Vertical Fixed-Roof	
Shell Diameter	11	ft
Shell Height	21	ft
Average Height of Liquid	10.5	ft
Maximum Height of Liquid	21	ft
Throughput	10,000,000	gallons/year
Maximum Liquid Volume	14928.85	gallons
Turnovers	703.28	turnovers/year
Nearest City	Baton Rouge	
Insulation	Uninsulated	
Tan	k Paint	
Roof Color	Gray (Light)	
Roof Condition	New	
Shell Color	Gray (Light)	
Shell Condition	New	
Tan	k Roof	
Туре	Dome	
Cone Slope (If Applicable)		ft/ft
Dome Radius (If Applicable)		ft
Vent	Settings	
Breather Vent Pressure Setting	0.03	psig
Breather Vent Vacuum Setting	-0.03	psig
Tank Pressure	0	psig
	ntents	
Tank Contents	Styrene	
Cor	istants	
Ideal Gas Constant R	10.731	psia * ft ³ /(lb-mole * °R)
Paint Solar Absorptance a _R	0.54	
Paint Solar Absorptance as	0.54	
Solar Insolation I	1428.00	Btu/(ft ² * day)

Emissions Summary				
Total Losses	L	920.52	lb/yr	
Total Losses	L	0.105	lb/hr	
Total Losses	L	0.46	ton/yr	

Tire Skid Pyr Oil Storage Tank - Styrene Emission Point No.: 23-06

Standing Losses	Ls	58.83	lb/yr	
Min Daily Ambient Temp.	T _{AN}	517.67	°R	
Max Daily Ambient Temp.	T _{AX}	537.47	°R	
Avg. Daily Ambient Temp.	TAA	527.57	°R	
Liquid Bulk Temp.	TB	554.67	°R	
Average Vapor Temperature	Tv	536.92	°R	
Daily Vapor Temp. Range	ΔTV	28.79	°R	
Avg. Daily Liq. Surface Temp.	TLA	545.79	°R	
Min Daily Liq. Surface Temp.	TLN	538.60	°R	
Max Daily Liq. Surface Temp.	T _{LX}	552.99	°R	
Atmospheric Pressure	PA	14.7	psia	
Vent Pressure Range	ΔΡΒ	0.06	psia	
Vapor Pressure at TLA	PVA	0.170	psia	
Vapor Pressure at T _{LN}	PVN	0.136	psia	
Vapor Pressure at T _{LX}	Pvx	0.212	psia	
Daily Vapor Press. Range	ΔPv	0.077	psia	
Vapor Molecular Weight	Mv	104.15	lb/lb-mole	
Vapor Space Exp. Factor	KE	0.05		
Vapor Saturation Factor	Ks	0.91		
Stock Vapor Density	Wv	0.003	lb/ft ³	
Vapor Space Outage	H _{VO}	11.25	ft	
Shell Height	Hs	21.00	ft	
Liquid Height	HL	10.50	ft	
Roof Height	H _R	1.47	ft	
Cone Roof Slope	SR	0.06	ft/ft	
Shell Radius	Rs	5.50	ft	
Dome Roof Radius	R _R	11.00	ft	
Roof Outage	H _{RO}	0.75	ft	
Working Losses	L _w	861.69	lb/yr	-
Vapor Molecular Weight	Mv	the second se	lb/lb-mole	
Vapor Pressure at TLA	PVA	0.17	psia	
Turnovers	N	703.28		
Sum of Increases in Liquid Level	ΣHQI	14065.54	ft/yr	
Man Halahi af Linuid	L	04		

Working Losses	Lw	861.69	lb/yr	
Vapor Molecular Weight	M _V	104.15	lb/lb-mole	
Vapor Pressure at TLA	PVA	0.17	psia	
Turnovers	N	703.28		
Sum of Increases in Liquid Level	ΣHQI	14065.54	ft/yr	
Max Height of Liquid	HLX	21	ft	
Net Working Loss Throughput	Va	1336693.40	ft ³ /yr	
Stock Vapor Density	Wv	0.003	lb/ft ³	
L _w Turnover Factor	KN	0.21		
L _w Product Factor	Kp	1.00		
Vent Correction Factor	KB	1.00		
Tank Pressure	P	0.00	psig	
Vent Pressure Setting	PBP	0.03	psig	

Notes:

¹ AP-42 Chapter 7.1 (11/19): Section 7.1.3.1 - Routine Losses From Fixed Roof Tanks

