



## AIR PERMIT ROUTING/APPROVAL SLIP-Permits

9-21-23



AI No.	234155	Company	Louisiana Green Fuels LLC	Date Received	June 9, 2022
Activity No.	PER20220001	Facility	Louisiana Green Fuels	Permit Type	<input checked="" type="checkbox"/> Synthetic Natural
CDS No.	0540-00040	Permit No.	0540-00040-00	Expedited Permit	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no

<b>1. Technical Review</b>		Approved	Date rec'd	Date FW	Comments
Permit Writer	DEM		7/10/22	10/21/22	Do K6, III, JJJJJ, ZZZZ
Air Quality / Modeling	YMO			5/3/23	PM2.5 & Ammonia OK
Toxics					
PSD/NNSR					
Technical Advisor	ALR			10/24/22	
Supervisor					
Other					
<b>2. Management Review (if PN req'd)</b>		Approved	Date rec'd	Date FW	Comments
Supervisor	ERB			10/22/22	
Manager	ASV			12/10/22	as noted
Administrator	BDJ			5/22/23	as noted
Assistant Secretary (PN)	B			5/24/23	Public hearing <input type="checkbox"/> yes <input type="checkbox"/> no
<b>3. Response to Comments (if PN req'd)</b>		Approved	Date rec'd	Date FW	Comments
Supervisor	ERB			8/17/23	
Manager					
Administrator	BDJ			9/18/23	
Legal (BFD)					
<b>4. Final Approval</b>		Approved	Date rec'd	Date FW	Comments
Supervisor	ERB			8/17/23	
Manager					
Administrator	BDJ			9/18/23	as noted
Assistant Secretary	B			9/19/23	
<b>1. Technical Review</b>					
PN of App needed	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Date of PN of App			Newspaper
Fee paid	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no				
NSPS applies	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	PSD/NNSR applies	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	NESHAP applies	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
<b>2. Post-Technical Review</b>					
Company technical review	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> n/a	E-mail date		11/21/22	Remarks received <input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Surveillance technical review	<input type="checkbox"/> yes <input type="checkbox"/> no <input checked="" type="checkbox"/> n/a	E-mail date			Remarks received <input type="checkbox"/> yes <input type="checkbox"/> no
<b>3. Public Notice</b>					
Public Notice Required	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no				
Library	Caldwell Parish Library - HQ				
LDEQ Website	PN Date	6/8/2023			
Company notification e-mail sent	Date e-mailed	6/8/2023			
EPA PN notification e-mail sent	Date e-mailed	N/A			
OES PN mailout	Date mailed	6/8/2023			
<b>4. Final Review</b>					
Public comments received	<input type="checkbox"/> yes <input type="checkbox"/> no	EPA comments rec'd	<input type="checkbox"/> yes <input type="checkbox"/> no		
Company comments received	<input type="checkbox"/> yes <input type="checkbox"/> no	PN info entered into Permit Sec VI	<input type="checkbox"/> yes <input type="checkbox"/> no		
Comments	JDoc Val.				

JOHN BEL EDWARDS  
GOVERNOR



ROGER W. GINGLES  
SECRETARY

State of Louisiana  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
ENVIRONMENTAL SERVICES

Certified Mail No. 9589 0710 5270 0644 2638 37

Agency Interest (AI) No. 234155  
Activity No. PER20220001

Dr. Paul Schubert  
Chief Executive Officer  
Louisiana Green Fuels LLC  
P.O. Box 1269  
Columbia, LA 71418

RE: Synthetic Minor Permit  
Louisiana Green Fuels LLC - Louisiana Green Fuels  
Columbia, Caldwell Parish, Louisiana

Dear Dr. Schubert:

This is to inform you that the permit request for the above referenced facility has been approved under LAC 33:III.501. The submittal was approved on the basis of the emissions reported and the approval in no way guarantees the design scheme presented will be capable of controlling the emissions as to the types and quantities stated. A new application must be submitted if the reported emissions are exceeded after operations begin. The synopsis, data sheets, and conditions are attached herewith.

It will be considered a violation of the permit if all proposed control measures and/or equipment are not installed and properly operated and maintained as specified in the application.

Operation of this facility is hereby authorized under the terms and conditions of this permit. This authorization shall expire at midnight, ten years from the issue date below, unless a timely and complete renewal application has been submitted six months prior to expiration. Terms and conditions of this permit shall remain in effect until such time as the permitting authority takes final action on the application for permit renewal.

Please be advised that pursuant to provisions of the Environmental Quality Act and the Administrative Procedure Act, the Department may initiate review of a permit during its term. However, before it takes any action to modify, suspend or revoke a permit, the Department shall, in accordance with applicable statutes and regulations, notify the permittee by mail of the facts or operational conduct that warrant the intended action and provide the permittee with the opportunity to demonstrate compliance with all lawful requirements for the retention of the effective permit.

The permit number cited below and agency interest number cited above should be referenced in future correspondence regarding this facility.

Permit No.: 0540-00040-00

Sincerely,

The handwritten signature of Bliss M. Higgins, which is a stylized, cursive script of the name.  
Bliss M. Higgins  
Assistant Secretary  
BMH: dm

The handwritten signature of Roger W. Gingles, which is a stylized, cursive script of the name.  
Date

**AIR PERMIT BRIEFING SHEET**  
**AIR PERMITS DIVISION**  
**LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY**

**AI No. 234155**  
**Louisiana Green Fuels LLC - Louisiana Green Fuels**  
**Columbia, Caldwell Parish, Louisiana**

**I. BACKGROUND**

Louisiana Green Fuels LLC proposes to construct and operate the Louisiana Green Fuels (LGF) facility, a renewable fuels bio-refinery. This is the initial air permit for this facility.

**II. ORIGIN**

A permit application dated May 31, 2022, was received requesting a permit. Additional information dated July 5, 2022, July 25, 2022, and April 3, 2023, was also received.

**III. DESCRIPTION**

The bio-refinery will be designed to process cellulosic biomass with a combined hydrogen and carbon content of 57% on a dry basis. The cellulosic biomass will be gasified to produce a raw synthetic gas (syngas) and ash. The syngas will be cooled and cleaned of particulates within the primary gas clean-up process. Syngas will then be compressed and sent to the secondary syngas clean-up process for trace contaminant treatment. A water-gas shift (WGS) unit will be utilized to adjust the syngas' hydrogen to carbon monoxide (H<sub>2</sub>:CO) ratio to an optimum level. Downstream of the WGS unit, acid gas species will be removed to reduce carbon dioxide (CO<sub>2</sub>) build-up and the sulfur load, with the objective of meeting an optimum composition prior to the syngas being routed to the Fischer-Tropsch (FT) synthesis unit. The CO<sub>2</sub> and hydrogen sulfide (H<sub>2</sub>S) removal will be accomplished using a Rectisol® unit, in which over 99.0% of the CO<sub>2</sub> within the process stream will be removed, and H<sub>2</sub>S levels will be reduced to parts per billion by volume levels.

The purified syngas, now with an optimized H<sub>2</sub>:CO ratio, will be sent to the FT synthesis unit where wax and light hydrocarbons will be produced. The wax and light hydrocarbon products from the FT synthesis loop will be directed to the upgrading unit, from which the raw synthetic hydrocarbon products will be hydrocracked and fractionated into saleable fuels, such as naphtha and diesel.

The prefeasibility level design of the project concluded that the facility would be bounded by the delivery of nominally 3,000 US short tons per day of woody biomass feedstock, resulting in a nominal combined diesel and naphtha production rate of 2,354 barrels per stream day.

The LGF facility's 85.5-MW biomass-fired boiler will be a significant contributor to the facility-wide air emissions. Substantial efforts will be made to control emissions of the boiler. NO<sub>x</sub> emissions will be controlled by a Selective Non-Catalytic Reduction and Selective Catalytic Reduction system. Carbon monoxide (CO) emissions will be controlled by CO catalyst. Sulfur dioxide (SO<sub>2</sub>) and condensable particulate matter (PM) will be controlled by a circulating dry scrubber. Filterable PM emissions will be controlled by a mechanical collector. Approximately 90% of CO<sub>2</sub> emissions will be recovered and injected via the facility's onsite CO<sub>2</sub> sequestration well.

Miscellaneous equipment used for emergency power generation, fire mitigation, and fugitive dust control will be located onsite. Enclosed conveyors will be utilized to move materials between various plant

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operations, storage, and loading operations. A baghouse will also control particulate emissions at various key locations throughout the woody biomass handling and transfer area.

Permitted emissions from this facility in tons per year (tpy) are as follows:

Criteria Pollutants	
Pollutant	Emissions
PM <sub>10</sub>	80.74
PM <sub>2.5</sub>	79.56
SO <sub>2</sub>	38.07
NO <sub>x</sub>	75.70
CO	69.86
VOC	91.49

LAC 33:III.Chapter 51 Toxic Air Pollutants (TAPs)	
Pollutant	Emissions
1,1,1-Trichlorethane	0.01
Acetaldehyde	0.07
Acrolein	2.30
Ammonia	9.41
Barium (and compounds)	0.01
Benzene	0.42
Benzyl chloride	0.08
Bromoform	0.04
Carbon disulfide	0.04
Chromium VI (and compounds)	0.01
Dichloromethane	0.04
Ethyl benzene	0.05
Formaldehyde	0.46
Hydrochloric acid	0.35
Hydrofluoric acid	0.35
Lead compounds	0.01
Manganese (and compounds)	0.02
Mercury (and compounds)	0.01
Methanol	0.56
Methyl chloride	0.15
Methyl ethyl ketone	0.04
Methyl isobutyl ketone	0.04
n-Hexane	2.84
Naphthalene	0.03
Phosphorus, Total (as P)	0.11
Polynuclear Aromatic Hydrocarbons	1.483

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LAC 33:III.Chapter 51 Toxic Air Pollutants (TAPs)	
Pollutant	Emissions
Styrene	0.48
Sulfuric Acid	0.89
Toluene	0.11
Xylene (mixed isomers)	3.52
Zinc (and compounds)	0.03
<b>Total TAPs</b>	<b>23.963</b>

#### **IV. TYPE OF REVIEW**

This permit was reviewed for compliance with the Louisiana Air Quality Regulations, New Source Performance Standards (NSPS), and National Emission Standards for Hazardous Air Pollutants (NESHAP). Prevention of Significant Deterioration (PSD) does not apply.

This facility will be a minor source of LAC 33:III.Chapter 51 TAPs. The facility will include affected sources under 40 CFR 60 Subpart Db – Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units; 40 CFR 60 Subpart Kb – Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984; and 40 CFR 63 JJJJJ – NESHAP for Industrial, Commercial, and Institutional Boilers Area Sources. The emergency engines will comply with 40 CFR 63 Subpart ZZZZ – NESHAP for Stationary Reciprocating Internal Combustion Engines by complying with the applicable standards in 40 CFR 60 Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.

#### **V. PUBLIC NOTICE**

A notice requesting public comment on the proposed permit was published on the department's website on June 8, 2023. On June 6, 2023, copies of the public notice were mailed to the individuals who have requested to be placed on the mailing list maintained by the Office of Environmental Services (OES). All comments were considered prior to the final permit decision.

#### **VI. EFFECTS ON AMBIENT AIR**

Based on the level of permitted emissions, emissions from the facility are not anticipated to prevent the attainment or maintenance of any state or national ambient air quality standard.

#### **VII. GENERAL CONDITION XVII ACTIVITIES**

None.

**AIR PERMIT BRIEFING SHEET  
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**AI No. 234155  
Louisiana Green Fuels LLC - Louisiana Green Fuels  
Columbia, Caldwell Parish, Louisiana**

**VIII. INSIGNIFICANT ACTIVITIES**

<u>ID No.</u>	<u>Description</u>	<u>Citation</u>
IA-22-01	CPI Waste Oil Tank, <10,000 gallons	LAC 33:III.501.B.5.A.3

## General Information

AI ID: 234155 Louisiana Green Fuels LLC - Louisiana Green Fuels

Activity Number: PER20220001

Permit Number: 0540-00040-00

Air - Minor (Synthetic) Initial

Alternate Identifiers	Name	User Group	Dates
0540-00040	CDS Number	CDS Number	06-10-2022

<b>Physical Location:</b>	106 Riverton Camp Rd Columbia, LA 71418	<b>Facility Email:</b> paulschubert@strategicbiofuels.com <b>Main Phone:</b> 3185024053
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<b>Mailing Address:</b>	303 Wall St PO Box 1269 Columbia, LA 71418	
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**Location of Front Gate:** -92.101678 Longitude, 32.187372 Latitude, Coordinate Method: Lat.\Long. - DMS, Coordinate Datum: NAD83

Related People:	Mail Address	Work Phone	Email	Relationship
Paul Schubert	303 Wall St Columbia, LA 71418	3185024053	paulschubert@strategicbiofuels.net	Responsible Official for

Related Organizations:	Mailing Address	Work Phone	Relationship
Louisiana Green Fuels LLC	PO Box 1269 Columbia, LA 71418	3185024053	Air Billing Party for Operates Owns

**SIC Codes:** 2869, Industrial organic chemicals, nec

**NAIC Codes:** 325199, All Other Basic Organic Chemical Manufacturing

**Note:** This report entitled "General Information" contains a summary of facility-level information contained in LDEQ's TEMPO database for this facility and is not considered a part of the permit. Please review the information contained in this document for accuracy and completeness. If any changes are required, or if you have questions regarding this document, please email the Permit Support Services Division at [facupdate@la.gov](mailto:facupdate@la.gov).

