apcd air pollution control district
SANTA BARBARA COUNTY

05/09/2025

Kimberlee Harding
Vandenberg SFB, Space Launch Delta 30
1028 Iceland Avenue, 30 CES/CEIEC
Vandenberg SFB, CA 93437-6010

FID: 00201
Permit: P7R 13968 R4
SSID: 01195

Re: Part 70 Permit Renewal / Reevaluation Application 13968 R4

Dear Kimberlee Harding:

On May 9, 2025, the Santa Barbara County Air Pollution Control District (District) determined that your application for Part 70 Permit Renewal / Reevaluation (PT-70/Reeval) No. 13968 R4 for the main Part-70 permit reevaluation for Vandenberg Space Force Base was complete. The District will make a decision to either issue or deny a permit for the application within 180 days from the completeness date or 180 days after lead agency approval of the project, whichever time period is longer.

Please be advised that proceeding with the construction of your project without an PT-70/Reeval permit violates District Rule 201 and may result in penalties.

Please include the Facility Identification (FID) and Permit numbers shown above on all correspondence regarding this permit application. If you have any questions, please call me at (805) 979-8313.

Sincerely,

Zachary Akzin, Air Quality Engineer I
Engineering Division

cc: Vandenberg SFB, Space Launch Delta 30 00201 Project File
Engr Chron File

\\sbcapcd.org\shares\Groups\ENGR\WP\VAFB\Reevals\PT-70 13968-R4\PT-70-Reeval 13968 R4 - ATC Completeness - 5-8-2025

DEPARTMENT OF THE AIR FORCE
UNITED STATES SPACE FORCE
SPACE LAUNCH DELTA 30

24 March 2025

MEMORANDUM FOR SANTA BARBARA COUNTY
AIR POLLUTION CONTROL DISTRICT
ATTN: MR. WILLIAM SARRAF

FROM: 30 CES/CEIEC
1028 Iceland Avenue
Vandenberg SFB, CA 93437-6010

SUBJECT: PTO 13968-R3/PT 70 Operating Permit 13968 Title V Renewal Application, FID 0201

1. Vandenberg Space Force Base (VSFB) is submitting the attached Title V Renewal application in accordance with PTO 13968-R3/PT 70 Operating Permit 13968 Condition 9.0.A.11. Please refer to the enclosure for details of the application.

2. The filing fee of $565.00 was submitted by OTIE, the VSFB environmental support contractor. If you have any questions, please do not hesitate to contact me at (805) 606-6863.

HARDING.KIMBERLEE.A.1231723443 Digitally signed by HARDING.KIMBERLEE.A.1231723443 Date: 2025.03.20 10:25:00 -07'00'

KIMBERLEE HARDING, NH-3
Air Quality Program Manager
Installation Management Flight

1 Attachment
PTO 13968-R3/PT 70 Operating Permit 13968 Title V Renewal Application

cc:
Stantec
Permit File

AIR QUALITY PROGRAM
VANDENBERG SPACE FORCE BASE

Vandenberg Space Force Base
PTO 13968-R3/PT 70 Operating Permit 13968
Title V Renewal Application
Contract Number: 47QFWA24A0002
Call Order Number: 47QFWA24F0010

24 March 2025

Prepared for

Office of Primary Responsibility:

30 CES/CEIEC
Air Quality Program Manager
1028 Iceland Avenue
Vandenberg Space Force Base, CA 93437

Prepared by:

Stantec

In association with:

OTIE
An Oneida ESC Group Company

TABLE OF CONTENTS

APPENDICES

TABLES

1.0 SOURCE IDENTIFICATION

1.1 General Permit Application Form - 01

Print Form

air pollution control district
SANTA BARBARA COUNTY

General Permit Application Form -01

Santa Barbara County Air Pollution Control District
260 N. San Antonio Road, Suite A
Santa Barbara, CA 93110-1315

1. APPLICATION TYPE (check all that apply)**:**

- ☐ Authority to Construct (ATC)
- ☐ Permit to Operate (PTO)
- ☐ ATC Modification
- ☐ PTO Modification
- ☒ Other (Specify) Permit Renewal Application
- ☐ Transfer of Owner/Operator (use Form -01T)
- ☐ Emission Reduction Credits
- ☐ Increase in Production Rate or Throughput
- ☐ Decrease in Production Rate or Throughput

Previous ATC/PTO Number (if known) PTO 13968-R3/PT 70 13986

◉ Yes ○ No Are Title 5 Minor Modification Forms Attached? (this applies to Title 5 sources only and applies to all application types except ATCs and Emission Reduction Credits). Complete Title 5 Form -1302 A1/A2, B, and M. Complete Title 5 Form -1302 C1/C2, D1/D2, E1/E2, F1/F2, G1/G2 as appropriate. http://www.ourair.org/wp-content/uploads/t5-forms.pdf

Mail or email the completed application to the APCD's Engineering Division at the address listed above or permits@sbcapcd.org.

2. FILING FEE:

A $565 application filing fee must be included with each application. The application filing fee is COLA-adjusted every July 1st. Please ensure you are remitting the correct current fee (the current fee schedule is available on the APCD's webpage at: http://www.ourair.org/district-fees). This filing fee will not be refunded or applied to any subsequent application. Payment may also be made by credit card by submitting the Credit Card Authorization Form found here https://www.ourair.org/wp-content/uploads/apcd-01c.pdf via mail or calling 805-979-8050 to pay via phone.

Do not submit the Credit Card Authorization Form via email.

3. IS YOUR PROJECT'S PROPERTY BOUNDARY LOCATED OR PROPOSED TO BE LOCATED WITHIN 1,000 FEET FROM THE OUTER BOUNDARY OF A SCHOOL? If yes, and the project results in an emissions increase, submit a completed Form -03 (*School Summary Form*) http://www.ourair.org/wp-content/uploads/apcd-03.pdf ○ Yes ◉ No

If yes, provide the name of school(s)

Address of school(s)

City Zip Code

4. DOES YOUR APPLICATION CONTAIN CONFIDENTIAL INFORMATION? ○ Yes ◉ No

If yes, please submit with a redacted duplicate application which shall be a public document. In order to be protected from disclosure to the public, all information claimed as confidential shall be submitted in accordance with APCD Policy & Procedure 6100-020 (*Handling of Confidential Information*): http://www.ourair.org/wp-content/uploads/6100-020.pdf, and meet the criteria of CA Govt Code Sec 6254.7. Failure to follow required procedures for submitting confidential information, or to declare it as confidential at the time of application, shall be deemed a waiver by the applicant of the right to protect such information from public disclosure. *Note: Part 70 permit applications may contain confidential information in accordance with the above procedures, however, the content of the permit documents must be public (no redactions).*

FOR APCD USE ONLY				DATE STAMP
FID		Permit No.		
Project Name				
Filing Fee			202.E? YES / NO	

5. COMPANY/CONTACT INFORMATION:

Owner Info	(●) Yes ( ) No	Use as Billing Contact?	
Company Name	The United States Space Force, Vandenberg Space Force Base, Space Launch Delta 30		
Doing Business As			
Contact Name	Darryl L. York	Position/Title	Chief, Environmental Section
Mailing Address	1028 Iceland Avenue, Building 11146		
City	Vandenberg Space Force Base	State CA	Zip Code 93437
Telephone	805-605-2015	Cell	Email darryl.york@spaceforce.mil

Operator Info	( ) Yes (●) No	Use as Billing Contact?	
Company Name	The United States Space Force, Vandenberg Space Force Base, 30 CES/CEIEC		
Doing Business As			
Contact Name	Kimberlee Harding	Position/Title	Air Quality Program Manager
Mailing Address	1028 Iceland Avenue		
City	Vandenberg Space Force Base	State CA	Zip Code 93437
Telephone	805-606-6863	Cell	Email kimberlee.harding@spaceforce.mil

Authorized Agent Info*	( ) Yes (●) No	Use as Billing Contact?	
Company Name			
Doing Business As			
Contact Name		Position/Title	
Mailing Address			
City		State	Zip Code
Telephone		Cell	Email

*Use this section if the application is not submitted by the owner/operator. Complete APCD Form -01A (http://www.ourair.org/wp-content/uploads/apcd-01a.pdf). Owner/Operator information above is still required.

SEND PERMITTING CORRESPONDENCE TO *(check all that apply)*:

- [x] Owner
- [ ] Operator
- [ ] Authorized Agent
- [ ] Other (attach mailing information)

6. GENERAL NATURE OF BUSINESS OR AGENCY:

National Defense

7. EQUIPMENT LOCATION (Address):

Specify the street address of the proposed or actual equipment location. If the location does not have a designated address, please specify the location by cross streets, or lease name, UTM coordinates, or township, range, and section.

Equipment Address: 747 Nebraska Avenue

City: Vandenberg Space Force Base State: CA Zip Code: 93437

Work Site Phone:

○ Incorporated (within city limits) ◉ Unincorporated (outside city limits) ○ Used at Various Locations

Assessors Parcel No(s):

8. PROJECT DESCRIPTION:

(Describe the equipment to be constructed, modified and/or operated or the desired change in the existing permit. Attach a separate page if needed):

This application is for the renewal of PTO 13968-R3/PT 70 13968

9. DO YOU REQUIRE A LAND USE PERMIT OR OTHER LEAD AGENCY PERMIT FOR THE PROJECT DESCRIBED IN THIS APPLICATION?: ○ Yes ◉ No

A. If **yes,** please provide the following information

Agency Name	Permit #	Phone #	Permit Date

* The lead agency is the public agency that has the principal discretionary authority to approve a project. The lead agency is responsible for determining whether the project will have a significant effect on the environment and determines what environmental review and environmental document will be necessary. The lead agency will normally be a city or county planning agency or similar, rather than the Air Pollution Control District.

B. If **yes,** has the lead agency permit application been deemed complete and is a copy of their completeness letter attached?

○ Yes ○ No

Please note that the APCD will not deem your application complete until the lead agency application is deemed complete.

C. If the lead agency permit application has not been deemed complete, please explain.

D. A copy of the final lead agency permit or other discretionary approval by the lead agency may be requested by the APCD as part of our completeness review process.

10. PROJECT STATUS:

A. Date of Equipment Installation: NA

B. Have you been issued a Notice of Violation (NOV) for not obtaining a permit for this equipment/modification *and/or* have you installed this equipment without the required APCD permit(s)? If yes, the application filing is double per Rule 210. ○ Yes ◉ No

C. Is this application being submitted due to the loss of a Rule 202 exemption? ○ Yes ◉ No

D. Will this project be constructed in multiple phases? If yes, attach a separate description of the nature and extent of each project phase, including the associated timing, equipment and emissions. ○ Yes ◉ No

E. Is this application also for a change of owner/operator? If yes, please also include a completed APCD Form -01T. ○ Yes ◉ No

11. APPLICANT/PREPARER STATEMENT:

The person who prepares the application also must sign the permit application. The preparer may be an employee of the owner/operator or an authorized agent (contractor/consultant) working on behalf of the owner/operator (an *Authorized Agent Form -01A* is required).

I certify pursuant to H&SC Section 42303.5 that all information contained herein and information submitted with this application is true and correct.

Signature of application preparer	Date
HARDING.KIMBERLEE.A.1231723443 Digitally signed by HARDING.KIMBERLEE.A.1231723443 Date: 2025.01.10 13:04:38 -08'00'	Jan 10, 2025
Print name of application preparer	Employer name
Kimberlee Harding	Vandenberg Space Force Base

12. APPLICATION CHECKLIST (*check all that apply*)

☒ Application Filing Fee (Fee = $565. The application filing fee is COLA adjusted every July 1st. Please ensure you are remitting the current fee.) As a convenience to applicants, the APCD will accept credit card payments. If you wish to use this payment option, please complete a *Credit Card Form-01C* https://www.ourair.org/wp-content/uploads/apcd-01c.pdf and submit it via mail or call 805-979-8050 to pay over the phone. **Do not submit the *Credit Card Form-01C* via email**.

☐ Existing permitted sources may request that the filing fee be deducted from their current reimbursable deposits by checking this box. Please deduct the filing fee from my existing reimbursement account.

☐ Form -01T (*Transfer of Owner/Operator*) attached if this application also addresses a change in owner and/or operator status from what is listed on the current permit. http://www.ourair.org/wp-content/uploads/apcd-01t.pdf

☐ Form -03 (*School Summary Form*) attached if the project's property boundary is within 1,000 feet of the outer boundary of a school (k-12) and the project results in an emissions increase. http://www.ourair.org/wp-content/uploads/apcd-03.pdf

☐ Information required by the APCD for processing the application as identified in APCD Rule 204 (*Applications*), the APCD's *General APCD Information Requirements List* (https://www.ourair.org/wp-content/uploads/gen-info.pdf), and any of the APCD's Process/Equipment Summary Forms (http://www.ourair.org/permit-applications) that apply to the project.

☐ Form -01A (*Authorized Agent Form*) attached if this application was prepared by and/or if correspondence is requested to be sent to an Authorized Agent (e.g., contractor or consultant). This form must accompany each application. http://www.ourair.org/wp-content/uploads/apcd-01a.pdf

☐ Confidential Information submitted according to APCD Policy & Procedure 6100-020. (*Failure to follow Policy and Procedure 6100-020 is a waiver of right to claim information as confidential.*)

13. NOTICE OF CERTIFICATION:

All applicants must complete the following Notice of Certification. This certification must be signed by the Authorized Company Representative representing the owner/operator. Signatures by Authorized Agents will not be accepted.

NOTICE of CERTIFICATION

I, Mark A. Shoemaker, Colonel, USSF , am employed by or represent

Type or Print Name of Authorized Company Representative

Space Launch Delta 30, Vandenberg Space Force Base

Type or Print Name of Business, Corporation, Company, Individual, or Agency

(hereinafter referred to as the applicant), and certify pursuant to H&SC Section 42303.5 that all information contained herein and information submitted with this application is true and correct and the equipment listed herein complies or can be expected to comply with said rules and regulations when operated in the manner and under the circumstances proposed. If the project fees are required to be funded by the cost reimbursement basis, as the responsible person, I agree that I will pay the Santa Barbara County Air Pollution Control District the actual recorded cost, plus administrative cost, incurred by the APCD in the processing of the application within 30 days of the billing date. If I withdraw my application, I further understand that I shall inform the APCD in writing and I will be charged for all costs incurred through closure of the APCD files on the project.

For applications submitted for Authority to Construct, modifications to existing Authority to Construct, and Authority to Construct/Permit to Operate permits, I hereby certify that all major stationary sources in the state and all stationary sources in the air basin which are owned or operated by the applicant, or by an entity controlling, controlled by, or under common control with the applicant, are in compliance, or are on approved schedule for compliance with all applicable emission limitations and standards under the Clean Air Act (42 USC 7401 *et seq.*) and all applicable emission limitations and standards which are part of the State Implementation Plan approved by the Environmental Protection Agency.