Tire Skid Pyr Oil Storage Tank - Xylene Emission Point No.: 23-06

Tank In	formation	
Туре	Vertical Fixed-Roof	
Shell Diameter	11	ft
Shell Height	21	ft
Average Height of Liquid	10.5	ft
Maximum Height of Liquid	21	ft
Throughput	10,000,000	gallons/year
Maximum Liquid Volume	14928.85	gallons
Turnovers	703.28	turnovers/year
Nearest City	Baton Rouge	
Insulation	Uninsulated	
Tan	k Paint	
Roof Color	Gray (Light)	
Roof Condition	New	
Shell Color	Gray (Light)	
Shell Condition	New	
Tan	k Roof	
Туре	Dome	
Cone Slope (If Applicable)		ft/ft
Dome Radius (If Applicable)		ft
Vent	Settings	
Breather Vent Pressure Setting	0.03	psig
Breather Vent Vacuum Setting	-0.03	psig
Tank Pressure	0	psig
the second se	ntents	
Tank Contents	Xylene(m-)	
Con	stants	
Ideal Gas Constant R	10.731	psia * ft ³ /(lb-mole * °R)
Paint Solar Absorptance a _R	0.54	
Paint Solar Absorptance α_S	0.54	
Solar Insolation	1428.00	Btu/(ft ² * day)

Emissions Summary				
Total Losses	L	1656.11	lb/yr	
Total Losses	L	0.189	lb/hr	
Total Losses	L	0.83	ton/yr	

Tire Skid Pyr Oil Storage Tank - Xylene Emission Point No.: 23-06

Standing Losses	Ls	105.90	lb/yr
Min Daily Ambient Temp.	TAN	517.67	°R
Max Daily Ambient Temp.	TAX	537.47	°R
Avg. Daily Ambient Temp.	TAA	527.57	°R
Liquid Bulk Temp.	TB	554.67	°R
Average Vapor Temperature	Tv	536.92	°R
Daily Vapor Temp. Range	ΔT_V	28.79	°R
Avg. Daily Liq. Surface Temp.	TLA	545.79	°R
Min Daily Liq. Surface Temp.	TLN	538.60	°R
Max Daily Liq. Surface Temp.	TLX	552.99	°R
Atmospheric Pressure	PA	14.7	psia
Vent Pressure Range	ΔPB	0.06	psia
Vapor Pressure at TLA	PVA	0.301	psia
Vapor Pressure at T _{LN}	PVN	0.241	psia
Vapor Pressure at T _{LX}	P _{VX}	0.373	psia
Daily Vapor Press. Range	ΔPv	0.132	psia
Vapor Molecular Weight	Mv	106.16	lb/lb-mole
Vapor Space Exp. Factor	KE	0.06	
Vapor Saturation Factor	Ks	0.85	
Stock Vapor Density	Wv	0.006	lb/ft ³
Vapor Space Outage	Hvo	11.25	ft
Shell Height	Hs	21.00	ft
Liquid Height	HL	10.50	ft
Roof Height	HR	1.47	ft
Cone Roof Slope	SR	0.06	ft/ft
Shell Radius	Rs	5.50	ft
Dome Roof Radius	R _R	11.00	ft
Roof Outage	H _{RO}	0.75	ft
Working Losses	Lw	1550.21	
Vapor Molecular Weight	M _V		lb/lb-mole
Vapor Pressure at TLA	PVA		psia
Turnovers	N	703.28	
Sum of Increases in Liquid Level	ΣHai	14065.54	ft/yr
Max Height of Liquid	HIX	21	ft

Working Losses	Lw	1550.21	lb/yr
Vapor Molecular Weight	Mv	106.16	lb/lb-mole
Vapor Pressure at TLA	PVA	0.30	psia
Turnovers	N	703.28	
Sum of Increases in Liquid Level	ΣHai	14065.54	ft/yr
Max Height of Liquid	H _{LX}	21	ft
Net Working Loss Throughput	Vq	1336693.40	ft ³ /yr
Stock Vapor Density	Wv	0.006	lb/ft ³
L _w Turnover Factor	KN	0.21	
L _w Product Factor	Kp	1.00	
Vent Correction Factor	KB	1.00	
Tank Pressure	Pi	0.00	psig
Vent Pressure Setting	PBP	0.03	psig

Notes:

¹ AP-42 Chapter 7.1 (11/19): Section 7.1.3.1 - Routine Losses From Fixed Roof Tanks

Plastic Skid Feed Hopper Purge Vent Emission Point No.: 23-07

Description of Source

The feed hopper to the Plastic Skid is purged with inert Nitrogen. Trace amounts of various pollutants are emitted during the purge.