**INVENTORIES**

AI ID: 234155 - Louisiana Green Fuels LLC - Louisiana Green Fuels

Activity Number: PER20220001

Permit Number: 0540-00040-00

Air - Minor (Synthetic) Initial

**Subject Item Inventory:**

ID	Description	Tank Volume	Max Operating Rate	Normal Operating Rate	Comments	Operating Time
<b>Louisiana Green Fuels</b>						
EQT 0001	22-01 - Biomass Boiler Stack		1168 MM BTU/hr	1168 MM BTU/hr		8760 hr/yr
EQT 0002	22-02 - Biomass Handling Baghouse		412800 SCFM	344000 SCFM		8760 hr/yr
EQT 0003	22-03 - Biomass Dryer No. 1		19 tons/hr	15.9 tons/hr		8760 hr/yr
EQT 0004	22-04 - Biomass Dryer No. 2		19 tons/hr	15.9 tons/hr		8760 hr/yr
EQT 0005	22-05 - Biomass Dryer No. 3		19 tons/hr	15.9 tons/hr		8760 hr/yr
EQT 0006	22-06 - Biomass Dryer No. 4		19 tons/hr	15.9 tons/hr		8760 hr/yr
EQT 0007	22-07 - Gasification Heater Common Stack		226 MM BTU/hr	188.3 MM BTU/hr		8760 hr/yr
EQT 0008	22-08 - Reactor Charge Heater		18.7 MM BTU/hr	15.6 MM BTU/hr		8760 hr/yr
EQT 0009	22-09 - SO2 Scrubber		2.8 MM BTU/hr	2.8 MM BTU/hr		8760 hr/yr
EQT 0010	22-10 - Flare		8 MM BTU/hr	6.7 MM BTU/hr		8760 hr/yr
EQT 0011	22-11 - Emergency Generator Diesel Engine No. 1		1006 horsepower	1006 horsepower		100 hr/yr
EQT 0012	22-12 - Emergency Generator Diesel Engine No. 2		201 horsepower	201 horsepower		100 hr/yr
EQT 0013	22-13 - Diesel Fire Water Pump No. 1		800 horsepower	800 horsepower		100 hr/yr
EQT 0014	22-14 - Diesel Fire Water Pump No. 2		800 horsepower	800 horsepower		100 hr/yr
EQT 0015	22-15 - Cooling Tower		30000 gallons/min	30000 gallons/min		8760 hr/yr
EQT 0016	22-16 - Fractionator Feed Heater		4.6 MM BTU/hr	3.8 MM BTU/hr		8760 hr/yr
EQT 0017	22-17 - 2072-TNK-0201 - Naphtha Storage Tank	117500 gallons	180 bbl/day	65700 bbl/yr		8760 hr/yr
EQT 0018	22-18 - 2072-TNK-0202 - Naphtha Storage Tank	117500 gallons	180 bbl/day	65700 bbl/yr		8760 hr/yr
EQT 0019	22-19 - 2072-TNK-0203 - Naphtha Storage Tank	287900 gallons	360 bbl/day	131400 bbl/yr		8760 hr/yr
EQT 0020	22-20 - 2072-TNK-0204 - Diesel Storage Tank	571100 gallons	1000 bbl/day	365000 bbl/yr		8760 hr/yr
EQT 0021	22-21 - 2072-TNK-0205 - Diesel Storage Tank	571100 gallons	1000 bbl/day	365000 bbl/yr		8760 hr/yr
EQT 0022	22-22 - 2072-TNK-0206 - Diesel Sales Tank	1.21 million gallons	2000 bbl/day	730000 bbl/yr		8760 hr/yr
EQT 0023	22-23 - 2043-TNK-0301 - Sulfuric Acid Storage Tank	11200 gallons	767.12 gallons/day	280000 gallons/yr		8760 hr/yr
EQT 0024	22-24 - 1041-TNK-0101 - Methanol Storage Tank	106300 gallons		36000 gallons/yr		8760 hr/yr
EQT 0025	22-25 - 2072-TNK-0207 - Diesel Blending Tank	12700 gallons	3.26 bbl/day	1190 bbl/yr		8760 hr/yr
EQT 0026	WW-01 - Wastewater Treatment System		26000 gallons/day	26000 gallons/day		8760 hr/yr
EQT 0027	22-02(a) - Collector #1, Truck Receiving Area		52800 SCFM	44000 SCFM		8760 hr/yr
EQT 0028	22-02(b) - Collector #2, Dryer Island Area		144000 SCFM	120000 SCFM		8760 hr/yr
EQT 0029	22-02(c) - Dried Chip Conveying and Storage Area		86400 SCFM	72000 SCFM		8760 hr/yr
EQT 0030	22-02(d) - Gasifier Feed/Distribution Systems		129600 SCFM	108000 SCFM		8760 hr/yr
EQT 0031	22-09(a) - Thermal Oxidizer		3.4 MM BTU/hr	2.8 MM BTU/hr		8760 hr/yr
EQT 0032	22-09(a)(1) - LHC Intermediate and Off spec Tank TNK-0101	4060 bbl				8760 hr/yr
EQT 0033	22-09(a)(2) - Wax Intermediate and Off spec Tank TNK-0102	2120 bbl				8760 hr/yr
EQT 0034	22-09(a)(3) - Slops Tank #1 TNK-0103	11331 bbl				8760 hr/yr
EQT 0035	22-09(a)(4) - Slops Tank #2 TNK-0104	11331 bbl				8760 hr/yr
EQT 0036	22-09(a)(5) - Railcar Loading					8760 hr/yr
FUG 0001	FUG-01 - Fugitive Leak Emissions					8760 hr/yr
FUG 0002	FUG-02 - Fugitive Roadway Emissions		272 vehicle miles traveled/yr	272 vehicle miles traveled/yr		8760 hr/yr

**Stack Information:**

ID	Description	Diameter (feet)	Discharge Area (square feet)	Height (feet)	Velocity (ft/sec)	Flow Rate (cubic ft/min-actual)	Temperature (oF)
<b>Louisiana Green Fuels</b>							
EQT 0001	22-01 - Biomass Boiler Stack	3		200	665.74	282350	186

**INVENTORIES**

AI ID: 234155 - Louisiana Green Fuels LLC - Louisiana Green Fuels

Activity Number: PER20220001

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Air - Minor (Synthetic) Initial

**Stack Information:**

ID	Description	Diameter (feet)	Discharge Area (square feet)	Height (feet)	Velocity (ft/sec)	Flow Rate (cubic ft/min-actual)	Temperature (oF)
<b>Louisiana Green Fuels</b>							
EQT 0002	22-02 - Biomass Handling Baghouse	5		25	292	344000	100
EQT 0003	22-03 - Biomass Dryer No. 1	1.5		25	282.94	30000	190
EQT 0004	22-04 - Biomass Dryer No. 2	1.5		25	282.94	30000	190
EQT 0005	22-05 - Biomass Dryer No. 3	1.5		25	282.94	30000	190
EQT 0006	22-06 - Biomass Dryer No. 4	1.5		25	282.94	30000	190
EQT 0007	22-07 - Gasification Heater Common Stack	6		30	64.65	109672	785
EQT 0008	22-08 - Reactor Charge Heater	.3		20	4.95	21	785
EQT 0009	22-09 - SO2 Scrubber	.5		30	405.31	4775	785
EQT 0010	22-10 - Flare	4		270	.01	10	785
EQT 0011	22-11 - Emergency Generator Diesel Engine No. 1	.67		10	284.96	6028	847
EQT 0012	22-12 - Emergency Generator Diesel Engine No. 2	.3		10	259.84	1102	825
EQT 0013	22-13 - Diesel Fire Water Pump No. 1	.67		10	284.96	6028	847
EQT 0014	22-14 - Diesel Fire Water Pump No. 2	.67		10	284.96	6028	847
EQT 0015	22-15 - Cooling Tower						77
EQT 0016	22-16 - Fractionator Feed Heater	.3		20	4.95	21	785
EQT 0017	22-17 - 2072-TNK-0201 - Naphtha Storage Tank	.33		35	.19	1	77
EQT 0018	22-18 - 2072-TNK-0202 - Naphtha Storage Tank	.33		35	.19	1	77
EQT 0019	22-19 - 2072-TNK-0203 - Naphtha Storage Tank	.33		43	.19	1	77
EQT 0020	22-20 - 2072-TNK-0204 - Diesel Storage Tank	.33		51	.19	1	77
EQT 0021	22-21 - 2072-TNK-0205 - Diesel Storage Tank	.33		51	.19	1	77
EQT 0022	22-22 - 2072-TNK-0206 - Diesel Sales Tank	.33		45	.19	1	77
EQT 0023	22-23 - 2043-TNK-0301 - Sulfuric Acid Storage Tank	.33		22	.19	1	77
EQT 0024	22-24 - 1041-TNK-0101 - Methanol Storage Tank	.33		29	.19	1	77
EQT 0025	22-25 - 2072-TNK-0207 - Diesel Blending Tank	.33		18	.19	1	77
EQT 0026	WW-01 - Wastewater Treatment System						77
FUG 0001	FUG-01 - Fugitive Leak Emissions						77
FUG 0002	FUG-02 - Fugitive Roadway Emissions						77

**Relationships:**

ID	Description	Relationship	ID	Description
EQT 0027	22-02(a) - Collector #1, Truck Receiving Area	Vents to	EQT 0002	22-02 - Biomass Handling Baghouse
EQT 0028	22-02(b) - Collector #2, Dryer Island Area	Vents to	EQT 0002	22-02 - Biomass Handling Baghouse
EQT 0029	22-02(c) - Dried Chip Conveying and Storage Area	Vents to	EQT 0002	22-02 - Biomass Handling Baghouse
EQT 0030	22-02(d) - Gasifier Feed/Distribution Systems	Vents to	EQT 0002	22-02 - Biomass Handling Baghouse
EQT 0031	22-09(a) - Thermal Oxidizer	Vents to	EQT 0009	22-09 - SO2 Scrubber
EQT 0032	22-09(a)(1) - LHC Intermediate and Off spec Tank TNK-0101	Vents to	EQT 0009	22-09 - SO2 Scrubber
EQT 0033	22-09(a)(2) - Wax Intermediate and Off spec Tank TNK-0102	Vents to	EQT 0009	22-09 - SO2 Scrubber
EQT 0034	22-09(a)(3) - Slops Tank #1 TNK-0103	Vents to	EQT 0009	22-09 - SO2 Scrubber
EQT 0035	22-09(a)(4) - Slops Tank #2 TNK-0104	Vents to	EQT 0009	22-09 - SO2 Scrubber
EQT 0036	22-09(a)(5) - Railcar Loading	Vents to	EQT 0009	22-09 - SO2 Scrubber

INVENTORIES

AI ID: 234155 - Louisiana Green Fuels LLC - Louisiana Green Fuels

Activity Number: PER20220001

Permit Number: 0540-00040-00

Air - Minor (Synthetic) Initial

**Subject Item Groups:**

ID	Group Type	Group Description
CRG 0001	Common Requirements Group	CRG-1 - Heaters subject to Ch. 13
CRG 0002	Common Requirements Group	CRG-2 - Thermal Oxidizer Tanks Group
CRG 0003	Common Requirements Group	CRG-3 - Emergency Diesel Generators
CRG 0004	Common Requirements Group	CRG-4 - Diesel Firewater Pumps
CRG 0005	Common Requirements Group	CRG-5 - Storage Tanks Subject to Ch. 21 and Kb
CRG 0006	Common Requirements Group	CRG-6 - Biomass Dryers
UNF 0001	Unit or Facility Wide	Entire Facility - Louisiana Green Fuels

**Group Membership:**

ID	Description	Member of Groups
EQT 0003	22-03 - Biomass Dryer No. 1	CRG000000000006
EQT 0004	22-04 - Biomass Dryer No. 2	CRG000000000006
EQT 0005	22-05 - Biomass Dryer No. 3	CRG000000000006
EQT 0006	22-06 - Biomass Dryer No. 4	CRG000000000006
EQT 0007	22-07 - Gasification Heater Common Stack	CRG000000000001
EQT 0008	22-08 - Reactor Charge Heater	CRG000000000001
EQT 0011	22-11 - Emergency Generator Diesel Engine No. 1	CRG000000000003
EQT 0012	22-12 - Emergency Generator Diesel Engine No. 2	CRG000000000003
EQT 0013	22-13 - Diesel Fire Water Pump No. 1	CRG000000000004
EQT 0014	22-14 - Diesel Fire Water Pump No. 2	CRG000000000004
EQT 0016	22-16 - Fractionator Feed Heater	CRG000000000001
EQT 0017	22-17 - 2072-TNK-0201 - Naphtha Storage Tank	CRG000000000005
EQT 0018	22-18 - 2072-TNK-0202 - Naphtha Storage Tank	CRG000000000005
EQT 0019	22-19 - 2072-TNK-0203 - Naphtha Storage Tank	CRG000000000005
EQT 0024	22-24 - 1041-TNK-0101 - Methanol Storage Tank	CRG000000000005
EQT 0032	22-09(a)(1) - LHC Intermediate and Off spec Tank TNK-0101	CRG000000000002
EQT 0033	22-09(a)(2) - Wax Intermediate and Off spec Tank TNK-0102	CRG000000000002
EQT 0034	22-09(a)(3) - Slops Tank #1 TNK-0103	CRG000000000002
EQT 0035	22-09(a)(4) - Slops Tank #2 TNK-0104	CRG000000000002

NOTE: The UNF group relationship is not printed in this table. Every subject item is a member of the UNF group.

