

**RECEIVED**

12/16/2022

**AIR QUALITY**  
DEP, Southwest Regional Office

December 16, 2022



**Submitted via OnBase: Reference #79177**

Air Quality Program  
Pennsylvania Department of Environmental Protection  
400 Waterfront Drive  
Pittsburgh, PA 15222

**Subject: RACT III Notification**  
**Title V Air Permit # 65-00207**  
**OMNOVA Solutions Inc., Jeannette Plant**

Dear Sir or Madam:

On behalf of OMNOVA Solutions Inc., Jeannette Plant, attached is the RACT III written notification as required by 25 Pa. Code 129.111 and 129.115(a), including a case-by-case analysis according to 129.114(i). As the analysis demonstrates that there will be no changes to the permit, according to an email correspondence with the PADEP on December 13, 2022, a permit modification is not required at this time and the PADEP will process changes to the regulatory citations during the permit renewal process.

Please contact us if you have any questions regarding this notification or require additional information.

Sincerely,

A handwritten signature in blue ink that reads 'Monty Saron'.

Monty Saron  
Principal Environmental Scientist II  
Mobile: 412-897-1045  
Email: [msaron@se-env.com](mailto:msaron@se-env.com)

A handwritten signature in blue ink that reads 'Meghan Yingling'.

Meghan Yingling  
Manager Environmental Compliance  
Phone: 412-221-1100 ext. 2225  
Email: [myingling@se-env.com](mailto:myingling@se-env.com)

Attachment

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**RACT III NOTIFICATION**



**CHAPTER 129. STANDARDS FOR SOURCES ADDITIONAL RACT REQUIREMENTS  
FOR MAJOR SOURCES OF NO<sub>x</sub> AND VOCs FOR THE 2015 OZONE NAAQS**

**Written notification, 25 Pa. Code §§129.111 and 129.115(a)**

25 Pa. Code Sections 129.111 and 129.115(a) require that the owner and operator of an air contamination source subject to the final-form RACT III regulations submit a notification describing how you intend to comply with the final-form RACT III requirements, and other information spelled out in subsection 129.115(a). The owner or operator may use this template to notify DEP. Notification must be submitted in writing or electronically to the appropriate Regional Manager located at the appropriate DEP regional office. In addition to the notification required by §§ 129.111 and 129.115(a), you also need to submit an applicable analysis or RACT determination as per § 129.114(a) or (i).

<b>Is the facility major for NO<sub>x</sub>?</b>	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
<b>Is the facility major for VOC?</b>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

FACILITY INFORMATION					
<b>Facility Name</b>	OMNOVA Solutions, Inc. – Jeannette Plant				
<b>Permit Number</b>	65-00207	<b>PF ID if known</b>			
<b>Address Line1</b>	1001 Chambers Avenue				
<b>Address Line2</b>					
<b>City</b>	City of Jeannette	<b>State</b>	PA	<b>Zip</b>	15644
<b>Municipality</b>	Jeannette	<b>County</b>	Westmoreland		
OWNER INFORMATION					
<b>Owner</b>	OMNOVA Solutions, Inc.				
<b>Address Line1</b>	25435 Harvard Road				
<b>Address Line2</b>					
<b>City</b>	Beachwood	<b>State</b>	OH	<b>Zip</b>	44122
<b>Email</b>			<b>Phone</b>	(216) 682-7000	
CONTACT INFORMATION					
<b>Permit Contact Name</b>	Curt Panick				
<b>Permit Contact Title</b>	SHE Manager				
<b>Address Line</b>	1001 Chambers Ave.				
<b>City</b>	Jeannette	<b>State</b>	PA	<b>Zip</b>	15644
<b>Email</b>	curt.panick@omnova.com		<b>Phone</b>	724-523-5411	

Complete Table 1, including all air contamination sources that commenced operation on or before August 3rd, 2018. Air contamination sources determined to be exempt from permitting requirements also must be included. You may find this information in section A and H of your operating permit.

**Table 1 - Source Information**

Source ID	Source Name	Make	Model	Physical location of source	Was this source subject to RACT II?
35	New Boiler 1	NA	NA	Plant	Yes
36	New Boiler 2	NA	NA	Plant	Yes
111	Calendar Line 1	NA	NA	Plant	Yes
112	Calendar Line 2	NA	NA	Plant	Yes
114	Calendar Line 4	NA	NA	Plant	Yes
221	Embosser/Laminator 1	NA	NA	Plant	Yes
222	Embosser/Laminator 2	NA	NA	Plant	Yes
232	Liquid Raw Material Storage	NA	NA	Plant	No
241	Resin Silos 1-6	NA	NA	Plant	No
243	Resin Solids Weigh and Handling	NA	NA	Plant	No
251	Powerhouse Generator (50 HP)	NA	NA	Plant	Yes
252	Direct Fired Make Up Air Units 1-3	NA	NA	Plant	Yes
300	AZO Scrap System	NA	NA	Plant	No
301	Misc. Raw Material Handling	NA	NA	Plant	No

Complete Table 2 or 3 if the facility is a major NO<sub>x</sub> or VOC emitting facility. For the column with the title “How do you intend to comply”, compliance options are:

- Presumptive RACT requirement under §129.112 (**PRES**),
- Facility-wide averaging (**FAC**) §129.113,
- System-wide averaging (**SYS**) §129.113, or
- Case by case determination §129.114 (**CbC**).

Please provide the applicable subsection if source will comply with the presumptive requirement under §129.112.

**Table 2 – Method of RACT III Compliance, NOx**

Source ID	Source Name	NOx PTE TPY	Exempt from RACT III (yes or no)	How do you intend to comply? (PRES, CbC, FAC or SYS)	Specific citation of rule if presumptive option is chosen
Not Applicable					

Please complete Table 3 if the facility is a major VOC emitting facility. Please provide the applicable section if a source is complying with any RACT regulation listed in 25 Pa Code §§ 129.51, 129.52(a)—(k) and Table I categories 1—11, 129.52a—129.52e, 129.54—129.63a, 129.64—129.69, 129.71—129.73, 129.75 129.71—129.75, 129.77 and 129.101—129.107.

**Table 3 – Method of RACT III Compliance, VOC**

Source ID	Source Name	VOC PTE TPY (1)	Exempt from RACT III (yes or no)	How do you intend to comply?	Specify citation of rule or subject to 25 Pa Code RACT regulation, (list applicable sections)	Notes
35	New Boiler 1	< 1 TPY	Yes	NA		
36	New Boiler 2	< 1 TPY	Yes	NA		
111	Calendar Line 1	36	No	CbC	129.114(i)(1)(i)	(2)
112	Calendar Line 2	36	No	CbC	129.114(i)(1)(i)	(2)
114	Calendar Line 4	36	No	CbC	129.114(i)(1)(i)	(2)
221	Embosser/Laminator 1	4	No	CbC	129.114(i)(1)(i)	(2)
222	Embosser/Laminator 2	4	No	CbC	129.114(i)(1)(i)	(2)
232	Liquid Raw Material Storage	---	Yes	NA		Regulated by 129.57
251	Powerhouse Generator (50 HP, 0.13 MMBtu/hr)	< 1 TPY	Yes	NA		
252	Direct Fired Make Up Air Units 1-3 (5.165 MMBtu/hr each)	< 1 TPY	Yes	NA		

Table Footnotes:

- (1) PTE is from the current permit.
- (2) Please see attached Case by Case analyses.
- (3) Only VOC sources are listed in Table 3.

**Certification of Truth, Accuracy and Completeness**

Note: This certification must be signed by a responsible official.

I certify under penalty of law that, based on information and belief formed after reasonable inquiry, the statements and information contained in this notification and the attached case-by-case analyses are true, accurate, and complete.

(Signed)



Date: 12-14-22

Name (Typed): Catherine Williams

Title: Plant Manager

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**RACT III**  
**CASE-BY-CASE ANALYSES**  
**OMNOVA SOLUTIONS INC., JEANNETTE FACILITY, WESTMORELAND COUNTY**

The OMNOVA Solutions Jeannette facility (“facility”) submitted a Case-by-Case RACT II analyses for the following sources:

- Source 111: Calendar Line 1
- Source 112 Calendar Line 2
- Source 114: Calendar Line 4
- Source 221: Embosser/Laminator 1
- Source 222: Embosser/Laminator 2

The previous RACT II application was submitted to the PADEP in November 2019 and a RACT II permit (through a Title V permit) was issued effective February 6, 2020. Since then, there have been no new pollutants emitted nor any modifications made to the RACT II sources.

The facility has not modified or changed any source subject to RACT that commenced operation on or before October 24, 2016, and has not installed and commenced operation of a new source after October 24, 2016. Thus, per Pa. code 129.114(i), the facility is submitting an analysis that demonstrates compliance with the alternative RACT requirement or RACT emission limitation previously approved by the PADEP (RACT II) that assures compliance with RACT III requirements. The following RACT III analyses follows the requirements in Pa. Code 129.114(i)(1)(i).

***(A) DETERMINATION OF NO NEW AIR POLLUTION CONTROL DEVICE, CONTROL TECHNOLOGY OR TECHNIQUE AVAILABLE***

According to 129.114(i)(1)(i)(A), the facility conducted a search for any new air pollution control devices, control technologies, or techniques available using the following sources of information:

1. US EPA RACT/BACT (Best Available Control Technology)/LAER (Lowest Achievable Emission Rate) (Clearinghouse (RBLC)
2. US EPA Clean Air Technology Center (CATC) Air Pollution Technology Fact Sheets (FS) and Technical Bulletins (TB)
3. US EPA CATC Air Pollution Technical Reports
4. US EPA CATC/CTC Information Bulletins and Newsletters

The paragraphs below describe the outcome of the evaluation of each of the four sources listed above.

**1. US EPA RACT/BACT/LAER Clearinghouse (RBLC)**

BACT and LAER (and sometimes RACT) are determined on a case-by-case basis, usually by State or local permitting agencies. EPA established the RACT/BACT/LAER Clearinghouse, or RBLC, to provide a central data base of air pollution technology information (including past RACT, BACT, and LAER decisions contained in NSR permits) to promote the sharing of information among permitting agencies and to aid in future case-by-case determinations. However, data in the RBLC are not limited to sources subject to RACT, BACT, and LAER requirements. Noteworthy prevention and control technology decisions and information are included even if they are not related to past RACT, BACT, or LAER decisions. Thus, the RBLC clearinghouse is a reliable source of the latest control technologies available for controlling VOC emissions.

The RBLC database was searched starting from November 1, 2019, since the facility submitted the RACT II proposal to the PADEP for evaluation. The full output of this search is given in Attachment A to this analysis. A summary of the control technologies listed in the search is given below.

*Table 1 Summary of RBLC Search Applicable VOC Control Methods*

RBLC ID	Process Name	Control Method	Emission Limit	Basis
TN-0184 (draft)	Polyurethane foam manufacturing	Good work practices and permitted VOC limit		NESHAP
IN-0354 (draft)	Rotogravure Printing Press RGP1	RTO and permanent total enclosure	98% overall VOC control efficiency and 10 ppmv VOC outlet concentration	OTHER CASE-BY-CASE

Most of the VOC controls listed in the RBLC were for combustion sources. The above two items were the only relevant control methods that are applicable to the non-combustion related VOC sources at the facility.

**2. US EPA CATC Air Pollution Technology Fact Sheets (FS) and Technical Bulletins (TB)**

The most recent CATC Air Pollution Technology Fact Sheets and Technical Bulletins listed on EPA’s website<sup>1</sup> are dated from 2005. Thus, no new air pollution technology or technical bulleting has been published since the facility was issued the RACT II permit.

<sup>1</sup> <https://www.epa.gov/catc/clean-air-technology-center-products#factsheets>



### **3. US EPA CATC Air Pollution Technical Reports**

The most recent CATC Air Pollution Technical Reports listed on EPA's website<sup>2</sup> is dated 2010. Thus, no new CATC Air Pollution Technical Report has been published since the facility was issued the RACT II permit.

### **4. US EPA CATC/Control Technology Center (CTC) Information Bulletins and Newsletters**

The most recent CATC/CTC information bulletin and newsletter listed on EPA's website<sup>3</sup> is dated 1998. Thus, no new CATC/CTC information bulletin and newsletter has been published since the facility was issued the RACT II permit.

All the above control technologies were already reviewed in the previously submitted and approved RACT II application. Thus, there is no new pollutant specific air cleaning device, air pollution control technology or technique available.

### **(B) LIST OF TECHNICALLY FEASIBLE AND APPROVED RACT II OPTIONS**

According to 129.114(i)(1)(i)(B), below is a list of the technically feasible air cleaning devices, air pollution control technologies or techniques previously identified and evaluated for the Calendering and embossing operations under RACT II and included in the previously submitted and RACT proposal submitted under § 129.99(d) and approved by the department.

The control technologies are listed in order of overall control effectiveness for VOC removal. The most effective control alternative is ranked at the top of the list. The remaining technologies are ranked in descending order of control effectiveness as shown in table 2 below.

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<sup>2</sup> <https://www.epa.gov/catc/clean-air-technology-center-products#reports>

<sup>3</sup> <https://www.epa.gov/catc/clean-air-technology-center-products#news>

*Table 2 Technically Feasible and Approved Control Technologies*

Rank	Control Technology	Control Efficiency	To Control Sources
1	Regenerative Thermal Oxidizer (RTO)	99.0%	111, 112, 114, 221, 222
1	Recuperative Thermal Oxidizer	99.0%	111, 112, 114, 221, 222
1	Catalytic Oxidizer – Fixed Bed	99.0%	111, 112, 114, 221, 222
1	Catalytic Oxidizer – Monolith	99.0%	111, 112, 114, 221, 222
1	Catalytic Oxidizer – Fluidized Bed	99.0%	221, 222
2	Fixed Bed Carbon Adsorber with Steam Regeneration	98.0%	111, 112, 114, 221, 222
2	Carbon Canister Adsorber with Carbon/Canister Replacement	98.0%	111, 112, 114

**(C) SUMMARY OF ECONOMIC FEASIBILITY ANALYSIS**

According to 129.114(i)(1)(i)(C), this is a summary of the economic feasibility analysis performed for each technically feasible air cleaning device, air pollution control technology or technique listed in (B) above and the cost effectiveness of each technically feasible air cleaning device, air pollution control technology or technique as submitted previously under RACT II proposal.

RACT III guidelines recommend a cost per ton of VOC removed to be \$12,000 or less to be economically justifiable. Economic analysis results of each technically feasible control technology submitted in the RACT II proposal and updated for 2022 costs are shown below in Tables 3 and 4 for the three Calender Lines and for the two Embosser/Laminator Lines.