Annual Operation:	8,760 hrs/yr
Average Operating Rate Tire Feed Tons:	1.18 tons/hr
Maximum Operating Rate Tire Feed Tons:	1.30 tons/hr

Summary of Emissions

	Emission		Emissions	
Pollutant	Factor ⁽¹⁾ (lbs/ton)	Average ⁽²⁾ (lbs/hr)	Maximum ⁽³⁾ (lbs/hr)	Annual ⁽⁴⁾ (tons/yr)
Particulate Matter (PM ₁₀)	0.00E+00	0.000	0.000	0.00
Particulate Matter (PM _{2.5})	0.00E+00	0.000	0.000	0.00
Sulfur dioxide (SO ₂)	0.00E+00	0.000	0.000	0.00
Nitrogen oxides (NO _x)	2.33E-05	0.000	0.000	0.00
Carbon monoxide (CO)	6.82E-02	0.080	0.096	0.35
Total VOC	8.76E-05	0.000	0.000	0.00
Hydrochloric Acid (HCl)	1.06E-06	0.000	0.000	0.00
Hydrofluoric Acid (HF)	3.53E-07	0.000	0.000	0.00

(1) Emission factors derived from vendor data.

⁽²⁾ Calculated as: Emission Factor (lbs/ton) X Average Operating Rate (tons/hr)

⁽³⁾ Calculated as: Emission Factor (lbs/ton) X Maximum Operating Rate (tons/hr)

⁽⁴⁾ Calculated as: Average hourly emissions (lbs/hr) X Annual Operation (hrs/yr) ÷ 2,000 lbs/ton.

Plastic Skid Char Storage Purge Vent Emission Point No.: 23-08

Description of Source

The char storage vessel of the Plastic Skid is purged with inert Nitrogen. Trace amounts of various pollutants are emitted during the purge.

Annual Operation:	8,760 hrs/yr
Average Operating Rate Tire Char Tons:	0.09 tons/hr
Maximum Operating Rate Tire Char Tons:	0.10 tons/hr

Summary of Emissions

	Emission		Emissions	
Pollutant	Factor ⁽¹⁾ (lbs/ton)	Average ⁽²⁾ (lbs/hr)	Maximum ⁽³⁾ (lbs/hr)	Annual ⁽⁴⁾ (tons/yr)
Particulate Matter (PM ₁₀)	0.00E+00	0.000	0.000	0.00
Particulate Matter (PM _{2.5})	0.00E+00	0.000	0.000	0.00
Sulfur dioxide (SO ₂)	0.00E+00	0.000	0.000	0.00
Nitrogen oxides (NO _x)	9.19E-05	0.000	0.000	0.00
Carbon monoxide (CO)	2.76E-04	0.000	0.000	0.00
Total VOC	1.38E-05	0.000	0.000	0.00
Hydrochloric Acid (HCI)	1.84E-05	0.000	0.000	0.00
Hydrofluoric Acid (HF)	5.51E-06	0.000	0.000	0.00

⁽¹⁾ Emission factors derived from vendor data.

(2) Calculated as: Emission Factor (lbs/ton) X Average Operating Rate (tons/hr)

⁽³⁾ Calculated as: Emission Factor (lbs/ton) X Maximum Operating Rate (tons/hr)

⁽⁴⁾ Calculated as: Average hourly emissions (lbs/hr) X Annual Operation (hrs/yr) ÷ 2,000 lbs/ton.

Plastic Skid Pyr Oil Storage Tank Emission Point No.: 23-09

Description of Source

A storage tank recieves Pyrolysis oil from the Plastic Skid unit prior to tank/railcar loading. Exact composition of Pyrolysis oil may vary, so worst case emissions are provided. Anticipated TAPs are included; however, other non-TAP VOCs will be emitted.

	Emission Rates ⁽¹⁾				
Pollutant	Avg (lb/hr)	Max (lb/hr)	Annual (tons/yr)		
Total VOC ⁽²⁾	0.189	0.189	0.83		
Cumene	0.086	0.086	0.38		
Ethyl benzene	0.161	0.161	0.70		
Styrene	0.105	0.105	0.46		
Xylene	0.189	0.189	0.83		

(*) AP-42 Chapter 7.1 (11/19): Section 7.1.3.1 - Routine Losses From Fixed Roof Tanks

⁽²⁾ Xylene is the highest emitting component of all the anticipated components of the Pyrolysis oil. Total VOC emissions assume 100% xylene as worst case.