**Annual Maintenance Fee:**

Fee Number	Air Contaminant Source	Multiplier	Units of Measure
1710	1710 Minor Source Negotiated Fee	1452	

**SIC Codes:**

2869	Industrial organic chemicals, nec	AI 234155
2869	Industrial organic chemicals, nec	UNF 001

**EMISSION RATES FOR CRITERIA POLLUTANTS AND CO<sub>2</sub>e**

AI ID: 234155 - Louisiana Green Fuels LLC - Louisiana Green Fuels

Activity Number: PER20220001

Permit Number: 0540-00040-00

Air - Minor (Synthetic) Initial

Louisiana Green Fuels

Subject Item	PM 10			PM 2.5			SO 2			NOx		
	Avg lb/hr	Max lb/hr	Tons/Year									
EQT 0001 22-01	14.54	17.45	63.70	14.54	17.45	63.70	7.48	8.98	32.76	13.14	15.77	57.55
EQT 0002 22-02	0.30	0.35	1.29	0.30	0.35	1.29						
EQT 0003 22-03												
EQT 0004 22-04												
EQT 0005 22-05												
EQT 0006 22-06												
EQT 0007 22-07	1.41	1.70	6.19	1.41	1.70	6.19	0.48	0.58	2.10	1.21	1.45	5.30
EQT 0008 22-08	0.12	0.14	0.51	0.12	0.14	0.51	0.27	0.32	1.17	0.76	0.92	3.35
EQT 0009 22-09	1.23	1.48	5.39	1.23	1.48	5.39	0.07	0.09	0.31	0.91	1.10	4.00
EQT 0010 22-10	0.05	0.06	0.22	0.05	0.06	0.22	0.12	0.14	0.50	0.33	0.39	1.44
EQT 0011 22-11	0.70	0.85	0.04	0.70	0.85	0.04	7.11	8.54	0.36	22.53	27.04	1.13
EQT 0012 22-12	0.44	0.52	0.02	0.44	0.52	0.02	0.41	0.49	0.02	6.21	7.45	0.31
EQT 0013 22-13	0.56	0.67	0.03	0.56	0.67	0.03	5.66	6.79	0.28	17.92	21.50	0.90
EQT 0014 22-14	0.56	0.67	0.03	0.56	0.67	0.03	5.66	6.79	0.28	17.92	21.50	0.90
EQT 0015 22-15	0.38	0.75	1.64	0.38	0.75	1.64						
EQT 0016 22-16	0.03	0.03	0.12	0.03	0.03	0.12	0.07	0.08	0.29	0.19	0.22	0.82
EQT 0017 22-17												
EQT 0018 22-18												
EQT 0019 22-19												
EQT 0020 22-20												

**EMISSION RATES FOR CRITERIA POLLUTANTS AND CO2e**

AI ID: 234155 - Louisiana Green Fuels LLC - Louisiana Green Fuels

Activity Number: PER20220001

Permit Number: 0540-00040-00

Air - Minor (Synthetic) Initial

Louisiana Green Fuels

Subject Item	CO			VOC		
	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year
EQT 0001 22-01	12.97	15.56	56.81	8.18	9.81	35.82
EQT 0002 22-02						
EQT 0003 22-03				2.43	2.91	10.63
EQT 0004 22-04				2.43	2.91	10.63
EQT 0005 22-05				2.43	2.91	10.63
EQT 0006 22-06				2.43	2.91	10.63
EQT 0007 22-07	0.41	0.49	1.77	1.02	1.22	4.45
EQT 0008 22-08	1.29	1.54	5.63	0.08	0.10	0.37
EQT 0009 22-09	0.23	0.28	1.01	0.02	0.02	0.07
EQT 0010 22-10	0.55	0.66	2.42	0.04	0.04	0.16
EQT 0011 22-11	5.99	7.18	0.30	0.63	0.76	0.03
EQT 0012 22-12	1.34	1.60	0.07	0.13	0.15	0.01
EQT 0013 22-13	4.76	5.71	0.24	0.50	0.61	0.03
EQT 0014 22-14	4.76	5.71	0.24	0.50	0.61	0.03
EQT 0015 22-15						
EQT 0016 22-16	0.31	0.38	1.37	0.02	0.03	0.09
EQT 0017 22-17				0.15	0.15	0.66
EQT 0018 22-18				0.15	0.15	0.66
EQT 0019 22-19				0.20	0.20	0.89
EQT 0020 22-20				0.06	0.06	0.28

**EMISSION RATES FOR CRITERIA POLLUTANTS AND CO2e**

AI ID: 234155 - Louisiana Green Fuels LLC - Louisiana Green Fuels

Activity Number: PER20220001

Permit Number: 0540-00040-00

Air - Minor (Synthetic) Initial

Louisiana Green Fuels

Subject Item	PM 10			PM 2.5			SO 2			NOx		
	Avg lb/hr	Max lb/hr	Tons/Year									
EQT 0021 22-21												
EQT 0022 22-22												
EQT 0024 22-24												
EQT 0025 22-25												
EQT 0026 WW-01												
FUG 0001 FUG-01												
FUG 0002 FUG-02	0.83		1.56	0.21		0.38						

**Note: Emission rates associated with alternate operating scenarios (SCN) are not included in permitted totals unless otherwise noted in a footnote.**

## EMISSION RATES FOR CRITERIA POLLUTANTS AND CO<sub>2</sub>e

AI ID: 234155 - Louisiana Green Fuels LLC - Louisiana Green Fuels

Activity Number: PER20220001

Permit Number: 0540-00040-00

Air - Minor (Synthetic) Initial

Louisiana Green Fuels

Subject Item	CO			VOC		
	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year
EQT 0021 22-21				0.06	0.06	0.28
EQT 0022 22-22				0.13	0.13	0.57
EQT 0024 22-24				0.01	0.01	0.03
EQT 0025 22-25				0.001	0.001	<0.01
EQT 0026 WW-01				0.48	0.57	2.09
FUG 0001 FUG-01				0.56		2.44
FUG 0002 FUG-02						

# EMISSION RATES FOR TAP/HAP & OTHER POLLUTANTS

AI ID: 234155 - Louisiana Green Fuels LLC - Louisiana Green Fuels

Activity Number: PER20220001

Permit Number: 0540-00040-00

Air - Minor (Synthetic) Initial

## All phases

Emission Pt.	Pollutant	Avg lb/hr	Max lb/hr	Tons/Year
EQT 0001 22-01	1,1,1-Trichloroethane	0.001	0.001	<0.01
	Acetaldehyde	0.014	0.02	0.06
	Acrolein	0.52	0.63	2.30
	Ammonia	1.84	2.21	8.05
	Benzene	0.09	0.10	0.38
	Chromium VI (and compounds)	0.001	0.001	<0.01
	Ethyl benzene	0.002	0.002	0.01
	Formaldehyde	0.08	0.09	0.34
	Hydrochloric acid	0.08	0.10	0.35
	Hydrofluoric acid	0.08	0.10	0.35
	Lead compounds	<0.001	<0.001	<0.01
	Manganese (and compounds)	0.004	0.01	0.02
	Mercury (and compounds)	0.002	0.002	0.01
	Methyl chloride	0.01	0.01	0.03
	Phosphorus, Total (as P)	0.03	0.03	0.11
	Polynuclear Aromatic Hydrocarbons	0.34	0.41	1.48
	Sulfuric acid	0.20	0.24	0.88
	Toluene	0.004	0.01	0.02
	Xylene (mixed isomers)	0.002	0.002	0.01
EQT 0003 22-03	Benzyl chloride	0.004	0.01	0.02
	Bromoform	0.003	0.003	0.01
	Carbon disulfide	0.001	0.001	<0.01
	Dichloromethane	0.001	0.001	<0.01
	Ethyl benzene	0.002	0.003	0.01
	Methyl chloride	0.01	0.01	0.03
	Methyl ethyl ketone	0.001	0.002	0.01
	Methyl isobutyl ketone	<0.001	<0.001	<0.01
	n-Hexane	0.01	0.02	0.06
	Styrene	0.03	0.03	0.12
	Toluene	0.001	0.002	0.01
	Xylene (mixed isomers)	0.20	0.24	0.87
EQT 0004 22-04	Benzyl chloride	0.004	0.01	0.02
	Bromoform	0.003	0.003	0.01
	Carbon disulfide	0.001	0.001	<0.01
	Dichloromethane	0.001	0.001	<0.01
	Ethyl benzene	0.002	0.003	0.01
	Methyl chloride	0.01	0.01	0.03
	Methyl ethyl ketone	0.001	0.002	0.01
	Methyl isobutyl ketone	<0.001	<0.001	<0.01
	n-Hexane	0.01	0.02	0.06
	Styrene	0.03	0.03	0.12
	Toluene	0.001	0.002	0.01
	Xylene (mixed isomers)	0.20	0.24	0.87
EQT 0005 22-05	Benzyl chloride	0.004	0.01	0.02
	Bromoform	0.003	0.003	0.01
	Carbon disulfide	0.001	0.001	<0.01
	Dichloromethane	0.001	0.001	<0.01
	Ethyl benzene	0.002	0.003	0.01
	Methyl chloride	0.01	0.01	0.03

**EMISSION RATES FOR TAP/HAP & OTHER POLLUTANTS**

AI ID: 234155 - Louisiana Green Fuels LLC - Louisiana Green Fuels

Activity Number: PER20220001

Permit Number: 0540-00040-00

Air - Minor (Synthetic) Initial

All phases

Emission Pt.	Pollutant	Avg lb/hr	Max lb/hr	Tons/Year
EQT 0006 22-06	Methyl ethyl ketone	0.001	0.002	0.01
	Methyl isobutyl ketone	<0.001	<0.001	<0.01
	n-Hexane	0.01	0.02	0.06
	Styrene	0.03	0.03	0.12
	Toluene	0.001	0.002	0.01
	Xylene (mixed isomers)	0.20	0.24	0.87
EQT 0006 22-06	Benzyl chloride	0.004	0.01	0.02
	Bromoform	0.003	0.003	0.01
	Carbon disulfide	0.001	0.001	<0.01
	Dichloromethane	0.001	0.001	<0.01
	Ethyl benzene	0.002	0.003	0.01
	Methyl chloride	0.01	0.01	0.03
	Methyl ethyl ketone	0.001	0.002	0.01
	Methyl isobutyl ketone	<0.001	<0.001	<0.01
	n-Hexane	0.01	0.02	0.06
	Styrene	0.03	0.03	0.12
	Toluene	0.001	0.002	0.01
	Xylene (mixed isomers)	0.20	0.24	0.87
EQT 0007 22-07	Ammonia	0.31	0.37	1.35
	Barium (and compounds)	0.001	0.001	<0.01
	Formaldehyde	0.01	0.02	0.06
	n-Hexane	0.33	0.40	1.46
	Toluene	0.001	0.001	<0.01
	Zinc (and compounds)	0.01	0.01	0.02
EQT 0008 22-08	Formaldehyde	0.001	0.001	0.01
	n-Hexane	0.03	0.03	0.12
	Zinc (and compounds)	<0.001	0.001	<0.01
EQT 0009 22-09	Ammonia	0.001	0.001	<0.01
	n-Hexane	0.01	0.01	0.02
EQT 0010 22-10	Formaldehyde	<0.001	0.001	<0.01
	n-Hexane	0.01	0.01	0.05
EQT 0011 22-11	Benzene	0.01	0.01	<0.01
	Formaldehyde	0.001	0.001	<0.01
	Naphthalene	0.001	0.001	<0.01
	Polynuclear Aromatic Hydrocarbons	0.001	0.002	<0.001
	Toluene	0.002	0.002	<0.01
	Xylene (mixed isomers)	0.001	0.002	<0.01
EQT 0012 22-12	Acetaldehyde	0.001	0.001	<0.01
	Benzene	0.001	0.002	<0.01
	Formaldehyde	0.002	0.002	<0.01
	Toluene	0.001	0.001	<0.01
EQT 0013 22-13	Benzene	0.004	0.01	<0.01
	Formaldehyde	<0.001	0.001	<0.01
	Naphthalene	0.001	0.001	<0.01
	Polynuclear Aromatic Hydrocarbons	0.001	0.001	<0.001
	Toluene	0.002	0.002	<0.01
	Xylene (mixed isomers)	0.001	0.001	<0.01
EQT 0014 22-14	Benzene	0.004	0.01	<0.01
	Formaldehyde	<0.001	0.001	<0.01