Table 3 Cost Effectiveness for Calender Lines 1, 2, and 4

VOC Control Efficiency Ranking by Cost Effectiveness	Control Technology	Number of Units Required	Estimated Control Efficiency	Total Annual Cost per Control Unit (\$/yr) 2018 dollars (1), (2)	Annual Quantity of VOC Removed (TPY)	Control Cost Effectiveness per Control Unit (\$/ton removed) 2018 dollars (1), (2)	Total Control Cost Effectiveness (\$/ton removed) 2018 dollars (1), (3)	Control Cost Effectiveness per Control Unit (\$/ton removed) 2022 dollars (2), (4)	Total Control Cost Effectiveness (\$/ton removed) 2022 dollars (3), (4)
1	Fixed-Bed Carbon Adsorber with Steam Regeneration	3	98.0%	\$289,437	34	\$8,438	\$25,315	\$12,379	\$37,137
2	Fixed-Bed Carbon Adsorber with Steam Regeneration	1	98.0%	\$908,826	103	\$8,832	\$8,832	\$12,957	\$12,957
3	Regenerative Thermal Oxidizer	1	99.0%	\$1,237,111	105	\$11,785	\$11,785	\$17,289	\$17,289
4	Carbon Canister Adsorber with Carbon Replacement	3	98.0%	\$443,417	34.3	\$12,927	\$38,781	\$18,964	\$56,892
5	Carbon Canister Adsorber with Canister Replacement	3	98.0%	\$502,615	34	\$14,653	\$43,960	\$21,496	\$64,489
6	Regenerative Thermal Oxidizer	3	99.0%	\$519,069	35	\$14,834	\$44,502	\$21,761	\$65,284
7	Catalytic Oxidizer – Fixed Bed	3	99.0%	\$1,818,935	35	\$51,982	\$155,946	\$76,258	\$228,773
8	Catalytic Oxidizer - Monolith	3	99.0%	\$1,818,935	35	\$51,982	\$155,946	\$76,258	\$228,773
9	Recuperative Thermal Oxidizer	3	99.0%	\$3,193,088	35	\$91,253	\$273,759	\$133,868	\$401,604

1. 2018-dollar values are from the RACT II Application
2. Indicates whether a single control is used for all three lines or if each line was evaluated with its own individual control device.
3. [Total Control Cost Effectiveness] = [Control Cost Effectiveness per Control Unit] x [Number of Units Required]
4. 2022-dollar values:  
 CEPCI = Chemical Engineering Plant Cost Index  
 CEPCI value for 2018 = 567.5  
 CEPCI value for 2022 = 832.6  
 CEPCI ratio = (CEPCI value for 2022) / (CEPCI value for 2018) = 832.6/567.5 = 1.467  
 2022-dollar values = [2018 dollars] x 1.467

Table 4 Cost Effectiveness for Embosser/Laminator Lines 1 and 2

VOC Control Efficiency Ranking by Cost Effectiveness	Control Technology	Number of Units Required	Estimated Control Efficiency	Total Annual Cost per Control Unit (\$/yr) 2018 dollars (1), (2)	Annual Quantity of VOC Removed (TPY)	Control Cost Effectiveness per Control Unit (\$/ton removed) 2018 dollars (1), (2)	Total Control Cost Effectiveness (\$/ton removed) 2018 dollars (1), (3)	Control Cost Effectiveness per Control Unit (\$/ton removed) 2022 dollars (2), (4)	Total Control Cost Effectiveness (\$/ton removed) 2022 dollars (3), (4)
1	Fixed-Bed Carbon Adsorber with Steam Regeneration	1	98.0%	\$147,130	8	\$18,772	\$27,538	\$27,538	\$40,398
2	Regenerative Thermal Oxidizer	1	99.0%	\$318,743	8	\$39,806	\$58,395	\$58,395	\$85,666
3	Catalytic Oxidizer – Fixed Bed	1	99.0%	\$932,095	8	\$116,404	\$170,765	\$170,765	\$250,512
4	Catalytic Oxidizer – Monolith	1	99.0%	\$932,095	8	\$116,404	\$170,765	\$170,765	\$250,512
5	Catalytic Oxidizer – Fluidized Bed	1	99.0%	\$956,120	8	\$119,404	\$175,166	\$175,166	\$256,968
6	Recuperative Thermal Oxidizer	1	99.0%	\$1,576,495	8	\$196,879	\$288,821	\$288,821	\$423,701

1. 2018-dollar values are from the RACT II Application
2. Indicates whether a single control is used for all three lines or if each line was evaluated with its own individual control device.
3. [Total Control Cost Effectiveness] = [Control Cost Effectiveness per Control Unit] x [Number of Units Required]
4. 2022-dollar values:  
 CEPCI = Chemical Engineering Plant Cost Index  
 CEPCI value for 2018 = 567.5  
 CEPCI value for 2022 = 832.6  
 CEPCI ratio = (CEPCI value for 2022) / (CEPCI value for 2018) = 832.6/567.5 = 1.467  
 2022-dollar values = [2018 dollars] x 1.467

**(D) VOC RACT SUMMARY**

For Sources 111, 112, and 114, the three Calender Lines, the economic analysis for technically feasible control devices indicated a cost per ton of VOC removed to range from \$133,868 to \$12,957, all of which are above the recommended guidance of \$12,000/ton of VOC controlled.

For Sources 221 and 222, the two Embosser/Laminator Lines, the economic analysis for technically feasible control devices indicated a cost per ton of VOC removed to range from \$288,821 to \$27,538, all of which are above the recommended guidance of \$12,000/ton of VOC controlled.

**Thus, an evaluation of each economic feasibility analysis summarized in section (C) above demonstrates that the cost effectiveness remains equal to or greater than \$12,000 per ton of VOC emissions reduced.** Based on the above analysis, the following is a summary of the facility’s RACT III Case-by-Case proposal.

*Table 5 Omnova – Jeannette RACT III Case-by-Case Summary*

Source ID	Source Description	RACT-III	Implementation Schedule
111	Calender Line 1	Economically unfeasible	Not Applicable
112	Calender Line 2	Economically unfeasible	Not Applicable
114	Calender Line 4	Economically unfeasible	Not Applicable
221	Embosser/Laminator 1	Economically unfeasible	Not Applicable
222	Embosser/Laminator 2	Economically unfeasible	Not Applicable

Based on the above analysis, the facility proposes the following RACT III permit conditions:

- Sources 111, 112, and 114: The Owner/Operator shall install, maintain, and operate the source in accordance with the manufacturer’s specifications and with good operating practices.
- Sources 221 and 222: The Owner/Operator shall install, maintain, and operate the source in accordance with the manufacturer’s specifications and with good operating practices.

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**ATTACHMENT A**

**RBLC DATABASE SEARCH RESULTS FROM 11/1/2019 – 9/29/2022**

COMPREHENSIVE REPORT  
Report Date:09/29/2022

Facility Information

**RBLC ID:** AR-0175 (draft) **Date Determination Last Updated:** 09/27/2022

**Corporate/Company Name:** **Permit Number:** 0463-AOP-R21

**Facility Name:** GEORGIA-PACIFIC WOOD PRODUCTS SOUTH LLC (GURDON PLYWOOD AND **Permit Date:** 09/26/2022 (actual)

**Facility Contact:** JEREMY BOHLEN 870-353-5501 JEREMY.BOHLEN@GAPAC.COM **FRS Number:** 110017425071

**Facility Description:** **SIC Code:** 2421

**Permit Type:** C: Modify process at existing facility **NAICS Code:** 321113

**Permit URL:**

**EPA Region:** 6 **COUNTRY:** USA

**Facility County:** CLARK

**Facility State:** AR

**Facility ZIP Code:** 71743

**Permit Issued By:** ARKANSAS DEPT OF ENVIRONMENTAL QUALITY (Agency Name)  
MR. THOMAS RHEAUME(Agency Contact) (501) 682-0762 rheume@adeq.state.ar.us

**Permit Notes:**

<b>Affected Boundaries:</b>	<b>Boundary Type:</b>	<b>Class 1 Area State:</b>	<b>Boundary:</b>	<b>Distance:</b>
	CLASS1	AR	Caney Creek	< 100 km

**Facility-wide Emissions:**

<b>Pollutant Name:</b>	<b>Facility-wide Emissions Increase:</b>
Volatile Organic Compounds (VOC)	87.2000 (Tons/Year)

Process/Pollutant Information

**PROCESS NAME:** SN-09 #4 Lumber Kiln

**Process Type:** 30.800 (Wood Lumber Kilns)

**Primary Fuel:** natural gas

**Throughput:** 306.60 MMBTU/hr

**Process Notes:**

**POLLUTANT NAME:** Volatile Organic Compounds (VOC)

**CAS Number:** VOC

**Test Method:** Unspecified

**Pollutant Group(s):** ( Volatile Organic Compounds (VOC) )

**Emission Limit 1:** 3.8000 LB/ 1000 BOARD FEET

**Emission Limit 2:** 460.9000 T/YR

**Standard Emission:**

**Did factors, other than air pollution technology considerations influence the BACT decisions:** U

**Case-by-Case Basis:** BACT-PSD

**Other Applicable Requirements:**

**Control Method:** (N)

**Est. % Efficiency:**

**Cost Effectiveness:** 0 \$/ton

**Incremental Cost Effectiveness:** 0 \$/ton

**Compliance Verified:** Unknown

**Pollutant/Compliance Notes:**

Facility Information

**RBLC ID:** TN-0184 (draft) **Date Determination Last Updated:** 09/28/2022

**Corporate/Company Name:** ADIENT US LLC **Permit Number:** 980244

**Facility Name:** ADIENT US LLC - PULASKI **Permit Date:** 09/22/2022 (actual)

**Facility Contact:** KRIS FOSTER 931-363-5666 KRIS.PATRICK.FOSTR@ADIENT.COM **FRS Number:** Not Found

**Facility Description:** Adient operates three moisture curing, urethane foam injection lines. The foam lines produce automotive seat cushions and other foam products in clamshell molds. **SIC Code:** 3086

**Permit Type:** C: Modify process at existing facility **NAICS Code:** 336360

**Permit URL:** https://dataviewers.tdec.tn.gov/dataviewers/?p=19031:34051:::34051:P34051\_PERMIT\_ID:96581

**EPA Region:** 4 **COUNTRY:** USA

**Facility County:** GILES

**Facility State:** TN

**Facility ZIP Code:** 38478

**Permit Issued By:** TENN.DEPT. OF ENVIRONMENT & CONSERVATION, DIV OF AIR POLLUTION CONTROL (Agency Name)  
LACEY HARDIN(Agency Contact) (615) 532-0545 Lacey.Hardin@tn.gov

**Permit Notes:**

<b>Facility-wide Emissions:</b>	<b>Pollutant Name:</b>	<b>Facility-wide Emissions Increase:</b>
	Particulate Matter (PM)	9.9000 (Tons/Year)
	Volatile Organic Compounds (VOC)	491.4000 (Tons/Year)

Process/Pollutant Information
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**PROCESS NAME:** Polyurethane Foam Manufacturing

**Process Type:** 99.016 (Polyurethane Foam Products Manufacturing)

**Primary Fuel:**

**Throughput:** 0

**Process Notes:** Production of polyurethane foam automotive seat cushions. Foam cushions or buns are produced on one of three production lines. Molds are sprayed with mold release, and/or with hand applied application techniques to prevent the foam from sticking to the mold. VOC emissions from the process are mostly from the use of solvent based mold release agents. Wax in the mold release materials may be emitted as total suspended particulates via process vents.

**POLLUTANT NAME:** Volatile Organic Compounds (VOC)

**CAS Number:** VOC

**Test Method:** Unspecified

**Pollutant Group(s):** ( Volatile Organic Compounds (VOC) )

**Emission Limit 1:** 491.4000 TONS 12 CONSECUTIVE MONTHS

**Emission Limit 2:**

**Standard Emission:**

**Did factors, other than air pollution technology considerations influence the BACT decisions:** U

**Case-by-Case Basis:** N/A

**Other Applicable Requirements:** NESHAP

**Control Method:** (P) Good work practices and permitted VOC limit

**Est. % Efficiency:**

**Cost Effectiveness:** 0 \$/ton

**Incremental Cost Effectiveness:** 0 \$/ton

**Compliance Verified:** Unknown

**Pollutant/Compliance Notes:**

**POLLUTANT NAME:** Particulate matter, total (TPM)

**CAS Number:** PM

**Test Method:** Unspecified

**Pollutant Group(s):** ( Particulate Matter (PM) )

**Emission Limit 1:** 3.0000 LB/HR DAILY AERAGE BASIS

**Emission Limit 2:** 9.9000 TON 12 CONSECUTIVE MONTHS

**Standard Emission:**

**Did factors, other than air pollution technology considerations influence the BACT decisions:** U

**Case-by-Case Basis:** N/A

**Other Applicable Requirements:**

**Control Method:** (N)



Est. % Efficiency:  
 Cost Effectiveness: 0 \$/ton  
 Incremental Cost Effectiveness: 0 \$/ton  
 Compliance Verified: Unknown  
 Pollutant/Compliance Notes:

Previous Page

**Facility Information**

<b>RBLC ID:</b>	TX-0940 (draft)	<b>Date Determination Last Updated:</b>	09/12/2022
<b>Corporate/Company Name:</b>	KNAUF INSULATION, INC.	<b>Permit Number:</b>	166392, PSDTX1600
<b>Facility Name:</b>	FIBERGLASS MANUFACTURING FACILITY	<b>Permit Date:</b>	09/06/2022 (actual)
<b>Facility Contact:</b>	KEVIN MCHUGH 317-421-4710	<b>FRS Number:</b>	NOT FOUND
<b>Facility Description:</b>	greenfield fiberglass insulation manufacturing plant. The plant consists of a raw material receiving area (liquid-tanks and dry-silos) and batch mixing points, gas-oxy melting furnace, binder application, forming, curing ovens, and finished goods.	<b>SIC Code:</b>	1499
<b>Permit Type:</b>	A: New/Greenfield Facility	<b>NAICS Code:</b>	327993
<b>Permit URL:</b>		<b>COUNTRY:</b>	USA
<b>EPA Region:</b>	6		
<b>Facility County:</b>	MCLENNAN		
<b>Facility State:</b>	TX		
<b>Facility ZIP Code:</b>			
<b>Permit Issued By:</b>	TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ) (Agency Name) MS. ANNE INMAN(Agency Contact) (512) 239-1267 anne.inman@tceq.texas.gov		
<b>Other Agency Contact Info:</b>	Mr. Huy Pham, (512) 239-1358, Huy.Pham@tceq.texas.gov		
<b>Permit Notes:</b>			
<b>Affected Boundaries:</b>	<b>Boundary Type:</b> CLASS1	<b>Class 1 Area State:</b> OK	<b>Boundary:</b> Wichita Mountains
			<b>Distance:</b> > 250 km