Completed By: Mark A. Shoemaker, Colonel, USSF Title: Commander, Space Launch Delta 30

Date: Feb 13, 2025 Phone: 805-606-3000

Signature of Authorized Company Representative SHOEMAKER.MARK.A.1077726418 Digitally signed by SHOEMAKER.MARK.A.1077726418 Date: 2025.02.13 13:03:11 -08'00'

PLEASE NOTE THAT FAILURE TO COMPLETELY PROVIDE ALL REQUIRED INFORMATION OR FEES WILL RESULT IN YOUR APPLICATION BEING RETURNED OR DEEMED INCOMPLETE.

1.2 Stationary Source Summary (Form 1302-A1)

STATIONARY SOURCE SUMMARY
(Form 1302-A1)

APCD: Santa Barbara County Air Pollution Control District
COMPANY NAME: Space Launch Delta 30, Vandenberg Space Force Base

➢ APCD USE ONLY ➣

APCD IDS Processing ID:

Application #: **Date Application Received:**

Application Filing Fee*: **Date Application Deemed Complete:**

I. SOURCE IDENTIFICATION

1. Source Name: Vandenberg Space Force Base
2. Four digit SIC Code: 9711 USEPA AIRS Plant ID (for APCD use only):
3. Parent Company (if different than Source Name):
4. Mailing Address of Responsible Official: 747 Nebraska Ave, Ste A302, Vandenberg SFB CA 93437
5. Street Address of Source Location (include Zip Code): Same as above
6. UTM Coordinates (if required) (see instructions):
7. Source located within: 50 miles of the state line [ ] Yes [X] No
   50 miles of a Native American Nation [X] Yes [ ] No [ ] Not Applicable
8. Type of Organization: [ ] Corporation [ ] Sole Ownership [X] Government
   [ ] Partnership [ ] Utility Company
9. Legal Owner's Name: Space Launch Delta 30
10. Owner's Agent Name (if any): Title: Telephone #:
11. Responsible Official: Colonel Mark A. Shoemaker Title: Commander, Space Launch Delta 30 Telephone #: (805) 606-3000
12. Plant Site Manager/Contact: Darryl L. York Title: Chief, Environmental Section Telephone #: (805) 605-2015
13. Type of facility: Military Installation
14. General description of processes/products: The Vandenberg Space Force Base stationary source is comprised primarily of internal and external combustion sources, conventional and exotic fuel transfer and storage operations, abrasive blasting and surface coating operations, and processes involving solvent usage.
15. Does your facility store, or otherwise handle, greater than threshold quantities of any substance on the Section 112(r) List of Substances and their Thresholds (see Attachment A)? [X] Yes [ ] No
16. Is a Federal Risk Management Plan [pursuant to Section 112(r)] required? [ ] Not Applicable [X] Yes [ ] No
    (If yes, attach verification that Risk Management Plan is registered with appropriate agency or description of status of Risk Management Plan submittal.)

* Applications submitted without a filing fee will be returned to the applicant immediately as "improper" submittals

Risk Management Plan (RMP) submission has been CERTIFIED

From
RMP*eSubmit
Date
9/12/2023 10:22:41 AM

Your Risk Management Plan (RMP) submission has been PREPARED, CERTIFIED and SENT to U.S. EPA for the facility shown below.

If you require assistance please contact the RMP Reporting Center at 703-227-7650 or RMPRC@epacdx.net.

Reference Transaction ID:	37386
Prepared by:	Mark Kaschmitter (MKASCHMIT)
Date Submitted:	09/05/2023
Certifying Official:	(VANDENBERG)
Certifier's Email:	joseph.naputi@spaceforce.mil
Date Certified and Sent to EPA:	09/12/2023
Submission Type:	Resubmission
5 Year Anniversary Date:	09/12/2028

This is the date by which your next full RMP re-submission must be completed, unless you must re-submit earlier due to changes in your regulated process(es) (see 40 CFR Part 68.190(b)). If you have submitted an RMP correction, your 5-year anniversary date has not changed. RMP corrections are used for minor administrative changes, and do not reset a facility's 5-year anniversary date.

EPA Facility ID: 1000 0006 4431

Facility:
Vandenberg SFB
1028 Iceland Avenue
Vandenberg SFB, CA 93437

You may wish to print a copy of this receipt and keep it for your records.
Do NOT send this receipt to EPA.

DEPARTMENT OF THE AIR FORCE
UNITED STATES SPACE FORCE
SPACE LAUNCH DELTA 30

Risk Management Plan
Vandenberg Space Force Base

To the best of the undersigned's knowledge, information, and belief formed after reasonable inquiry, the information submitted is true, accurate, and complete. This update certifies that owner/operator has evaluated compliance with the provisions of Title 19, Chapter 4.5, Article 6 of the California Code of Regulation.

DAN ALDRIDGE
Aerospace Support Services Contract Program Manager

ALDRIDGE.DANNY.E.1280285478
Digitally signed by ALDRIDGE.DANNY.E.1280285478
Date: 2023.09.08 14:12:33 -07'00'
Operator Signature/Date

BEATRICE L. KEPHART
Chief, Installation Management Flight

KEPHART.BEATRICE.LINDA.1166122291
Digitally signed by KEPHART.BEATRICE.LINDA.1166122291
Date: 2023.09.11 10:42:42 -07'00'
Certifier Signature/Date

1.3 Stationary Source Summary (Form 1302-A2)

STATIONARY SOURCE SUMMARY
(Form 1302-A2)

APCD:	➢ APCD USE ONLY ≺
Santa Barbara County Air Pollution Control District	APCD IDS Processing ID:
COMPANY NAME: Space Launch Delta 30	**SOURCE NAME:** Vandenberg Space Force Base

II. TYPE OF PERMIT ACTION

	CURRENT PERMIT (permit number)	EXPIRATION (date)
☐ **Initial SBCAPCD's Regulation XIII Application**		
☒ **Permit Renewal**	PT 70 13968-R3	01 October 2025
☐ **Significant Permit Revision***		
☐ **Minor Permit Revision***		
☐ **Administrative Amendment**		

III. DESCRIPTION OF PERMIT ACTION

1. Does the permit action requested involve: a: [ ] Portable Source [ ] Voluntary Emissions Caps
   [ ] Acid Rain Source [ ] Alternative Operating Scenarios
   [ ] Source Subject to MACT Requirements [Section 112]

   b: [x] None of the options in 1.a. are applicable

2. Is source operating under a Title V Program Compliance Schedule? [ ] Yes [X] No

3. For permit modifications, provide a general description of the proposed permit modification:

The application is for the re-evaluation and renewal of Part 70 Permit to Operate 13968.

*Requires APCD-approved NSR permit prior to a permit revision submittal

1.4 Total Stationary Source Emissions (Form 1302-B)

:

► APCD USE ONLY ◄

Barbara County Air Pollution Control District

APCD IDS Processing ID:

PANY NAME: Vandenberg Space Force Base

SOURCE NAME: Vandenberg Space Force Base

OTAL STATIONARY SOURCE EMISSIONS

ovide a brief description of operating scenario: Potential to Emit.

UTANT*)	EMISSIONS (tons per year)		PRE-MODIFICATION EMISSIONS (tons per year)		EMISSIONS CHANGE (tons per year)
	103.88		123.22		-19.34
	32.92		32.79		0.13
	14.25		14.88		-0.63
	14.25		14.88		-0.63
	14.25		14.88		-0.63
	57.98		57.02		0.96
	5.13		5.13		0.00
(see below)	4.38		4.35		0.03
dehyde	Turbines	0.01	Turbines	0.01	0.00
	Diesel IC Engines	0.07	Diesel IC Engines	0.06	0.01
	Total	**0.08**	**Total**	**0.07**	**0.01**
in	Diesel IC Engines	0.00	Diesel IC Engines	0.00	0.00
nitrile					
c	Diesel IC Engines	0.00	Diesel IC Engines	0.00	0.00
	Diesel IC Engines	0.01	Diesel IC Engines	0.01	0.00
ne	Solvent Usage	0.21	Solvent Usage	0.21	0.00
	Mobile Vehicle Fueling	0.07	Mobile Vehicle Fueling	0.07	0.00
	Total	**0.29**	**Total**	**0.29**	**0.00**
um					
tadiene	Diesel IC Engines	0.02	Diesel IC Engines	0.02	0.00
ium	Diesel IC Engines	0.00	Diesel IC Engines	0.00	0.00
n disulfide					
n tetrachloride					
nyl sulfide					
obenzene	Diesel IC Engines	0.00	Diesel IC Engines	0.00	0.00
oform					
nium	Diesel IC Engines	0.00	Diesel IC Engines	0.00	0.00
robenzene					
methyl Hydrazine	Scrubber	0.03	Scrubber	0.03	0.00
	Turbines	0.01	Turbines	0.01	0.00
	Coatings	0.08	Coatings	0.08	0.00
enzene	Diesel IC Engines	0.00	Diesel IC Engines	0.00	0.00
	Mobile Vehicle Fueling	0.05	Mobile Vehicle Fueling	0.05	0.00
	Total	**0.14**	**Total**	**0.14**	**0.00**
Chloride					
ne Dichloride					
dene Dichloride					
	Turbines	0.19	Turbines	0.19	0.00
ldehyde	Diesel IC Engines	0.14	Diesel IC Engines	0.13	0.01
	Total	**0.33**	**Total**	**0.32**	**0.01**
Ethers	Coatings	0.43	Coatings	0.43	0.00
	Diesel IC Engines	0.01	Diesel IC Engines	0.01	0.00
	Diesel IC Engines	0.00	Diesel IC Engines	0.00	0.00
e	Mobile Vehicle Fueling	0.04	Mobile Vehicle Fueling	0.04	0.00
	Total	**0.04**	**Total**	**0.04**	**0.00**
zine	Scrubber	0.03	Scrubber	0.03	0.00
	Diesel IC Engines	0.00	Diesel IC Engines	0.00	0.00
	Diesel IC Engines	0.00	Diesel IC Engines	0.00	0.00
anese	Turbines	0.01	Turbines	0.01	0.00
	Total	**0.01**	**Total**	**0.01**	**0.00**
ry	Diesel IC Engines	0.00	Diesel IC Engines	0.00	0.00
nol	Coatings	0.09	Coatings	0.09	0.00

halene	Diesel IC Engines	0.00	Diesel IC Engines	0.00	0.00
	Diesel IC Engines	0.00	Diesel IC Engines	0.00	0.00
(excluding naphthalene)	Diesel IC Engines	0.00	Diesel IC Engines	0.00	0.00
ene Dichloride					
ene Oxide	Turbines	0.01	Turbines	0.01	0.00
um	Diesel IC Engines	0.00	Diesel IC Engines	0.00	0.00
e	Coatings	0.01	Coatings	0.01	0.00
2-Tetrachloroethane					
hloroethylene					
Trimethylpentane	Mobile Vehicle Fueling	0.16	Mobile Vehicle Fueling	0.16	0.00
	Coatings	1.31	Coatings	1.31	0.00
	Solvent Usage	0.21	Solvent Usage	0.21	0.00
	Mobile Vehicle Fueling	0.27	Mobile Vehicle Fueling	0.27	0.00
ne	Boilers	0.00	Boilers	0.00	0.00
	Turbines	0.03	Turbines	0.03	0.00
	Diesel IC Engines	0.01	Diesel IC Engines	0.01	0.00
	Total	**1.83**	**Total**	**1.83**	**0.00**
oroethylene					
Chloride					
lene Chloride					
	Turbines	0.02	Turbines	0.02	0.00
	Coatings	0.36	Coatings	0.36	0.00
e	Diesel IC Engines	0.00	Diesel IC Engines	0.00	0.00
	Solvent Usage	0.21	Solvent Usage	0.21	0.00
	Mobile Vehicle Fueling	0.27	Mobile Vehicle Fueling	0.27	0.00
	Total	**0.86**	**Total**	**0.86**	**0.00**

ssions for all pollutants for which the source is major and for all NSPS/MACT-regulated air pollutants must be reported. HAP emissions mus
ermined, and those exceeding one ton per year from any emission unit category must also be quantified; if less than one ton per year, just
APs emitted by name.

1.5 Certification Statement (Form 1302-M)

CERTIFICATION STATEMENT
(Form 1302-M)

APCD:	➢ APCD USE ONLY ≺
Santa Barbara County Air Pollution Control District	**APCD IDS PROCESSING ID:**
COMPANY NAME: Space Launch Delta 30	**SOURCE NAME:** Vandenberg Space Force Base

Identify, by checking off below, the forms and attachments that are part of your application. If the application contains forms or attachments that are not identified below, please identify these attachments in the blank space provided below. Review the instructions if you are unsure of the forms and attachments that need to be included in a complete application.

Forms included with application

_X_ Stationary Source Summary Form
___ Total Stationary Source Emission Form
___ Compliance Plan Form
___ Compliance Plan Certification Form
___ Exempt Equipment Form
_X_ Certification Statement Form

List other forms or attachments

_____
_____
_____
_____

[ ] check here if additional forms listed on back

Attachments included with application

___ Description of Operating Scenarios
___ Sample emission calculations
___ Fugitive emission estimates
___ List of Applicable requirements
___ Discussion of units out of compliance with applicable federal requirements and, if required, submit a schedule of Compliance
___ Facility schematic showing emission points
___ NSR Permit
___ PSD Permit
___ Compliance Assurance monitoring protocols
_X_ Risk management verification per 112(r)

I certify under penalty of law, based on information and belief formed after reasonable inquiry, that the information contained in this application, composed of the forms and attachments identified above, are true, accurate, and complete.

I certify that I am the responsible official, as defined in SBCAPCD's Regulation XIII, Rule 1301 or USEPA's 40 CFR Part 70.

SHOEMAKER.MARK.A.1077726418 Digitally signed by SHOEMAKER.MARK.A.1077726418 Date: 2025.02.13 13:03:38 -08'00' 2/13/25

Signature of Responsible Official **Date**

Print Name of Responsible Official: Colonel Mark A. Shoemaker

Title of Responsible Official and Company Name: Commander, Space Launch Delta 30

CERTIFICATION STATEMENT
(Form 1302-M continued)

APCD: Santa Barbara County Air Pollution Control District	➢ **APCD USE ONLY** ➣ **APCD IDS PROCESSING ID:**
COMPANY NAME: Space Launch Delta 30	**SOURCE NAME:** Vandenberg Space Force Base

List Other Forms or Attachments (cont.)