# **EMISSION RATES FOR TAP/HAP & OTHER POLLUTANTS**

AI ID: 234155 - Louisiana Green Fuels LLC - Louisiana Green Fuels

Activity Number: PER20220001

Permit Number: 0540-00040-00

Air - Minor (Synthetic) Initial

## All phases

Emission Pt.	Pollutant	Avg lb/hr	Max lb/hr	Tons/Year
	Naphthalene	0.001	0.001	<0.01
	Polynuclear Aromatic Hydrocarbons	0.001	0.001	<0.001
	Toluene	0.002	0.002	<0.01
	Xylene (mixed isomers)	0.001	0.001	<0.01
EQT 0016 22-16	n-Hexane	0.01	0.01	0.03
EQT 0017 22-17	n-Hexane	0.05	0.05	0.20
EQT 0018 22-18	n-Hexane	0.05	0.05	0.20
EQT 0019 22-19	n-Hexane	0.06	0.06	0.27
EQT 0023 22-23	Sulfuric acid	0.001	0.001	<0.01
EQT 0024 22-24	Methanol	0.01	0.01	0.03
FUG 0001 FUG-01	Methanol	0.12		0.53
	n-Hexane	0.06		0.25
UNF 0001 Entire Facility	1,1,1-Trichloroethane			0.01
	Acetaldehyde			0.07
	Acrolein			2.30
	Ammonia			9.41
	Barium (and compounds)			0.01
	Benzene			0.42
	Benzyl chloride			0.08
	Bromoform			0.04
	Carbon disulfide			0.04
	Chromium VI (and compounds)			0.01
	Dichloromethane			0.04
	Ethyl benzene			0.05
	Formaldehyde			0.46
	Hydrochloric acid			0.35
	Hydrofluoric acid			0.35
	Lead compounds			0.01
	Manganese (and compounds)			0.02
	Mercury (and compounds)			0.01
	Methanol			0.56
	Methyl chloride			0.15
	Methyl ethyl ketone			0.04
	Methyl isobutyl ketone			0.04
	n-Hexane			2.84
	Naphthalene			0.03
	Phosphorus, Total (as P)			0.11
	Polynuclear Aromatic Hydrocarbons			1.483
	Styrene			0.48
	Sulfuric acid			0.89
	Toluene			0.11
	Xylene (mixed isomers)			3.52
	Zinc (and compounds)			0.03

Note: Emission rates associated with alternate operating scenarios (SCN) are not included in permitted totals unless otherwise noted in a footnote. Emission rates attributed to the UNF reflect the sum of the TAP/HAP limits of the individual emission points (or caps) under this permit, but do not constitute an emission cap.

## **EMISSION RATES FOR TAP/HAP & OTHER POLLUTANTS**

AI ID: 234155 - Louisiana Green Fuels LLC - Louisiana Green Fuels

Activity Number: PER20220001

Permit Number: 0540-00040-00

Air - Minor (Synthetic) Initial

## SPECIFIC REQUIREMENTS

AI ID: 234155 - Louisiana Green Fuels LLC - Louisiana Green Fuels

Activity Number: PER20220001

Permit Number: 0540-00040-00

Air - Minor (Synthetic) Initial

### CRG 0001 CRG-1 - Heaters subject to Ch. 13

Group Members: EQT 0007 EQT 0008 EQT 0016

1 [LAC 33:III.1313.C]

Total suspended particulate <= 0.6 lb/MMBTU of heat input.  
Which Months: All Year Statistical Basis: None specified

### CRG 0002 CRG-2 - Thermal Oxidizer Tanks Group

Group Members: EQT 0032 EQT 0033 EQT 0034 EQT 0035

2 [40 CFR 60.112b(a)(3)(ii)]

VOC, Total >= 95 % reduction efficiency using a closed vent system and control device. Subpart Kb. [40 CFR 60.112b(a)(3)(ii)]  
Which Months: All Year Statistical Basis: None specified

3 [40 CFR 60.112b(a)(3)]

Equip with a closed vent system and control device. Design the closed vent system to collect all VOC vapors and gases discharged from the storage vessel and operate with no detectable emissions. Subpart Kb. [40 CFR 60.112b(a)(3)]

4 [40 CFR 60.113b(c)(1)]

Submit operating plan for approval by the Administrator as outlined in 40 CFR 60.113b(c)(1). The operating plan shall be submitted as an attachment to the notification required by 40 CFR 60.7(a)(1) and shall be postmarked no later than 30 days after commencement of construction. [40 CFR 60.113b(c)(1)]

5 [40 CFR 60.113b(c)(2)]

Operate the closed vent system and control device and monitor the parameters of the closed vent system and control device in accordance with the operating plan submitted to the Administrator in accordance with paragraph (c)(1) of this section, unless the plan was modified by the Administrator during the review process. In this case, the modified plan applies. [40 CFR 60.113b(c)(2)]

6 [40 CFR 60.115b(c)]

After installing control equipment in accordance with 40 CFR 60.112b (a)(3) or (b)(1) (closed vent system and control device other than a flare), the owner or operator shall keep the records specified in 40 CFR 60.115b(c)(1) and (2). [40 CFR 60.115b(c)]

7 [40 CFR 60.116b(b)]

Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. Keep copies of all records for the life of the source as specified by 40 CFR 60.116b(a). Subpart Kb. [40 CFR 60.116b(b)]

8 [LAC 33:III.2103.B]

Equip with a submerged fill pipe.  
VOC, Total >= 95 % control efficiency using a vapor loss control system. This limitation does not apply during periods of planned routine maintenance which may not exceed 240 hours per year.

9 [LAC 33:III.2103.E.1]

Which Months: All Year Statistical Basis: None specified

10 [LAC 33:III.2103.E]

Equip with a vapor loss control system that consists of a gathering system capable of collecting volatile organic compound vapors and a vapor disposal system capable of processing such organic vapors. Ensure that all tank gauging and sampling devices are gas-tight except when gauging or sampling is taking place.

11 [LAC 33:III.2103.I]

Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep records of the information specified in LAC 33:III.2103.I.1 through I.7, as applicable. Maintain records for at least two years.

### CRG 0003 CRG-3 - Emergency Diesel Generators

Group Members: EQT 0011 EQT 0012

12 [40 CFR 60.4205(b)]

Comply with the emission standards for new nonroad CI engines in 40 CFR 60.4202, for all pollutants, for the same model year and maximum engine power. Subpart IIII. [40 CFR 60.4205(b)]

13 [40 CFR 60.4206]

Operate and maintain stationary CI ICE that achieve the emission standards as required in 40 CFR 60.4204 and 40 CFR 60.4205 over the entire life of the engine. Subpart IIII.

## SPECIFIC REQUIREMENTS

AI ID: 234155 - Louisiana Green Fuels LLC - Louisiana Green Fuels

Activity Number: PER20220001

Permit Number: 0540-00040-00

Air - Minor (Synthetic) Initial

### CRG 0003 CRG-3 - Emergency Diesel Generators

Group Members: EQT 0011 EQT 0012

14 [40 CFR 60.4207(b)] Use diesel fuel that meets the requirements of 40 CFR 1090.305 for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted. Subpart III. [40 CFR 60.4207(b)]

15 [40 CFR 60.4209(a)] Operating time monitored by hour/time monitor continuously during operation. If the emergency engine meets the standards applicable to emergency engines, install a non-resettable hour meter prior to startup of the engine. Subpart III. [40 CFR 60.4209(a)]

16 [40 CFR 60.4211(a)(1)] Which Months: All Year Statistical Basis: None specified

17 [40 CFR 60.4211(a)(2)] Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions, except as permitted in 40 CFR 60.4211(g). Subpart III. [40 CFR 60.4211(a)(1)]

18 [40 CFR 60.4211(a)(3)] Change only those emission-related settings that are permitted by the manufacturer, except as permitted in 40 CFR 60.4211(g). Subpart III. [40 CFR 60.4211(a)(2)]

19 [40 CFR 60.4211(c)] Meet the requirements of 40 CFR 1068, as applicable, except as permitted in 40 CFR 60.4211(g). Subpart III. [40 CFR 60.4211(a)(3)]

20 [40 CFR 60.4211(e)(2)] Ensure engine is certified to the emission standards in 40 CFR 60.4204(b), or 40 CFR 60.4205(b) or (c), as applicable, for the same model year and maximum (or in the case of fire pumps, NFPA nameplate) engine power. Install and configure according to the manufacturer's emissions-related specifications, except as permitted in 40 CFR 60.4211(g). Subpart III. [40 CFR 60.4211(c)]

21 [40 CFR 60.4211(f)(1)] Conduct a performance test to demonstrate initial compliance with emission standards according to the requirements specified in 40 CFR 60.4212 or 40 CFR 60.4213, as appropriate, within 60 days after commencing operation after a modification or reconstruction. Subpart III. [40 CFR 60.4211(e)(2)]

22 [40 CFR 60.4211(f)(2)(i)] There is no time limit on the use of emergency stationary ICE in emergency situations. Subpart III. [40 CFR 60.4211(f)(1)]

23 [40 CFR 60.4211(f)(3)] Operate for maintenance checks and readiness testing for a maximum of 100 hours per calendar year, provided that the tests are recommended by the federal, state or local government; the manufacturer; the vendor; the regional transmission organization or equivalent balancing authority and transmission operator; or the insurance company associated with the engine. LDEQ may be petitioned for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if records are maintained indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year. Subpart III. [40 CFR 60.4211(f)(2)(i)]

24 [40 CFR 60.4211(f)] Operate for up to 50 hours per calendar year in non-emergency situations. Count the 50 hours of operation in non-emergency situations as part of the 100 hours per calendar year for maintenance and testing provided in 40 CFR 60.4211(f)(2)(i). Do not use the 50 hours per calendar year for non-emergency situations for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity, except as provided in 40 CFR 60.4211(f)(3)(i). Subpart III. [40 CFR 60.4211(f)(3)]

25 [40 CFR 60.4211(g)] Operate according to the requirements in 40 CFR 60.4211(f)(1), (f)(2)(i), and (f)(3). In order for the engine to be considered an emergency stationary ICE under 40 CFR 60 Subpart III, any operation other than as described in 40 CFR 60.4211(f)(1), (f)(2)(i), and (f)(3) is prohibited. If the engine is not operated according to these requirements, the engine will not be considered an emergency engine under 40 CFR 60 Subpart III and must meet all requirements for non-emergency engines. Subpart III. [40 CFR 60.4211(f)]

26 [40 CFR 60.4211(g)] Conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year after the engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions (can include within 1 year of startup), or within 1 year after the emission-related settings are changed in a way that is not permitted by the manufacturer. Conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first, thereafter to demonstrate compliance, if the engine is greater than 500 HP. Subpart III. [40 CFR 60.4211(g)]

Keep a maintenance plan and records of conducted maintenance. Subpart III. [40 CFR 60.4211(g)]

## SPECIFIC REQUIREMENTS

AI ID: 234155 - Louisiana Green Fuels LLC - Louisiana Green Fuels

Activity Number: PER20220001

Permit Number: 0540-00040-00

Air - Minor (Synthetic) Initial

### **CRG 0003 CRG-3 - Emergency Diesel Generators**

Group Members: EQT 0011 EQT 0012

27 [40 CFR 60.4211(g)] Maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. Subpart III. [40 CFR 60.4211(g)]

28 [40 CFR 60.4212] Conduct performance tests according to 40 CFR 60.4212(a) through (e). Subpart III.

29 [40 CFR 60.4214(b)] Operating time recordkeeping by electronic or hard copy upon occurrence of event. If the emergency engine meets the standards applicable to emergency engines in the applicable model year, keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. Record the time of operation of the engine and the reason the engine was in operation during that time. Subpart III. [40 CFR 60.4214(b)]

30 [40 CFR 63.6590(c)] Meet the requirements of 40 CFR 60 Subpart III for compression ignition engines. Subpart ZZZZ. [40 CFR 63.6590(c)]

31 [LAC 33:III.1101.B] Opacity <= 20 percent, except for emissions that have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes. Determine opacity by using Method 9 of 40 CFR Part 60, Appendix A.