Plastic Skid Pyr Oil Storage Tank - Cumene Emission Point No.: 23-09

Tank Ir	nformation	
Туре	Vertical Fixed-Roof	
Shell Diameter	11	ft
Shell Height	21	ft
Average Height of Liquid	10.5	ft
Maximum Height of Liquid	21	ft
Throughput	10,000,000	gallons/year
Maximum Liquid Volume	14928.85	gallons
Turnovers	703.28	turnovers/year
Nearest City	Baton Rouge	
Insulation	Uninsulated	
Tan	k Paint	
Roof Color	Gray (Light)	
Roof Condition	New	
Shell Color	Gray (Light)	
Shell Condition	New	
Tan	nk Roof	
Туре	Dome	
Cone Slope (If Applicable)		ft/ft
Dome Radius (If Applicable)		ft
Vent	Settings	
Breather Vent Pressure Setting	0.03	psig
Breather Vent Vacuum Setting	-0.03	psig
Tank Pressure	0	psig
	ntents	
Tank Contents	Cumene (isopropylben	zene)
	nstants	
deal Gas Constant R		psia * ft ³ /(lb-mole * °R)
Paint Solar Absorptance α_R	0.54	
Paint Solar Absorptance as	0.54	
Solar Insolation I	1428.00	Btu/(ft ² * day)

	Emissions S	ummary		
Total Losses	L,	752.09	lb/yr	
Total Losses	L	0.086	lb/hr	
Total Losses	L,	0.38	ton/yr	

Plastic Skid Pyr Oil Storage Tank - Cumene Emission Point No.: 23-09

Standing Losses	Ls	48.18	lb/yr
Min Daily Ambient Temp.	TAN	517.67	°R
Max Daily Ambient Temp.	T _{AX}	537.47	°R
Avg. Daily Ambient Temp.	TAA	527.57	°R
Liquid Bulk Temp.	TB	554.67	°R
Average Vapor Temperature	Tv	536.92	°R
Daily Vapor Temp. Range	ΔT _V	28.79	°R
Avg. Daily Liq. Surface Temp.	TLA	545.79	°R
Min Daily Liq. Surface Temp.	TLN	538.60	°R
Max Daily Liq. Surface Temp.	T _{LX}	552.99	°R
Atmospheric Pressure	PA	14.7	psia
Vent Pressure Range	ΔPB	0.06	psia
Vapor Pressure at TLA	PVA	0.121	psia
Vapor Pressure at TLN	PVN	0.095	psia
Vapor Pressure at TLX	Pvx	0.152	psia
Daily Vapor Press. Range	ΔPV	0.058	psia
Vapor Molecular Weight	Mv	120.19	lb/lb-mole
Vapor Space Exp. Factor	KE	0.05	
Vapor Saturation Factor	Ks	0.93	
Stock Vapor Density	Wv	0.003	lb/ft ³
Vapor Space Outage	Hvo	11.25	ft
Shell Height	Hs	21.00	ft
Liquid Height	HL	10.50	ft
Roof Height	HR	1.47	ft
Cone Roof Slope	SR	0.06	ft/ft
Shell Radius	Rs	5.50	ft
Dome Roof Radius	R _R	11.00	ft
Roof Outage	H _{RO}	0.75	ft
Working Losses	Lw	703.91	lb/yr
Vapor Molecular Weight	My		lb/lb-mole
Vapor Pressure at TLA	PVA		psia
Turnovers	N	703.28	
Sum of Increases in Liquid Level	ΣHQI	14065.54	ft/vr
Max Height of Liquid	HLX	21	111
Net Working Loss Throughput	Va	1336693.40	the second s
Stock Vapor Density	Wv	0.003	
L _w Turnover Factor	KN	0.21	
L _w Product Factor	Kp	1.00	
Vent Correction Factor	KB	1.00	
Tank Pressure	P		psig
Vent Pressure Setting	PBP		psig

Notes:

¹ AP-42 Chapter 7.1 (11/19): Section 7.1.3.1 - Routine Losses From Fixed Roof Tanks