1.6 List of Owners and Operators

Owners

I. United States Space Force

II. National Aeronautics and Space Administration

III. Missile Defense Agency

IV. National Reconnaissance Office

V. Army Air Force Exchange Service

Operators

I. United States Space Force

II. RGNext

III. a.i. solutions

IV. The Boeing Company

V. HHS Government

VI. Lockheed Martin Space

VII. Northrop Grumman

VIII. Army Air Force Exchange Service

IX. Call Henry, Inc.

X. Katmai Technical Services

XI. Amentum

XII. Valiant

rs/Operators

Owner	Operator	Operator ID	APCD Device ID	Building Number	Equipme
ervice	Army Air Force Exchange Service	3415	384085	14400	FUEL DISPENSER(S)
ervice	Army Air Force Exchange Service	646769	384082	14400	UNDERGROUND STORAGE T GASOLINE
ervice	Army Air Force Exchange Service	646770	384083	14400	UNDERGROUND STORAGE T GASOLINE
ervice	Army Air Force Exchange Service	646771	384084	14400	UNDERGROUND STORAGE T GASOLINE
	Boeing	3548	384076	1917	EMERGENCY GENERATOR-D
	Boeing	3791	384077	1916	EMERGENCY GENERATOR-D
	30 CES/CEOFP	741463	395662	1900	EMERGENCY GENERATOR-D
	30 CES/CEOFP	737837	395664	8337	EMERGENCY GENERATOR-D
	30 CES/CEOFP	737845	395666	8339	EMERGENCY GENERATOR-D
ace Administration	a.i. solutions	3872	111100	836	BOILER-NATURAL GAS-2.16
ace Administration	a.i. solutions	3873	111101	836	BOILER-NATURAL GAS-2.16
ace Administration	a.i. solutions	4130	384033	831	SPRAY GUN CLEANER
ace Administration	a.i. solutions	4174	384032	831	PAINT BOOTH
fice	Lockheed Martin Space	3540	384071	764	EMERGENCY GENERATOR-D
fice	Lockheed Martin Space	3814	384066	2520	EMERGENCY GENERATOR-D
fice	Lockheed Martin Space	652248	386176	2520	BOILER-NATURAL GAS-4.6 M
fice	Lockheed Martin Space	652249	386177	2520	BOILER-NATURAL GAS-4.6 M
fice	Lockheed Martin Space	706728	391549	1731	PAINT BOOTH
fice	Lockheed Martin Space	708765	391550	1731	PAINT BOOTH HEATER-NAT
fice	Lockheed Martin Space	708766	391552	1731	SPRAY GUN CLEANER
fice	Lockheed Martin Space	711280	391955	3000	EMERGENCY GENERATOR-1
fice	Lockheed Martin Space	711384	391956	3000	EMERGENCY GENERATOR-1
fice	Lockheed Martin Space	715723	393451	2500	EMERGENCY GENERATOR-D
fice	Lockheed Martin Space	715725	393452	2500	EMERGENCY GENERATOR-D
fice	Lockheed Martin Space	731313	384072	Various Facilities	SURFACE COATING LINE ITH
fice	Lockheed Martin Space	732815	396728	Various Facilities	WET ABRASIVE BLASTER-D

Owner	Operator	Operator ID	APCD Device ID	Building Number	Equipme
	30 CES/CEOE	3399	115291	9505	LANDFILL GAS
	30 CES/CEOFP	589	107038	10579	EMERGENCY GENERATOR-D
	30 CES/CEOFP	698	107004	10660	EMERGENCY GENERATOR-D
	30 CES/CEOFP	3050	107006	1559	EMERGENCY GENERATOR-D
	30 CES/CEOFP	3183	107007	1762	EMERGENCY GENERATOR-D
	30 CES/CEOFP	3329	107088	1937	EMERGENCY GENERATOR-D
	30 CES/CEOFP	3397	107000	830	EMERGENCY GENERATOR-D
	30 CES/CEOFP	3411	107031	1561	EMERGENCY GENERATOR-D
	30 CES/CEOFP	3582	111125	23201	EMERGENCY GENERATOR-D
	30 CES/CEOFP	3626	108889	1604	EMERGENCY GENERATOR-D
	30 CES/CEOFP	3639	112689	1747	EMERGENCY GENERATOR-D
	30 CES/CEOFP	3906	111766	830	EMERGENCY GENERATOR-D
	30 CES/CEOFP	3928	112255	12006	EMERGENCY GENERATOR-D
	30 CES/CEOFP	3929	112256	12006	EMERGENCY GENERATOR-D
	30 CES/CEOFP	4109	113916	1735	EMERGENCY GENERATOR-D
	30 CES/CEOFP	4116	113917	8195	EMERGENCY GENERATOR-D
	30 CES/CEOFP	4123	114377	8317	EMERGENCY GENERATOR-D
	30 CES/CEOFP	4268	114696	12000	EMERGENCY GENERATOR-D
	30 CES/CEOFP	652220	386257	23243	EMERGENCY GENERATOR-D
	30 CES/CEOFP	652224	386258	23243	EMERGENCY GENERATOR-D
	30 CES/CEOFP	652232	386166	11439	EMERGENCY GENERATOR-D
	30 CES/CEOFP	652235	386163	661	EMERGENCY GENERATOR-D
	30 CES/CEOFP	698283	388931	968	EMERGENCY FIRE PUMP-DI
	30 CES/CEOFP	698284	388930	968	EMERGENCY FIRE PUMP-DI
	30 CES/CEOFP	704948	391670	1581	EMERGENCY GENERATOR-D
	30 CES/CEOFP	706693	391526	23209	EMERGENCY FIRE PUMP-DI
	30 CES/CEOFP	706879	390424	10525	EMERGENCY GENERATOR-D
	30 CES/CEOFP	727237	393196	7000	EMERGENCY GENERATOR-D
	30 CES/CEOFP	727238	393195	7000	EMERGENCY GENERATOR-D

Owner	Operator	Operator ID	APCD Device ID	Building Number	Equipme
	30 CES/CEOFP	727244	393197	7000	EMERGENCY GENERATOR-D
	30 CES/CEOFP	740942	393544	23215	EMERGENCY GENERATOR-D
	30 CES/CEOFP	740946	393545	23215	EMERGENCY GENERATOR-D
	30 CES/CEOFP	728205	394717	6601	EMERGENCY GENERATOR-D
	30 CES/CEOFP	730106	395011	13730	EMERGENCY GENERATOR-D
	30 CES/CEOFP	730454	395036	1748	EMERGENCY GENERATOR-D
	30 CES/CEOFP	734932	395589	8425	EMERGENCY GENERATOR-D
	30 CES/CEOFP	4076	397878	8425	EMERGENCY GENERATOR-D
	30 CES/CEOFP	4077	398097	8425	EMERGENCY GENERATOR-D
	30 CES/CEOIH	679373	388149	7015	BOILER-NATURAL GAS-1.5 M
	30 CES/CEOIH	679380	388150	7015	BOILER-NATURAL GAS-1.5 M
	30 CES/CEOIH	706477	391691	7000	BOILER-NATURAL GAS-2.5M
	30 CES/CEOIH	706481	391690	7000	BOILER-NATURAL GAS-2.5M
	30 LRS/LGRVM	1604	107930	10711	PAINT BOOTH
	30 LRS/LGRVM	3888	111748	10711	PAINT BOOTH HEATER-NAT
	30 LRS/LGRVM	645869	107932	10711	SPRAY GUN CLEANER
	30 OSS/OSOF	1603	105647	8190	PAINT BOOTH
	532 TRS/DOMF	3936	112253	7425	TRAINING GENERATOR-DIE
	583 MMXS/MXDPH	3907	110229	9320	ABRASIVE BLAST BOOTH
	583 MMXS/MXDPH	4096	113676	9327	PAINT BOOTH
	583 MMXS/MXDPH	703426	388390	9360	PAINT BOOTH
	583 MMXS/MXDPH	703427	388395	9360	PROCESS HEATER- NATURA
	Call Henry Inc.	643	106939	1764	EMERGENCY GENERATOR-D
	Call Henry Inc.	645	107141	1829	EMERGENCY FIRE PUMP-DI
	Call Henry Inc.	649	107142	1829	EMERGENCY FIRE PUMP-DI
	Call Henry Inc.	818	104867	525	PONY STARTER ENGINE A-D
	Call Henry Inc.	820	104868	525	PONY STARTER ENGINE B-D
	Call Henry Inc.	821	104869	525	PONY STARTER ENGINE C-D
	Call Henry Inc.	822	104870	525	PONY STARTER ENGINE D-D

Owner	Operator	Operator ID	APCD Device ID	Building Number	Equipme
	Call Henry Inc.	823	104871	525	PONY STARTER ENGINE E-D
	Call Henry Inc.	1286	6080	525	TURBINE GEN A-NATURAL G
	Call Henry Inc.	1287	6081	525	TURBINE GEN B-NATURAL G
	Call Henry Inc.	1288	6082	525	TURBINE GEN C-NATURAL G
	Call Henry Inc.	1289	6083	525	TURBINE GEN D-NATURAL G
	Call Henry Inc.	1290	6084	525	TURBINE GEN E-NATURAL G
	Call Henry Inc.	3007	106942	425	EMERGENCY GENERATOR-D
	Call Henry Inc.	3012	106944	906	EMERGENCY GENERATOR-D
	Call Henry Inc.	3549	384058	1962	EMERGENCY GENERATOR-D
	Call Henry Inc.	3550	384057	1964	EMERGENCY GENERATOR-D
	Call Henry Inc.	3551	384056	1971	EMERGENCY GENERATOR-D
	Call Henry Inc.	3552	384055	1972	EMERGENCY GENERATOR-D
	Call Henry Inc.	3573	386330	1768	EMERGENCY GENERATOR-D
	Call Henry Inc.	3642	109236	21203	EMERGENCY GENERATOR-D
	Call Henry Inc.	3747	110201	8401	EMERGENCY GENERATOR-D
	Call Henry Inc.	3790	384060	1965	EMERGENCY GENERATOR-D
	Call Henry Inc.	3815	110735	6510	EMERGENCY GENERATOR-D
	Call Henry Inc.	3921	111769	1919	EMERGENCY FIRE PUMP-DI
	Call Henry Inc.	3927	111765	929	EMERGENCY GENERATOR-D
	Call Henry Inc.	3976	112688	383	EMERGENCY GENERATOR-D
	Call Henry Inc.	3980	386456	64	EMERGENCY GENERATOR-D
	Call Henry Inc.	3996	112964	8510	BOILER-NATURAL GAS-2 MM
	Call Henry Inc.	3997	112965	8510	BOILER-NATURAL GAS-2 MM
	Call Henry Inc.	4005	114491	511	EMERGENCY GENERATOR-D
	Call Henry Inc.	4010	113280	Basewide	EMERGENCY GENERATOR-D
	Call Henry Inc.	4011	113281	Basewide	EMERGENCY GENERATOR-D
	Call Henry Inc.	4012	113282	Basewide	EMERGENCY GENERATOR-D
	Call Henry Inc.	4013	113283	Basewide	EMERGENCY GENERATOR-D
	Call Henry Inc.	4014	113284	Basewide	EMERGENCY GENERATOR-D

Owner	Operator	Operator ID	APCD Device ID	Building Number	Equipme
	Call Henry Inc.	661867	386557	7025	EMERGENCY GENERATOR-D
	Call Henry Inc.	678120	387721	1819	EMERGENCY GENERATOR-D
	Call Henry Inc.	682870	388091	1819	BOILER-PROPANE-1.5 MMBT
	Call Henry Inc.	682871	388092	1819	BOILER-PROPANE-1.5 MMBT
	Call Henry Inc.	711413	391957	8401	EMERGENCY GENERATOR-D
	Call Henry Inc.	713135	391893	1639	EMERGENCY GENERATOR-D
	Call Henry Inc.	713136	391888	21150	EMERGENCY GENERATOR-D
	Call Henry Inc.	724465	393543	1959	EMERGENCY GENERATOR-D
	Call Henry Inc.	725445	393611	7011	EMERGENCY GENERATOR-D
	Call Henry Inc.	727887	394799	8510	EMERGENCY GENERATOR-D
	HHS Government	652230	393280	13850	BOILER-NATURAL GAS-2 MM
	HHS Government	652231	386175	13850	BOILER-NATURAL GAS-2 MM
	HHS Government	678768	388045	13850	EMERGENCY GENERATOR-D
	HHS Government	678837	388044	10314	EMERGENCY GENERATOR-D
	Katmai Technical Services	434	109369	10726	FUEL DISPENSER - GASOLIN
	Katmai Technical Services	1987	109898	1706	FILL STAND-JETA/JP8
	Katmai Technical Services	3508	387622	10726	FUEL DISPENSER - E85-TANK
	Katmai Technical Services	1702	109896	1702	ABOVEGROUND STORAGE T
	Katmai Technical Services	646763	109372	10726	UNDERGROUND STORAGE T
	Katmai Technical Services	646767	386792	10726	UNDERGROUND STORAGE T TANK 18
	Katmai Technical Services	646772	115219	10726	UNDERGROUND STORAGE T 15
	Katmai Technical Services	648578	109899	1706	FILL STAND-JETA/JP8
	Katmai Technical Services	675217	113960	1701	ABOVEGROUND STORAGE T
	Katmai Technical Services	678228	386791	10726	FUEL DISPENSER-E85-TANK
	RGNext	1591	384028	9320	PAINT BOOTH #1
	RGNext	1592	384029	9320	PAINT BOOTH #2
	RGNext	1859	9890	9320	ABRASIVE BLAST BOOTH
	RGNext	4129	384030	9320	SPRAY GUN CLEANER

Owner	Operator	Operator ID	APCD Device ID	Building Number	Equipme
	Raytheon Missiles & Defense	731802	395257	980	EMERGENCY GENERATOR-I
	The Boeing Company	3417	113616	Basewide	MICROWAVE SCRUBBER-FV
	The Boeing Company	3418	113621	Basewide	MICROWAVE SCRUBBER-OV
	The Boeing Company	4039	384078	1594	EMERGENCY GENERATOR-I
	Amentum	1598	107926	875	PAINT BOOTH
	Amentum	4131	107928	875	SPRAY GUN CLEANER
	Amentum	4172	104655	976/977	FUEL (A-50) SCRUBBER-HSF
	Amentum	4173	104788	974/975	OXIDIZER (N2O4) SCRUBBER
	United States Space Force	685507	114277	Basewide	MISCELLANEOUS SOLVENT
	United States Space Force	685508	110309	Basewide	MISCELLANEOUS SOLVENT
	Valiant	1600	108716	2007	PAINT BOOTH
	Valiant	3599	107916	2007	ABRASIVE BLAST BOOTH
	Valiant	4134	108717	2007	SPRAY GUN CLEANER