32 [LAC 33:III.1311.C] Which Months: All Year Statistical Basis: None specified  
Opacity <= 20 percent, except for emissions that have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes.  
Which Months: All Year Statistical Basis: Six-minute average

### **CRG 0004 CRG-4 - Diesel Firewater Pumps**

Group Members: EQT 0013 EQT 0014

33 [40 CFR 60.4205(c)] Non-methane hydrocarbons plus Nitrogen oxides (NOx) <= 4.8 g/BHP-hr (6.4 g/KW-hr). Subpart III. [40 CFR 60.4205(c)]  
Which Months: All Year Statistical Basis: None specified

34 [40 CFR 60.4205(c)] Particulate matter (10 microns or less) (PM10) <= 0.15 g/BHP-hr (0.20 g/KW-hr). Subpart III. [40 CFR 60.4205(c)]  
Which Months: All Year Statistical Basis: None specified

35 [40 CFR 60.4206] Operate and maintain stationary CI ICE that achieve the emission standards as required in 40 CFR 60.4204 and 40 CFR 60.4205 over the entire life of the engine. Subpart III.

36 [40 CFR 60.4207(b)] Use diesel fuel that meets the requirements of 40 CFR 1090.305 for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted. Subpart III. [40 CFR 60.4207(b)]

37 [40 CFR 60.4209(a)] Operating time monitored by hour/time monitor continuously during operation. If the emergency engine meets the standards applicable to emergency engines, install a non-resettable hour meter prior to startup of the engine. Subpart III. [40 CFR 60.4209(a)]  
Which Months: All Year Statistical Basis: None specified

38 [40 CFR 60.4211(a)(1)] Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions, except as permitted in 40 CFR 60.4211(g). Subpart III. [40 CFR 60.4211(a)(1)]

39 [40 CFR 60.4211(a)(2)] Change only those emission-related settings that are permitted by the manufacturer, except as permitted in 40 CFR 60.4211(g). Subpart III. [40 CFR 60.4211(a)(2)]

40 [40 CFR 60.4211(a)(3)] Meet the requirements of 40 CFR 1068, as applicable, except as permitted in 40 CFR 60.4211(g). Subpart III. [40 CFR 60.4211(a)(3)]

41 [40 CFR 60.4211(f)(1)] There is no time limit on the use of emergency stationary ICE in emergency situations. Subpart III. [40 CFR 60.4211(f)(1)]

## SPECIFIC REQUIREMENTS

AI ID: 234155 - Louisiana Green Fuels LLC - Louisiana Green Fuels

Activity Number: PER20220001

Permit Number: 0540-00040-00

Air - Minor (Synthetic) Initial

### CRG 0004 CRG-4 - Diesel Firewater Pumps

Group Members: EQT 0013 EQT 0014

42 [40 CFR 60.4211(f)(2)(i)]

Operate for maintenance checks and readiness testing for a maximum of 100 hours per calendar year, provided that the tests are recommended by the federal, state or local government; the manufacturer; the vendor; the regional transmission organization or equivalent balancing authority and transmission operator; or the insurance company associated with the engine. LDEQ may be petitioned for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if records are maintained indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.  
Subpart III. [40 CFR 60.4211(f)(2)(i)]

43 [40 CFR 60.4211(f)(3)]

Operate for up to 50 hours per calendar year in non-emergency situations. Count the 50 hours of operation in non-emergency situations as part of the 100 hours per calendar year for maintenance and testing provided in 40 CFR 60.4211(f)(2)(i). Do not use the 50 hours per calendar year for non-emergency situations for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity, except as provided in 40 CFR 60.4211(f)(3)(i). Subpart III. [40 CFR 60.4211(f)(3)]

44 [40 CFR 60.4211(f)]

Operate according to the requirements in 40 CFR 60.4211(f)(1), (f)(2)(i), and (f)(3). In order for the engine to be considered an emergency stationary ICE under 40 CFR 60 Subpart III, any operation other than as described in 40 CFR 60.4211(f)(1), (f)(2)(i), and (f)(3) is prohibited. If the engine is not operated according to these requirements, the engine will not be considered an emergency engine under 40 CFR 60 Subpart III and must meet all requirements for non-emergency engines. Subpart III. [40 CFR 60.4211(f)]

45 [40 CFR 60.4211(g)]

Conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year after the engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions (can include within 1 year of startup), or within 1 year after the emission-related settings are changed in a way that is not permitted by the manufacturer. Conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first, thereafter to demonstrate compliance, if the engine is greater than 500 HP. Subpart III. [40 CFR 60.4211(g)]

46 [40 CFR 60.4211(g)]

Keep a maintenance plan and records of conducted maintenance. Subpart III. [40 CFR 60.4211(g)]

47 [40 CFR 60.4211(g)]

Maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. Subpart III. [40 CFR 60.4211(g)]

48 [40 CFR 60.4212]

Conduct performance tests according to 40 CFR 60.4212(a) through (e). Subpart III.

49 [40 CFR 60.4214(b)]

Operating time recordkeeping by electronic or hard copy upon occurrence of event. If the emergency engine meets the standards applicable to emergency engines in the applicable model year, keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. Record the time of operation of the engine and the reason the engine was in operation during that time. Subpart III. [40 CFR 60.4214(b)]

50 [40 CFR 63.6590(c)]

Meet the requirements of 40 CFR 60 Subpart III for compression ignition engines. Subpart ZZZZ. [40 CFR 63.6590(c)]

51 [LAC 33:III.1101.B]

Opacity <= 20 percent, except for emissions that have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes. Determine opacity by using Method 9 of 40 CFR Part 60, Appendix A.

Which Months: All Year Statistical Basis: None specified

52 [LAC 33:III.1311.C]

Opacity <= 20 percent, except for emissions that have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes.

Which Months: All Year Statistical Basis: Six-minute average

**SPECIFIC REQUIREMENTS**

AI ID: 234155 - Louisiana Green Fuels LLC - Louisiana Green Fuels

Activity Number: PER20220001

Permit Number: 0540-00040-00

Air - Minor (Synthetic) Initial

**CRG 0005 CRG-5 - Storage Tanks Subject to Ch. 21 and Kb**

Group Members: EQT 0017 EQT 0018 EQT 0019 EQT 0024

53 [40 CFR 60.112b(a)(1)(i)] Equip with a fixed roof in combination with an internal floating roof. The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal floating roof shall be floating on the liquid surface at all times, except during initial fill and during those intervals when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible. Subpart Kb. [40 CFR 60.112b(a)(1)(i)]

54 [40 CFR 60.112b(a)(1)(ii)(B)] Equip internal floating roof with two seals mounted secondary above the primary so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The primary seal may be vapor-mounted, but both must be continuous. Subpart Kb. [40 CFR 60.112b(a)(1)(ii)(B)]

55 [40 CFR 60.112b(a)(1)] Each opening in a noncontact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface. Equip each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains with a cover or lid and maintain in a closed position at all times (i.e., no visible gap) except when the device is in actual use. Equip the cover or lid with a gasket. Bolt covers on each access hatch and automatic gauge float well except when they are in use. Equip automatic bleeder vents with a gasket and close at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports. Equip rim space vents with a gasket and set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting. Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The sample well shall have a slit fabric cover that covers at least 90 percent of the opening. Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover. Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover. Subpart Kb. [40 CFR 60.112b(a)(1)]

56 [40 CFR 60.113b(a)(1)] Tank roof and seals monitored by visual inspection/determination at the regulation's specified frequency. Inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), prior to filling the storage vessel with VOL. If there are holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric or defects in the internal floating roof, or both, repair the items before filling the storage vessel. Subpart Kb. [40 CFR 60.113b(a)(1)]

57 [40 CFR 60.113b(a)(3)(i)] Which Months: All Year Statistical Basis: None specified

Tank roof and seals monitored by visual inspection/determination once every five years as specified in 40 CFR 60.113b(a)(4). Subpart Kb. [40 CFR 60.113b(a)(3)(i)]

58 [40 CFR 60.113b(a)(3)(ii)] Which Months: All Year Statistical Basis: None specified

Tank roof and seals monitored by visual inspection/determination annually as specified in 40 CFR 60.113b(a)(2). Subpart Kb. [40 CFR 60.113b(a)(3)(ii)]

59 [40 CFR 60.113b(a)(4)] Which Months: All Year Statistical Basis: None specified

If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel with VOL. In no event shall inspections conducted in accordance with this provision occur at intervals greater than 10 years in the case of vessels conducting the annual visual inspection as specified in 40 CFR 60.113b(a)(2) and (a)(3)(ii) and at intervals no greater than 5 years in the case of vessels specified in paragraph 40 CFR 60.113b(a)(3)(i) of this section. Subpart Kb. [40 CFR 60.113b(a)(4)]

## **SPECIFIC REQUIREMENTS**

**AI ID: 234155 - Louisiana Green Fuels LLC - Louisiana Green Fuels**

**Activity Number: PER20220001**

**Permit Number: 0540-00040-00**

**Air - Minor (Synthetic) Initial**

### **CRG 0005 CRG-5 - Storage Tanks Subject to Ch. 21 and Kb**

**Group Members: EQT 0017 EQT 0018 EQT 0019 EQT 0024**

60 [40 CFR 60.113b(a)(4)] Tank roof and seals monitored by visual inspection/determination at the regulation's specified frequency. Inspect the internal floating roof, the primary seal, the secondary seal (if one is in service), gaskets, slotted membranes and sleeve seals (if any) each time the storage vessel is emptied and degassed. If a failure is detected during inspections required in this paragraph initiate repair provisions. Subpart Kb. [40 CFR 60.113b(a)(4)]

61 [40 CFR 60.113b(a)(5)] Which Months: All Year Statistical Basis: None specified  
Submit notification in writing: Due at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by 40 CFR 60.113b(a)(1) and (a)(4) to afford DEQ an opportunity to have an observer present. If the inspection required by paragraph 40 CFR 60.113b(a)(4) is not planned and the owner or operator could not have known about the inspection 30 days in advance or refilling the tank, notify DEQ at least 7 days prior to the refilling of the storage vessel. Notify by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, submit notification in writing including the written documentation and send by express mail so that it is received by DEQ at least 7 days prior to the refilling. Subpart Kb. [40 CFR 60.113b(a)(5)]

62 [40 CFR 60.115b(a)(1)] Submit a report: Due to DEQ as an attachment to the notification required by 40 CFR 60.7(a)(3). This report shall describe the control equipment and certify that the control equipment meets the specifications of 40 CFR 60.112b(a)(1) and 60.113b(a)(1). Keep copies of all reports for at least two years. Subpart Kb. [40 CFR 60.115b(a)(1)]

63 [40 CFR 60.115b(a)(2)] Inspection records recordkeeping by electronic or hard copy upon each occurrence of inspection, per 40 CFR 60.113b(a)(1) through (4). Each record shall identify the storage vessel on which the inspection was performed and shall contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings). Keep copies of all records for at least two years. Subpart Kb. [40 CFR 60.115b(a)(2)]

64 [40 CFR 60.115b(a)(4)] Submit a report: Due to DEQ within 30 days of each inspection required by 40 CFR 60.113b(a)(3) that finds holes or tears in the seal or seal fabric, or defects in the internal floating roof, or other control equipment defects listed in 40 CFR 60.113b(a)(3)(ii). The report shall identify the storage vessel and the reason it did not meet the specifications of 40 CFR 60.112b(a)(1) or 40 CFR 60.113b(a)(3) and list each repair made. Keep copies of all reports for at least two years. Subpart Kb. [40 CFR 60.115b(a)(4)]

65 [40 CFR 60.116b(b)] Equipment/operational data recordkeeping by electronic or hard copy at the approved frequency. Keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. Keep copies of all records for the life of the source as specified by 40 CFR 60.116b(a). Subpart Kb. [40 CFR 60.116b(b)]

66 [40 CFR 60.116b(c)] VOL storage data recordkeeping by electronic or hard copy at the approved frequency. Records consist of the VOL stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period. Keep copies of all records for at least two years. Subpart Kb. [40 CFR 60.116b(c)]

67 [LAC 33:III.2103.B] Equip with a submerged fill pipe.

68 [LAC 33:III.2103.C] Equip with an internal floating roof consisting of a pontoon type roof, double deck roof, or internal floating cover which rests or floats on the surface of the liquid contents and is equipped with a closure seal to close the space between the roof edge and tank wall. Ensure that all tank gauging and sampling devices are gas-tight except when gauging or sampling is taking place.

69 [LAC 33:III.2103.I] Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep records of the information specified in LAC 33:III.2103.I.1 through I.7, as applicable. Maintain records for at least two years.