Plastic Skid Pyr Oil Storage Tank - Ethyl benzene Emission Point No.: 23-09

Tank Ir	nformation	
Туре	Vertical Fixed-Roof	
Shell Diameter	11	ft
Shell Height	21	ft
Average Height of Liquid	10.5 21	ft
Maximum Height of Liquid		ft
Throughput	10,000,000	gallons/year
Maximum Liquid Volume	14928.85	gallons
Turnovers	703.28	turnovers/year
Nearest City	Baton Rouge	
Insulation	Uninsulated	
Tan	k Paint	
Roof Color	Gray (Light)	
Roof Condition	New	
Shell Color	Gray (Light)	
Shell Condition	New	
Tan	k Roof	
Туре	Dome	
Cone Slope (If Applicable)		ft/ft
Dome Radius (If Applicable)		ft
	Settings	
Breather Vent Pressure Setting	0.03	psig
Breather Vent Vacuum Setting	-0.03	psig
Tank Pressure	0	psig
	ntents	
Tank Contents	Ethyl benzene	
	nstants	
Ideal Gas Constant R	10.731	psia * ft ³ /(lb-mole * °R)
Paint Solar Absorptance a _R	0.54	
Paint Solar Absorptance as	0.54	
Solar Insolation	1428.00	Btu/(ft ² * day)

Emissions Summary					
Total Losses	Lt	1406.00	lb/yr		
Total Losses	Lt	0.161	lb/hr		
Total Losses	L	0.70	ton/yr		

Plastic Skid Pyr Oil Storage Tank - Ethyl benzene Emission Point No.: 23-09

Standing Losses	Ls	89.97	lb/yr
Min Daily Ambient Temp.	TAN	517.67	
Max Daily Ambient Temp.	TAX	537.47	°R
Avg. Daily Ambient Temp.	TAA	527.57	°R
Liquid Bulk Temp.	TB	554.67	°R
Average Vapor Temperature	Tv	536.92	°R
Daily Vapor Temp. Range	ΔT_{V}	28.79	°R
Avg. Daily Liq. Surface Temp.	TLA	545.79	°R
Min Daily Liq. Surface Temp.	TLN	538.60	°R
Max Daily Liq. Surface Temp.	TLX	552.99	°R
Atmospheric Pressure	PA	14.7	psia
Vent Pressure Range	ΔPB	0.06	psia
Vapor Pressure at TLA	PVA	0.255	psia
Vapor Pressure at TLN	PVN	0.204	psia
Vapor Pressure at T _{LX}	Pvx	0.317	psia
Daily Vapor Press. Range	ΔPV	0.114	psia
Vapor Molecular Weight	Mv	106.17	lb/lb-mole
Vapor Space Exp. Factor	KE	0.06	
Vapor Saturation Factor	Ks	0.87	
Stock Vapor Density	Wv	0.005	lb/ft ³
Vapor Space Outage	HVO	11.25	ft
Shell Height	Hs	21.00	ft
Liquid Height	HL	10.50	ft
Roof Height	H _R	1.47	ft
Cone Roof Slope	SR	0.06	ft/ft
Shell Radius	Rs	5.50	ft
Dome Roof Radius	R _R	11.00	ft
Roof Outage	H _{RO}	0.75	ft
Weddies Lesses		1010.00	H. 6
Working Losses Vapor Molecular Weight	L _w M _V	1316.03	the second s
Vapor Pressure at TLA	P _{VA}		lb/lb-mole psia
Turnovers	N	703.28	poid
Sum of Increases in Liquid Level	ΣHQI	14065.54	ft/see
	HLX		
Max Height of Liquid		21 1336693.40	
Net Working Loss Throughput	Va	1336693.40	-
Stock Vapor Density L _w Turnover Factor	Wv		10/11
L _w Product Factor	KN	0.21	
	Kp	1.00	
Vent Correction Factor	KB	1.00	

Notes:

Tank Pressure

Vent Pressure Setting

¹ AP-42 Chapter 7.1 (11/19): Section 7.1.3.1 - Routine Losses From Fixed Roof Tanks