**Process/Pollutant Information**

**PROCESS NAME:** RAW MATERIAL HANDLING

**Process Type:** 90.033 (Wool Fiberglass Manufacturing)

**Primary Fuel:**

**Throughput:** 0

**Process Notes:** RECIEVING, MIXING, AND HANDLING

**POLLUTANT NAME:** Particulate matter, filterable (FPM)

**CAS Number:** PM

**Test Method:** Unspecified

**Pollutant Group(s):** ( Particulate Matter (PM) )

**Emission Limit 1:**

**Emission Limit 2:**

**Standard Emission:**

**Did factors, other then air pollution technology considerations influence the BACT decisions:** N

**Case-by-Case Basis:** BACT-PSD

**Other Applicable Requirements:**

**Control Method:** (A) BAGHOUSE

**Est. % Efficiency:** 99.000

**Cost Effectiveness:** 0 \$/ton

**Incremental Cost Effectiveness:** 0 \$/ton

**Compliance Verified:** Unknown

**Pollutant/Compliance Notes:**

**POLLUTANT NAME:** Particulate matter, filterable < 10 μ (FPM10)  
**CAS Number:** PM  
**Test Method:** Unspecified  
**Pollutant Group(s):** ( Particulate Matter (PM) )  
**Emission Limit 1:**  
**Emission Limit 2:**  
**Standard Emission:**  
**Did factors, other than air pollution technology considerations influence the BACT decisions:** N  
**Case-by-Case Basis:** BACT-PSD  
**Other Applicable Requirements:**  
**Control Method:** (A) BAGHOUSE  
**Est. % Efficiency:** 99.000  
**Cost Effectiveness:** 0 \$/ton  
**Incremental Cost Effectiveness:** 0 \$/ton  
**Compliance Verified:** Unknown  
**Pollutant/Compliance Notes:**

**POLLUTANT NAME:** Particulate matter, filterable < 2.5 μ (FPM2.5)  
**CAS Number:** PM  
**Test Method:** Unspecified  
**Pollutant Group(s):** ( Particulate Matter (PM) )  
**Emission Limit 1:**  
**Emission Limit 2:**  
**Standard Emission:**  
**Did factors, other than air pollution technology considerations influence the BACT decisions:** N  
**Case-by-Case Basis:** BACT-PSD  
**Other Applicable Requirements:**  
**Control Method:** (A) BAGHOUSE  
**Est. % Efficiency:** 99.000  
**Cost Effectiveness:** 0 \$/ton  
**Incremental Cost Effectiveness:** 0 \$/ton  
**Compliance Verified:** Unknown  
**Pollutant/Compliance Notes:**

Process/Pollutant Information
-------------------------------

**PROCESS NAME:** MELTING AND REFINING FURNACE  
**Process Type:** 90.033 (Wool Fiberglass Manufacturing)  
**Primary Fuel:** NATURAL GAS  
**Throughput:** 30333.00 LB/HR  
**Process Notes:**

**POLLUTANT NAME:** Nitrogen Oxides (NOx)  
**CAS Number:** 10102  
**Test Method:** Unspecified  
**Pollutant Group(s):** ( InOrganic Compounds , Oxides of Nitrogen (NOx) , Particulate Matter (PM) )  
**Emission Limit 1:** 1.3000 LB/TGP  
**Emission Limit 2:**  
**Standard Emission:**  
**Did factors, other than air pollution technology considerations influence the BACT decisions:** N  
**Case-by-Case Basis:** BACT-PSD  
**Other Applicable Requirements:** NESHAP , NSPS  
**Control Method:** (P) Gas-oxy burners and good combustion practices  
**Est. % Efficiency:**  
**Cost Effectiveness:** 0 \$/ton  
**Incremental Cost Effectiveness:** 0 \$/ton  
**Compliance Verified:** Unknown  
**Pollutant/Compliance Notes:**

**POLLUTANT NAME:** Volatile Organic Compounds (VOC)  
**CAS Number:** VOC  
**Test Method:** Unspecified  
**Pollutant Group(s):** ( Volatile Organic Compounds (VOC) )  
**Emission Limit 1:** 0.1500 LB/TGP  
**Emission Limit 2:**  
**Standard Emission:**  
**Did factors, other than air pollution technology considerations influence the BACT decisions:** N  
**Case-by-Case Basis:** BACT-PSD  
**Other Applicable Requirements:** NSPS , NESHAP  
**Control Method:** (P) Gas-oxy burners and good combustion practices  
**Est. % Efficiency:**  
**Cost Effectiveness:** 0 \$/ton  
**Incremental Cost Effectiveness:** 0 \$/ton  
**Compliance Verified:** Unknown  
**Pollutant/Compliance Notes:**

**POLLUTANT NAME:** Carbon Monoxide  
**CAS Number:** 630-08-0  
**Test Method:** Unspecified  
**Pollutant Group(s):** ( InOrganic Compounds )  
**Emission Limit 1:** 0.0300 LB/TGP  
**Emission Limit 2:**  
**Standard Emission:**  
**Did factors, other than air pollution technology considerations influence the BACT decisions:** N  
**Case-by-Case Basis:** BACT-PSD  
**Other Applicable Requirements:** NSPS , NESHAP  
**Control Method:** (P) Gas-oxy burners and good combustion practices  
**Est. % Efficiency:**  
**Cost Effectiveness:** 0 \$/ton  
**Incremental Cost Effectiveness:** 0 \$/ton  
**Compliance Verified:** Unknown  
**Pollutant/Compliance Notes:**

**POLLUTANT NAME:** Particulate matter, filterable (FPM)  
**CAS Number:** PM  
**Test Method:** Unspecified  
**Pollutant Group(s):** ( Particulate Matter (PM) )  
**Emission Limit 1:** 0.5000 LB/TGP  
**Emission Limit 2:**  
**Standard Emission:**  
**Did factors, other than air pollution technology considerations influence the BACT decisions:** N  
**Case-by-Case Basis:** BACT-PSD  
**Other Applicable Requirements:** NSPS , NESHAP  
**Control Method:** (A) DRY ESP  
**Est. % Efficiency:**  
**Cost Effectiveness:** 0 \$/ton  
**Incremental Cost Effectiveness:** 0 \$/ton  
**Compliance Verified:** Unknown  
**Pollutant/Compliance Notes:**

**POLLUTANT NAME:** Particulate matter, filterable < 10 μ (FPM10)  
**CAS Number:** PM  
**Test Method:** Unspecified  
**Pollutant Group(s):** ( Particulate Matter (PM) )  
**Emission Limit 1:** 0.5000 LB/TGP  
**Emission Limit 2:**

**Standard Emission:**

**Did factors, other than air pollution technology considerations influence the BACT decisions:** N

**Case-by-Case Basis:** BACT-PSD  
**Other Applicable Requirements:** NSPS , NESHAP  
**Control Method:** (A) DRY ESP  
**Est. % Efficiency:**  
**Cost Effectiveness:** 0 \$/ton  
**Incremental Cost Effectiveness:** 0 \$/ton  
**Compliance Verified:** Unknown  
**Pollutant/Compliance Notes:**

**POLLUTANT NAME:** Particulate matter, filterable < 2.5 µ (FPM2.5)  
**CAS Number:** PM  
**Test Method:** Unspecified  
**Pollutant Group(s):** ( Particulate Matter (PM) )  
**Emission Limit 1:** 0.5000 LB/TGP  
**Emission Limit 2:**  
**Standard Emission:**

**Did factors, other than air pollution technology considerations influence the BACT decisions:** N

**Case-by-Case Basis:** BACT-PSD  
**Other Applicable Requirements:** NSPS , NESHAP  
**Control Method:** (A) DRY ESP  
**Est. % Efficiency:**  
**Cost Effectiveness:** 0 \$/ton  
**Incremental Cost Effectiveness:** 0 \$/ton  
**Compliance Verified:** Unknown  
**Pollutant/Compliance Notes:**

<b>Process/Pollutant Information</b>
--------------------------------------

**PROCESS NAME:** FORMING, CURING AND COOLING OPERATIONS

**Process Type:** 90.033 (Wool Fiberglass Manufacturing)  
**Primary Fuel:** NATURAL GAS  
**Throughput:** 30333.00 LB/HR

**Process Notes:**

**POLLUTANT NAME:** Nitrogen Oxides (NOx)  
**CAS Number:** 10102  
**Test Method:** Unspecified  
**Pollutant Group(s):** ( InOrganic Compounds , Oxides of Nitrogen (NOx) , Particulate Matter (PM) )  
**Emission Limit 1:** 1.0500 LB/TGP  
**Emission Limit 2:**  
**Standard Emission:**

**Did factors, other than air pollution technology considerations influence the BACT decisions:** N

**Case-by-Case Basis:** BACT-PSD  
**Other Applicable Requirements:** NSPS  
**Control Method:** (B) Low-NOx burners for curing and cooling. Good combustion techniques and pipeline quality natural gas  
**Est. % Efficiency:**  
**Cost Effectiveness:** 0 \$/ton  
**Incremental Cost Effectiveness:** 0 \$/ton  
**Compliance Verified:** Unknown  
**Pollutant/Compliance Notes:**

**POLLUTANT NAME:** Volatile Organic Compounds (VOC)  
**CAS Number:** VOC  
**Test Method:** Unspecified  
**Pollutant Group(s):** ( Volatile Organic Compounds (VOC) )  
**Emission Limit 1:** 1.8800 LB/TGP

**Emission Limit 2:****Standard Emission:****Did factors, other than air pollution technology considerations influence the BACT decisions:** N**Case-by-Case Basis:** BACT-PSD**Other Applicable Requirements:** NSPS**Control Method:** (P) Good combustion techniques and pipeline quality natural gas**Est. % Efficiency:****Cost Effectiveness:** 0 \$/ton**Incremental Cost Effectiveness:** 0 \$/ton**Compliance Verified:** Unknown**Pollutant/Compliance Notes:****POLLUTANT NAME:** Carbon Monoxide**CAS Number:** 630-08-0**Test Method:** Unspecified**Pollutant Group(s):** ( InOrganic Compounds )**Emission Limit 1:** 3.6000 LB/TGP**Emission Limit 2:****Standard Emission:****Did factors, other than air pollution technology considerations influence the BACT decisions:** N**Case-by-Case Basis:** BACT-PSD**Other Applicable Requirements:** NSPS**Control Method:** (P) Low-NOx burners for curing and cooling. Good combustion techniques and pipeline quality natural gas**Est. % Efficiency:****Cost Effectiveness:** 0 \$/ton**Incremental Cost Effectiveness:** 0 \$/ton**Compliance Verified:** Unknown**Pollutant/Compliance Notes:****POLLUTANT NAME:** Particulate matter, filterable (FPM)**CAS Number:** PM**Test Method:** Unspecified**Pollutant Group(s):** ( Particulate Matter (PM) )**Emission Limit 1:** 2.7800 LB/TGP**Emission Limit 2:****Standard Emission:****Did factors, other than air pollution technology considerations influence the BACT decisions:** N**Case-by-Case Basis:** BACT-PSD**Other Applicable Requirements:** NSPS**Control Method:** (A) WET ESP**Est. % Efficiency:****Cost Effectiveness:** 0 \$/ton**Incremental Cost Effectiveness:** 0 \$/ton**Compliance Verified:** Unknown**Pollutant/Compliance Notes:****POLLUTANT NAME:** Particulate matter, filterable < 10 μ (FPM10)**CAS Number:** PM**Test Method:** Unspecified**Pollutant Group(s):** ( Particulate Matter (PM) )**Emission Limit 1:** 2.7800 LB/TGP**Emission Limit 2:****Standard Emission:****Did factors, other than air pollution technology considerations influence the BACT decisions:** N**Case-by-Case Basis:** BACT-PSD**Other Applicable Requirements:** NSPS**Control Method:** (A) WET ESP**Est. % Efficiency:**

**Cost Effectiveness:** 0 \$/ton  
**Incremental Cost Effectiveness:** 0 \$/ton  
**Compliance Verified:** Unknown  
**Pollutant/Compliance Notes:**

**POLLUTANT NAME:** Particulate matter, filterable < 2.5 μ (FPM2.5)  
**CAS Number:** PM  
**Test Method:** Unspecified  
**Pollutant Group(s):** ( Particulate Matter (PM) )  
**Emission Limit 1:** 2.7800 LB/TGP  
**Emission Limit 2:**  
**Standard Emission:**  
**Did factors, other than air pollution technology considerations influence the BACT decisions:** N  
**Case-by-Case Basis:** BACT-PSD  
**Other Applicable Requirements:** NSPS  
**Control Method:** (A) WET ESP  
**Est. % Efficiency:**  
**Cost Effectiveness:** 0 \$/ton  
**Incremental Cost Effectiveness:** 0 \$/ton  
**Compliance Verified:** Unknown  
**Pollutant/Compliance Notes:**

Process/Pollutant Information
-------------------------------

**PROCESS NAME:** WBW SCRAP DOCK  
**Process Type:** 90.033 (Wool Fiberglass Manufacturing)  
**Primary Fuel:**  
**Throughput:** 0  
**Process Notes:**

**POLLUTANT NAME:** Volatile Organic Compounds (VOC)  
**CAS Number:** VOC  
**Test Method:** Unspecified  
**Pollutant Group(s):** ( Volatile Organic Compounds (VOC) )  
**Emission Limit 1:**  
**Emission Limit 2:**  
**Standard Emission:**  
**Did factors, other than air pollution technology considerations influence the BACT decisions:** N  
**Case-by-Case Basis:** BACT-PSD  
**Other Applicable Requirements:**  
**Control Method:** (P) Good housekeeping and use of lower-VOC emitting products where possible.  
**Est. % Efficiency:**  
**Cost Effectiveness:** 0 \$/ton  
**Incremental Cost Effectiveness:** 0 \$/ton  
**Compliance Verified:** Unknown  
**Pollutant/Compliance Notes:**

**POLLUTANT NAME:** Particulate matter, filterable (FPM)  
**CAS Number:** PM  
**Test Method:** Unspecified  
**Pollutant Group(s):** ( Particulate Matter (PM) )  
**Emission Limit 1:** 0.0050 GR/DSCF  
**Emission Limit 2:**  
**Standard Emission:**  
**Did factors, other than air pollution technology considerations influence the BACT decisions:** N  
**Case-by-Case Basis:** BACT-PSD  
**Other Applicable Requirements:**  
**Control Method:** (A) Fabric filter baghouse and emissions exhausted inside a building for additional capture efficiency.