## SPECIFIC REQUIREMENTS

AI ID: 234155 - Louisiana Green Fuels LLC - Louisiana Green Fuels

Activity Number: PER20220001

Permit Number: 0540-00040-00

Air - Minor (Synthetic) Initial

### CRG 0006 CRG-6 - Biomass Dryers

Group Members: EQT 0003 EQT 0004 EQT 0005 EQT 0006

70 [LAC 33:III.501.C.6]

Conduct a performance/emissions test: Due under any of the following circumstances:

1. Within 180 days of initial start-up (or restart-up after modification); or within 60 days of achieving normal production or completing shakedown period, whichever is earlier; or
2. Within 180 days of the issuance of this permit, for existing sources that have never conducted a performance/emissions test; or
3. Within 5 years, plus or minus 6 months, from when the previous performance/emissions test was performed.

If this source is not operational when a performance/emissions test is due, the test shall be due within 60 days of startup.

71 [LAC 33:III.501.C.6]

Conduct performance/emissions test using EPA Other Test Method (OTM) 26 – Interim VOC Measurement Protocol for the Wood Products Industry (WPP1 VOC). VOC shall be calculated as Total Hydrocarbons (THC) expressed as propane, plus methanol and formaldehyde expressed as compound, minus adjustments. The test's purpose is to demonstrate compliance with the emission limits of this permit; therefore, conduct each test run within 80 percent of maximum permitted load, or within 10 percent of 100 percent maximum achievable load. Use alternate stack test methods only with the prior approval of the Office of Environmental Services. Provide necessary sampling ports in stacks or ducts and such other safe and proper sampling and testing facilities for proper determination of the emission limits, as required by LAC 33:III.913.

72 [LAC 33:III.501.C.6]

Submit notification: Due to the Office of Environmental Services at least 30 days prior to any LDEQ required performance/emissions test. Submit notification in order to provide the opportunity to conduct a pretest meeting and observe the emission testing. Submit notification at least 45 days prior to the deadline specified in this permit indicating the reason that the test will not be conducted by the specified deadline, if any LDEQ required performance/emissions test will not be conducted by the deadline specified in this permit. This notification will be evaluated by the department on a case-by-case basis to determine if an extension to the deadline for testing specified in this permit is warranted. The deadline for testing specified in this permit shall remain in effect until the department responds in writing with an extension to this deadline.

73 [LAC 33:III.501.C.6]

Submit report: Due within 60 days after performance/emissions test. Submit performance/emissions test results to the Office of Environmental Services. Include any necessary conversion into the units of any applicable standard (lbs/MMBtu, gr/dscf, lbs SO<sub>2</sub> / ton 100% H<sub>2</sub>SO<sub>4</sub>, etc.). Include plant and in house laboratory data to support production values (example: how many tons of 100% equivalent H<sub>2</sub>SO<sub>4</sub> was being produced).

### EQT 0001 22-01 - Biomass Boiler Stack

74 [40 CFR 60.43b(f)]

Opacity <= 20 percent, except for one 6-minute period per hour of not more than 27% opacity. The opacity standards apply at all times, except during periods of startup, shutdown, or malfunction. Subpart Db. [40 CFR 60.43b(f)]

Which Months: All Year Statistical Basis: Six-minute average

75 [40 CFR 60.43b(h)(4)]

On and after the date on which the initial performance test is completed or is required to be completed under 40 CFR 60.8, whichever date comes first, no owner or operator of an affected facility that commences modification after February 28, 2005, and that combusts over 30 percent wood (by heat input) on an annual basis and has a maximum heat input capacity greater than 73 MW (250 MMBtu/h) shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of 37 ng/J (0.085 lb/MMBtu) heat input. [40 CFR 60.43b(h)(4)]

76 [40 CFR 60.44b(l)(1)]

Nitrogen oxides (NO<sub>x</sub>) <= 0.20 lb/MMBTU (86 ng/J) heat input (expressed as NO<sub>2</sub>), except as provided in 40 CFR 60.44b(k). The nitrogen oxide standards apply at all times, including periods of startup, shutdown, or malfunction. Subpart Db. [40 CFR 60.44b(l)(1)]

Which Months: All Year Statistical Basis: Thirty-day rolling average

## SPECIFIC REQUIREMENTS

AI ID: 234155 - Louisiana Green Fuels LLC - Louisiana Green Fuels

Activity Number: PER2022001

Permit Number: 0540-00040-00

Air - Minor (Synthetic) Initial

### EQT 0001 22-01 - Biomass Boiler Stack

77 [40 CFR 60.46b(b)]

Determine compliance with the PM and opacity standards in 40 CFR 60.43b through performance testing as described in 40 CFR 60.46b (d), except as provided in 40 CFR 60.46b(i). Subpart Db. [40 CFR 60.46b(b)]

78 [40 CFR 60.48b(a)]

Install, calibrate, maintain, and operate a continuous opacity monitoring systems (COMS) for measuring the opacity of emissions discharged to the atmosphere and record the output of the system. The owner or operator of an affected facility subject to an opacity standard under 40 CFR 60.43b and meeting the conditions under paragraphs (j)(1), (2), (3), (4), (5), or (6) of this section who elects not to use a COMS shall conduct a performance test using Method 9 of appendix A-4 of this part and the procedures in 40 CFR 60.11 to demonstrate compliance with the applicable limit in 40 CFR 60.43b by April 29, 2011, within 45 days of stopping use of an existing COMS, or within 180 days after initial startup of the facility, whichever is later, and shall comply with either paragraphs (a)(1), (a)(2), or (a)(3) of this section. The observation period for Method 9 of appendix A-4 of this part performance tests may be reduced from 3 hours to 60 minutes if all 6-minute averages are less than 10 percent and all individual 15-second observations are less than or equal to 20 percent during the initial 60 minutes of observation. [40 CFR 60.48b(a)]

79 [40 CFR 60.49b(a)]

Submit notification: Due as provided by 40 CFR 60.7. Submit a notification of the actual date of initial startup including design heat input capacity of the affected facility, identification of fuels to be combusted, copy of any federally enforceable requirement limiting annual capacity factor, and all other data as specified in 40 CFR 60.49b(a)(1) through (a)(4). Subpart Db. [40 CFR 60.49b(a)]

80 [40 CFR 60.49b(b)]

Submit the performance test data from the initial performance test and the performance evaluation of the CEMS using the applicable performance specifications in 40 CFR 60 Appendix B to DEQ. Subpart Db. [40 CFR 60.49b(b)]

81 [40 CFR 60.49b(d)]

Fuel rate recordkeeping by electronic or hard copy daily. Record the amounts of each fuel combusted during each day and calculate the annual capacity factor individually for coal, distillate oil, residual oil, natural gas, wood, and municipal-type solid waste for the reporting period. Determine the annual capacity factor on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month. If the facility is not required to continuously monitor any emissions (excluding opacity) or parameters indicative of emissions, the facility may record the amount of each fuel combusted during each calendar month. Subpart Db. [40 CFR 60.49b(d)]

82 [40 CFR 60.49b(f)]

Opacity recordkeeping by the regulation's specified method(s) at the regulation's specified frequency. Maintain records according to the requirements specified in 40 CFR 60.49b(f)(1) through (f)(3). Subpart Db. [40 CFR 60.49b(f)]

83 [40 CFR 60.49b(h)]

Submit excess emissions report: Due by the 30th day following the end of each six-month period. Report any excess emissions which occurred during the reporting period. Subpart Db. [40 CFR 60.49b(h)]

84 [40 CFR 60.49b(o)]

Maintain all records required under 40 CFR 60.49b for a period of 2 years following the date of such record. Subpart Db. [40 CFR 60.49b (o)]

85 [40 CFR 60.49b(r)(1)]

The owner or operator of an affected facility who elects to demonstrate that the affected facility combusts only very low sulfur oil, natural gas, wood, a mixture of these fuels, or any of these fuels (or a mixture of these fuels) in combination with other fuels that are known to contain an insignificant amount of sulfur in § 60.42b(j) or § 60.42b(k) shall obtain and maintain at the affected facility fuel receipts (such as a current, valid purchase contract, tariff sheet, or transportation contract) from the fuel supplier that certify that the oil meets the definition of distillate oil and gaseous fuel meets the definition of natural gas as defined in § 60.41b and the applicable sulfur limit. Reports shall be submitted to the Administrator certifying that only very low sulfur oil meeting this definition, natural gas, wood, and/or other fuels that are known to contain insignificant amounts of sulfur were combusted in the affected facility during the reporting period. [40 CFR 60.49b(r)(1)]

86 [40 CFR 60.49b(w)]

The reporting period for the reports required under this subpart is each 6 month period. All reports shall be submitted to the Administrator and shall be postmarked by the 30th day following the end of the reporting period. [40 CFR 60.49b(w)]

87 [40 CFR 63.11201(a)]

Particulate matter (10 microns or less) (PM10) <= 0.03 lb/MMBTU of heat input. Subpart JJJJJ. [40 CFR 63.11201(a)]

Which Months: All Year Statistical Basis: None specified

**SPECIFIC REQUIREMENTS**

**AI ID: 234155 - Louisiana Green Fuels LLC - Louisiana Green Fuels**

**Activity Number: PER20220001**

**Permit Number: 0540-00040-00**

**Air - Minor (Synthetic) Initial**

**EQT 0001 22-01 - Biomass Boiler Stack**

88 [40 CFR 63.11201(b)] Minimize the boiler's startup and shutdown periods and conduct startups and shutdowns according to the manufacturer's recommended procedures. Follow recommended procedures for a unit of similar design for which manufacturer's recommended procedures are available, if manufacturer's recommended procedures are not available. Subpart JJJJJ. [40 CFR 63.11201(b), 40 CFR 63.11214(d), 40 CFR 63.11223(g)]

89 [40 CFR 63.11201(c)] Maintain opacity to less than or equal to 10 percent opacity (daily block average) as specified by Table 3 Item 5. [40 CFR 63.11201(c)]

90 [40 CFR 63.11201(c)] Maintain the operating load such that it does not exceed 110 percent of the average operating load recorded during the most recent performance stack test as specified by Table 3 Item 7. Subpart JJJJJ. [40 CFR 63.11201(c)]

91 [40 CFR 63.11201(d)] These standards apply at all times the affected boiler is operating, except during periods of startup and shutdown as defined in 40 CFR 63.11237, during which time you must comply only with Table 2 to this subpart. [40 CFR 63.11201(d)]

92 [40 CFR 63.11205(a)] At all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. [40 CFR 63.11205(a)]

93 [40 CFR 63.11205(b)] Demonstrate compliance with all applicable emission limits using performance stack testing, fuel analysis, or a continuous monitoring system (CMS), including a continuous emission monitoring system (CEMS), a continuous opacity monitoring system (COMS), or a continuous parameter monitoring system (CPMS), where applicable. Fuel analysis may be used to demonstrate compliance with an applicable mercury emission limit, if the emission rate calculated according to 40 CFR 63.11211(c) is less than the applicable emission limit. Subpart JJJJJ. [40 CFR 63.11205(b)]

94 [40 CFR 63.11210(a)] Demonstrate initial compliance with each applicable emission limit specified in 40 CFR 63 Subpart JJJJJ Table 1 by either conducting performance (stack) tests, as applicable, according to 40 CFR 63.11212 and 40 CFR 63 Subpart JJJJJ Table 4 or, for mercury, conducting fuel analyses, as applicable, according to 40 CFR 63.11213 and 40 CFR 63 Subpart JJJJJ Table 5. Subpart JJJJJ. [40 CFR 63.11210(a)]

95 [40 CFR 63.11210(d)] Demonstrate initial compliance with the applicable emission limits no later than 180 days after March 21, 2011 or within 180 calendar days after startup of the source, whichever is later, according to 40 CFR 63.7(a)(2)(ix). Subpart JJJJJ. [40 CFR 63.11210(d)]

96 [40 CFR 63.11210(g)] For new or reconstructed affected boilers that have applicable work practice standards or management practices, you are not required to complete an initial performance tune-up, but you are required to complete the applicable biennial or 5-year tune-up as specified in 40 CFR 63.11223 no later than 25 months or 61 months, respectively, after the initial startup of the new or reconstructed affected source. [40 CFR 63.11210(g)]

97 [40 CFR 63.11211(a)] Demonstrate initial compliance with the emission limits of 40 CFR 63 Subpart JJJJJ by conducting performance (stack) tests according to 40 CFR 63.11212 and 40 CFR 63 Subpart JJJJJ Table 4, conducting a fuel analysis for each type of fuel burned in the boiler according to 40 CFR 63.11213 and 40 CFR 63 Subpart JJJJJ Table 5, establishing operating limits according to 40 CFR 63.11222, 40 CFR 63 Subpart JJJJJ Table 6, and 40 CFR 63.11211(b), as applicable, and conducting CMS performance evaluations according to 40 CFR 63.11224. Subpart JJJJJ. [40 CFR 63.11211(a)]

98 [40 CFR 63.11212] Conduct all performance tests according to 40 CFR 63.7(c), (d), (f), and (h) and 40 CFR 63.11212(b) through (e). Develop a site-specific test plan according to the requirements in 40 CFR 63.7(c). Subpart JJJJJ.