PI

PBP

0.00 psig

0.03 psig

Plastic Skid Pyr Oil Storage Tank - Styrene Emission Point No.: 23-09

Tank	Information	
Туре	Vertical Fixed-Roof	
Shell Diameter	11	ft
Shell Height	21	ft
Average Height of Liquid	10.5	ft
Maximum Height of Liquid	21	ft
Throughput	10,000,000	gallons/year
Maximum Liquid Volume	14928.85	gallons
Turnovers	703.28	turnovers/year
Nearest City	Baton Rouge	
Insulation	Uninsulated	
Та	nk Paint	
Roof Color	Gray (Light)	
Roof Condition	New	
Shell Color	Gray (Light)	
Shell Condition	New	
Ta	nk Roof	
Туре	Dome	
Cone Slope (If Applicable)		ft/ft
Dome Radius (If Applicable)		ft
Ven	t Settings	
Breather Vent Pressure Setting		psig
Breather Vent Vacuum Setting	-0.03	psig
Tank Pressure	0	psig
	ontents	
Tank Contents	Styrene	
	onstants	
deal Gas Constant R	10.731	psia * ft ³ /(lb-mole * °R)
Paint Solar Absorptance a _R	0.54	
Paint Solar Absorptance as	0.54	
Solar Insolation	1428.00	Btu/(ft ² * day)

Emissions Summary				
Total Losses	L	920.52	lb/yr	
Total Losses	L	0.105	lb/hr	
Total Losses	L	0.46	ton/yr	

Plastic Skid Pyr Oil Storage Tank - Styrene Emission Point No.: 23-09

Standing Losses	Ls	58.83	lb/yr	
Min Daily Ambient Temp.	T _{AN}	517.67	°R	
Max Daily Ambient Temp.	TAX	537.47	°R	
Avg. Daily Ambient Temp.	TAA	527.57	°R	
Liquid Bulk Temp.	TB	554.67	°R	
Average Vapor Temperature	Tv	536.92	°R	
Daily Vapor Temp. Range	ΔT _V	28.79	°R	
Avg. Daily Liq. Surface Temp.	TLA	545.79	°R	
Min Daily Liq. Surface Temp.	TLN	538.60	°R	
Max Daily Liq. Surface Temp.	TLX	552.99	°R	
Atmospheric Pressure	PA	14.7	psia	
Vent Pressure Range	ΔPB	0.06	psia	
Vapor Pressure at TLA	PVA	0.170	psia	
Vapor Pressure at TLN	PVN	0.136	psia	
Vapor Pressure at TLX	Pvx	0.212	psia	
Daily Vapor Press. Range	ΔPv	0.077	psia	
Vapor Molecular Weight	Mv	104.15	lb/lb-mole	
Vapor Space Exp. Factor	KE	0.05		
Vapor Saturation Factor	Ks	0.91		
Stock Vapor Density	Wv	0.003	Ib/ft ³	
Vapor Space Outage	Hvo	11.25	ft	
Shell Height	Hs	21.00	ft	
Liquid Height	HL	10.50	ft	
Roof Height	HR	1.47	ft	
Cone Roof Slope	SR	0.06	ft/ft	
Shell Radius	Rs	5.50	ft	
Dome Roof Radius	RR	11.00	ft	
Roof Outage	H _{RO}	0.75	ft	
Working Losses	Lw	861.69	lb/ur	_

Working Losses	Lw	861.69	lb/yr
Vapor Molecular Weight	M _V	104.15	lb/lb-mole
Vapor Pressure at TLA	PVA	0.17	psia
Turnovers	N	703.28	
Sum of Increases in Liquid Level	ΣHai	14065.54	ft/yr
Max Height of Liquid	HLX	21	ft
Net Working Loss Throughput	Va	1336693.40	ft ³ /yr
Stock Vapor Density	Wv	0.003	lb/ft ³
L _w Turnover Factor	KN	0.21	
L _w Product Factor	KP	1.00	
Vent Correction Factor	K _B	1.00	
Tank Pressure	PI	0.00	psig
Vent Pressure Setting	PBP	0.03	psig

Notes:

¹ AP-42 Chapter 7.1 (11/19): Section 7.1.3.1 - Routine Losses From Fixed Rocf Tanks

Plastic Skid Pyr Oil Storage Tank - Xylene Emission Point No.: 23-09

Tank Ir	formation		
Туре	Vertical Fixed-Roof		
Shell Diameter	11	ft	
Shell Height	21	ft	
Average Height of Liquid	10.5	ft	
Maximum Height of Liquid	21	ft	
Throughput	10,000,000	gallons/year	
Maximum Liquid Volume	14928.85	gallons	
Turnovers	703.28	turnovers/year	
Nearest City	Baton Rouge		
Insulation	Uninsulated		
Tan	k Paint		
Roof Color	Gray (Light)		
Roof Condition	New		
Shell Color	Gray (Light)		
Shell Condition	New		
Tan	k Roof		
Туре	Dome		
Cone Slope (If Applicable)		ft/ft	
Dome Radius (If Applicable)		ft	
Vent	Settings		
Breather Vent Pressure Setting	0.03	psig	
Breather Vent Vacuum Setting	-0.03	psig	
Tank Pressure	0	psig	
	ntents		
Tank Contents	Xylene(m-)		
Cor	nstants		
Ideal Gas Constant R	10.731	psia * ft ³ /(lb-mole * °R)	
Paint Solar Absorptance a _R	0.54		
Paint Solar Absorptance as	0.54		
Solar Insolation I	1428.00	Btu/(ft ⁻ * day)	