**Est. % Efficiency:** 85.000  
**Cost Effectiveness:** 0 \$/ton  
**Incremental Cost Effectiveness:** 0 \$/ton  
**Compliance Verified:** Unknown  
**Pollutant/Compliance Notes:**

**POLLUTANT NAME:** Particulate matter, filterable < 10 µ (FPM10)  
**CAS Number:** PM  
**Test Method:** Unspecified  
**Pollutant Group(s):** ( Particulate Matter (PM) )  
**Emission Limit 1:** 0.0050 GR/DSCF  
**Emission Limit 2:**  
**Standard Emission:**  
**Did factors, other than air pollution technology considerations influence the BACT decisions:** N  
**Case-by-Case Basis:** BACT-PSD  
**Other Applicable Requirements:**  
**Control Method:** (A) Fabric filter baghouse and emissions exhausted inside a building for additional capture efficiency.  
**Est. % Efficiency:** 85.000  
**Cost Effectiveness:** 0 \$/ton  
**Incremental Cost Effectiveness:** 0 \$/ton  
**Compliance Verified:** Unknown  
**Pollutant/Compliance Notes:**

**POLLUTANT NAME:** Particulate matter, filterable < 2.5 µ (FPM2.5)  
**CAS Number:** PM  
**Test Method:** Unspecified  
**Pollutant Group(s):** ( Particulate Matter (PM) )  
**Emission Limit 1:** 0.0050 GR/DSCF  
**Emission Limit 2:**  
**Standard Emission:**  
**Did factors, other than air pollution technology considerations influence the BACT decisions:** N  
**Case-by-Case Basis:** BACT-PSD  
**Other Applicable Requirements:**  
**Control Method:** (A) Fabric filter baghouse and emissions exhausted inside a building for additional capture efficiency.  
**Est. % Efficiency:** 85.000  
**Cost Effectiveness:** 0 \$/ton  
**Incremental Cost Effectiveness:** 0 \$/ton  
**Compliance Verified:** Unknown  
**Pollutant/Compliance Notes:**

Process/Pollutant Information
-------------------------------

**PROCESS NAME:** FACING, SIZING AND PACKAGING  
**Process Type:** 90.033 (Wool Fiberglass Manufacturing)  
**Primary Fuel:**  
**Throughput:** 0  
**Process Notes:**

**POLLUTANT NAME:** Particulate matter, filterable (FPM)  
**CAS Number:** PM  
**Test Method:** Unspecified  
**Pollutant Group(s):** ( Particulate Matter (PM) )  
**Emission Limit 1:** 0.0050 GR/DSCF  
**Emission Limit 2:**  
**Standard Emission:**  
**Did factors, other than air pollution technology considerations influence the BACT decisions:** N  
**Case-by-Case Basis:** BACT-PSD  
**Other Applicable Requirements:**

**Control Method:** (A) Fabric filter baghouse and emissions exhausted inside a building for additional capture efficiency.  
**Est. % Efficiency:** 85.000  
**Cost Effectiveness:** 0 \$/ton  
**Incremental Cost Effectiveness:** 0 \$/ton  
**Compliance Verified:** Unknown  
**Pollutant/Compliance Notes:**

**POLLUTANT NAME:** Particulate matter, filterable < 10 µ (FPM10)  
**CAS Number:** PM  
**Test Method:** Unspecified  
**Pollutant Group(s):** ( Particulate Matter (PM) )  
**Emission Limit 1:** 0.0050 GR/DSCF  
**Emission Limit 2:**  
**Standard Emission:**

**Did factors, other than air pollution technology considerations influence the BACT decisions:** N

**Case-by-Case Basis:** BACT-PSD

**Other Applicable Requirements:**

**Control Method:** (A) Fabric filter baghouse and emissions exhausted inside a building for additional capture efficiency.  
**Est. % Efficiency:** 85.000  
**Cost Effectiveness:** 0 \$/ton  
**Incremental Cost Effectiveness:** 0 \$/ton  
**Compliance Verified:** Unknown  
**Pollutant/Compliance Notes:**

**POLLUTANT NAME:** Particulate matter, filterable < 2.5 µ (FPM2.5)  
**CAS Number:** PM  
**Test Method:** Unspecified  
**Pollutant Group(s):** ( Particulate Matter (PM) )  
**Emission Limit 1:** 0.0050 GR/DSCF  
**Emission Limit 2:**  
**Standard Emission:**

**Did factors, other than air pollution technology considerations influence the BACT decisions:** N

**Case-by-Case Basis:** BACT-PSD

**Other Applicable Requirements:**

**Control Method:** (A) Fabric filter baghouse and emissions exhausted inside a building for additional capture efficiency.  
**Est. % Efficiency:** 85.000  
**Cost Effectiveness:** 0 \$/ton  
**Incremental Cost Effectiveness:** 0 \$/ton  
**Compliance Verified:** Unknown  
**Pollutant/Compliance Notes:**

Process/Pollutant Information
-------------------------------

**PROCESS NAME:** ADHESIVE BACKING OPERATIONS

**Process Type:** 90.033 (Wool Fiberglass Manufacturing)

**Primary Fuel:**

**Throughput:** 0

**Process Notes:**

**POLLUTANT NAME:** Volatile Organic Compounds (VOC)  
**CAS Number:** VOC  
**Test Method:** Unspecified  
**Pollutant Group(s):** ( Volatile Organic Compounds (VOC) )  
**Emission Limit 1:**  
**Emission Limit 2:**  
**Standard Emission:**

**Did factors, other than air pollution technology considerations influence the BACT decisions:** N

**Case-by-Case Basis:** BACT-PSD



**Other Applicable Requirements:**

**Control Method:** (P) Good housekeeping and use of lower-VOC emitting products where possible.

**Est. % Efficiency:**

**Cost Effectiveness:** 0 \$/ton

**Incremental Cost Effectiveness:** 0 \$/ton

**Compliance Verified:** Unknown

**Pollutant/Compliance Notes:**

Process/Pollutant Information

**PROCESS NAME:** INKING

**Process Type:** 90.033 (Wool Fiberglass Manufacturing)

**Primary Fuel:**

**Throughput:** 0

**Process Notes:**

**POLLUTANT NAME:** Volatile Organic Compounds (VOC)

**CAS Number:** VOC

**Test Method:** Unspecified

**Pollutant Group(s):** ( Volatile Organic Compounds (VOC) )

**Emission Limit 1:**

**Emission Limit 2:**

**Standard Emission:**

**Did factors, other than air pollution technology considerations influence the BACT decisions:** N

**Case-by-Case Basis:** BACT-PSD

**Other Applicable Requirements:**

**Control Method:** (P) Good housekeeping and use of lower-VOC emitting products where possible.

**Est. % Efficiency:**

**Cost Effectiveness:** 0 \$/ton

**Incremental Cost Effectiveness:** 0 \$/ton

**Compliance Verified:** Unknown

**Pollutant/Compliance Notes:**

Process/Pollutant Information

**PROCESS NAME:** COOLING TOWER

**Process Type:** 99.009 (Industrial Process Cooling Towers)

**Primary Fuel:**

**Throughput:** 2175.00 GAL/MIN

**Process Notes:**

**POLLUTANT NAME:** Particulate matter, total (TPM)

**CAS Number:** PM

**Test Method:** Unspecified

**Pollutant Group(s):** ( Particulate Matter (PM) )

**Emission Limit 1:** 0.0010 %

**Emission Limit 2:**

**Standard Emission:**

**Did factors, other than air pollution technology considerations influence the BACT decisions:** N

**Case-by-Case Basis:** BACT-PSD

**Other Applicable Requirements:**

**Control Method:** (A) DRIFT ELIMINATOR

**Est. % Efficiency:**

**Cost Effectiveness:** 0 \$/ton

**Incremental Cost Effectiveness:** 0 \$/ton

**Compliance Verified:** Unknown

**Pollutant/Compliance Notes:**

**POLLUTANT NAME:** Particulate matter, total < 10 μ (TPM10)  
**CAS Number:** PM  
**Test Method:** Unspecified  
**Pollutant Group(s):** ( Particulate Matter (PM) )  
**Emission Limit 1:** 0.0010 %  
**Emission Limit 2:**  
**Standard Emission:**  
**Did factors, other than air pollution technology considerations influence the BACT decisions:** N  
**Case-by-Case Basis:** BACT-PSD  
**Other Applicable Requirements:**  
**Control Method:** (A) DRIFT ELIMINATOR  
**Est. % Efficiency:**  
**Cost Effectiveness:** 0 \$/ton  
**Incremental Cost Effectiveness:** 0 \$/ton  
**Compliance Verified:** Unknown  
**Pollutant/Compliance Notes:**

**POLLUTANT NAME:** Particulate matter, total < 2.5 μ (TPM2.5)  
**CAS Number:** PM  
**Test Method:** Unspecified  
**Pollutant Group(s):** ( Particulate Matter (PM) )  
**Emission Limit 1:** 0.0010 %  
**Emission Limit 2:**  
**Standard Emission:**  
**Did factors, other than air pollution technology considerations influence the BACT decisions:** N  
**Case-by-Case Basis:** BACT-PSD  
**Other Applicable Requirements:**  
**Control Method:** (A) DRIFT ELIMINATOR  
**Est. % Efficiency:**  
**Cost Effectiveness:** 0 \$/ton  
**Incremental Cost Effectiveness:** 0 \$/ton  
**Compliance Verified:** Unknown  
**Pollutant/Compliance Notes:**

Previous Page

**Facility Information**

<b>RBLC ID:</b>	IN-0354 (draft)	<b>Date Determination</b>	
<b>Corporate/Company Name:</b>	PATRICK INDUSTRIES, INC. DBA GRAVURE INK	<b>Last Updated:</b>	09/08/2022
<b>Facility Name:</b>	PATRICK INDUSTRIES, INC. DBA GRAVURE INK	<b>Permit Number:</b>	45433
<b>Facility Contact:</b>		<b>Permit Date:</b>	08/25/2022 (actual)
<b>Facility Description:</b>		<b>FRS Number:</b>	Not Found
<b>Permit Type:</b>	C: Modify process at existing facility	<b>SIC Code:</b>	2754
<b>Permit URL:</b>	https://permits.air.idem.in.gov/45433f	<b>NAICS Code:</b>	323111
<b>EPA Region:</b>	5	<b>COUNTRY:</b>	USA
<b>Facility County:</b>	LAPORTE		
<b>Facility State:</b>	IN		
<b>Facility ZIP Code:</b>	46350		
<b>Permit Issued By:</b>	INDIANA DEPT OF ENV MGMT, OFC OF AIR (Agency Name) MR. MATT STUCKEY(Agency Contact) (317) 233-0203 mstuckey@idem.in.gov		
<b>Permit Notes:</b>			

**Process/Pollutant Information**

**PROCESS NAME:** Rotogravure Printing Press RGP1  
**Process Type:** 41.999 (Other Surface Coating/Printing/Graphic Arts Sources)  
**Primary Fuel:**  
**Throughput:** 984.00 feet per minute  
**Process Notes:** maximum printing width of 50 inches

**POLLUTANT NAME:** Volatile Organic Compounds (VOC)  
**CAS Number:** VOC  
**Test Method:** Unspecified  
**Pollutant Group(s):** ( Volatile Organic Compounds (VOC) )  
**Emission Limit 1:** 98.0000 PERCENT OVERALL VOC CONTROL EFFICIENCY  
**Emission Limit 2:** 10.0000 PPMV VOC OUTLET CONCENTRATION  
**Standard Emission:**  
**Did factors, other than air pollution technology considerations influence the BACT decisions:** U  
**Case-by-Case Basis:** OTHER CASE-BY-CASE  
**Other Applicable Requirements:**  
**Control Method:** (A) RTO and permanent total enclosure  
**Est. % Efficiency:** 98.000  
**Cost Effectiveness:** 0 \$/ton  
**Incremental Cost Effectiveness:** 0 \$/ton  
**Compliance Verified:** Unknown  
**Pollutant/Compliance Notes:**

Previous Page

**Facility Information**

<b>RBLC ID:</b>	IN-0355 (draft)	<b>Date Determination Last Updated:</b>	09/15/2022
<b>Corporate/Company Name:</b>	FULCRUM CENTERPOINT, LLC	<b>Permit Number:</b>	F089-44042-00660
<b>Facility Name:</b>	FULCRUM CENTERPOINT, LLC	<b>Permit Date:</b>	08/16/2022 (actual)
<b>Facility Contact:</b>	FLYN VAN EWIKJ (925) 224-8241 FVANEWIJK@FULCRUM-BIOENERGY.COM	<b>FRS Number:</b>	110071219870
<b>Facility Description:</b>	Stationary biorefinery	<b>SIC Code:</b>	2999
<b>Permit Type:</b>	A: New/Greenfield Facility	<b>NAICS Code:</b>	324199
<b>Permit URL:</b>	https://permits.air.idem.in.gov/44042f.pdf	<b>COUNTRY:</b>	USA
<b>EPA Region:</b>	5		
<b>Facility County:</b>	LAKE		
<b>Facility State:</b>	IN		
<b>Facility ZIP Code:</b>	46406		
<b>Permit Issued By:</b>	INDIANA DEPT OF ENV MGMT, OFC OF AIR (Agency Name) MR. MATT STUCKEY(Agency Contact) (317) 233-0203 mstuckey@idem.in.gov		

**Permit Notes:**

<b>Affected Boundaries:</b>	<b>Boundary Type:</b>	<b>Class 1 Area State:</b>	<b>Boundary:</b>	<b>Distance:</b>
	INTL BORDER		US/Canada Border	100km - 50km

<b>Facility-wide Emissions:</b>	<b>Pollutant Name:</b>	<b>Facility-wide Emissions Increase:</b>
	Carbon Monoxide	131.8200 (Tons/Year)
	Nitrogen Oxides (NOx)	170.3500 (Tons/Year)
	Particulate Matter (PM)	1182.9600 (Tons/Year)
	Sulfur Oxides (SOx)	13.7200 (Tons/Year)
	Volatile Organic Compounds (VOC)	1429.1000 (Tons/Year)

**Process/Pollutant Information**

**PROCESS NAME:** Fixed Bed Tubular Fischer Tropsch (FT) Synthesis Reactor  
**Process Type:** 11.290 (Other Liquid Fuel & Liquid Fuel Mixtures)

**Primary Fuel:** Purge Gas  
**Throughput:** 1650.00 tons/day  
**Process Notes:**

**POLLUTANT NAME:** Volatile Organic Compounds (VOC)  
**CAS Number:** VOC  
**Test Method:** Unspecified  
**Pollutant Group(s):** ( Volatile Organic Compounds (VOC) )  
**Emission Limit 1:** 10.0000 PPMVD  
**Emission Limit 2:** 1.2300 LB/HR  
**Standard Emission:**

**Did factors, other than air pollution technology considerations influence the BACT decisions:** U

**Case-by-Case Basis:** OTHER CASE-BY-CASE

**Other Applicable Requirements:**

**Control Method:** (A) The VOC emissions from the fixed bed tubular Fischer Tropsch (FT) Synthesis reactor shall be controlled by the utility boiler (BOIL) except when flaring the VOC emissions during startup and shutdown. The utility boiler (BOIL) shall operate with an overall VOC control efficiency (including the capture efficiency and destruction efficiency) of not less than 98.0% or the VOC outlet concentration shall not exceed 10 ppmvd of VOC at 100% capture. VOC emissions from the utility boiler stack (SV10) shall not exceed 1.23 lb/hr.