2.0 IDENTIFICATION OF PERMITTED EMISSION UNITS

Permitted emission units are divided into four sections of this application. These are internal combustion engines, external combustion equipment, spray paint booths, and other permitted emission units. For each permitted internal combustion engine, Table 2-1 presents both emission unit descriptions such as the brake horsepower (bhp) and engine tier as well as operational information such as location and operating schedule. For each permitted external combustion equipment, Table 2-2 presents both emission unit descriptions such as the fuel and heat rating as well as operational information such as location and tune-up schedules. Information for permitted spray paint booths and their associated spray gun cleaners are presented in Table 2-3. Finally, Table 2-4 lists emission unit descriptions and operational information for the remaining permitted emission units that do not fit into the previous three categories.

ion	Device No.	Operator ID	Make	Model	Rating (bhp)	Fuel	Tier	EPA Family Name	Daily Hours	Annual Hours	Category	Year o Installat
Engines												
	396728	732815	John Deere	4045HFC04	139	Diesel	IV	JJDXL04.5315	8	198	Prime Power	2020
	104867	818	Deutz	BF6L913	160	Diesel	0	NA	NA	20	Pony Starter Engine	1993
	104868	820	Deutz	BF6L913	160	Diesel	0	NA	NA	20	Pony Starter Engine	1993
	104869	821	Deutz	BF6L913	160	Diesel	0	NA	NA	20	Pony Starter Engine	1993
	104870	822	Deutz	BF6L913	160	Diesel	0	NA	NA	20	Pony Starter Engine	1993
	104871	823	Deutz	BF6L913	160	Diesel	0	NA	NA	20	Pony Starter Engine	1993
	006080	1286	Allison (GM)	501-KB	4090	NG	NA	NA	24	2326.4	Facility Power	1990
	006081	1287	Allison (GM)	501-KB	4090	NG	NA	NA	24	2326.4	Facility Power	1990
	006082	1288	Allison (GM)	501-KB	4090	NG	NA	NA	24	2326.4	Facility Power	1990
	006083	1289	Allison (GM)	501-KB	4090	NG	NA	NA	24	2326.4	Facility Power	1990
	006084	1290	Allison (GM)	501-KB	4090	NG	NA	NA	24	2326.4	Facility Power	1990
	112253	3936	Cummins	6CT8.3-G2	207	Diesel	I	NA	7.5	600	Training Engine	2006
bustion Engines												
	113280	4010	Cummins	QSB5-G3 NR3	145	Diesel	III	9CEXL0275AAG	8	50	Emergency Stand-by Generator	2011
	113281	4011	Cummins	QSB5-G3 NR3	145	Diesel	III	9CEXL0275AAG	8	50	Emergency Stand-by Generator	2011
	113282	4012	Cummins	QSB5-G3 NR3	145	Diesel	III	9CEXL0275AAG	8	50	Emergency Stand-by Generator	2011
	113283	4013	Cummins	QSB5-G3 NR3	145	Diesel	III	9CEXL0275AAG	8	50	Emergency Stand-by Generator	2011
	113284	4014	Cummins	QSB5-G3 NR3	145	Diesel	III	9CEXL0275AAG	8	50	Emergency Stand-by Generator	2011
	397967	728052	Cummins	QSB4.5	155	Diesel	IV	GCEXL04.5AAH	24	199	Prime Power	2022
	386456	3980	Cummins	QST30-G5	1490	Diesel	II	ACEXL030.AAD	8	50	Emergency Stand-by Generator	2010
	112688	3976	Cummins	QSL9-G2 NR3	364	Diesel	III	9CEXL0540AAB	24	50	Emergency Stand-by Generator	2009
	106942	3007	Detroit Diesel	10437305	210	Diesel	0	NA	20	20	Emergency Stand-by Generator	1994
d	114491	4005	Cummins	QSX15-G9-NR2	755	Diesel	II	ACEXL015.AAJ	16.5	100	Command Transmitter E/S	2011
	386163	4320	Volvo	TAD1641GE	757	Diesel	II	CVPXL16.1ACB	3	50	Emergency Stand-by Generator	2013
	384071	3540	Caterpillar	3456 DITA	685	Diesel	II	3CPXL15.8ESK	24	50	Emergency Stand-by Generator	2004
	107000	3397	Cummins	KTA19-G3	685	Diesel	I	NA	20	20	Emergency Stand-by Generator	2002
	111766	3906	Cummins	QST30-G5	1490	Diesel	II	8CEXL030.AAD	8	50	Emergency Stand-by Generator	2009
	106944	3012	Detroit Diesel	71237406	750	Diesel	0	NA	20	20	Emergency Stand-by Generator	1993

ion	Device No.	Operator ID	Make	Model	Rating (bhp)	Fuel	Tier	EPA Family Name	Daily Hours	Annual Hours	Category	Year o Installat
	111765	3927	Cummins	QSM11-G4-NR3	470	Diesel	III	8CEXL0661AAH	24	100	Command Transmitter E/S	2009
	388931	698283	John Deere	4045HFC28	175	Diesel	III	FJDXL06.8120	24	50	Emergency Fire Water Pump	2016
	388930	698284	John Deere	4045HFC28	175	Diesel	III	FJDXL06.8120	24	50	Emergency Fire Water Pump	2016
	395257	731802	Cummins	QSL9-G9	433	Diesel	IV	MCEXL08.9AAL	9	50	Emergency Stand-by Generator	2021
	107006	3050	Caterpillar	3406B	534	Diesel	0	NA	20	20	Emergency Stand-by Generator	1991
	107031	3411	Caterpillar	3406	449	Diesel	0	NA	20	20	Emergency Stand-by Generator	2002
	391670	704948	Cummins	4BT3.3G5	69	Diesel	III	GCEXL03.3BAA	24	50	Emergency Stand-by Generator	2019
	384078	4039	John Deere	6068HF485	315	Diesel	III	7JDXL06.8101	8	50	Emergency Stand-by Generator	2011
	108889	3626	Detroit Diesel	6063-HV35	490	Diesel	III	7DDXL14.0VLD	8	50	Emergency Stand-by Generator	2007
	391893	713135	Volvo	TAD1641GE	768	Diesel	II	HVPXL16.1ACB	15	50	Emergency Stand-by Generator	2019
	113916	4109	Volvo	TAD1641GE	757	Diesel	II	BVPXL16.1ACB	8	50	Emergency Stand-by Generator	2011
	112689	3639	Cummins	QSX15-G9	755	Diesel	II	7CEXL015.AAB	24	50	Emergency Stand-by Generator	2010
	395036	730454	Cummins	QSB5-G13	173	Diesel	III	MCEXL0275AAK	23	50	Emergency Stand-by Generator	2021
	107007	3183	Cummins	6A3.4-G1	50	Diesel	0	NA	20	20	Emergency Stand-by Generator	1992
	106939	643	Caterpillar	D330	78	Diesel	0	NA	20	20	Emergency Stand-by Generator	1990
	386330	3573	Cummins	QSX15-G9 NR2	750	Diesel	II	4CEXL015.AAB	24	50	Emergency Stand-by Generator	2004
1	387721	678120	Cummins	QSX15-G9	755	Diesel	II	ECEXL015.AAJ	16	50	Emergency Stand-by Generator	2015
	107141	645	Caterpillar	3208	270	Diesel	0	NA	NA	NA	Emergency Fire Water Pump	1993
	107142	649	Caterpillar	3208	270	Diesel	0	NA	NA	NA	Emergency Fire Water Pump	1993
	395662	741463	John Deere	6135HFG84A	617	Diesel	III	MJDXL13.5146	6	50	Emergency Stand-by Generator	2023
	384077	3791	Caterpillar	C15	563	Diesel	III	7CPXL15.2ESK	24	50	Emergency Stand-by Generator	2008
	384076	3548	Caterpillar	3456	680	Diesel	II	4CPXL15.8ESK	24	50	Emergency Stand-by Generator	2004
	111769	3921	John Deere	4045DF120	67	Diesel	II	NA	NA	NA	Emergency Fire Water Pump	2008
	107088	3329	John Deere	6081AF001C	251	Diesel	I	1JDXL08.1008	24	30	Emergency Stand-by Generator	2001
	393543	724465	Volvo	TAD570-72VE	218	Diesel	IV	KVPXL05.1CJA	8	50	Emergency Stand-by Generator	2019
	384058	3549	Cummins	6CTAA8.3G3	317	Diesel	II	4CEXL0505ACB	24	50	Emergency Stand-by Generator	2004
	384057	3550	Cummins	6CTAA8.3G3	317	Diesel	II	4CEXL0505ACB	24	50	Emergency Stand-by Generator	2004
	384060	3790	Cummins	QSL9-G2 NR3	364	Diesel	III	7CEXL0540.AAB	8	50	Emergency Stand-by Generator	2008
	384056	3551	Cummins	6CTAA8.3G3	317	Diesel	II	4CEXL0505ACB	24	50	Emergency Stand-by Generator	2004

ion	Device No.	Operator ID	Make	Model	Rating (bhp)	Fuel	Tier	EPA Family Name	Daily Hours	Annual Hours	Category	Year o Installat
	384055	3552	Cummins	6CTAA8.3G3	317	Diesel	II	4CEXL0505ACB	24	50	Emergency Stand-by Generator	2004
	393451	715723	Cummins	QST30-G5 NR2	1490	Diesel	II	KCEXL030.AAD	8	50	Emergency Stand-by Generator	2019
	393452	715725	Cummins	QST30-G5 NR2	1490	Diesel	II	KCEXL030.AAD	8	50	Emergency Stand-by Generator	2019
	384066	3814	Cummins	QST30-G5	1490	Diesel	II	8CEXL030.AAD	8	50	Emergency Stand-by Generator	2008
	391955	711280	Cummins	QST30-G5 NR2	1490	Diesel	II	JCEXL030.AAD	8	50	Emergency Stand-by Generator	2018
	391956	711384	Cummins	QST30-G5 NR2	1490	Diesel	II	JCEXL030.AAD	8	50	Emergency Stand-by Generator	2018
	110735	3815	Cummins	QSL9-G3-NR3	399	Diesel	III	8CEXL0540AAB	24	50	Emergency Stand-by Generator	2008
	394717	728205	Cummins	QSL9-G7	464	Diesel	III	LCEXL0540AAB	24	50	Emergency Stand-by Generator	2020
	393196	727237	Caterpillar	C27	1141	Diesel	II	JCPXL27.0NZS	3.5	50	Emergency Stand-by Generator	2019
	393195	727238	Caterpillar	C27	1141	Diesel	II	JCPXL27.0NZS	3.5	50	Emergency Stand-by Generator	2019
	393197	727244	Caterpillar	C27	1141	Diesel	II	JCPXL27.0NZS	3.5	50	Emergency Stand-by Generator	2019
	393611	725445	Cummins	QSK23-G7	1220	Diesel	II	LCEXL023.AAB	9	50	Emergency Stand-by Generator	2020
	386557	661867	Mitsubishi	S16R-Y2PTAW2-1	2923	Diesel	II	DMVXL65.4BBB	4	50	Emergency Stand-by Generator	2013
	113917	4116	Cummins	QSL9-G2 NR3	364	Diesel	III	BCEXL0540AAB	8	50	Emergency Stand-by Generator	2011
	114377	4123	Cummins	QSB7-G3 NR3	250	Diesel	III	BCEXL0409AAB	8.0	50.0	Emergency Stand-by Generator	2012
	395664	737837	John Deere	6135HFG84A	617	Diesel	III	NJDXL13.5146	6	50	Emergency Stand-by Generator	2023
	395666	737845	John Deer	6135HFG84A	617	Diesel	III	NJDXL13.5146	6	50	Emergency Stand-by Generator	2023
	110201	3747	Cummins	QSX15-G9	755	Diesel	II	7CEXL015.AAB	3	50	Emergency Stand-by Generator	2007
	391957	711413	Cummins	QSX15-G9	755	Diesel	II	JCEXL015.AAJ	15	50	Emergency Stand-by Generator	2018
	397878	4076	Isuzu	BJ-4JJ1X	97.9	Diesel	III	ASZXL03.0JXB	8	50	Emergency Stand-by Generator	2010
	398097	4077	Isuzu	BJ-4JJ1X	97.9	Diesel	III	ASZXL03.0JXB	8	50	Emergency Stand-by Generator	2010
	395589	734932	Cummins	QSB5-G11	169	Diesel	IV	MCEXL04.5AAJ	8	50	Emergency Stand-by Generator	2022
	394799	727887	Cummins	QST30-G5 NR2	1490	Diesel	II	KCEXL030.AAD	8	50	Emergency Stand-by Generator	2020
d	388044	678837	Cummins	QSB5-G3 NR3	145	Diesel	III	FCEXL0275AAG	8	50	Emergency Stand-by Generator	2015
l	390424	706879	Cummins	QSB7-G5 NR3	325	Diesel	III	GCEXL0409AAD	24	50	Emergency Stand-by Generator	2017
	107038	589	Cummins	KTTA19-G2	750	Diesel	0	NA	20	20	Emergency Stand-by Generator	1992
Ave	107004	698	Onan	L634T-I/10148C	68	Diesel	0	NA	20	20	Emergency Stand-by Generator	1988
	386166	652232	Cummins	QSB5-G3 NR3	145	Diesel	III	BCEXL0275AAG	3	50	Emergency Stand-by Generator	2015
e	114696	4268	Caterpillar	C27	1,141	Diesel	II	CCPXL27.ONZS	8	50	Emergency Stand-by Generator	2012

ion	Device No.	Operator ID	Make	Model	Rating (bhp)	Fuel	Tier	EPA Family Name	Daily Hours	Annual Hours	Category	Year o Installat
ve	112255	3928	Cummins	QSK60-G6 NR2	2922	Diesel	II	8CEXL060.AAD	24	50	Emergency Stand-by Generator	2009
ve	112256	3929	Cummins	QSK60-G6 NR2	2922	Diesel	II	8CEXL060.AAD	24	50	Emergency Stand-by Generator	2009
	395011	730106	Cummins	QSB7-G5 NR3	324	Diesel	III	LCEXL0409AAD	12	50	Emergency Stand-by Generator	2021
Ave	388045	678768	Cummins	QSL9-G7	464	Diesel	III	ECEXL0540AAB	8	50	Emergency Stand-by Generator	2015
	391888	713136	Volvo	TAD1350GE	382	Diesel	III	HVPXL12.8BCA	24	50	Emergency Stand-by Generator	2018
	109236	3642	Cummins	QSX15-G9	755	Diesel	II	7CEXL015.AAB	8	100	Command Transmitter E/S	2007
	111125	3582	Cummins	4BT3.9-G4	99	Diesel	I	3CEXL0239AFA	24	30	Emergency Stand-by Generator	2004
	391526	706693	John Deere	4045HF280G	86	Diesel	III	GJDXL04.5141	NA	NA	Emergency Fire Water Pump	2017
	393544	740942	Cummins	QST30-G5	1490	Diesel	II	KCEXL030.AAD	8	50	Emergency Stand-by Generator	2023
	393545	740946	Cummins	QST30-G5 NR2	1490	Diesel	II	KCEXL030.AAD	8	50	Emergency Stand-by Generator	2023
	386257	4375	Volvo	TWD1643GE	904	Diesel	II	DVPXL16.1ACW	6	50	Emergency Stand-by Generator	2013
	386258	4376	Volvo	TWD1643GE	904	Diesel	II	DVPXL16.1ACW	6	50	Emergency Stand-by Generator	2013