Emissions Summary				
Total Losses	L	1656.11	lb/yr	
Total Losses	L	0.189	lb/hr	
Total Losses	L	0.83	ton/yr	

Plastic Skid Pyr Oil Storage Tank - Xylene Emission Point No.: 23-09

Standing Losses	Ls	105.90	lb/yr
Min Daily Ambient Temp.	T _{AN}	517.67	°R
Max Daily Ambient Temp.	T _{AX}	537.47	°R
Avg. Daily Ambient Temp.	TAA	527.57	°R
Liquid Bulk Temp.	TB	554.67	°R
Average Vapor Temperature	Tv	536.92	°R
Daily Vapor Temp. Range	ΔTV	28.79	°R
Avg. Daily Liq. Surface Temp.	TLA	545.79	°R
Min Daily Liq. Surface Temp.	T _{LN}	538.60	°R
Max Daily Liq. Surface Temp.	T _{LX}	552.99	°R
Atmospheric Pressure	PA	14.7	psia
Vent Pressure Range	ΔPB	0.06	psia
Vapor Pressure at TLA	PVA	0.301	psia
Vapor Pressure at TLN	PVN	0.241	psia
Vapor Pressure at TLX	Pvx	0.373	psia
Daily Vapor Press. Range	ΔPv	0.132	psia
Vapor Molecular Weight	Mv	106.16	lb/lb-mole
Vapor Space Exp. Factor	KE	0.06	
Vapor Saturation Factor	Ks	0.85	
Stock Vapor Density	Wv	0.006	Ib/ft ³
Vapor Space Outage	Hvo	11.25	ft
Shell Height	Hs	21.00	ft
Liquid Height	HL	10.50	ft
Roof Height	HR	1.47	ft
Cone Roof Slope	SR	0.06	ft/ft
Shell Radius	Rs	5.50	ft
Dome Roof Radius	R _R	11.00	ft
Roof Outage	H _{RO}	0.75	ft
Mating		4550.04	

Working Losses	Lw	1550.21	lb/yr
Vapor Molecular Weight	Mv	106.16	lb/lb-mole
Vapor Pressure at TLA	PVA	0.30	psia
Turnovers	N	703.28	
Sum of Increases in Liquid Level	ΣΗαι	14065.54	ft/yr
Max Height of Liquid	H _{LX}	21	ft
Net Working Loss Throughput	Vq	1336693.40	ft ³ /yr
Stock Vapor Density	Wv	0.006	lb/ft ³
L _w Turnover Factor	KN	0.21	
L _w Product Factor	Kp	1.00	
Vent Correction Factor	KB	1.00	
Tank Pressure	PI	0.00	psig
Vent Pressure Setting	PBP	0.03	psig

Notes:

¹ AP-42 Chapter 7.1 (11/19): Section 7.1.3.1 - Routine Losses From Fixed Roof Tanks

Tire Skid Fugitive Leak Emissions Emission Point No.: FUG-01

Description of Source

Facility fugitive leak emissions are estimated based on equipment component counts.

Summary of Emissions

	Emission			mission			Emissions	
Pollutant	Factor ⁽¹⁾ (lbs/hr)	Emission Factor ⁽¹⁾ (lbs/MMBtu)	Control Efficiency	Average ⁽²⁾ (lbs/hr)	Maximum ⁽³⁾ (lbs/hr)	Annual ^(*) (tons/yr)		
Total VOC	0.212			0.212		0.93		

Equipment Leak Fugitive Emissions

Leaking components⁽¹⁾ Non-leaking components⁽¹⁾ 2% 98%

Total VOCs						
Component Type and Service	Component Count	Leak Emission Factor ⁽²⁾ (kg/hr-comp.)	No-Leak Emission Factor ⁽³⁾ (kg/hr-comp.)	Average Emissions (lbs/hr)	Maximum Emissions (lbs/hr)	Annual Emissions (tpy)
Connectors - All	360	0.00025	7.50E-06	0.010		C.04
Valves - Gas	100	0.02680	7.80E-06	0.120		C.52
Valves - Light Liquid	100	0.01090	7.80E-06	0.050		C.22
Valves - Heavy Liquid	100	0.00023	7.80E-06	0.003		C.01
Pumps - Light Liquid	5	0.11400	2.40E-05	0.025		C.11
Pumps - Heavy Liquid	5	0.02100	2.40E-05	0.005		C.02
			Total VOC	0.212		0.93

⁽¹⁾ Percentages of leaking components based on 98% non-leaking (0 range), and 2% leaking.