**Est. % Efficiency:** 98.000  
**Cost Effectiveness:** 0 \$/ton  
**Incremental Cost Effectiveness:** 0 \$/ton  
**Compliance Verified:** Unknown  
**Pollutant/Compliance Notes:**

Previous Page

**Facility Information**

<b>RBLC ID:</b>	IN-0350 (draft)	<b>Date Determination</b>	
<b>Corporate/Company Name:</b>	GENERAL ALUMINUM MANUFACTURING COMPANY	<b>Last Updated:</b>	08/11/2022
<b>Facility Name:</b>	GENERAL ALUMINUM MANUFACTURING COMPANY	<b>Permit Number:</b>	069-44829-00048
<b>Facility Contact:</b>	GARY APPLGATE	<b>Permit Date:</b>	08/11/2022 (actual)
<b>Facility Description:</b>	A stationary aluminum foundry, melting only clean charge.	<b>FRS Number:</b>	Not Found
<b>Permit Type:</b>	C: Modify process at existing facility	<b>SIC Code:</b>	3365
<b>Permit URL:</b>		<b>NAICS Code:</b>	331524
<b>EPA Region:</b>	5	<b>COUNTRY:</b>	USA
<b>Facility County:</b>	HUNTINGTON		
<b>Facility State:</b>	IN		
<b>Facility ZIP Code:</b>	46750		
<b>Permit Issued By:</b>	INDIANA DEPT OF ENV MGMT, OFC OF AIR (Agency Name) MR. MATT STUCKEY(Agency Contact) (317) 233-0203 mstuckey@idem.in.gov		
<b>Permit Notes:</b>			
<b>Affected Boundaries:</b>	<b>Boundary Type:</b> INTL BORDER	<b>Class 1 Area State:</b>	<b>Boundary:</b> US/Canada Border
			<b>Distance:</b> > 250 km
<b>Facility-wide Emissions:</b>	<b>Pollutant Name:</b> Volatile Organic Compounds (VOC)	<b>Facility-wide Emissions Increase:</b>	17.0000 (Tons/Year)

**Process/Pollutant Information**

**PROCESS NAME:** Lost Foam Casting Process  
**Process Type:** 82.123 (Secondary AL Casting Lines)  
**Primary Fuel:**  
**Throughput:** 0  
**Process Notes:** VOC emissions from the lost foam casting process shall not exceed 26.82 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

**POLLUTANT NAME:** Volatile Organic Compounds (VOC)  
**CAS Number:** VOC  
**Test Method:** Unspecified  
**Pollutant Group(s):** ( Volatile Organic Compounds (VOC) )  
**Emission Limit 1:**  
**Emission Limit 2:**  
**Standard Emission:**  
**Did factors, other than air pollution technology considerations influence the BACT decisions:** U  
**Case-by-Case Basis:** OTHER CASE-BY-CASE  
**Other Applicable Requirements:**  
**Control Method:** (N)  
**Est. % Efficiency:**  
**Cost Effectiveness:** 0 \$/ton  
**Incremental Cost Effectiveness:** 0 \$/ton  
**Compliance Verified:** Unknown  
**Pollutant/Compliance Notes:**

**POLLUTANT NAME:** Volatile Organic Compounds (VOC)  
**CAS Number:** VOC  
**Test Method:** Unspecified  
**Pollutant Group(s):** ( Volatile Organic Compounds (VOC) )  
**Emission Limit 1:**  
**Emission Limit 2:**  
**Standard Emission:**  
**Did factors, other than air pollution technology considerations influence the BACT decisions:** U  
**Case-by-Case Basis:** OTHER CASE-BY-CASE  
**Other Applicable Requirements:**  
**Control Method:** (N)  
**Est. % Efficiency:**  
**Cost Effectiveness:** 0 \$/ton  
**Incremental Cost Effectiveness:** 0 \$/ton  
**Compliance Verified:** Unknown  
**Pollutant/Compliance Notes:**

Previous Page

**Facility Information**

<b>RBLC ID:</b>	AR-0174 (draft)	<b>Date Determination Last Updated:</b>	09/07/2022
<b>Corporate/Company Name:</b>	POTLATCHDELTAIC LAND & LUMBER, LLC	<b>Permit Number:</b>	0356-AOP-R14
<b>Facility Name:</b>	POTLATCHDELTAIC LAND AND LUMBER, LLC - WARREN LUMBER MILL	<b>Permit Date:</b>	08/01/2022 (actual)
<b>Facility Contact:</b>	MAE DINIVAH I 8702261174 MANGALAA.DINIVAH I@POTLATCHDELTAIC.COM	<b>FRS Number:</b>	110000780511
<b>Facility Description:</b>	PotlatchDeltaic Warren Lumber Mill has a sawmill and planer mill that produce softwood lumber and chips.	<b>SIC Code:</b>	2411
<b>Permit Type:</b>	C: Modify process at existing facility	<b>NAICS Code:</b>	321113
<b>Permit URL:</b>	<a href="https://www.adeq.state.ar.us/downloads/WebDatabases/PermitsOnline/Air/0356-AOP-R14.pdf">https://www.adeq.state.ar.us/downloads/WebDatabases/PermitsOnline/Air/0356-AOP-R14.pdf</a>	<b>COUNTRY:</b>	USA
<b>EPA Region:</b>	6		
<b>Facility County:</b>	BRADLEY		
<b>Facility State:</b>	AR		
<b>Facility ZIP Code:</b>	71671		
<b>Permit Issued By:</b>	ARKANSAS DEPT OF ENVIRONMENTAL QUALITY (Agency Name) MR. THOMAS RHEAUME(Agency Contact) (501) 682-0762 rheaume@adeq.state.ar.us		
<b>Permit Notes:</b>	PotlatchDeltaic will add a fourth continuous steam-heated lumber kiln, increase their annual production limit from 360,000 to 400,000 MBF/yr, replace the existing planer mill baghouse and planer mill cyclone, increase gasoline throughput at a tank, construct an additional		

1.0 mile of paved haul road, increase vehicle miles traveled per year, replace a diesel-fired emergency engine, and add equipment/facilities to support lumber production (a trimmer/sort line, a stacker line, and a second log line including a merchandiser).

<b>Affected Boundaries:</b>	<b>Boundary Type:</b> CLASS1	<b>Class 1 Area State:</b> AR	<b>Boundary:</b> Caney Creek	<b>Distance:</b> 100km - 50km
<b>Facility-wide Emissions:</b>	<b>Pollutant Name:</b> Nitrogen Oxides (NOx) Particulate Matter (PM) Volatile Organic Compounds (VOC)	<b>Facility-wide Emissions Increase:</b> 10.7000 (Tons/Year) 5.6000 (Tons/Year) 71.2000 (Tons/Year)		

**Process/Pollutant Information**

<b>PROCESS NAME:</b>	Continuous Drying Kilns		
<b>Process Type:</b>	30.800 (Wood Lumber Kilns)		
<b>Primary Fuel:</b>			
<b>Throughput:</b>	400.00 MMBF		
<b>Process Notes:</b>			
<b>POLLUTANT NAME:</b>	Volatile Organic Compounds (VOC)		
<b>CAS Number:</b>	VOC		
<b>Test Method:</b>	Unspecified		
<b>Pollutant Group(s):</b>	( Volatile Organic Compounds (VOC) )		
<b>Emission Limit 1:</b>	3.5000 LB/MBF		
<b>Emission Limit 2:</b>	727.3000 T/YR		
<b>Standard Emission:</b>			
<b>Did factors, other than air pollution technology considerations influence the BACT decisions:</b>	U		
<b>Case-by-Case Basis:</b>	BACT-PSD		
<b>Other Applicable Requirements:</b>			
<b>Control Method:</b>	(N)		
<b>Est. % Efficiency:</b>			
<b>Cost Effectiveness:</b>	0 \$/ton		
<b>Incremental Cost Effectiveness:</b>	0 \$/ton		
<b>Compliance Verified:</b>	Unknown		
<b>Pollutant/Compliance Notes:</b>			

Previous Page

**Facility Information**

<b>RBLC ID:</b>	IL-0133 (draft)	<b>Date Determination</b>	
<b>Corporate/Company Name:</b>	LINCOLN LAND ENERGY CENTER (A/K/A EMBERCLEAR)	<b>Last Updated:</b>	08/26/2022
<b>Facility Name:</b>	LINCOLN LAND ENERGY CENTER	<b>Permit Number:</b>	18040008
<b>Facility Contact:</b>	JIM PALUMBO 888-582-4460 X 55 JPALUMBO@EMBERCLEAR.COM	<b>Permit Date:</b>	07/29/2022 (actual)
<b>Facility Description:</b>	The proposed facility is designed to generate baseload power. It will consist of two combined-cycle generating units, with each a Siemens combustion turbine (3,647 mmBtu/hr) and a heat recovery steam generator (HRSG) with duct burners (35 mmBtu/hr); fired by natural gas only. Other units at the facility include an auxiliary boiler, engines, piping and piping components, circuit breakers and roadways.	<b>FRS Number:</b>	Not Found
<b>Permit Type:</b>	A: New/Greenfield Facility	<b>SIC Code:</b>	4911
<b>Permit URL:</b>	www2.illinois.gov/epa/public-notices/boa-notices/pages/archive.aspx	<b>NAICS Code:</b>	221112
<b>EPA Region:</b>	5	<b>COUNTRY:</b>	USA
<b>Facility County:</b>	SANGAMON		
<b>Facility State:</b>	IL		
<b>Facility ZIP Code:</b>	62558		
<b>Permit Issued By:</b>	ILLINOIS EPA, BUREAU OF AIR (Agency Name) MR. RAY PILAPIL(Agency Contact) (217) 782-2113 ray.pilapil@illinois.gov		
<b>Permit Notes:</b>	Additional facility-wide pollutants, in tons/year: PM10/PM 2.5: 131.7 and 131.6 (respectively); sulfuric acid mist (SAM): 17.2; greenhouse gasses (GHG): 3,586,918		

<b>Facility-wide Emissions:</b>	<b>Pollutant Name:</b>	<b>Facility-wide Emissions Increase:</b>
	Carbon Monoxide	327.5000 (Tons/Year)
	Nitrogen Oxides (NOx)	273.9000 (Tons/Year)
	Particulate Matter (PM)	101.5000 (Tons/Year)
	Sulfur Oxides (SOx)	47.4000 (Tons/Year)
	Volatile Organic Compounds (VOC)	63.9000 (Tons/Year)

<b>Process/Pollutant Information</b>
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**PROCESS NAME:** Combined-Cycle Combustion Turbines

**Process Type:** 15.210 (Natural Gas (includes propane & liquified petroleum gas))

**Primary Fuel:** Natural Gas

**Throughput:** 3647.00 mmBtu/hour

**Process Notes:** Combined-cycle combustion turbines and heat recovery steam generators (HRSG) with a 35 mmBtu/hr duct burner. Turbine inlets would have evaporative cooling systems to cool the inlet air during warm weather to increase power output.

**POLLUTANT NAME:** Carbon Monoxide

**CAS Number:** 630-08-0

**Test Method:** Unspecified

**Pollutant Group(s):** ( InOrganic Compounds )

**Emission Limit 1:** 1.5000 PPMV @ 15% O2 TURBINE LOAD > OR = 60% W/O DUCT BURNERS

**Emission Limit 2:** 1.8000 PPMV @ 15% O2 TURBINE LOAD > OR= 60% WITH DUCT BURNERS

**Standard Emission:**

**Did factors, other than air pollution technology considerations influence the BACT decisions:** U

**Case-by-Case Basis:** BACT-PSD

**Other Applicable Requirements:**

**Control Method:** (B) Oxidation catalyst and good combustion practices

**Est. % Efficiency:**

**Cost Effectiveness:** 0 \$/ton

**Incremental Cost Effectiveness:** 0 \$/ton

**Compliance Verified:** Unknown

**Pollutant/Compliance Notes:** Emission Limits 1 and 2 are averaged on a rolling 3-operating hour basis. Emission Limit 3: 2.0 ppmv @ 15% O2 for turbine load < 60% on a rolling 3-operating hour operating basis. Emission Limits 1, 2 and 3 do not include startup, shutdown or breakdown. Emission Limit 4: During any clock hour, including startup, shutdown and breakdown, emissions shall not exceed 923 pounds/hour (cold start/shakedown); 325 pounds/hour (non-cold start); 216 pounds/hour (shutdown). Compliance is demonstrated using a continuous emissions monitoring system (CEMS).