Device No.	Operator ID	Make	Model	Heat Rating (MMBtu/hr)	Fuel	Tune-Up	Fuel Use Monitoring	Low Use Expn	NOx (ppm)	CO (ppm)	Basis (Rule)	Source Test	Anniversary Date	Year Inst
111100	3872	Parker Boiler	T2160L	2.16	NG	Biannual	Shared	No	30	400	361	No	May/Nov	2008
111101	3873	Parker Boiler	T2160L	2.16	NG	Biannual	Shared	No	30	400	361	No	May/Nov	2008
388091	682870	Raypak	H7-1503	1.5	LPG	Annual	Shared	No	30	400	360	No	Jun	2015
388092	682871	Raypak	H7-1503	1.5	LPG	Annual	Shared	No	30	400	360	No	Jun	2015
386176	4371	Parker Boiler Co.	T-4600LR	4.6	NG	Biannual	Shared	No	30	400	361	No	Mar/Sep	2013
386177	4372	Parker Boiler Co.	T-4600LR	4.6	NG	Biannual	Shared	No	30	400	361	No	Mar/Sep	2013
391691	706477	Aerco	BMK 2500	2.5	NG	Biannual	Shared	No	30	400	361	No	Nov	2018
391690	706481	Aerco	BMK 2500	2.5	NG	Biannual	Shared	No	30	400	361	No	Nov	2018
388149	679373	Lochinvar	FBN1500	1.5	NG	Annual	Shared	No	30	400	360	No	Oct	2015
388150	679380	Lochinvar	FBN1500	1.5	NG	Annual	Shared	No	30	400	360	No	Oct	2015
111731	1052	Ajax	WGB-2250-D	2.25	NG	None	Dedicated	No	NA	NA	361	No	NA	1983
112964	3996	Patterson-Kelley	N2000-MFD	2.0	NG	Annual	Shared	No	30	400	360	No	Mar	2010
112965	3997	Patterson-Kelley	N2000-MFD	2.0	NG	Annual	Shared	No	30	400	360	No	Mar	2010
388395	703427	Midco	HMA-2	4.125	NG	None	Dedicated	No	NA	NA	361	No	NA	2016
111748	3888	Hastings Industries	SBD-227-32-3700	3.7	NG	None	No Meter	No	NA	NA	361	No	NA	1992
393280	4369	Patterson-Kelley/Harsco	MACH C2000H	2.0	NG	Annual	Shared	No	30	400	360	No	Jun	2013 Burne 2019
386175	4370	Patterson-Kelley/Harsco	MACH C2000H	2.0	NG	Annual	Shared	No	30	400	360	No	Jun	2013

t Location	Device No.	Operator ID	Booth Filter Type	Spray Gun Cleaner?	Booth Heater	Emissions		Year of Install	Curre Perm
						lb/day	ton/year		
	384032	4174	Overspray Filters	Yes - OID 4130	No	11.2	0.55	1991	13968
Rd	107926	1598	Overspray Filters	Yes - OID 4131	No	5.61	0.73	1991	13968
	391549	706728	Dry Overspray Filters	Yes- OID 708766	Yes- DID 391550	2.3	0.025	2019	13968
l	108716	1600	Dry Overspray Filters	Yes - OID 4134	No	7.76	1.01	1991	13968
Ave	105647	1603	Overspray Filters	No	Yes - OID 4106	9.36	1.21	1993	13968
	384028	1591	Water Wash Overspray System	Yes - OID 4129	No	4.80	0.62	1983	13968
	384029	1592	Overspray Filters	Yes - OID 4129	No			1983	13968
xico Ave	113676	4096	Rear Exhaust Plenum	No	No	9.36	1.22	2011	13968
xico Ave	388390	703426	Three Stage HEPA Filter	No	Yes- OID 703427			2016	13968
ve	107930	1604	Dry Overspray Filters	Yes - OID 4374	Yes - OID 3888	11.26	1.47	1993	13968
ons	384072	731313	Not Applicable	Not Applicable	Not Applicable	7.6	0.49	Not Applicable	13968

on	Device No.	Operator ID	Device Type	Daily Mass Limit	Quarterly Mass Limit	Annual Mass Limit	Mass Units	Daily Throughput Limit	Annual Throughput Limit	Throug put Uni
	113616	3417	Microwave Reactor System for Hypergolic Fuel Vapors	0.57	16.00	16.00	Lbs ROC	NA	2	event
	113621	3418	Microwave Reactor System for Hypergolic Oxidizer Vapors	0.01	0.2	0.2	Lbs NOx	NA	2	event
	104779	4166	28,000 Gallon Nitrogen Tetroxide AST	NA	NA	NA	NA	NA	NA	gallon
	104780	4167	28,000 Gallon Nitrogen Tetroxide AST	NA	NA	NA	NA	NA	NA	gallon
	104781	4168	28,000 Gallon Nitrogen Tetroxide AST	NA	NA	NA	NA	NA	NA	gallon
	104782	4169	28,000 Gallon Nitrogen Tetroxide AST	NA	NA	NA	NA	NA	NA	gallon
	104783	4170	28,000 Gallon Nitrogen Tetroxide AST	NA	NA	NA	NA	NA	NA	gallon
	104784	4171	28,000 Gallon Nitrogen Tetroxide AST	NA	NA	NA	NA	NA	NA	gallon
	104788	4173	Scrubber (OVSS); Nitrogen Tetroxide	62.16	NA	440	Lbs NOx	NA	NA	NA
	104630	AST01	28,000 Gallon Aerozine50 AST	NA	NA	NA	NA	NA	NA	gallon
	104631	AST02	28,000 Gallon Aerozine50 AST	NA	NA	NA	NA	NA	NA	gallon
	104632	AST03	28,000 Gallon Aerozine50 AST	NA	NA	NA	NA	NA	NA	gallon
	104633	AST04	28,000 Gallon Aerozine50 AST	NA	NA	NA	NA	NA	NA	gallon
	104634	AST05	28,000 Gallon Aerozine50 AST	NA	NA	NA	NA	NA	NA	gallon
	104635	AST06	28,000 Gallon Aerozine50 AST	NA	NA	NA	NA	NA	NA	gallon
	104655	4172	Scrubber (FVSS); Aerozine-50 Fuel	23.04	NA	100	Lbs ROC	NA	NA	NA
	109898	1987	Tanker Truck/Trailer Unloading Equipment; Jet-A, AST#1703	NA	NA	NA	NA	NA	NA	NA
	109899	648578	Tanker Truck/Trailer Loading Equipment; Jet-A, AST#1702	7.20	NA	NA	NA	NA	NA	NA
	113960	675217	AST; RP1: 126000 Gallons AST #1701	NA	NA	16.39	Lbs ROC	21,600	245,600	Gallons
	109896	1702	210,000 Gallon JET A AST #1702	NA	NA	0.28	Tons ROC	NA	2,040,000	gallon
	109897	1703	420,000 Gallon JET A AST #1703							
	107916	3599	Abrasive Blasting Operations	0.00065	NA	0.163	Tons PM	2.00	500	ton
	114277	4384	Miscellaneous Solvent Usage	24	NA	6,336	Lbs ROC	NA	NA	NA
	110309	4385	Miscellaneous Solvent Usage	22.73	500	2,000	Lbs ROC	NA	NA	NA
	009890	1859	Abrasive Blasting Operations	0.000312	NA	0.032	Tons PM	2.40	250	ton
	110229	3907	Abrasive Blasting Operations	0.0004315	NA	0.112	Tons PM	6.64	1726	ton

on	Device No.	Operator ID	Device Type	Daily Mass Limit	Quarterly Mass Limit	Annual Mass Limit	Mass Units	Daily Throughput Limit	Annual Throughput Limit	Throughput Uni
	115291	3399	Landfill Gas	NA	NA	NA	NA	NA	NA	NA
e	109369	434	Military Gasoline Dispensing Facility	2.53	NA	920	Lbs ROC	NA	1,200,000	gallon
e	386791	678228	E-85 GDF with Phase 1 VRS							
e	387622	3508	E-85 GDF with Phase 1 VRS							
e	109372	UST01	10,000 Gallon Tank #16 Gasoline UST	NA	NA				NA	gallon
e	115219	3507	10,000 Gallon Tank #15 E85 UST	NA	NA				NA	gallon
e	386792	UST04	10,000 Gallon Tank #18 E85 UST	NA	NA				NA	gallon
	384085	3415	AAFES Gasoline Dispensing Facility	16.54	NA	6,040	Lbs ROC	NA	4,800,000	gallon
	384082	3412	12,000 Gallon Gasoline UST	NA	NA				NA	gallon
	384083	3413	12,000 Gallon Gasoline UST	NA	NA				NA	gallon
	384084	3414	12,000 Gallon Gasoline UST	NA	NA				NA	gallon

3.0 IDENTIFICATION OF PERMIT-EXEMPT EMISSION UNITS

Permit-exempt emission units are divided into three sections of this application. These are internal combustion engines, external combustion equipment, and other permit-exempt emission units. For each permit-exempt internal combustion engine, Table 3-1 presents the emission unit descriptions such as the bhp and engine tier, and operational information such as location and operating schedule, and the basis for exemption. For each permit-exempt external combustion equipment Table 3-2 presents emission unit descriptions such as the fuel and heat rating, operational information such as location, and the basis for exemption. Finally, Table 3-3 lists other permit-exempt emission unit descriptions and operational information for the remaining units that do not fit into the previous two categories. Appendix A lists the emissions and corresponding calculations for each permit-exempt emission unit.

Location	Operator ID	Make	Model	EPA Family Name/Tier	Rating (bhp)	Fuel	Category
	3063	Ford	LSG87516005A	NA	104	LPG	Emergency Stand-by Generator
e	3083	Cummins	GTA 28	NA	500	LPG	Emergency Stand-by Generator
ss Rd	3603	Kubota	F2803-BG-ES	4KBXL02.8BCC/II	44.8	Diesel	Emergency Stand-by Generator
	3054	Kubota	F2803	0	42	Diesel	Emergency Stand-by Generator
	3932	Kubota	F2803-BG-ES	5KBXL02.8BCC/II	42	Diesel	Emergency Stand-by Generator
	703337	Kohler	KDI 1903TCR/G18C	IV	49	Diesel	Emergency Stand-by Generator
d	3072	Ford	CSG-6491-6005-A	NA	77	LPG	Emergency Stand-by Generator
	677064	John Deere	4024TF281D	DJDXL02.4215/III	45	Diesel	Emergency Stand-by Generator
	677065	John Deere	4024TF281D	DJDXL02.4215/III	45	Diesel	Emergency Stand-by Generator
d	4177	John Deere	3029DF120	I	47	Diesel	Emergency Stand-by Generator
l Shuttle	3190	Kubota	D1703-BG-ES01	6KBXL02.2FCC/II	27	Diesel	Emergency Stand-by Generator
	4067	Cummins	GM3.0 L	III	55	LPG	Emergency Stand-by Generator
	635	Hercules	D2300X308	0	45	Diesel	Emergency Stand-by Generator
	677066	Yanmar	4TNE84-EK	2YDXL2.00F4N/I	13	Diesel	Emergency Stand-by Generator
	677067	Yanmar	4TNE84-EK	2YDXL2.00F4N/I	13	Diesel	Emergency Stand-by Generator
	3804	Lister Petter	LPW4	I	18	Diesel	Emergency Stand-by Generator
	4003	Ford	ESG642	II	77	LPG	Emergency Stand-by Generator
	3567	Ford	LSG-8751-6005-A	NA	173	LPG	Emergency Stand-by Generator
o	4113	Kubota	D1703-M-BG-ET01	AKBXL02.2FCD/I-IV	25	Diesel	Emergency Stand-by Generator
	3068	Generac	7.4 L	I	173	NG	Emergency Stand-by Generator
	3597	Kubota	F2803-BG-ES	4KBXL02.8BCC/I	45	Diesel	Emergency Stand-by Generator
	869	Ford	LSG-4231-6005F	NA	50	LPG	Emergency Stand-by Generator
	3187	Yanmar	4TNV84T-BGKL	AYDXL2.00J4T/IV	27	Diesel	Emergency Stand-by Generator
Ave	813523	Kubota	V2203-M-BG-ET02	Unknown	26.5	Diesel	Emergency Stand-by Generator
	765	Ford	LSG-4231-6005-F	NA	57	LPG	Emergency Stand-by Generator
	3605	Kubota	F2803	4KBXL02.8BCC/II	44.8	Diesel	Emergency Stand-by Generator