99 [40 CFR 63.11214(b)] Demonstrate initial compliance with the work practice standard, emission reduction measures, and management practices by conducting a performance tune-up according to 40 CFR 63.11210(c) or (g), as applicable, and 40 CFR 63.11223(b). Submit a signed statement in the Notification of Compliance Status report that indicates a tune-up of the boiler was conducted, if the boiler is an existing boiler. Subpart JJJJJ. [40 CFR 63.11214(b)]

100 [40 CFR 63.11214(d)] Submit a signed statement in the Notification of Compliance Status report that indicates that startups and shutdowns are conducted according to the manufacturer's recommended procedures or procedures specified for a boiler of similar design if manufacturer's recommended procedures are not available. Subpart JJJJJ. [40 CFR 63.11214(d), 40 CFR 63.11223(g)]

## SPECIFIC REQUIREMENTS

AI ID: 234155 - Louisiana Green Fuels LLC - Louisiana Green Fuels

Activity Number: PER20220001

Permit Number: 0540-00040-00

Air - Minor (Synthetic) Initial

### EQT 0001 22-01 - Biomass Boiler Stack

101 [40 CFR 63.11220(a)] Conduct all applicable performance (stack) tests according to 40 CFR 63.11212 on a triennial basis, except as specified in 40 CFR 63.11220(b) through (e). Ensure that triennial performance tests are completed no more than 37 months after the previous performance test. Subpart JJJJJJ. [40 CFR 63.11220(a)]

102 [40 CFR 63.11220(c)] For new or reconstructed boilers that commenced construction or reconstruction after September 14, 2016, when demonstrating initial compliance with the PM emission limit, if your boiler's performance test results show that your PM emissions are equal to or less than half of the PM emission limit, you may choose to conduct performance tests for PM every fifth year, but must continue to comply with all applicable operating limits and monitoring requirements and must comply with the provisions as specified in paragraphs (c)(1) through (3) of this section. [40 CFR 63.11220(c)]

103 [40 CFR 63.11222(a)(2)] If you have an applicable mercury or PM emission limit, you must keep records of the type and amount of all fuels burned in each boiler during the reporting period. [40 CFR 63.11222(a)(2)]

104 [40 CFR 63.11222(a)] Boiler operating load: Demonstrate continuous compliance by a. Collecting operating load data (fuel feed rate or steam generation data) every 15 minutes; b. Reducing the data to 30-day rolling averages; and c. Maintaining the 30-day rolling average at or below the operating limit established during the performance test according to 40 CFR 63.11212(c) and Table 6 to this subpart. [40 CFR 63.11222(a)]

105 [40 CFR 63.11222(a)] Opacity: Demonstrate continuous compliance by a. Collecting the opacity monitoring system data according to 40 CFR 63.11224(e) and 40 CFR 63.11221; b. Reducing the opacity monitoring data to 6-minute averages; and c. Maintaining opacity to less than or equal to 10 percent (daily block average). [40 CFR 63.11222(a)]

106 [40 CFR 63.11222(b)] You must report each instance in which you did not meet each emission limit and operating limit in Tables 1 and 3 to this subpart that apply to you. These instances are deviations from the emission limits in this subpart. These deviations must be reported according to the requirements in 40 CFR 63.11225. [40 CFR 63.11222(b)]

107 [40 CFR 63.11223(a)] Conduct performance tune-ups while burning the type of fuel (or fuels in the case of boilers that routinely burn two types of fuels at the same-time) that provided the majority of the heat input to the boiler over the 12 months prior to the tune-up. Subpart JJJJJJ. [40 CFR 63.11223(a)]

108 [40 CFR 63.11223(b)] Conduct a tune-up biennially to demonstrate continuous compliance as specified in 40 CFR 63.11223(b)(1) through (b)(7), except as specified in 40 CFR 63.11223(c). Conduct each tune-up no more than 25 months after the previous tune-up. Ensure that the first biennial tune-up of a new or reconstructed boiler is no later than 25 months after the initial startup. Subpart JJJJJJ. [40 CFR 63.11201(b), 40 CFR 63.11223(b)]

109 [40 CFR 63.11224(b)] If you are using a control device to comply with the emission limits specified in Table 1 to this subpart, you must maintain each operating limit in Table 3 to this subpart that applies to your boiler as specified in Table 7 to this subpart. [40 CFR 63.11224(b)]

110 [40 CFR 63.11224(e)] If you have an applicable opacity operating limit under this rule, you must install, operate, certify and maintain each COMS according to the procedures in paragraphs (e)(1) through (8) of this section by the compliance date specified in 40 CFR 63.11196. [40 CFR 63.11224(e)]

111 [40 CFR 63.11225(a)(1)] You must submit all of the notifications in 40 CFR 63.7(b); 63.8(e) and (f); and 63.9(b) through (e), (g), and (h) that apply to you by the dates specified in those sections except as specified in paragraphs (a)(2) and (4) of this section. [40 CFR 63.11225(a)(1)]

112 [40 CFR 63.11225(a)(2)] Submit Initial Notification: Due to DEQ within 120 days after the source becomes subject to 40 CFR 63 Subpart JJJJJJ. Subpart JJJJJJ. [40 CFR 63.11225(a)(2)]

113 [40 CFR 63.11225(a)(3)] Submit Notification of Intent to conduct a performance stack test: Due to DEQ at least 60 days before a performance stack test is scheduled to begin. Subpart JJJJJJ. [40 CFR 63.11225(a)(3)]

114 [40 CFR 63.11225(a)(4)] Submit Notification of Compliance Status: Due to DEQ no later than 120 days after the applicable compliance date specified in 40 CFR 63.11196. Submit the notification in accordance with 40 CFR 63.11225(a)(4)(i) and (a)(4)(vi). Include the information and certification(s) of compliance in 40 CFR 63.11225(a)(4)(i) through (a)(4)(v), as applicable. Ensure that they are signed by a responsible official. Subpart JJJJJJ. [40 CFR 63.11225(a)(4)]

## SPECIFIC REQUIREMENTS

AI ID: 234155 - Louisiana Green Fuels LLC - Louisiana Green Fuels

Activity Number: PER20220001

Permit Number: 0540-00040-00

Air - Minor (Synthetic) Initial

### EQT 0001 22-01 - Biomass Boiler Stack

115 [40 CFR 63.11225(b)]

Prepare an annual compliance certification report by March 1 of each year for the previous calendar year containing the information specified in 40 CFR 63.11225(b)(1) through (b)(4). Submit the report by March 15 if any instance described by 40 CFR 63.11225(b)(3) occurred during the previous calendar year or upon request of DEQ. Subpart JJJJJ. [40 CFR 63.11225(b)]

116 [40 CFR 63.11225(c)]

Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Maintain the records specified in 40 CFR 63.11225(c)(1) through (c)(7), as applicable. Subpart JJJJJ. [40 CFR 63.11225(c)]

117 [40 CFR 63.11225(d)]

Your records must be in a form suitable and readily available for expeditious review. You must keep each record for 5 years following the date of each recorded action. You must keep each record on-site or be accessible from a central location by computer or other means that instantly provide access at the site for at least 2 years after the date of each recorded action. You may keep the records off site for the remaining 3 years. [40 CFR 63.11225(d)]

118 [40 CFR 63.11225(e)(1)]

Within 60 days after the date of completing each performance test (as defined in 40 CFR 63.2) required by this subpart, you must submit the results of the performance tests, including any associated fuel analyses, following the procedure specified in either paragraph (e)(1)(i) or (ii) of this section. [40 CFR 63.11225(e)(1)]

119 [LAC 33:III.1101.B]

Opacity <= 20 percent, except for emissions that have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes. Determine opacity by using Method 9 of 40 CFR Part 60, Appendix A or by using a continuous opacity monitoring system (COMS) meeting the requirements outlined in 40 CFR 60.13(c) and (d).

120 [LAC 33:III.1311.C]

Which Months: All Year Statistical Basis: None specified

121 [LAC 33:III.1513.C]

Opacity <= 20 percent, except for emissions that have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes.

122 [LAC 33:III.501.C.6]

Which Months: All Year Statistical Basis: Six-minute average

123 [LAC 33:III.501.C.6]

The owner or operator of any emissions unit that is not subject to the emissions limitations of this Chapter shall record and retain at the site sufficient data to show annual potential sulfur dioxide emissions from the emissions unit.

Conduct a performance/emissions test: Due under any of the following circumstances:

1. Within 180 days of initial start-up (or restart-up after modification); or within 60 days of achieving normal production or completing shakedown period, whichever is earlier; or
2. Within 180 days of the issuance of this permit, for existing sources that have never conducted a performance/emissions test; or
3. Within 5 years, plus or minus 6 months, from when the previous performance/emissions test was performed.

124 [LAC 33:III.501.C.6]

If this source is not operational when a performance/emissions test is due, the test shall be due within 60 days of startup.

Conduct performance/emissions tests according to the following test methods unless otherwise specified in an applicable state or federal regulation: New Source Performance Standards, 40 CFR 60, Appendix A, Method 10 - Determination of Carbon Monoxide Emissions from Stationary Sources; and Method 25A - Determination of Total Gaseous Organic Concentration using a Flame Ionization Analyzer. The test's purpose is to demonstrate compliance with the emission limits of this permit; therefore, conduct each test run within 80 percent of maximum permitted load, or within 10 percent of 100 percent maximum achievable load. Use alternate stack test methods only with the prior approval of the Office of Environmental Services. Provide necessary sampling ports in stacks or ducts and such other safe and proper sampling and testing facilities for proper determination of the emission limits, as required by LAC 33:III.913.

NOx emissions shall be controlled via selective non-catalytic reduction (SNCR) and selective catalytic reduction (SCR). CO emissions shall be controlled using an oxidation catalyst. SO2 emissions shall be controlled using a circulating dry scrubber. To the extent practicable, maintenance of the control systems shall be scheduled for periods when the Biomass Boiler is not operational.

## **SPECIFIC REQUIREMENTS**

**AI ID: 234155 - Louisiana Green Fuels LLC - Louisiana Green Fuels**

**Activity Number: PER20220001**

**Permit Number: 0540-00040-00**

**Air - Minor (Synthetic) Initial**

### **EQT 0001 22-01 - Biomass Boiler Stack**

125 [LAC 33:III.501.C.6]

Operating rate monitored by technically sound method daily. This condition shall not apply if the most recent LDEQ required performance/emissions test was conducted at greater than or equal to 80% of the maximum permitted load.

Which Months: All Year Statistical Basis: None specified

126 [LAC 33:III.501.C.6]

Operating rate recordkeeping by electronic or hard copy daily. This condition shall not apply if the most recent LDEQ required performance/emissions test was conducted at greater than or equal to 80% of the maximum permitted load.

127 [LAC 33:III.501.C.6]

Submit Notification: Due within 14 days to the Office of Environmental Services if the source is operated at a load that is more than 10 percent higher than the rate at which the most recent LDEQ required performance/emissions test was conducted. Determine the operating load of the source based on a 30 day rolling average. Calculate the increase in operating load as a percentage of the rate at which the most recent performance/emissions test was conducted. Include information identifying the source, the data used to calculate the operating rate during the 30 day rolling average, and a description of the circumstances that caused the source to operate more than 10 percent higher than the rate at which the most recent performance/emissions test was conducted. This condition shall not apply if the most recent LDEQ required performance/emissions test was conducted at greater than or equal to 80% of the maximum permitted load.

128 [LAC 33:III.501.C.6]

Submit notification: Due to the Office of Environmental Services at least 30 days prior to any LDEQ required performance/emissions test. Submit notification in order to provide the opportunity to conduct a pretest meeting and observe the emission testing. Submit notification at least 45 days prior to the deadline specified in this permit indicating the reason that the test will not be conducted by the specified deadline, if any LDEQ required performance/emissions test will not be conducted by the deadline specified in this permit. This notification will be evaluated by the department on a case-by-case basis to determine if an extension to the deadline for testing specified in this permit is warranted. The deadline for testing specified in this permit shall remain in effect until the department responds in writing with an extension to this deadline.

129 [LAC 33:III.501.C.6]

Submit report: Due within 60 days after performance/emissions test. Submit performance/emissions test results to the Office of Environmental Services. Include any necessary conversion into the units of any applicable standard (lbs/MMBtu, gr/dscf, lbs SO2 / ton 100% H2SO4, etc.). Include plant and in house laboratory data to support production values (example: how many tons of 100% equivalent H2SO4 was being produced).