**POLLUTANT NAME:** Nitrogen Oxides (NOx)

**CAS Number:** 10102

**Test Method:** Unspecified

**Pollutant Group(s):** ( InOrganic Compounds , Oxides of Nitrogen (NOx) , Particulate Matter (PM) )

**Emission Limit 1:** 2.0000 PPMV @ 15% O2 SEE NOTES

**Emission Limit 2:** SEE NOTES

**Standard Emission:**

**Did factors, other than air pollution technology considerations influence the BACT decisions:** U

**Case-by-Case Basis:** BACT-PSD

**Other Applicable Requirements:** NSPS

**Control Method:** (A) Dry low-NOx combustion with ultra-low NOx combustors; low-NOx duct burners; and selective catalytic reduction (SCR)

**Est. % Efficiency:**

**Cost Effectiveness:** 0 \$/ton

**Incremental Cost Effectiveness:** 0 \$/ton

**Compliance Verified:** Unknown

**Pollutant/Compliance Notes:** Emission limit 1 is applicable during normal operation, excluding startup and shutdown; averaging time: 3-operating hour, rolled hourly. Beginning 36 months after completion of shakedown, the averaging time: 1-operating hour. Emission Limit 2 is applicable during startup and shutdown: 130 pounds/hour (cold start/shakedown); 71 pounds/hour (non-cold start); 55 pounds/hour (shutdown). Limits for startup and shutdown are applicable for each clock hour that includes a startup, shutdown or shakedown. Compliance demonstrated using a continuous emissions monitoring system (CEMS)

**POLLUTANT NAME:** Particulate matter, total (TPM)

**CAS Number:** PM  
**Test Method:** Unspecified  
**Pollutant Group(s):** ( Particulate Matter (PM) )  
**Emission Limit 1:** 0.0032 POUNDS/MMBTU WITH DUCT BURNER; ROLLING 3-OPERATING HR  
**Emission Limit 2:** 0.0031 POUNDS/MMBTU W/O DUCT BURNER; ROLLING 3-OPERATING HR  
**Standard Emission:**

**Did factors, other than air pollution technology considerations influence the BACT decisions:** U

**Case-by-Case Basis:** BACT-PSD

**Other Applicable Requirements:**

**Control Method:** (P) Good combustion practices

**Est. % Efficiency:**

**Cost Effectiveness:** 0 \$/ton

**Incremental Cost Effectiveness:** 0 \$/ton

**Compliance Verified:** Unknown

**Pollutant/Compliance Notes:** Compliance is determined by performance testing.

**POLLUTANT NAME:** Sulfur Dioxide (SO<sub>2</sub>)

**CAS Number:** 7446-09-5

**Test Method:** Unspecified

**Pollutant Group(s):** ( InOrganic Compounds , Oxides of Sulfur (SO<sub>x</sub>) )

**Emission Limit 1:** 5.5000 POUNDS/HOUR ROLLING 3-OPERATING HOUR

**Emission Limit 2:**

**Standard Emission:**

**Did factors, other than air pollution technology considerations influence the BACT decisions:** U

**Case-by-Case Basis:** BACT-PSD

**Other Applicable Requirements:** NSPS

**Control Method:** (P) Good combustion practices and use of natural gas with a sulfur content of no more than 0.5 grains (gr)/100 standard cubic feet (scf).

**Est. % Efficiency:**

**Cost Effectiveness:** 0 \$/ton

**Incremental Cost Effectiveness:** 0 \$/ton

**Compliance Verified:** Unknown

**Pollutant/Compliance Notes:** Compliance is determined by performance testing.

**POLLUTANT NAME:** Volatile Organic Compounds (VOC)

**CAS Number:** VOC

**Test Method:** Unspecified

**Pollutant Group(s):** ( Volatile Organic Compounds (VOC) )

**Emission Limit 1:** 1.0000 PPMV, ADJ. TO 15% O<sub>2</sub> ROLLING 3-OPERATING HOUR

**Emission Limit 2:** 1.1000 PPMV, ADJ. TO 15% O<sub>2</sub> ROLLING 3-OPERATING HOUR

**Standard Emission:**

**Did factors, other than air pollution technology considerations influence the BACT decisions:** U

**Case-by-Case Basis:** BACT-PSD

**Other Applicable Requirements:**

**Control Method:** (B) Oxidation catalyst and good combustion practices.

**Est. % Efficiency:**

**Cost Effectiveness:** 0 \$/ton

**Incremental Cost Effectiveness:** 0 \$/ton

**Compliance Verified:** Unknown

**Pollutant/Compliance Notes:** Emission Limits 1 and 2 exclude startup and shutdown. Emission Limit 3: 56 pounds/hour (cold start); 48 pounds/hour (non-cold start); and 44 pounds/hour (shutdown) during each hour that includes a startup or shutdown and shakedown.

**POLLUTANT NAME:** Particulate matter, total < 10 μ (TPM<sub>10</sub>)

**CAS Number:** PM

**Test Method:** Unspecified

**Pollutant Group(s):** ( Particulate Matter (PM) )

**Emission Limit 1:** 0.0041 POUNDS/MMBTU ROLLING 3-OPERATING HOUR

**Emission Limit 2:**



**Standard Emission:**

**Did factors, other than air pollution technology considerations influence the BACT decisions:** U

**Case-by-Case Basis:** BACT-PSD

**Other Applicable Requirements:**

**Control Method:** (P) Good combustion practices.

**Est. % Efficiency:**

**Cost Effectiveness:** 0 \$/ton

**Incremental Cost Effectiveness:** 0 \$/ton

**Compliance Verified:** Unknown

**Pollutant/Compliance Notes:** Limit for PM10 also includes PM2.5, i.e., PM10/PM2.5. Compliance is demonstrated by performance testing.

**POLLUTANT NAME:** Sulfuric Acid (mist, vapors, etc)

**CAS Number:** 7664-93-9

**Test Method:** Unspecified

**Pollutant Group(s):** ( InOrganic Compounds , Particulate Matter (PM) )

**Emission Limit 1:** 2.0000 POUNDS/MMBTU ROLLING 3-OPERATING HOUR

**Emission Limit 2:**

**Standard Emission:**

**Did factors, other than air pollution technology considerations influence the BACT decisions:** U

**Case-by-Case Basis:** BACT-PSD

**Other Applicable Requirements:**

**Control Method:** (P) Good combustion practices and use of only natural gas with a sulfur content no greater than 0.5 grains (gr)/100 standard cubic feet (scf).

**Est. % Efficiency:**

**Cost Effectiveness:** 0 \$/ton

**Incremental Cost Effectiveness:** 0 \$/ton

**Compliance Verified:** Unknown

**Pollutant/Compliance Notes:** Compliance to be determined by performance testing.

**POLLUTANT NAME:** Carbon Dioxide Equivalent (CO2e)

**CAS Number:** CO2e

**Test Method:** Unspecified

**Pollutant Group(s):** ( Greenhouse Gasses (GHG) )

**Emission Limit 1:** 850.0000 LB/MW-HR (GROSS) 12 CONSECUTIVE OPERATING MONTHS

**Emission Limit 2:**

**Standard Emission:**

**Did factors, other than air pollution technology considerations influence the BACT decisions:** U

**Case-by-Case Basis:** BACT-PSD

**Other Applicable Requirements:**

**Control Method:** (P) Inherently lower-polluting design, good combustion practices and operational energy efficiency

**Est. % Efficiency:**

**Cost Effectiveness:** 0 \$/ton

**Incremental Cost Effectiveness:** 0 \$/ton

**Compliance Verified:** Unknown

**Pollutant/Compliance Notes:** Compliance is based on quantification procedures of 40 CFR 98 Subpart D except where testing for nitrous oxide (N2O) and methane (CH4) are higher than in 40 CFR 98 Subpart D, emission factors based on these tests shall be used.

<b>Process/Pollutant Information</b>
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**PROCESS NAME:** Auxiliary Boiler

**Process Type:** 13.310 (Natural Gas (includes propane and liquefied petroleum gas))

**Primary Fuel:** Natural Gas

**Throughput:** 80.00 mmBtu/hour

**Process Notes:** The Auxiliary Boiler is used on an intermittent basis to produce intermediate pressure steam for heating the heat recovery steam generator (HRSG) and combined-cycle combustion turbines

**POLLUTANT NAME:** Nitrogen Oxides (NOx)

**CAS Number:** 10102

**Test Method:** Unspecified  
**Pollutant Group(s):** ( InOrganic Compounds , Oxides of Nitrogen (NOx) , Particulate Matter (PM) )  
**Emission Limit 1:** 0.0100 POUNDS/MMBTU ROLLING 3-OPERATING HOUR  
**Emission Limit 2:**  
**Standard Emission:**  
**Did factors, other than air pollution technology considerations influence the BACT decisions:** U  
**Case-by-Case Basis:** BACT-PSD  
**Other Applicable Requirements:**  
**Control Method:** (B) Ultra low-NOx burners and flue gas recirculation, air preheater, automated combustion management system, with an oxygen trim system and an automated water blowdown system.  
**Est. % Efficiency:**  
**Cost Effectiveness:** 0 \$/ton  
**Incremental Cost Effectiveness:** 0 \$/ton  
**Compliance Verified:** Unknown  
**Pollutant/Compliance Notes:**

**POLLUTANT NAME:** Carbon Monoxide  
**CAS Number:** 630-08-0  
**Test Method:** Unspecified  
**Pollutant Group(s):** ( InOrganic Compounds )  
**Emission Limit 1:** 0.0370 POUNDS/MMBTU ROLLING 3-OPERATING HOUR  
**Emission Limit 2:**  
**Standard Emission:**  
**Did factors, other than air pollution technology considerations influence the BACT decisions:** U  
**Case-by-Case Basis:** BACT-PSD  
**Other Applicable Requirements:**  
**Control Method:** (P) Good burner design and good combustion practices.  
**Est. % Efficiency:**  
**Cost Effectiveness:** 0 \$/ton  
**Incremental Cost Effectiveness:** 0 \$/ton  
**Compliance Verified:** Unknown  
**Pollutant/Compliance Notes:**

**POLLUTANT NAME:** Volatile Organic Compounds (VOC)  
**CAS Number:** VOC  
**Test Method:** Unspecified  
**Pollutant Group(s):** ( Volatile Organic Compounds (VOC) )  
**Emission Limit 1:** 0.0015 POUNDS/MMBTU ROLLING 3-OPERATING HOUR  
**Emission Limit 2:**  
**Standard Emission:**  
**Did factors, other than air pollution technology considerations influence the BACT decisions:** U  
**Case-by-Case Basis:** BACT-PSD  
**Other Applicable Requirements:**  
**Control Method:** (P) Good burner design and good combustion practices  
**Est. % Efficiency:**  
**Cost Effectiveness:** 0 \$/ton  
**Incremental Cost Effectiveness:** 0 \$/ton  
**Compliance Verified:** Unknown  
**Pollutant/Compliance Notes:**

**POLLUTANT NAME:** Particulate matter, total (TPM)  
**CAS Number:** PM  
**Test Method:** Unspecified  
**Pollutant Group(s):** ( Particulate Matter (PM) )  
**Emission Limit 1:** 0.0019 POUNDS/MMBTU ROLLING 3-OPERATING HOUR  
**Emission Limit 2:**  
**Standard Emission:**  
**Did factors, other than air pollution technology considerations influence the BACT decisions:** U  
**Case-by-Case Basis:** BACT-PSD

**Other Applicable Requirements:** NSPS  
**Control Method:** (P) Good combustion practices.  
**Est. % Efficiency:**  
**Cost Effectiveness:** 0 \$/ton  
**Incremental Cost Effectiveness:** 0 \$/ton  
**Compliance Verified:** Unknown  
**Pollutant/Compliance Notes:**

**POLLUTANT NAME:** Particulate matter, total < 10 µ (TPM10)  
**CAS Number:** PM  
**Test Method:** Unspecified  
**Pollutant Group(s):** ( Particulate Matter (PM) )  
**Emission Limit 1:** 0.0075 POUNDS/MMBTU ROLLING 3-OPERATING HOUR  
**Emission Limit 2:**  
**Standard Emission:**  
**Did factors, other than air pollution technology considerations influence the BACT decisions:** U  
**Case-by-Case Basis:** BACT-PSD  
**Other Applicable Requirements:** NSPS  
**Control Method:** (P) Good combustion practices.  
**Est. % Efficiency:**  
**Cost Effectiveness:** 0 \$/ton  
**Incremental Cost Effectiveness:** 0 \$/ton  
**Compliance Verified:** Unknown  
**Pollutant/Compliance Notes:** Emission Limit 1 includes PM2.5, i.e., PM10/PM2.5.

**POLLUTANT NAME:** Sulfur Dioxide (SO2)  
**CAS Number:** 7446-09-5  
**Test Method:** Unspecified  
**Pollutant Group(s):** ( InOrganic Compounds , Oxides of Sulfur (SOx) )  
**Emission Limit 1:** 0.0014 POUNDS/MMBTU ROLLING 3-OPERATING HOUR  
**Emission Limit 2:**  
**Standard Emission:**  
**Did factors, other than air pollution technology considerations influence the BACT decisions:** U  
**Case-by-Case Basis:** BACT-PSD  
**Other Applicable Requirements:**  
**Control Method:** (P) Use of only natural gas with a sulfur content of no greater than 0.5 grains (gr)/100 standard cubic feet (scf).  
**Est. % Efficiency:**  
**Cost Effectiveness:** 0 \$/ton  
**Incremental Cost Effectiveness:** 0 \$/ton  
**Compliance Verified:** Unknown  
**Pollutant/Compliance Notes:**

**POLLUTANT NAME:** Sulfuric Acid (mist, vapors, etc)  
**CAS Number:** 7664-93-9  
**Test Method:** Unspecified  
**Pollutant Group(s):** ( InOrganic Compounds , Particulate Matter (PM) )  
**Emission Limit 1:** 0.0200 POUNDS/MMBTU ROLLING 3-OPERATING HOUR  
**Emission Limit 2:**  
**Standard Emission:**  
**Did factors, other than air pollution technology considerations influence the BACT decisions:** U  
**Case-by-Case Basis:** BACT-PSD  
**Other Applicable Requirements:**  
**Control Method:** (P) Use of only natural gas with a sulfur content of no greater than 0.5 grains (gr)/100 standard cubic feet (scf).  
**Est. % Efficiency:**  
**Cost Effectiveness:** 0 \$/ton  
**Incremental Cost Effectiveness:** 0 \$/ton  
**Compliance Verified:** Unknown  
**Pollutant/Compliance Notes:**

**POLLUTANT NAME:** Carbon Dioxide Equivalent (CO2e)  
**CAS Number:** CO2e  
**Test Method:** Unspecified  
**Pollutant Group(s):** ( Greenhouse Gasses (GHG) )  
**Emission Limit 1:** 5059.0000 TONS/YEAR 12 MONTH ROLLING  
**Emission Limit 2:**  
**Standard Emission:**  
**Did factors, other than air pollution technology considerations influence the BACT decisions:** U  
**Case-by-Case Basis:** BACT-PSD  
**Other Applicable Requirements:**  
**Control Method:** (P) Good combustion practices.  
**Est. % Efficiency:**  
**Cost Effectiveness:** 0 \$/ton  
**Incremental Cost Effectiveness:** 0 \$/ton  
**Compliance Verified:** Unknown  
**Pollutant/Compliance Notes:**

Process/Pollutant Information
-------------------------------

**PROCESS NAME:** Emergency Engines  
**Process Type:** 17.110 (Fuel Oil (ASTM # 1,2, includes kerosene, aviation, diesel fuel))  
**Primary Fuel:** Ultra-Low Sulfur Diesel  
**Throughput:** 1250.00 kW  
**Process Notes:** Two engine-generators will power an electrical generator to provide power to critical equipment during power outages. Ultra-low sulfur diesel fuel (sulfur content <15 part per million (ppm)) will be used as fuel

**POLLUTANT NAME:** Nitrogen Oxides (NOx)  
**CAS Number:** 10102  
**Test Method:** Unspecified  
**Pollutant Group(s):** ( InOrganic Compounds , Oxides of Nitrogen (NOx) , Particulate Matter (PM) )  
**Emission Limit 1:** 6.4000 GRAMS KILOWATT-HOUR  
**Emission Limit 2:**  
**Standard Emission:**  
**Did factors, other than air pollution technology considerations influence the BACT decisions:** U  
**Case-by-Case Basis:** BACT-PSD  
**Other Applicable Requirements:** NSPS  
**Control Method:** (N)  
**Est. % Efficiency:**  
**Cost Effectiveness:** 0 \$/ton  
**Incremental Cost Effectiveness:** 0 \$/ton  
**Compliance Verified:** Unknown  
**Pollutant/Compliance Notes:** Limit 1 includes non-methane hydrocarbons (NMHC), i.e. NOx + NMHC, consistent with the NSPS, 40 CFR 60 Subpart III.