Location	Operator ID	Make	Model	EPA Family Name/Tier	Rating (bhp)	Fuel	Category
ons	645481	John Deere	4045HF285	BJDXL06.8105/III	140	Diesel	Vacuum Pump, PERP RN 160694
ons	4307	Cummins	QSC	ACEXL0505AAE/III	260	Diesel	Air Compressor, PERP RN 15838
ons	3903	John Deere	3029TF270D	4JDXL02.9050/II	64	Diesel	Generator, TSE RN 101091
ons	695013	Honda	GX620	1HNXS.6712AK/II	20	Gasoline	Pressure Washer
ons	700047	Kohler	KDI 2504TCR/G18A	FKHXL2.48TCR/IV	74	Diesel	Generator, PERP RN 173572
ons	700099	Kohler	KDI 2504TCR/G18A	FKHXL2.48TCR/IV	74	Diesel	Generator, PERP RN 173573
ons	700100	Volvo Penta	TAD1170VE	GVPXL10.8CJA/IV	320	Diesel	Generator, PERP RN 173574
ons	709118	Onan	12DJC L343410	Unknown	22	Diesel	Emergency Stand-by Generator
ons	709119	Onan	12DJC L343410	Unknown	22	Diesel	Emergency Stand-by Generator
t	717151	Cummins	QSB6.7	GCEXL06.7AAK/IV	260	Diesel	Air Compressor, PERP RN 17915
	717152	Cummins	QSB6.7 260	GCEXL06.7AAK/IV	260	Diesel	Air Compressor PERP RN 179154
ons	698117	Caterpillar	3738/2500	EFPXL03.4ADC/I-IV	115	Diesel	Chipper Engine, PERP RN 17285
ons	732845	Isuzu	3LD1	0	39	Diesel	Generator, TSE RN 101091
ons	732846	Isuzu	3LD1	0	39	Diesel	Generator, TSE RN 101091
ons	732844	Perkins	GJ71018N	0	39	Diesel	Generator, TSE RN 101091
ons	732848	Isuzu	3LD1	0	39	Diesel	Generator, TSE RN 101091
ons	732850	Isuzu	3LD1	0	39	Diesel	Generator, TSE RN 101091
ons	732838	Isuzu	3LD1	0	39	Diesel	Generator, TSE RN 101091
ons	732841	Isuzu	3LD1	0	39	Diesel	Generator, TSE RN 101091
ons	733837	Yanmar	4TNNAC	EYDXL3.32NDA/IV	69.7	Diesel	Water Pump, PERP RN 199359
ons	735003	Yanmar	L100W6-G	Unknown	9.3	Diesel	Generator
ons	735004	Yanmar	L100W6-G	Unknown	9.3	Diesel	Generator
ons	736710	Honda	GX660	Unknown	24	Gasoline	Pressure Washer
ons	736711	Yanmar	4TNNACOT	IV	69.7	Diesel	Pump, PERP RN 209012
ons	736825	Kubota	V1505	Unknown	20	Diesel	Generator, TSE RN 101091
ons	736826	Kubota	V1505	Unknown	20	Diesel	Generator, TSE RN 101091
ons	746250	Yanmar	L100V6CA1T1AA	Unknown	9.1	Diesel	Pump
ons	813269	Kubota	V1505	Unknown	20	Diesel	Generator, TSE RN 101091
ons	813948	Kubota	4KPB115	Unknown	18.8	Diesel	Auxiliary Power

Location	Operator ID	Make	Model	EPA Family Name/Tier	Rating (bhp)	Fuel	Category
lvd	814780	Kubota	V2203-M-BG-ET02	Unknown	26.5	Diesel	Auxiliary Power
ons	815390	Karcher	SSG-603537E	Unknown	24	Diesel	Pressure Washer
ons	NA	Various	Various	NA	<2.5	Gasoline	31Trimmers < 2.5 Hp
ons	NA	Various	Various	NA	<13	Gasoline	11 Pressure Washers <13 Hp
ons	NA	Various	Various	NA	<13	Gasoline	8 Generators < 13 Hp
ons	NA	Various	Various	NA	<8	Gasoline	5 Chainsaw < 8 Hp
ons	NA	Various	Various	NA	<5	Gasoline	9 Blowers < 5 Hp
ons	726553	Yanmar	L100W6-G	GYDXL0.44H1N	9.3	Diesel	Generator
ons	675288	Honda	GX620	Unknown	28	Gasoline	Generator
ons	675355	Briggs & Stratton	Dethatcher	NA	7	Gasoline	Thatcher
ons	3613	Detroit Diesel	10435000	0	148	Diesel	Generator, TSE RN 101091
ons	3614	Detroit Diesel	10435000	0	148	Diesel	Generator, TSE RN 101091
ons	3615	Detroit Diesel	10435000	0	148	Diesel	Generator, TSE RN 101091
ons	3617	Detroit Diesel	10435000	0	148	Diesel	Generator, TSE RN 101091
ons	3618	Detroit Diesel	10435000	0	148	Diesel	Generator, TSE RN 101091
	3946	Isuzu	A-6BG1T	0	155	Diesel	Generator, TSE RN 101091
	3993	John Deere	4024TF281	8JDXL02.4074/IV	49	Diesel	Air Compressor
	3994	John Deere	4024TF281	8JDXL02.4074/IV	49	Diesel	Air Compressor
	3995	John Deere	4024TF281	8JDXL02.4074/IV	49	Diesel	Air Compressor
	4021	John Deere	4024TF281	8JDXL02.4074/IV	49	Diesel	Air Compressor
	4022	John Deere	4024TF281	8JDXL02.4074/IV	49	Diesel	Air Compressor
	4023	John Deere	4024TF281	8JDXL02.4074/IV	49	Diesel	Air Compressor
	4024	John Deere	4024TF281	8JDXL02.4074/IV	49	Diesel	Air Compressor
	707871	Deutz	D2.9 L4	GDZXL02.9021	49	Diesel	Air Compressor
	707880	Deutz	D2.9 L4	GDZXL02.9021	49	Diesel	Air Compressor
	814751	Kubota	V2403-TI-BG-EF01	NKBXL02.4EMC/IV	49	Diesel	Facility Power
Ridge	722066	Generac	A2400T-GEN1	KKMCL2.39A45/IV	49	Diesel	Generator
	732760	Kubota	D1105	Unknown/IV	25	Diesel	Trailer Mounted Floodlight
	732761	Kubota	D1105	Unknown/IV	25	Diesel	Trailer Mounted Floodlight

Location	Operator ID	Make	Model	EPA Family Name/Tier	Rating (bhp)	Fuel	Category
	732762	Kubota	D1105	Unknown/IV	25	Diesel	Trailer Mounted Floodlight
	718068	Cummins	QSB5-G11	JCEXL04.5AAJ/IV	169	Diesel	Generator, PERP RN 182216
on	718669	Cummins	QSB5-G11	JCEXL04.5AAJ/IV	169	Diesel	Generator, PERP RN 182217
	3421	Isuzu	4LEI	0	49	Diesel	Self Generating Nitrogen Cart, TS
	727890	John Deere	4024TF281A	CJDXL02.4074/IV	49	Diesel	Air Compressor
	4298	Cummins	4BT3.9G4	I	93	Diesel	Generator, TSE RN 101091
	4299	Cummins	4BT3.9G4	I	93	Diesel	Generator, TSE RN 101091
	4300	Cummins	4BT3.9G4	I	93	Diesel	Generator, TSE RN 101091
	4301	Cummins	4BT3.9G4	I	93	Diesel	Generator, TSE RN 101091
	4310	Deutz	BF4M1008	I	38.8	JP-8	Generator, TSE RN 101091
	4311	Deutz	BF4M1008	I	38.8	JP-8	Generator, TSE RN 101091
	653788	Perkins	404D-22T	Unknown	38.8	JP-8	Start cart, TSE RN 101091
	653789	Perkins	1104D-E44TA	BPKXL04.4NJ1	38.8	JP-8	Start cart, TSE RN 101091
	677068	Caterpillar	C13	Unknown	569	Diesel	Auxiliary Power, TSE RN 101091
ld	630175	Garrett	GTCP85-180C	NA	100	JP-8	Turbine Compressor - Aircraft Eng 101091
	2055	Garrett	GTCP85-180C	NA	100	JP-8	Turbine Compressor - Aircraft Eng 101091
	728018	Kubota	D905 V1305-EBG	NA	19	Diesel	Trailer Mounted Floodlight
	728019	Kubota	D905 V1305-EBG	NA	19	Diesel	Trailer Mounted Floodlight
	728020	Kubota	D905 V1305-EBG	NA	19	Diesel	Trailer Mounted Floodlight
	728021	Kubota	D905 V1305-EBG	NA	19	Diesel	Trailer Mounted Floodlight
	728022	Kubota	D905 V1305-EBG	NA	19	Diesel	Trailer Mounted Floodlight
	728023	Kubota	D905 V1305-EBG	NA	19	Diesel	Trailer Mounted Floodlight
	728024	Kubota	D905 V1305-EBG	NA	19	Diesel	Trailer Mounted Floodlight
	728025	Kubota	D1105-EU2	3KBXL01.5BCD	26	Diesel	Air Compressor
	728026	Yanmar	L70ABE-DEGMTAYC	Unknown	6.7	Diesel	Heater New Generation
	728027	Yanmar	L70ABE-DEGMTAYC	Unknown	6.7	Diesel	Heater New Generation
	719092	Kubota	D1703-M-BG-ET01	GKBL02.2FCC/IV	20.2	Diesel	Generator
	4072	Kubota	D1503 M BG ET02e	9KBXL01.5FCC/IV	24	Diesel	Winch Motor

Location	Operator ID	Make	Model	EPA Family Name/Tier	Rating (bhp)	Fuel	Category
	4073	Kubota	D1503 M BG ET02e	9KBXL01.5FCC/IV	24	Diesel	Winch Motor
	3516	Deutz	BF4M1013E	2DZXL07.1005/I	119	Diesel	PERP RN 120369
	3517	Deutz	BF4M1013E	2DZXL07.1005/I	119	Diesel	PERP RN 120370
	3949	Deutz	TCD2013L042V	8DZXL04.8064/III	172	Diesel	PERP RN 144722
	3950	Deutz	TCD2013L042V	8DZXL04.8064/III	172	Diesel	PERP RN 144723
	4317	Isuzu	BI-4HK1X	BSZXL05.21XB/III	173	Diesel	Generator, PERP RN 159459
	652758	John Deere	4045HFG93A B	CJDXL06.8210/IV	166	Diesel	Generator, PERP RN 162910
	703351	Kohler	CH740	Unknown	25	Gasoline	Blower
	723469	Kubota	D1803-T	KKBL01.8EMD/IV	49	Diesel	Air Compressor
	723470	Kubota	D1803-T	KKBL01.8EMD/IV	49	Diesel	Air Compressor
	3735	John Deere	3029TF270D	4JDXL02.9050/II	64	Diesel	Air Compressor, TSE RN 101091
	734977	CUMMINS	QSB5-G11	LCEXL04.5AAI	169	Diesel	Generator, TSE RN 101091
	813884	John Deere	4045TF285	Unknown	99	Diesel	Generator, TSE RN 101091
	813895	CUMMINS	4BT3.9-G4	Unknown	93	Diesel	Generator, TSE RN 101091
	813896	CUMMINS	4BT3.9-G4	Unknown	93	Diesel	Generator, TSE RN 101091
	746201	VANGUARD	6134770280J1	Unknown	35	Gasoline	Blower
EET	729098	JOHN DEERE	3029TF270D	Unknown	64	Diesel	Generator, TSE RN 101091
	730034	Kohler	LT6K	FKHL1.37SF1/IV	25.5	Diesel	Trailer Mounted Floodlight
	730035	Kohler	LT6K	FKHL1.37SF1/IV	25.5	Diesel	Trailer Mounted Floodlight
	730036	Kohler	LT6K	FKHL1.37SF1/IV	25.5	Diesel	Trailer Mounted Floodlight
	730037	Kohler	LT6K	FKHL1.37SF1/IV	25.5	Diesel	Trailer Mounted Floodlight
	3820	John Deere	3029TF270D	II	64	Diesel	Generator, TSE RN 101091
	3821	John Deere	3029TF270D	II	64	Diesel	Generator, TSE RN 101091
ons	4124	Isuzu	BH-6UZ1X	ASZXL09.8HXB/III	349	Diesel	Generator, PERP RN 154640
	696	Cummins	NT855G3	0	390	Diesel	Generator, TSE RN 101091
	4034	Onan	DN4M	II	24.1	Diesel	Generator, TSE RN 101091
	730542	Kubota	Z482-D2-ES02	7KBXL.719KCC/II	10.9	Diesel	Trailer Mounted Floodlight
	730543	Kubota	Z482-D2-ES02	7KBXL.719KCC/II	10.9	Diesel	Trailer Mounted Floodlight
	730544	Lombardini	LDW 1003	9LBDL1.37SF1/II	12	Diesel	Trailer Mounted Floodlight

Location	Operator ID	Make	Model	EPA Family Name/Tier	Rating (bhp)	Fuel	Category
	730545	Lombardini	LDW 1003	9LBDL1.37SF1/II	12	Diesel	Trailer Mounted Floodlight
	730546	Kubota	Z482-D2-ES02	7KBXL.719KCC/II	10.9	Diesel	Trailer Mounted Floodlight
	730547	Kubota	D1005	JKBXL01.0BCC/IV	26	Diesel	Trailer Mounted Floodlight
	730548	Kubota	D1105	JKBXL01.0BCC/IV	25	Diesel	Trailer Mounted Floodlight
	719728	Cummins	QSB4.5	JCEXL0275AAG/III	139	Diesel	Generator, TSE RN 101091
	726921	Kohler	KDI1903TCR/G18C	KKHXL2.48TCR/IV	49	Diesel	Generator, TSE RN 101091
	719726	Cummins	QSB4.5	JCEXL0275AAG/III	139	Diesel	Generator, TSE RN 101091
	722304	Kohler	KDI1903TCR/G18C	KKHXL2.48TCR/IV	49	Diesel	Generator, TSE RN 101091
	815665	Kubota	D1005	IV	26	Diesel	Trailer Mounted Floodlight
	4097	Caterpillar	C4.4	APKXL04.4NJ1/III	130	Diesel	Air Compressor, PERP RN 15351
	703411	Kubota	ZB600E	NA	12	Diesel	Pressure Washer
e	762	Teledyne Continental	TMD-20	0	32.5	Diesel	Generator
e	653776	Lister Petter	4100548LPWS3A90	Unknown	15	Diesel	Air Compressor
n Ave	4294	Caterpillar	C2.2	BH3XL2.22N4T/I-IV	60	Diesel	Ginder Engine, PERP RN 157631
n Ave	703412	John Deere	4045TF275	6JDXL06.8082	110	Diesel	Generator, TSE RN 101091
n Ave	730530	John Deere	4045TF275	6JDXL06.8082/III	110	Diesel	Sweeper, TSE RN 101091
n Ave	4288	John Deere	4045HF280	AJDXL04.5111/III	50	Diesel	Generator, TSE RN 101091
n Ave	4364	Kubota	V3600-T-ETO2	Unknown	63	Diesel	Water Pump, TSE RN 101091
n Ave	4365	Kubota	V3600-T-ETO2	Unknown	63	Diesel	Water Pump, TSE RN 101091
n Ave	723759	Kohler	KDI1903TCR/26B	IV	49	Diesel	Air Compressor
n Ave	746797	CUMMINS	QSB3.3	Unknown	99	Diesel	Generator, TSE RN 101091
n Ave	727959	Cummins	QSB3.3	BCEXL0275AAH/III	99	Diesel	Generator, TSE RN 101091
n Ave	727960	Cummins	QSB3.3	BCEXL0275AAH/III	99	Diesel	Generator, TSE RN 101091
n Ave	727963	Cummins	QSB3.3	BCEXL0275AAH/III	99	Diesel	Generator, TSE RN 101091
n Ave	727961	Cummins	QSB3.3	BCEXL0275AAH/III	99	Diesel	Generator, TSE RN 101091
n Ave	727958	Cummins	QSB3.3	BCEXL0275AAH/III	99	Diesel	Generator, TSE RN 101091
n Ave	718452	Cummins	QSB3.3	BCEXL0275AAH/III	99	Diesel	Generator, TSE RN 101091
n Ave	718453	Cummins	QSB3.3	BCEXL0275AAH/III	99	Diesel	Generator, TSE RN 101091
n Ave	718454	Cummins	QSB3.3	BCEXL0275AAH/III	99	Diesel	Generator, TSE RN 101091