130 [LAC 33:III.501.C.6]

The permittee shall monitor and record NOx emissions using Continuous Emissions Monitoring System (CEMS) calibrated, operated, and maintained according to the manufacturer's specifications. The CEMS shall comply with Performance Specification 2 of 40 CFR 60, Appendix B, and be evaluated in accordance with Procedure 1 of 40 CFR 60, Appendix F. Data availability shall be dictated by Louisiana General Condition V of LAC 33:III.535.A.

### **EQT 0002 22-02 - Biomass Handling Baghouse**

131 [LAC 33:III.1311.C]

Opacity <= 20 percent, except for emissions that have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes.

Which Months: All Year Statistical Basis: Six-minute average

132 [LAC 33:III.501.C.6]

Baghouses (including gaskets): Equipment/operational data monitored by technically sound method semiannually or whenever a visible emissions check indicates maintenance may be necessary. Change elements as necessary.

Which Months: All Year Statistical Basis: None specified

133 [LAC 33:III.501.C.6]

Baghouses: Equipment/operational data recordkeeping by electronic or hard copy upon each occurrence of inspection. Keep records of inspections and maintenance activities on site for a period of at least five years and available for inspection by the Office of Environmental Compliance.

## SPECIFIC REQUIREMENTS

AI ID: 234155 - Louisiana Green Fuels LLC - Louisiana Green Fuels

Activity Number: PER20220001

Permit Number: 0540-00040-00

Air - Minor (Synthetic) Initial

### **EQT 0002 22-02 - Biomass Handling Baghouse**

134 [LAC 33:III.501.C.6]

Filter vents: Equipment/operational data recordkeeping by electronic or hard copy daily. Keep the purchase order or manufacturer certification showing that the installed filters meet the Manufacturer's specification for particulate matter removal efficiency or the filter MERV rating, as applicable; records of visible emissions checks or differential pressure gauge readings, as applicable; and records of maintenance activities. Keep records on site for a period of at least five years and available for review by the Office of Environmental Compliance.

135 [LAC 33:III.501.C.6]

Filter vents: Visible emissions monitored by visual inspection/determination daily. If visible emissions are observed, return the filter to proper operation as expeditiously as practicable, but at a maximum within three working days, in accordance with good air pollution control practices for minimizing emissions.

Which Months: All Year Statistical Basis: None specified

### **EQT 0007 22-07 - Gasification Heater Common Stack**

136 [LAC 33:III.501.C.6]

NOx emissions shall be controlled via selective catalytic reduction (SCR). CO emissions shall be controlled using an oxidation catalyst. To the extent practicable, maintenance of the control systems shall be scheduled for periods when the Gasification Heater is not operational.

### **EQT 0009 22-09 - SO2 Scrubber**

137 [LAC 33:III.501.C.6]

Flow rate monitored by flow rate monitoring device once every four hours.

Which Months: All Year Statistical Basis: None specified

138 [LAC 33:III.501.C.6]

Flow rate recordkeeping by electronic or hard copy once every four hours.

139 [LAC 33:III.501.C.6]

Flow rate: Flow rate  $\geq$  TBD. The permittee shall incorporate the manufacturer's minimum recommended flow rate via an administrative amendment request once the design of the scrubber has been completed.

140 [LAC 33:III.501.C.6]

Submit report: Due annually, by the 31st of March for the preceding calendar year. List the hours that the scrubber operated out of the ranges specified. Submit report to the Office of Environmental Compliance. This report can be combined with reports required under LAC 33:III.537 G.C. XI. Any written report submitted in advance of the time frame specified in this requirement, may serve to meet the reporting requirements of this Condition provided all information specified in Paragraph D of Louisiana General Condition XI is included. pH monitored by pH instrument once every four hours.

141 [LAC 33:III.501.C.6]

Which Months: All Year Statistical Basis: None specified

142 [LAC 33:III.501.C.6]

pH recordkeeping by electronic or hard copy once every four hours.

143 [LAC 33:III.501.C.6]

pH: pH  $\geq$  TBD. The permittee shall incorporate the manufacturer's minimum recommended pH via an administrative amendment request once the design of the scrubber has been completed.

### **EQT 0010 22-10 - Flare**

144 [LAC 33:III.1105]

Opacity  $\leq$  20 percent, except for a combined total of six hours in any 10 consecutive day period, for burning in connection with pressure valve releases for control over process upsets. Determine opacity by using Method 9 of 40 CFR Part 60, Appendix A or by using a continuous opacity monitoring system (COMS) meeting the requirements outlined in 40 CFR 60.13(c) and (d).

Which Months: All Year Statistical Basis: None specified

145 [LAC 33:III.1105]

Submit notification: Due to SPOC as soon as possible after the start of burning of pressure valve releases for control over process upsets. Notify in accordance with LAC 33:I.3923. Notification is required only if the upset cannot be controlled in six hours.

## SPECIFIC REQUIREMENTS

AI ID: 234155 - Louisiana Green Fuels LLC - Louisiana Green Fuels

Activity Number: PER20220001

Permit Number: 0540-00040-00

Air - Minor (Synthetic) Initial

### EQT 0010 22-10 - Flare

146 [LAC 33:III.1311.C]

Opacity <= 20 percent, except for emissions that have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes.

Which Months: All Year Statistical Basis: Six-minute average

147 [LAC 33:III.501.C.6]

Develop a corrective action plan for re-lighting the flare. Keep plan readily available for immediate implementation in the event the flare needs to be re-lit.

148 [LAC 33:III.501.C.6]

Flare gas: Heat content > 300 BTU/scf, to ensure destruction of VOC emissions to the flare stack.

Which Months: All Year Statistical Basis: None specified

149 [LAC 33:III.501.C.6]

Flare gas: Heat content monitored by gas analysis annually. Monitor and analyze, by technical means, the heat content of the flare gas and any associated flare fuel gas (including pilot fuel) as a mixture at the point of combustion, to insure the heat content is above 300 BTU/scf.

Which Months: All Year Statistical Basis: None specified

150 [LAC 33:III.501.C.6]

Flare gas: Heat content recordkeeping by electronic or hard copy annually.

151 [LAC 33:III.501.C.6]

Permittee shall ensure compliance with the opacity limits of this permit by visually inspecting the Flare for visible emissions on a daily basis. If visible emissions are detected, the permittee shall conduct a six-minute opacity reading in accordance with Method 9 of 40 CFR 60, Appendix A. Records of visible emissions checks shall include a record if visible emissions were detected and a record and the results of any Method 9 testing conducted. These records shall be kept on-site and available for inspection by the Office of Environmental Compliance.

As an alternative to the requirement to conduct Method 9 testing, the permittee may assume that any visible emissions detected constitute opacity greater than 20 percent. In this case, no visible emissions detected shall be considered opacity less than or equal to 20 percent, even if a qualitative assessment suggests otherwise. The permittee may also determine opacity via any federally-approved alternative to Method 9 (e.g., Method ALT-082). In lieu of performing daily visual inspections, the permittee may immediately perform a six-minute opacity reading in accordance with Method 9.

152 [LAC 33:III.501.C.6]

Presence of a flame monitored by visual inspection/determination daily.

153 [LAC 33:III.501.C.6]

Which Months: All Year Statistical Basis: None specified

Presence of a flame recordkeeping by electronic or hard copy daily.

### EQT 0031 22-09(a) - Thermal Oxidizer

154 [LAC 33:III.1101.B]

Opacity <= 20 percent, except for emissions that have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes. Determine opacity by using Method 9 of 40 CFR Part 60, Appendix A or by using a continuous opacity monitoring system (COMS) meeting the requirements outlined in 40 CFR 60.13(c) and (d).

Which Months: All Year Statistical Basis: None specified

155 [LAC 33:III.1311.C]

Opacity <= 20 percent, except for emissions that have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes.

Which Months: All Year Statistical Basis: Six-minute average

### FUG 0002 FUG-02 - Fugitive Roadway Emissions

156 [LAC 33:III.1305.A]

Prevent particulate matter from becoming airborne by taking all reasonable precautions including, but not limited to, those specified in LAC 33:III.1305.A.1 through A.7.

**SPECIFIC REQUIREMENTS**

**AI ID: 234155 - Louisiana Green Fuels LLC - Louisiana Green Fuels**

**Activity Number: PER20220001**

**Permit Number: 0540-00040-00**

**Air - Minor (Synthetic) Initial**

**UNF 0001 Entire Facility - Louisiana Green Fuels**

157 [40 CFR 60.]

158 [40 CFR 63.]

159 [40 CFR 68.]

160 [40 CFR 82.Subpart F]

161 [LAC 33:III.1103]

162 [LAC 33:III.1109.B]

163 [LAC 33:III.1303.B]

164 [LAC 33:III.1305.A]

165 [LAC 33:III.2113.A]

166 [LAC 33:III.219]

167 [LAC 33:III.2901.D]

168 [LAC 33:III.2901.F]

169 [LAC 33:III.537]

170 [LAC 33:III.5609.A.1.b]

171 [LAC 33:III.5609.A.2.b]

172 [LAC 33:III.5609.A.3.b]

173 [LAC 33:III.5609.A]

174 [LAC 33:III.5901.A]

175 [LAC 33:III.5907]

176 [LAC 33:III.5911.C]

177 [LAC 33:III.905]

All affected facilities shall comply with all applicable provisions in 40 CFR 60 Subpart A.

All affected facilities shall comply with all applicable provisions in 40 CFR 63 Subpart A as delineated in Table 8 of 40 CFR 63 Subpart JJJJJ.

Comply with all applicable requirements of 40 CFR 68.

Comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B.

Emissions of smoke which pass onto or across a public road and create a traffic hazard by impairment of visibility as defined in LAC 33:III.111 or intensifies an existing traffic hazard condition are prohibited.

Outdoor burning of waste material or other combustible material is prohibited.

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.

Prevent particulate matter from becoming airborne by taking all reasonable precautions including, but not limited to, those specified in LAC 33:III.1305.A.1 through A.7.

Maintain best practical housekeeping and maintenance practices at the highest possible standards to reduce the quantity of organic compounds emissions. Good housekeeping includes, but is not limited to, the practices listed in LAC 33:III.2113.A.1 through A.5.

Failure to pay the prescribed application fee or annual fee as provided herein, within 90 days after the due date, will constitute a violation of these regulations and shall subject the person to applicable enforcement actions under the Louisiana Environmental Quality Act including, but not limited to, revocation or suspension of the applicable permit, license, registration, or variance.

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.

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.

Comply with the Louisiana General Conditions as set forth in LAC 33:III.537.

Activate the preplanned abatement strategy listed in LAC 33:III.5611.Table 5 when DEQ declares an Air Pollution Alert.

Activate the preplanned strategy listed in LAC 33:III.5611.Table 6 when DEQ declares an Air Pollution Warning.

Activate the preplanned abatement strategy listed in LAC 33:III.5611.Table 7 when DEQ declares an Air Pollution Emergency.

Prepare standby plans for the reduction of emissions during periods of Air Pollution Alert, Air Pollution Warning and Air Pollution Emergency. Design standby plans to reduce or eliminate emissions in accordance with the objectives as set forth in LAC 33:III.5611. Tables 5, 6, and 7.

Comply with the provisions of 40 CFR 68 as incorporated in LAC 33:III.Chapter 59. Modifications or exceptions provided in LAC 33:III.5901.C shall not relieve the permittee from the obligation to comply timely with any otherwise applicable condition of 40 CFR 68.

Identify hazards that may result from accidental releases of the substances listed in 40 CFR 68.130, Table 59.0 of LAC 33:III.5907, or Table 59.1 of LAC 33:III.5913 using appropriate hazard assessment techniques, design and maintain a safe facility, and minimize the off-site consequences of accidental releases of such substances that do occur.

Submit amended registration: Due to the Office of Environmental Compliance within 60 days after the information in the submitted registration is no longer accurate.

Install air pollution control facilities whenever practically, economically, and technologically feasible, except as specified in LAC 33:III.905.B. When facilities have been installed on a property, use and diligently maintain in proper working order whenever any emissions are being made which can be controlled by the facilities, even though the ambient air quality standards in affected areas are not exceeded.

**SPECIFIC REQUIREMENTS**

AI ID: 234155 - Louisiana Green Fuels LLC - Louisiana Green Fuels

Activity Number: PER20220001

Permit Number: 0540-00040-00

Air - Minor (Synthetic) Initial

**UNF 0001 Entire Facility - Louisiana Green Fuels**

178 [LAC 33:III.927]

Report the unauthorized discharge of any air pollutant into the atmosphere in accordance with LAC 33:I.Chapter 39, Notification Regulations and Procedures for Unauthorized Discharges. Submit written reports to DEQ pursuant to LAC 33:I.3925. Submit timely and appropriate follow-up reports detailing methods and procedures to be used to prevent similar atmospheric releases.

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