**POLLUTANT NAME:** Carbon Monoxide  
**CAS Number:** 630-08-0  
**Test Method:** Unspecified  
**Pollutant Group(s):** ( InOrganic Compounds )  
**Emission Limit 1:** 3.5000 GRAMS KILOWATT-HOUR  
**Emission Limit 2:**  
**Standard Emission:**  
**Did factors, other than air pollution technology considerations influence the BACT decisions:** U  
**Case-by-Case Basis:** BACT-PSD  
**Other Applicable Requirements:** NSPS  
**Control Method:** (N)  
**Est. % Efficiency:**  
**Cost Effectiveness:** 0 \$/ton

**Incremental Cost Effectiveness:** 0 \$/ton  
**Compliance Verified:** Unknown  
**Pollutant/Compliance Notes:** Emission Limit 1 is consistent with the NSPS, 40 CFR 60 Subpart IIII.

**POLLUTANT NAME:** Particulate matter, total (TPM)  
**CAS Number:** PM  
**Test Method:** Unspecified  
**Pollutant Group(s):** ( Particulate Matter (PM) )  
**Emission Limit 1:** 0.2000 GRAMS KILOWATT-HOUR  
**Emission Limit 2:**  
**Standard Emission:**

**Did factors, other than air pollution technology considerations influence the BACT decisions:** U

**Case-by-Case Basis:** BACT-PSD  
**Other Applicable Requirements:** NSPS  
**Control Method:** (N)  
**Est. % Efficiency:**  
**Cost Effectiveness:** 0 \$/ton  
**Incremental Cost Effectiveness:** 0 \$/ton  
**Compliance Verified:** Unknown  
**Pollutant/Compliance Notes:** Emission Limit 1 includes PM10 and PM2.5, i.e., PM/PM10/PM2.5.

**POLLUTANT NAME:** Sulfur Dioxide (SO2)  
**CAS Number:** 7446-09-5  
**Test Method:** Unspecified  
**Pollutant Group(s):** ( InOrganic Compounds , Oxides of Sulfur (SOx) )  
**Emission Limit 1:**  
**Emission Limit 2:**  
**Standard Emission:**

**Did factors, other than air pollution technology considerations influence the BACT decisions:** U

**Case-by-Case Basis:** BACT-PSD  
**Other Applicable Requirements:**  
**Control Method:** (P) Use of ultra-low sulfur diesel, with a sulfur content < 15 ppm sulfur.  
**Est. % Efficiency:**  
**Cost Effectiveness:** 0 \$/ton  
**Incremental Cost Effectiveness:** 0 \$/ton  
**Compliance Verified:** Unknown  
**Pollutant/Compliance Notes:** Use of ultra-low sulfur diesel represents BACT.

**POLLUTANT NAME:** Carbon Dioxide Equivalent (CO2e)  
**CAS Number:** CO2e  
**Test Method:** Unspecified  
**Pollutant Group(s):** ( Greenhouse Gasses (GHG) )  
**Emission Limit 1:** 508.0000 TONS/YEAR  
**Emission Limit 2:**  
**Standard Emission:**

**Did factors, other than air pollution technology considerations influence the BACT decisions:** U

**Case-by-Case Basis:** BACT-PSD  
**Other Applicable Requirements:**  
**Control Method:** (N)  
**Est. % Efficiency:**  
**Cost Effectiveness:** 0 \$/ton  
**Incremental Cost Effectiveness:** 0 \$/ton  
**Compliance Verified:** Unknown  
**Pollutant/Compliance Notes:** Limit 1 is applicable to each engine.

**POLLUTANT NAME:** Sulfuric Acid (mist, vapors, etc)  
**CAS Number:** 7664-93-9  
**Test Method:** Unspecified

**Pollutant Group(s):** ( InOrganic Compounds , Particulate Matter (PM) )  
**Emission Limit 1:**  
**Emission Limit 2:**  
**Standard Emission:**  
**Did factors, other than air pollution technology considerations influence the BACT decisions:** U  
**Case-by-Case Basis:** BACT-PSD  
**Other Applicable Requirements:**  
**Control Method:** (P) Use of ultra-low sulfur diesel, with a sulfur content < 15 ppm sulfur.  
**Est. % Efficiency:**  
**Cost Effectiveness:** 0 \$/ton  
**Incremental Cost Effectiveness:** 0 \$/ton  
**Compliance Verified:** Unknown  
**Pollutant/Compliance Notes:** Use of ultra-low sulfur diesel represents BACT.

Process/Pollutant Information
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**PROCESS NAME:** Fire Water Pump Engine  
**Process Type:** 17.210 (Fuel Oil (ASTM # 1,2, includes kerosene, aviation, diesel fuel))  
**Primary Fuel:** Ultra-Low Sulfur Diesel  
**Throughput:** 320.00 horsepower  
**Process Notes:** The fire water pump engine will power the pump in the plant's fire water system

**POLLUTANT NAME:** Nitrogen Oxides (NOx)  
**CAS Number:** 10102  
**Test Method:** Unspecified  
**Pollutant Group(s):** ( InOrganic Compounds , Oxides of Nitrogen (NOx) , Particulate Matter (PM) )  
**Emission Limit 1:** 4.0000 GRAMS KILOWATT-HOUR  
**Emission Limit 2:**  
**Standard Emission:**  
**Did factors, other than air pollution technology considerations influence the BACT decisions:** U  
**Case-by-Case Basis:** BACT-PSD  
**Other Applicable Requirements:** NSPS  
**Control Method:** (N)  
**Est. % Efficiency:**  
**Cost Effectiveness:** 0 \$/ton  
**Incremental Cost Effectiveness:** 0 \$/ton  
**Compliance Verified:** Unknown  
**Pollutant/Compliance Notes:** Limit 1 includes non-methane hydrocarbons (NMHC), i.e., NOx + NMHC, consistent with the NSPS, 40 CFR 60 Subpart III.

**POLLUTANT NAME:** Carbon Monoxide  
**CAS Number:** 630-08-0  
**Test Method:** Unspecified  
**Pollutant Group(s):** ( InOrganic Compounds )  
**Emission Limit 1:** 3.5000 GRAMS KILOWATT-HOUR  
**Emission Limit 2:**  
**Standard Emission:**  
**Did factors, other than air pollution technology considerations influence the BACT decisions:** U  
**Case-by-Case Basis:** BACT-PSD  
**Other Applicable Requirements:** NSPS  
**Control Method:** (N)  
**Est. % Efficiency:**  
**Cost Effectiveness:** 0 \$/ton  
**Incremental Cost Effectiveness:** 0 \$/ton  
**Compliance Verified:** Unknown  
**Pollutant/Compliance Notes:** Emission Limit 1 is consistent with the NSPS, 40 CFR 60 Subpart III.

**POLLUTANT NAME:** Particulate matter, total (TPM)

**CAS Number:** PM  
**Test Method:** Unspecified  
**Pollutant Group(s):** ( Particulate Matter (PM) )  
**Emission Limit 1:** 0.2000 GRAMS KILOWATT-HOUR  
**Emission Limit 2:**  
**Standard Emission:**  
**Did factors, other than air pollution technology considerations influence the BACT decisions:** U  
**Case-by-Case Basis:** BACT-PSD  
**Other Applicable Requirements:** NSPS  
**Control Method:** (N)  
**Est. % Efficiency:**  
**Cost Effectiveness:** 0 \$/ton  
**Incremental Cost Effectiveness:** 0 \$/ton  
**Compliance Verified:** Unknown  
**Pollutant/Compliance Notes:** Emission Limit 1 includes PM10 and PM2.5, i.e., PM/PM10/PM2.5.

**POLLUTANT NAME:** Sulfur Dioxide (SO<sub>2</sub>)  
**CAS Number:** 7446-09-5  
**Test Method:** Unspecified  
**Pollutant Group(s):** ( InOrganic Compounds , Oxides of Sulfur (SO<sub>x</sub>) )  
**Emission Limit 1:**  
**Emission Limit 2:**  
**Standard Emission:**  
**Did factors, other than air pollution technology considerations influence the BACT decisions:** U  
**Case-by-Case Basis:** BACT-PSD  
**Other Applicable Requirements:**  
**Control Method:** (P) Use of ultra-low sulfur diesel, with a sulfur content < 15 ppm sulfur.  
**Est. % Efficiency:**  
**Cost Effectiveness:** 0 \$/ton  
**Incremental Cost Effectiveness:** 0 \$/ton  
**Compliance Verified:** Unknown  
**Pollutant/Compliance Notes:** Use of ultra-low sulfur diesel represents BACT.

**POLLUTANT NAME:** Sulfuric Acid (mist, vapors, etc)  
**CAS Number:** 7664-93-9  
**Test Method:** Unspecified  
**Pollutant Group(s):** ( InOrganic Compounds , Particulate Matter (PM) )  
**Emission Limit 1:**  
**Emission Limit 2:**  
**Standard Emission:**  
**Did factors, other than air pollution technology considerations influence the BACT decisions:** U  
**Case-by-Case Basis:** BACT-PSD  
**Other Applicable Requirements:**  
**Control Method:** (P) Use of ultra-low sulfur diesel, with a sulfur content < 15 ppm sulfur.  
**Est. % Efficiency:**  
**Cost Effectiveness:** 0 \$/ton  
**Incremental Cost Effectiveness:** 0 \$/ton  
**Compliance Verified:** Unknown  
**Pollutant/Compliance Notes:** Use of ultra-low sulfur diesel represents BACT.

**POLLUTANT NAME:** Carbon Dioxide Equivalent (CO<sub>2</sub>e)  
**CAS Number:** CO<sub>2</sub>e  
**Test Method:** Unspecified  
**Pollutant Group(s):** ( Greenhouse Gasses (GHG) )  
**Emission Limit 1:** 92.0000 TONS/YEAR  
**Emission Limit 2:**  
**Standard Emission:**  
**Did factors, other than air pollution technology considerations influence the BACT decisions:** U

**Case-by-Case Basis:** BACT-PSD  
**Other Applicable Requirements:**  
**Control Method:** (N)  
**Est. % Efficiency:**  
**Cost Effectiveness:** 0 \$/ton  
**Incremental Cost Effectiveness:** 0 \$/ton  
**Compliance Verified:** Unknown  
**Pollutant/Compliance Notes:**

Process/Pollutant Information
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**PROCESS NAME:** Natural Gas Piping and Piping Components  
**Process Type:** 50.007 (Petroleum Refining Equipment Leaks/Fugitive Emissions)  
**Primary Fuel:**  
**Throughput:** 0  
**Process Notes:** Methane may leak from piping components, such as flanges, valves, etc.

**POLLUTANT NAME:** Methane  
**CAS Number:** 74-82-8  
**Test Method:** Unspecified  
**Pollutant Group(s):** ( Greenhouse Gasses (GHG) , Organic Compounds (all) , Organic Non-HAP Compounds )  
**Emission Limit 1:** 1.5300 TONS/YEAR  
**Emission Limit 2:**  
**Standard Emission:**

**Did factors, other than air pollution technology considerations influence the BACT decisions:** N

**Case-by-Case Basis:** BACT-PSD

**Other Applicable Requirements:**

**Control Method:** (P) Leakless valves and pumps where possible, otherwise high-quality components; non-instrumental leak detection and repair (LDAR) (e.g., auditory, visual and olfactory inspections monthly); instrument-based LDAR (e.g., optical gas imaging); and 40 CFR 60 Subpart OOOOa as relevant.

**Est. % Efficiency:**

**Cost Effectiveness:** 0 \$/ton

**Incremental Cost Effectiveness:** 0 \$/ton

**Compliance Verified:** Unknown

**Pollutant/Compliance Notes:** Emission Limit 1 is a permit limit, not a BACT limit.

Process/Pollutant Information
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**PROCESS NAME:** Circuit Breakers  
**Process Type:** 99.999 (Other Miscellaneous Sources)  
**Primary Fuel:**  
**Throughput:** 0  
**Process Notes:** Electrical switchgear includes circuit breakers that use gaseous sulfur hexafluoride (SF6) as a dielectric or insulating material. Emissions may result from SF6 leaks.

**POLLUTANT NAME:** Sulfur Hexafluoride  
**CAS Number:** 2551-62-4  
**Test Method:** Unspecified  
**Pollutant Group(s):** ( Greenhouse Gasses (GHG) )  
**Emission Limit 1:** 0.5000 PERCENT LEAK RATE 12-MONTH ROLLING AVERAGE  
**Emission Limit 2:** 12.0000 POUNDS/YEAR 12-MONTH ROLLING AVERAGE  
**Standard Emission:**

**Did factors, other than air pollution technology considerations influence the BACT decisions:** U

**Case-by-Case Basis:** BACT-PSD

**Other Applicable Requirements:**

**Control Method:** (N)

**Est. % Efficiency:**

**Cost Effectiveness:** 0 \$/ton



**Incremental Cost Effectiveness:** 0 \$/ton  
**Compliance Verified:** Unknown  
**Pollutant/Compliance Notes:** BACT also includes implementation of a Leak Detection and Repair (LDAR) program, systematic operations tracking and procedures for quantification of GHG pursuant to 40 CFR 98 Subpart DD.