Operator ID	Make	Model	Model Year	Rating (MMBtu/hr)	Fuel	Type of Unit	Basis Exemp
732823	Cleaver Brooks	CFC-E	NA	0.75	LPG	Boiler	202.G.1
705824	Cleaver Brooks	CFC-700-1500-125HW	NA	1.5	LPG	Boiler	202.G.1
4156	Takagi	T-K3	NA	0.199	LPG	Water Heater	202.G.1
704772	York	TG9S120D16MP11A	NA	0.12	NG	Furnace	202.G.1
704778	American Water Heater Co	BFG6140T403NO	NA	0.04	NG	Water Heater	202.G.1
735980	United Refrigeration Dist.	TZ80MSS100C50XA	NA	0.1	NG	Furnace	202.G.1
707832	Lochinvar	CHL0502	NA	0.5	NG	Boiler	202.G.1
723353	Rbi	DB600	NA	0.51	NG	Boiler	202.G.1
1007	Sterling-Alton	GMIF-50	NA	0.625	NG	Furnace	202.G.1
4333	Rheem	22DV50F	NA	0.038	NG	Water Heater	202.G.1
707833	Lennox	G50UH-60C-110X-05	NA	0.11	NG	Furnace	202.G.1
694968	A.O. Smith	BT 100 300	NA	0.075	NG	Water Heater	202.G.1
707834	Lochinvar	KBN106	NA	0.105	NG	Boiler	202.G.1
707835	Lochinvar	KBN106	NA	0.105	NG	Boiler	202.G.1
727966	Lochinvar	KHB285N	NA	0.285	NG	Boiler	202.G.1
735994	Lochinvar	KBN285	NA	0.285	NG	Boiler	202.G.1
736011	Navien	NPE-240A	NA	0.1999	NG	Water Heater	202.G.1
727968	Goodman	GMSS961005CNAA	NA	0.1	NG	Boiler	202.G.1
3228	Bryant	376CAV060115	NA	0.115	NG	Furnace	202.G.1
3229	Bryant	376CAV060115	NA	0.115	NG	Furnace	202.G.1
735988	A.O. Smith	AT-M50 ASME-N	NA	0.38	NG	Water Heater	202.G.1
816005	Carrier Corp	58STX045-08	NA	0.044	NG	Furnace	202.G.1
694919	Lochinvar	KBN400	NA	0.399	NG	Boiler	202.G.1
698766	Raypak	H7-0700A	NA	0.7	NG	Boiler	202.G.1
4040	Ajax Boiler	WPG-1050	NA	1.05	NG	Boiler	202.G.1
676461	Vanguard	5AU69	NA	0.038	NG	Water Heater	202.G.1
814990	Parker	T300L	NA	0.3	NG	Boiler	202.G.1
814991	Parker	T300L	NA	0.3	NG	Boiler	202.G.1
4086	Raypak	H7-0753	NA	0.75	NG	Boiler	202.G.1
4087	Raypak	H7-0753	NA	0.75	NG	Boiler	202.G.1
745074	Nortek	VG7SA-126C-T45DP	NA	0.122	LPG	Furnace	202.G.1

Operator ID	Make	Model	Model Year	Rating (MMBtu/hr)	Fuel	Type of Unit	Basis Exemp
814994	Nortex	VG7SA-054C-T23AP	NA	0.052	NG	Furnace	202.G.1
815008	Airtemp	VG7SA072C-35C1	NA	0.072	NG	Furnace	202.G.1
815009	Airtemp	VG7SA072C-35C1	NA	0.072	NG	Furnace	202.G.1
736655	Raypak, Inc	H7-0400A	NA	0.399	NG	Boiler	202.G.1
736657	Raypak, Inc	H7-0400A	NA	0.399	NG	Boiler	202.G.1
814995	Lochinvar Llc	FTX725N	NA	0.725	NG	Boiler	202.G.1
814996	Lochinvar Llc	FTX725N	NA	0.725	NG	Boiler	202.G.1
3652	Raypak	H8-0992A	NA	0.99	NG	Boiler	202.G.1
3653	Raypak	H3-0652A	NA	0.65	NG	Boiler	202.G.1
732164	Bradford White	URG140T6N	NA	0.034	NG	Water Heater	202.G.1
732165	Bradford White	URG150T6N	NA	0.034	NG	Water Heater	202.G.1
697049	Rbi-Dominator	DB400	NA	0.399	NG	Boiler	202.G.1
814672	Bradford White	URG204T6N	NA	0.04	NG	Water Heater	202.G.1
910	Lennox	G14Q4-5-100-6	NA	0.1	LPG	Furnace	202.G.1
707836	Lennox	G61MP-60C-111-09	NA	0.11	LPG	Furnace	202.G.1
727972	Raypak	H8-0992C	NA	0.99	NG	Boiler	202.G.1
676538	Carrier	CNRVT4821ACAABAA	NA	0.08	LPG	Furnace	202.G.1
676539	Carrier	CNRVT4821ACAABAA	NA	0.08	LPG	Furnace	202.G.1
676540	Carrier	CNRVT6024ACAABAA	NA	0.1	LPG	Furnace	202.G.1
676712	York	DH036N014N2AAA1A	NA	0.05	LPG	Furnace	202.G.1
676719	York	DHUC-TO36N100A	NA	0.1	LPG	Furnace	202.G.1
676722	York	DHUC-TO36N100A	NA	0.1	LPG	Furnace	202.G.1
707800	Bradford White	U440T6FRN	NA	0.04	LPG	Water Heater	202.G.1
707998	York	CNRVT4821ACAAAAA	NA	0.08	LPG	Furnace	202.G.1
707999	York	DH036N014N2AAA1A	NA	0.1	LPG	Furnace	202.G.1
700460	Carrier	58STX135-16	NA	0.132	NG	Furnace	202.G.1
701731	American Water Heater Co	G62-40T34-3N	NA	0.034	NG	Water Heater	202.G.1
701732	Bradford White	M440T6FBN	NA	0.04	NG	Water Heater	202.G.1
727973	American Standard	TUX080C960D2	NA	0.8	NG	Furnace	202.G.1
3833	A.O. Smith	FCG-100 300	NA	0.075	NG	Water Heater	202.G.1
733094	Parker Boiler	T760LR	NA	0.76	NG	Boiler	202.G.1
708767	Rheem	XG40T06EN38U0	NA	0.038	NG	Water Heater	202.G.1

	Operator ID	Make	Model	Model Year	Rating (MMBtu/hr)	Fuel	Type of Unit	Basis Exemp
	720648	Bradford White	50T65FB3N	NA	0.065	NG	Water Heater	202.G.1
	929	American Standard	GSI-40T34-3N	NA	0.034	NG	Water Heater	202.G.1
	4056	A.O. Smith	FGR 40 248E	NA	0.038	NG	Water Heater	202.G.1
	694920	Patterson-Kelley	N1000-MFD	NA	1	NG	Boiler	202.G.1
	694969	Patterson-Kelley	N1000-MFD	NA	1	NG	Boiler	202.G.1
	3236	Day & Nite	376C	NA	0.074	NG	Furnace	202.G.1
	3281	Reznor	HCRGB175-S	NA	0.15	NG	Furnace	202.G.1
	3282	Reznor	TR75	NA	0.075	NG	Furnace	202.G.1
	3988	A.O. Smith	FCG 100 300	NA	0.751	NG	Water Heater	202.G.1
	3923	Raypak	H3-0302B	NA	0.3	NG	Boiler	202.G.1
	3924	Raypak	H3-0302B	NA	0.3	NG	Boiler	202.G.1
	732133	Bradford White	URG240T6N	NA	0.04	NG	Water Heater	202.G.1
	727974	Rheem	GN75-125	NA	0.125	NG	Water Heater	202.G.1
	947	Lennox	GS11D2100	NA	0.1	NG	Furnace	202.G.1
	3238	Lennox	GS11D2100	NA	0.08	NG	Furnace	202.G.1
	658417	Bradford White	U140T6FRN	NA	0.04	NG	Water Heater	202.G.1
	698205	Reznor	UDAS-75	NA	0.075	NG	Furnace	202.G.1
	698206	Reznor	UDAS-75	NA	0.075	NG	Furnace	202.G.1
	698207	Reznor	UDAS-75	NA	0.075	NG	Furnace	202.G.1
	698208	Reznor	UDAS-75	NA	0.075	NG	Furnace	202.G.1
	3942	Patterson-Kelley	N2000-MFD	NA	1.999	LPG	Boiler	202.G.1
	4289	Parker Boiler Co.	G672RL	NA	0.672	LPG	Boiler	202.G.1
d	648940	Bradford White	M440T6FSX	NA	0.036	LPG	Water Heater	202.G.1
d	656947	Dayton	3E407D	NA	0.06	LPG	Furnace	202.G.1
d	657188	Dayton	3E407D	NA	0.06	LPG	Furnace	202.G.1
d	735997	Intl Comfort Products	N80ESL1102120A1	NA	0.11	LPG	Heater	202.G.1
	4356	Lennox	TGLS100C20MP11A	NA	0.1	LPG	Furnace	202.G.1
	714341	Airtemp	VG 7SA 108C- 35C1	NA	0.108	LPG	Furnace	202.G.1
	714343	Airtemp	VG 7SA 108C- 35C1	NA	0.108	LPG	Furnace	202.G.1
	816004	Bradford White	RG240T6X	NA	0.036	LPG	Water Heater	202.G.1

	Operator ID	Make	Model	Model Year	Rating (MMBtu/hr)	Fuel	Type of Unit	Basis Exemp
	731776	Lochinvar	FTX400N	NA	0.399	NG	Boiler	202.G.1
	736315	Trane	S9V2B080U4PSBBB	NA	0.08	NG	Furnace	202.G.1
	723354	Lochinvar	FTX400N	NA	0.399	NG	Boiler	202.G.1
	723355	Lochinvar	FTX400N	NA	0.399	NG	Boiler	202.G.1
	734785	A.O. Smith	BL-100 100	NA	0.0751	NG	Water Heater	202.G.1
	703338	Parker Boiler Co.	TC600L	NA	2	NG	Boiler	202.G.1
	703339	Parker Boiler Co.	TC600L	NA	2	NG	Boiler	202.G.1
ra	676752	Carrier	58MSA080---1--20	NA	0.08	NG	Furnace	202.G.1
ra	707838	A.O. Smith	BTN 200 108	NA	0.2	NG	Water Heater	202.G.1
ra	3219	Rheem	RGDD-08NE-GR	NA	0.08	NG	Furnace	202.G.1
ra	4290	American Water Heater Co	CG32-75T75-4NOV	NA	0.0751	NG	Water Heater	202.G.1
ra	4221	Dayton	FG9B08012UP11C	NA	0.08	NG	Furnace	202.G.1
ra	4338	Bradford White	M4403T6EN12	NA	0.04	NG	Water Heater	202.G.1
	3244	Tempstar	GNJ075M16C1	NA	0.075	NG	Furnace	202.G.1
	676761	Munching Contender	MC-50	NA	0.05	NG	Water Heater	202.G.1
	734161	Nortek	VG7SA-090C-T35CP	NA	0.085	NG	Furnace	202.G.1
	4058	Raypak	H3-0752B	NA	0.75	NG	Boiler	202.G.1
	707930	Raypak	H7-850A	NA	0.85	NG	Boiler	202.G.1
	708039	Raypak	H7-850A	NA	0.85	NG	Boiler	202.G.1
	732806	Bradford White	URG240T6N	NA	0.04	NG	Water Heater	202.G.1
	676800	American Appliance Mfg Co	DSID250-100-1	NA	0.25	NG	Water Heater	202.G.1
	3667	American Water Heater Co	CG32-75T75-4NV	NA	0.0751	NG	Water Heater	202.G.1
	661827	Raypak	H7-0500A	NA	0.5	NG	Boiler	202.G.1
	664578	Raypak	H7-2004A	NA	1.999	NG	Boiler	202.G.1
	727976	Bradford White	UGL275H763N	NA	0.076	NG	Water Heater	202.G.1
	734148	Lennox	G26Q3/4-100-6	NA	0.1	NG	Furnace	202.G.1
	734153	Lennox	G26Q3/4-100-6	NA	0.1	NG	Furnace	202.G.1

Operator ID	Make	Model	Model Year	Rating (MMBtu/hr)	Fuel	Type of Unit	Basis Exemp
734156	Lennox	G26Q3/4-100-6	NA	0.1	NG	Furnace	202.G.1
815790	Bradford White	ULG275H763N	NA	0.076	NG	Water Heater	202.G.1
704767	Rheem	RGD05NAUER	NA	0.05	NG	Water Heater	202.G.1
704769	American Water Heater Co	BFG6140T403N0	NA	0.04	NG	Water Heater	202.G.1
657189	Rheem	GNU100-250	NA	0.25	NG	Water Heater	202.G.1
734158	Rbi	MB1000	NA	1	NG	Boiler	202.G.1
734159	Rbi	MB1000	NA	1	NG	Boiler	202.G.1
3989	Raypak	H3-0401	NA	0.375	NG	Boiler	202.G.1
736002	Bradford White	URG240T6N	NA	0.04	NG	Water Heater	202.G.1
720649	Trane	TUD1C100A9601AB	NA	0.1	NG	Furnace	202.G.1
720650	Trane	TUD1C100A9601AB	NA	0.1	NG	Furnace	202.G.1
4339	Lochinvar	CHN0502	NA	0.5	NG	Boiler	202.G.1
4068	Cleaver Brooks	CFC-700-750-60HW	NA	0.75	NG	Boiler	202.G.1
698107	Bradford White	D100L199E3N	NA	0.199	NG	Water Heater	202.G.1
708770	Patterson-Kelley	C1050	NA	1.05	NG	Boiler	202.G.1
708771	Patterson-Kelley	C1050	NA	1.05	NG	Boiler	202.G.1
3627	Ajax Boiler	WPG1050	NA	1	NG	Boiler	202.G.1
3628	Ajax Boiler	WPG1050	NA	1	NG	Boiler	202.G.1
698034	Raypak	H7-0500A	NA	0.5	NG	Boiler	202.G.1
734162	Bradford White	URG240T6N	NA	0.04	NG	Water Heater	202.G.1
734164	Raypak	XPAK 120	NA	0.1195	NG	Water Heater	202.G.1
734165	Raypak	XPAK 120	NA	0.1195	NG	Water Heater	202.G.1
676815	York	P4HUC20L08001A	NA	0.1	NG	Furnace	202.G.1
676816	York	P4HUC20L08001A	NA	0.1	NG	Furnace	202.G.1
676817	Bradford White	MI40T6EN12	NA	0.04	NG	Water Heater	202.G.1
676818	Bradford White	M4403T6EN12	NA	0.04	NG	Water Heater	202.G.1
698138	Raypak	H7-0500A	NA	0.5	NG	Boiler	202.G.1
698139	Raypak	H7-0500A	NA	0.5	NG	Boiler	202.G.1
724495	Bradford White	URG240T6N	NA	0.04	NG	Water Heater	202.G.1
3379	Carrier	58SXC120-LG	NA	0.132	NG	Furnace	202.G.1
3941	Ajax Boiler	WRFG-840	NA	0.84	NG	Boiler	202.G.1