⁽²⁾ Emission factors taken from EPA's Protocol for Equipment Leak Emission Estimates (EPA-453/R-95-017, November 1995) Average Emission Factors (Table 2-2).

(3) Default Zero Values: Petroleum Industry (Table 2-12)

Plastic Skid Fugitive Leak Emissions Emission Point No.: FUG-02

Description of Source

Facility fugitive leak emissions are estimated based on equipment component counts.

Summary of Emissions

Pollutant	Emission Factor ⁽¹⁾ (lbs/hr)	Emission Factor ⁽¹⁾ (Ibs/MMBtu)		Emissions		
			Control Efficiency	Average ⁽²⁾ (lbs/hr)	Maximum ⁽³⁾ (lbs/hr)	Annual ^(*) (tons/yr)
Total VOC	0.212	***		0.212	***	0.93

Equipment Leak Fugitive Emissions

Leaking components⁽¹⁾ Non-leaking components⁽¹⁾

2% 98%

Total VOCs						
Component Type and Service	Component Count	Leak Emission Factor ⁽²⁾ (kg/hr-comp.)	No-Leak Emission Factor ⁽³⁾ (kg/hr-comp.)	Average Emissions (Ibs/hr)	Maximum Emissions (lbs/hr)	Annual Emissions (tpy)
Connectors - All	360	0.00025	7.50E-06	0.010		0.04
Valves - Gas	100	0.02680	7.80E-06	0.120		0.52
Valves - Light Liquid	100	0.01090	7.80E-06	0.050		0.22
Valves - Heavy Liquid	100	0.00023	7.80E-06	0.003		C.01
Pumps - Light Liquid	5	0.11400	2.40E-05	0.025		C.11
Pumps - Heavy Liquid	5	0.02100	2.40E-05	0.005		C.02
			Total VOC	0.212	-	0.93

⁽¹⁾ Percentages of leaking components based on 98% non-leaking (0 range), and 2% leaking.

(2) Emission factors taken from EPA's Protocol for Equipment Leak Emission Estimates (EPA-453/R-95-017, November 1995) Average Emission Factors (Table 2-2).

(3) Default Zero Values: Petroleum Industry (Table 2-12)

Appendix D Certificate of Good Standing State of Louisiana Secretary of State



COMMERCIAL DIVISION 225.925.4704

Fax Numbers 225.932.5317 (Admin. Services) 225.932.5314 (Corporations) 225.932.5318 (UCC)

Name		Туре	City	Status
HME GLOBAL, LLC		Limited Liability Company	LAFAYETTE	Active
Previous Names				
Business:	HME GLOBAL, LLC			
Charter Number:	44072544K			
Registration Date	e: 9/15/2020			
Domicile Address				
	110 TRAVIS STREET			
	SUITE 107			
	LAFAYETTE, LA 70503			
Mailing Address				
	110 TRAVIS STREET			
	SUITE 107			
	LAFAYETTE, LA 70503			
Status				
Status:	Active			
Annual Report St	tatus: In Good Standing			
File Date:	9/15/2020			
Last Report Filed	l: 9/11/2023			
Type:	Limited Liability Company			
Registered A	Agent(s)			
Agent:	RANDY ANGELLE			
Address 1:	401 E. MILLS AVE.			
City, State, Zip:	BREAUX BRIDGE, LA 70517			
Appointment Date:	9/15/2020			
Officer(s)				Additional Officers:
Officer:	MATTHEW EMORY			
Title:	Member, Manager			
Address 1:	103 SOUTHWOOD DRIVE			
City, State, Zip:	LAFAYETTE, LA 70503			
Officer:	ROYAL CRESCENT VENTURES, LI	c		
Title:	Member			
Address 1:	110 TRAVIS STREET			
Address 2:	SUITE 107			
	LAFAYETTE, LA 70503			

Description	Date
Domestic LLC Agent/Domicile Change	10/13/2023
	Print