**Process/Pollutant Information**

**PROCESS NAME:** Roadways  
**Process Type:** 99.140 (Paved Roads)  
**Primary Fuel:**  
**Throughput:** 0  
**Process Notes:** Roadways will serve trucks delivering bulk materials (e.g., selective catalytic reduction (SCR) reagent)

**POLLUTANT NAME:** Particulate matter, total (TPM)  
**CAS Number:** PM  
**Test Method:** Unspecified  
**Pollutant Group(s):** ( Particulate Matter (PM) )  
**Emission Limit 1:** 10.0000 PERCENT OPACITY FROM FUGITIVE EMISSIONS  
**Emission Limit 2:**  
**Standard Emission:**

**Did factors, other than air pollution technology considerations influence the BACT decisions:** U

**Case-by-Case Basis:** BACT-PSD

**Other Applicable Requirements:**

**Control Method:** (N)

**Est. % Efficiency:**

**Cost Effectiveness:** 0 \$/ton

**Incremental Cost Effectiveness:** 0 \$/ton

**Compliance Verified:** Unknown

**Pollutant/Compliance Notes:** All roadways subject to regular travel must be paved. Must also implement a Fugitive Dust Program, including such measures as sweeping, water spray and prompt cleanups.

Previous Page

**Facility Information**

<b>RBLC ID:</b>	IN-0353 (draft)	<b>Date Determination</b>	
		<b>Last Updated:</b>	09/07/2022
<b>Corporate/Company Name:</b>		<b>Permit Number:</b>	039-45277-00946
<b>Facility Name:</b>	FOREST RIVER, INC. PLANT 508	<b>Permit Date:</b>	07/28/2022 (actual)
<b>Facility Contact:</b>	WILLIAM CONWAY, JR. (574) 534-6913	<b>FRS Number:</b>	Not Found
<b>Facility Description:</b>		<b>SIC Code:</b>	3792
<b>Permit Type:</b>	U: Unspecified	<b>NAICS Code:</b>	336214
<b>Permit URL:</b>		<b>COUNTRY:</b>	USA
<b>EPA Region:</b>	5		
<b>Facility County:</b>	ELKHART		
<b>Facility State:</b>	IN		
<b>Facility ZIP Code:</b>	46516		
<b>Permit Issued By:</b>	INDIANA DEPT OF ENV MGMT, OFC OF AIR (Agency Name) MR. MATT STUCKEY(Agency Contact) (317) 233-0203 mstuckey@idem.in.gov		
<b>Permit Notes:</b>			

**Process/Pollutant Information**

**PROCESS NAME:** RV Assembly (EU-01)  
**Process Type:** 49.999 (Other Organic Evaporative Loss Sources)

**Primary Fuel:**

**Throughput:** 2.75 vehicles/hr

**Process Notes:**

**POLLUTANT NAME:** Volatile Organic Compounds (VOC)  
**CAS Number:** VOC  
**Test Method:** Unspecified  
**Pollutant Group(s):** ( Volatile Organic Compounds (VOC) )  
**Emission Limit 1:** 75.0000 TONS PER TWELVE (12) CONSECUTIVE MONTH PERIOD  
**Emission Limit 2:** 6.6000 POUNDS VOC PER GALLON OF COATING  
**Standard Emission:**  
**Did factors, other than air pollution technology considerations influence the BACT decisions:** U  
**Case-by-Case Basis:** OTHER CASE-BY-CASE  
**Other Applicable Requirements:**  
**Control Method:** (P) Cleaners and solvents limit: 6.6 lbs/gal and use non-HAP based cleaners and solvents; Good housekeeping practices for VOC  
**Est. % Efficiency:**  
**Cost Effectiveness:** 370748 \$/ton  
**Incremental Cost Effectiveness:** 0 \$/ton  
**Compliance Verified:** Unknown  
**Pollutant/Compliance Notes:** The total VOC input for RV assembly operation, identified as EU-1, including the use of sealants, adhesives, lubricant, stains, spray paint, epoxy, and clean-up solvents, shall not exceed seventy five (75) tons per twelve (12) consecutive month period with compliance determined at the end of each month. The cleaners and solvent applied at EU-01 shall not exceed a VOC content of 6.6 pounds of VOC per gallon of coating as applied. All cleaners and solvents that exceed 6.5 pounds of VOC per gallon of coating shall not contain HAPs. (c) Good housekeeping practices to minimize spills and evaporative losses shall be used. This includes: (1) Sealed lids on containers of VOC containing materials not in use or in storage; (2) Gun and line purging of VOC containing cleaning solvents into approved containers and at the minimum cleaning pressure required to prevent excess atomization; (3) Organized spill response and immediate cleanup for spills of VOC containing materials; (4) Disposal of VOC containing materials may not be performed by allowing solvents to evaporate; and (5) Preventive maintenance procedures for application equipment to prevent spills and releases of VOC containing materials.

Previous Page

**Facility Information**

<b>RBLC ID:</b>	AK-0088 (final)	<b>Date Determination</b>	
		<b>Last Updated:</b>	08/16/2022
<b>Corporate/Company Name:</b>	ALASKA GASLINE DEVELOPMENT CORPORATION	<b>Permit Number:</b>	AQ1539CPT01
<b>Facility Name:</b>	LIQUEFACTION PLANT	<b>Permit Date:</b>	07/07/2022 (actual)
<b>Facility Contact:</b>	LISA HAAS LHAAS@AGDC.US	<b>FRS Number:</b>	Not Found
<b>Facility Description:</b>	The Liquefaction Plant is planned to encompass 921 acres, including 901 acres onshore for the liquefied natural gas (LNG) Plant as well as 20 acres offshore for the Marine Terminal. The Liquefaction Plant will be the terminus of an approximately 807-mile gas pipeline, allowing natural gas from Alaska's North Slope to be shipped to outside markets. The stationary source will consist of structures and equipment associated with processing, storage, and loading of LNG. There will be three liquefaction trains combining to process up to approximately 20 million metric tons per annum of LNG.	<b>SIC Code:</b>	4922
<b>Permit Type:</b>	A: New/Greenfield Facility	<b>NAICS Code:</b>	488999
<b>Permit URL:</b>	https://dec.alaska.gov/Applications/Air/airtoolsweb/AirPermitsApprovalsAndPublicNotices		
<b>EPA Region:</b>	10	<b>COUNTRY:</b>	USA
<b>Facility County:</b>	KENAI PENNINSULA BOROUGH		
<b>Facility State:</b>	AK		
<b>Facility ZIP Code:</b>	99635		
<b>Permit Issued By:</b>	ALASKA DEPT OF ENVIRONMENTAL CONS (Agency Name) MR. JIM PLOSAY(Agency Contact) (907) 465-5103 JOHN.KUTERBACH@ALASKA.GOV		
<b>Other Agency Contact Info:</b>	Dave Jones - Permit Writer - dave.jones2@alaska.gov		
<b>Permit Notes:</b>			

<b>Affected Boundaries:</b>	<b>Boundary Type:</b>	<b>Class 1 Area State:</b>	<b>Boundary:</b>	<b>Distance:</b>
	CLASS1	AK	Denali NP	100km - 50km
	CLASS1	AK	Tuxedni	< 100 km

<b>Facility-wide Emissions:</b>	<b>Pollutant Name:</b>	<b>Facility-wide Emissions Increase:</b>
	Carbon Monoxide	11891.0000 (Tons/Year)
	Nitrogen Oxides (NOx)	2793.0000 (Tons/Year)
	Particulate Matter (PM)	1303.0000 (Tons/Year)
	Sulfur Oxides (SOx)	183.0000 (Tons/Year)
	Volatile Organic Compounds (VOC)	24657.0000 (Tons/Year)

Process/Pollutant Information
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**PROCESS NAME:** Six Simle Cycle Gas-Fired Turbines

**Process Type:** 15.110 (Natural Gas (includes propane & liquified petroleum gas))

**Primary Fuel:** Natural Gas

**Throughput:** 1113.00 MMBtu/hr

**Process Notes:** EUs 1 - 6 are simple cycle gas turbines used for gas compression at LNG facility

**POLLUTANT NAME:** Carbon Monoxide

**CAS Number:** 630-08-0

**Test Method:** Unspecified

**Pollutant Group(s):** ( InOrganic Compounds )

**Emission Limit 1:** 5.0000 PPMV @ 15% O2 3-HOURS

**Emission Limit 2:**

**Standard Emission:**

**Did factors, other then air pollution technology considerations influence the BACT decisions:** U

**Case-by-Case Basis:** BACT-PSD

**Other Applicable Requirements:**

**Control Method:** (A) Oxidation Catalyst and good combustion practices

**Est. % Efficiency:**

**Cost Effectiveness:** 0 \$/ton

**Incremental Cost Effectiveness:** 0 \$/ton

**Compliance Verified:** Unknown

**Pollutant/Compliance Notes:** Allowed 40 hours per year per turbine of operation without SCR and OxCat.

**POLLUTANT NAME:** Carbon Dioxide Equivalent (CO2e)

**CAS Number:** CO2e

**Test Method:** Unspecified

**Pollutant Group(s):** ( Greenhouse Gasses (GHG) )

**Emission Limit 1:** 117.1000 LB/MMBTU 3-HOURS

**Emission Limit 2:**

**Standard Emission:**

**Did factors, other then air pollution technology considerations influence the BACT decisions:** U

**Case-by-Case Basis:** BACT-PSD

**Other Applicable Requirements:**

**Control Method:** (P) Good combustion practices and burning clean fuels (natural gas)

**Est. % Efficiency:**

**Cost Effectiveness:** 0 \$/ton

**Incremental Cost Effectiveness:** 0 \$/ton

**Compliance Verified:** Unknown

**Pollutant/Compliance Notes:**

**POLLUTANT NAME:** Nitrogen Oxides (NOx)

**CAS Number:** 10102

**Test Method:** Unspecified

**Pollutant Group(s):** ( InOrganic Compounds , Oxides of Nitrogen (NOx) , Particulate Matter (PM) )

**Emission Limit 1:** 2.0000 PPMV @ 15% O2 3-HOURS

**Emission Limit 2:**

**Standard Emission:**

**Did factors, other then air pollution technology considerations influence the BACT decisions:** U

**Case-by-Case Basis:** BACT-PSD  
**Other Applicable Requirements:** NSPS  
**Control Method:** (A) SCR, DLN combustors, and good combustion practices  
**Est. % Efficiency:**  
**Cost Effectiveness:** 0 \$/ton  
**Incremental Cost Effectiveness:** 0 \$/ton  
**Compliance Verified:** Unknown  
**Pollutant/Compliance Notes:** Allowed 40 hours per year per turbine of operation without SCR and OxCat.

**POLLUTANT NAME:** Particulate matter, total (TPM)  
**CAS Number:** PM  
**Test Method:** Unspecified  
**Pollutant Group(s):** ( Particulate Matter (PM) )  
**Emission Limit 1:** 0.0070 LB/MMBTU 3-HOURS  
**Emission Limit 2:** 10.0000 % OPACITY 6 CONSECUTIVE MINUTES  
**Standard Emission:**  
**Did factors, other than air pollution technology considerations influence the BACT decisions:** U  
**Case-by-Case Basis:** BACT-PSD  
**Other Applicable Requirements:**  
**Control Method:** (P) Good combustion practices and burning clean fuel (natural gas)  
**Est. % Efficiency:**  
**Cost Effectiveness:** 0 \$/ton  
**Incremental Cost Effectiveness:** 0 \$/ton  
**Compliance Verified:** Unknown  
**Pollutant/Compliance Notes:**

**POLLUTANT NAME:** Volatile Organic Compounds (VOC)  
**CAS Number:** VOC  
**Test Method:** Unspecified  
**Pollutant Group(s):** ( Volatile Organic Compounds (VOC) )  
**Emission Limit 1:** 2.0000 PPMV @ 15% O2 3-HOURS  
**Emission Limit 2:**  
**Standard Emission:**  
**Did factors, other than air pollution technology considerations influence the BACT decisions:** U  
**Case-by-Case Basis:** BACT-PSD  
**Other Applicable Requirements:**  
**Control Method:** (A) Oxidation catalyst and good combustion practices  
**Est. % Efficiency:**  
**Cost Effectiveness:** 0 \$/ton  
**Incremental Cost Effectiveness:** 0 \$/ton  
**Compliance Verified:** Unknown  
**Pollutant/Compliance Notes:** Allowed 40 hours per year per turbine of operation without SCR and OxCat.

**POLLUTANT NAME:** Particulate matter, total < 10 µ (TPM10)  
**CAS Number:** PM  
**Test Method:** Unspecified  
**Pollutant Group(s):** ( Particulate Matter (PM) )  
**Emission Limit 1:** 0.0070 LB/MMBTU 3-HOURS  
**Emission Limit 2:** 10.0000 % OPACITY 6 CONSECUTIVE MINUTES  
**Standard Emission:**  
**Did factors, other than air pollution technology considerations influence the BACT decisions:** U  
**Case-by-Case Basis:** BACT-PSD  
**Other Applicable Requirements:**  
**Control Method:** (P) Good combustion practices and burning clean fuel (natural gas)  
**Est. % Efficiency:**  
**Cost Effectiveness:** 0 \$/ton  
**Incremental Cost Effectiveness:** 0 \$/ton  
**Compliance Verified:** Unknown

**Pollutant/Compliance Notes:**

**POLLUTANT NAME:** Particulate matter, total < 2.5  $\mu$  (TPM2.5)  
**CAS Number:** PM  
**Test Method:** Unspecified  
**Pollutant Group(s):** ( Particulate Matter (PM) )  
**Emission Limit 1:** 0.0070 LB/MMBTU 3-HOURS  
**Emission Limit 2:** 10.0000 % OPACITY 6 CONSECUTIVE MINUTES  
**Standard Emission:**  
**Did factors, other than air pollution technology considerations influence the BACT decisions:** U  
**Case-by-Case Basis:** BACT-PSD  
**Other Applicable Requirements:**  
**Control Method:** (P) Good combustion practices and burning clean fuel (natural gas)  
**Est. % Efficiency:**  
**Cost Effectiveness:** 0 \$/ton  
**Incremental Cost Effectiveness:** 0 \$/ton  
**Compliance Verified:** Unknown  
**Pollutant/Compliance Notes:**

**POLLUTANT NAME:** Sulfur Dioxide (SO<sub>2</sub>)  
**CAS Number:** 7446-09-5  
**Test Method:** Unspecified  
**Pollutant Group(s):** ( InOrganic Compounds , Oxides of Sulfur (SO<sub>x</sub>) )  
**Emission Limit 1:** 16.0000 PPMV SULFUR IN FUEL  
**Emission Limit 2:**  
**Standard Emission:**  
**Did factors, other than air pollution technology considerations influence the BACT decisions:** U  
**Case-by-Case Basis:** BACT-PSD  
**Other Applicable Requirements:** NSPS  
**Control Method:**