Operator ID	Make	Model	Model Year	Rating (MMBtu/hr)	Fuel	Type of Unit	Basis Exemp
676819	Bradford White	M440T6FBN	NA	0.04	NG	Water Heater	202.G.1
744816	Raypak	H7-0300B	NA	0.3	NG	Boiler	202.G.1
3812	Lochinvar	CHN651	NA	0.65	NG	Boiler	202.G.1
3813	Lochinvar	CHN651	NA	0.65	NG	Boiler	202.G.1
3855	American Water Heater Company	G52-40T34-3N	NA	0.034	NG	Water Heater	202.G.1
4060	Raypak	H7-2003	NA	1.999	NG	Boiler	202.G.1
732807	Raypak	H7-2003A	NA	1.999	NG	Boiler	202.G.1
734178	Bradford White	URG240T6N	NA	0.04	NG	Water Heater	202.G.1
4319	Raypak	H7-2003	NA	1.999	NG	Boiler	202.G.1
698745	Bradford White	ULG275H763N	NA	0.076	NG	Water Heater	202.G.1
734171	Dristeem	GTS-400 DI	NA	0.4	NG	Humidifier	202.G.1
734173	Dristeem	GTS-400 DI	NA	0.4	NG	Humidifier	202.G.1
3677	Hydrotherm	AM-300	NA	0.299	NG	Boiler	202.G.1
701734	Rheem	G75-75N-2	NA	0.0751	NG	Water Heater	202.G.1
734175	Raypak	H7-0300B	NA	0.3	NG	Boiler	202.G.1
4106	Weather Rite	TOT-215HHI	NA	1.2	NG	Heater	202.G.1
4020	Laars Heating Systems	PNCH1000NACN2CXN	NA	0.99996	NG	Boiler	202.G.1
698399	Bradford White	URG140T6N	NA	0.034	NG	Water Heater	202.G.1
734169	Raypak	H7-0300B	NA	0.3	NG	Boiler	202.G.1
734170	Raypak	H7-0300B	NA	0.3	NG	Boiler	202.G.1
3682	American Appliance Mfg Co	DSID199-85-1	NA	0.199	NG	Water Heater	202.G.1
4184	Raypak	H9-1262B	NA	1.26	NG	Boiler	202.G.1
3683	Ajax Boiler	WNG-350	NA	0.35	NG	Boiler	202.G.1
701735	Bradford White	U140T6FRN	NA	0.04	NG	Water Heater	202.G.1
731904	Parker Boiler Co.	T970LR	NA	0.97	NG	Boiler	202.G.1
731906	Parker Boiler Co.	T970LR	NA	0.97	NG	Boiler	202.G.1
743120	Rheem	PROG40-38U RH62 EC1-1	NA	0.038	NG	Water Heater	202.G.1
743121	Parker Boiler	TC350(L)	NA	1	NG	Boiler	202.G.1
4219	A.O. Smith	FGR40240	NA	0.038	NG	Water Heater	202.G.1

Operator ID	Make	Model	Model Year	Rating (MMBtu/hr)	Fuel	Type of Unit	Basis Exemp
4308	Comfort Aire	GMUH125-E5A	NA	0.125	NG	Furnace	202.G.1
4309	Comfort Aire	GMUH125-E5A	NA	0.125	NG	Furnace	202.G.1
3857	American Water Heater Co	G62-40T34-3N	NA	0.034	NG	Water Heater	202.G.1
4025	Patterson-Kelley	N750-MFD	NA	0.75	NG	Boiler	202.G.1
4026	Patterson-Kelley	N750-MFD	NA	0.75	NG	Boiler	202.G.1
701736	American Water Heater Co	G52-40T34-3N	NA	0.034	NG	Water Heater	202.G.1
1066	Raypak	H0824A CCCRCBX	NA	0.825	NG	Boiler	202.G.1
3630	Patterson-Kelley	N-700	NA	0.7	NG	Boiler	202.G.1
3631	Patterson-Kelley	N-700	NA	0.7	NG	Boiler	202.G.1
744968	Rheem	GHE100SU-160	NA	0.16	NG	Water Heater	202.G.1
744967	Rheem	GHE100SU-200	NA	0.1999	NG	Water Heater	202.G.1
4043	Raypak	H7-1503	NA	1.5	NG	Boiler	202.G.1
4044	Raypak	H7-1503	NA	1.5	NG	Boiler	202.G.1
648903	Raypak	H7-0300A	NA	0.3	NG	Boiler	202.G.1
648927	Raypak	H7-0300A	NA	0.3	NG	Boiler	202.G.1
1073	Ajax Boiler	WGB-1750	NA	1.75	NG	Boiler	202.G.1
3382	Lennox	G20Q5/6X-100-7	NA	0.1	NG	Furnace	202.G.1
3383	Lennox	G20Q5/6X-100-7	NA	0.1	NG	Furnace	202.G.1
3858	American Water Heater Co	DCG31100S1996N	NA	0.199	NG	Water Heater	202.G.1
4088	Raypak	H7-2003	NA	1.999	NG	Boiler	202.G.1
732808	Raypak	H7-2003A	NA	1.999	NG	Boiler	202.G.1
734194	Rheem	G75-75N-3	NA	0.0751	NG	Water Heater	202.G.1
3688	American Appliance Mfg Co	DSID250-100	NA	0.25	NG	Water Heater	202.G.1
724497	Rheem Sales Co.	XG40T06EN38U0	NA	0.038	NG	Water Heater	202.G.1
727882	Cleaver Brooks	CFC-E	NA	0.5	NG	Boiler	202.G.1
727883	Cleaver Brooks	CFC-E	NA	0.5	NG	Boiler	202.G.1
732819	Rheem	XG40T09EN38U1	NA	0.038	NG	Water Heater	202.G.1
3859	Lochinvar	CBN0745	NA	0.745	NG	Boiler	202.G.1
3860	Lochinvar	CBN0745	NA	0.745	NG	Boiler	202.G.1

	Operator ID	Make	Model	Model Year	Rating (MMBtu/hr)	Fuel	Type of Unit	Basis Exemp
	3861	Lochinvar	EWN150PM	NA	0.15	NG	Boiler	202.G.1
	3862	Lochinvar	EWN150PM	NA	0.15	NG	Boiler	202.G.1
	709144	AO Smith	BTH-400A300	NA	0.3999	NG	Boiler	202.G.1
	815788	RayPak	H7-0300B	NA	0.3	NG	Boiler	202.G.1
	815789	RayPak	H7-0300B	NA	0.3	NG	Boiler	202.G.1
	734190	Raypak	WH7-0300A	NA	0.3	NG	Boiler	202.G.1
	734191	Raypak	WH7-0300A	NA	0.3	NG	Boiler	202.G.1
	734192	Raypak	H7-0500B	NA	0.5	NG	Boiler	202.G.1
	734193	Raypak	H7-0500B	NA	0.5	NG	Boiler	202.G.1
	676824	Bradford White	U15036FRN	NA	0.04	NG	Water Heater	202.G.1
	734182	Raypak	H7-0300A	NA	0.3	NG	Boiler	202.G.1
	734183	Raypak	H7-0300A	NA	0.3	NG	Boiler	202.G.1
	3636	Lochinvar	CBN1796	NA	1.79	NG	Boiler	202.G.1
	734197	Payne	PG8JAA048090ADJA	NA	0.11	NG	Furnace	202.G.1
	3247	Reznor	HCRGB75-5-2	NA	0.075	NG	Furnace	202.G.1
	3621	Trane	YCD150D4L0AA	NA	0.15	NG	Furnace	202.G.1
	3622	Trane	BYC130G4H0DA	NA	0.3	NG	Furnace	202.G.1
	3623	Trane	YCD150C4L0BB	NA	0.15	NG	Furnace	202.G.1
	3624	Trane	YCH180BN4L0DE	NA	0.25	NG	Furnace	202.G.1
	3625	Trane	BYC060F4L0BB	NA	0.0875	NG	Furnace	202.G.1
	694975	Trane	Y1AC060A4RLA	NA	0.06	NG	Furnace	202.G.1
	736004	Bradford White	URG240T6N	NA	0.04	NG	Water Heater	202.G.1
	698360	Raypak	H3-HD301	NA	0.299	NG	Boiler	202.G.1
	727980	Bradford White	URG240T6N	NA	0.04	NG	Water Heater	202.G.1
	676827	Reznor	SCE175-6	NA	0.175	NG	Furnace	202.G.1
	676828	Reznor	EBNH95X3N13203	NA	0.4	NG	Furnace	202.G.1
	694976	Trane	TUE1D140A9601AD	NA	0.14	NG	Furnace	202.G.1

Operator ID	Make	Model	Model Year	Rating (MMBtu/hr)	Fuel	Type of Unit	Basis Exemp
724648	Bradford White	URG140T6N	NA	0.04	NG	Water Heater	202.G.1
4295	Riverside Hydronics	2000W	NA	2	NG	Water Heater	202.G.1
676829	Green Heck	IGX-110-H12-HZ	NA	0.1	NG	Furnace	202.G.1
676830	Green Heck	IGX-112-H22-HZ	NA	0.2	NG	Furnace	202.G.1
676831	Green Heck	IG-109-H10-HZ	NA	0.075	NG	Furnace	202.G.1
676832	Green Heck	IG-112-H20-HZ	NA	0.2	NG	Furnace	202.G.1
676833	Green Heck	IG-112-H20-HZ	NA	0.2	NG	Furnace	202.G.1
676834	Trane	YHC092A4RZA2YD1B0A0A20600	NA	0.2	NG	Furnace	202.G.1
676835	Trane	YHC092A4RZA2YD1B0A0A20600	NA	0.2	NG	Furnace	202.G.1
676836	Trane	YHC072A4RYA2TD1B0A0A20600	NA	0.12	NG	Furnace	202.G.1
676837	Trane	YHC072A4RYA2TD1B0A0A20600	NA	0.12	NG	Furnace	202.G.1
694977	Trane	YHC092A4RZA2YD1B0A0A20600	NA	0.2	NG	Furnace	202.G.1
656862	Raypak	P-2005	NA	1.5	NG	Boiler	202.G.1
656863	Raypak	P-2005	NA	1.5	NG	Boiler	202.G.1
734980	Purpose Co. Ltd	AT-M50-N	NA	0.38	NG	Water Heater	202.G.1
694980	Reznor	FE50	NA	0.05	NG	Furnace	202.G.1
694981	Reznor	FE50	NA	0.05	NG	Furnace	202.G.1
694982	Reznor	FE50	NA	0.05	NG	Furnace	202.G.1
694983	Reznor	FE50	NA	0.05	NG	Furnace	202.G.1
734984	Bradford White	65T653N	NA	0.065	NG	Water Heater	202.G.1
727981	Intertek	RDF-2-80	NA	0.8	NG	Furnace	202.G.1

Operator ID	Make	Model	Model Year	Rating (MMBtu/hr)	Fuel	Type of Unit	Basis Exemp
656935	Bradford White	M2XR75S6BN	NA	0.076	NG	Water Heater	202.G.1
735854	Lochinvar	WHN085	NA	0.085	NG	Water Heater	202.G.1
711980	Bradford White	URG240T6N	NA	0.04	NG	Water Heater	202.G.1
2614	Modine	DFG300SFRNN10A1	NA	0.3	NG	Furnace	202.G.1
2615	Modine	DFG300SFRNN10A1	NA	0.3	NG	Furnace	202.G.1
3252	Lennox	G50UH-60C-110X-07	NA	0.11	NG	Furnace	202.G.1
3253	Lennox	G50UH-60C-110X-07	NA	0.11	NG	Furnace	202.G.1
706526	Bradford White	URG240T6N	NA	0.04	NG	Water Heater	202.G.1
676841	Lennox	G20Q3/4X-125-7	NA	0.125	NG	Furnace	202.G.1
676842	Lennox	G50UH-60C-110X-05	NA	0.11	NG	Furnace	202.G.1
4197	Vangaurd	5AU69	NA	0.038	NG	Water Heater	202.G.1
3287	Bryant	395CAV060111	NA	0.11	NG	Furnace	202.G.1
3353	Lennox	G16Q5X-100-5	NA	0.1	NG	Furnace	202.G.1
3354	Lennox	G16Q5X-100-5	NA	0.1	NG	Furnace	202.G.1
3865	A.O. Smith	FCG 100 270	NA	0.075	NG	Water Heater	202.G.1
694985	Bryant	395CAV060111	NA	0.11	NG	Furnace	202.G.1
694986	Bryant	395CAV060111	NA	0.11	NG	Furnace	202.G.1
694987	Bradford White	U140T6FRN	NA	0.04	NG	Water Heater	202.G.1
3357	Lennox	G20Q5/6X-100-2	NA	0.1	NG	Furnace	202.G.1

	Operator ID	Make	Model	Model Year	Rating (MMBtu/hr)	Fuel	Type of Unit	Basis Exemp
	4202	A.O. Smith	40248E	NA	0.038	NG	Water Heater	202.G.1
	676843	Lennox	TGA090H2B	NA	0.13	NG	Furnace	202.G.1
	676844	Lennox	TGA090H2B	NA	0.13	NG	Furnace	202.G.1
	676846	Lennox	TGA090H2B	NA	0.13	NG	Furnace	202.G.1
	676849	Carrier	48GSN036060511--	NA	0.06	NG	Furnace	202.G.1
	734986	Raypak, Inc.	H7-0800B	NA	0.8	NG	Boiler	202.G.1
e	4000	Raypak	WH1-0402	NA	0.399	NG	Boiler	202.G.1
e	736008	Bradford White	URG130T6N	NA	0.027	NG	Water Heater	202.G.1
	4090	American Standard	BCG380T1506NOX	NA	0.154	NG	Water Heater	202.G.1
e	4340	Vangaurd	5AU69	NA	0.038	NG	Water Heater	202.G.1
e	727982	Raypak	HB-0752B	NA	0.75	NG	Boiler	202.G.1
e	4276	Raypak	H7-0500	NA	0.5	NG	Boiler	202.G.1
e	4277	Raypak	H7-0500	NA	0.5	NG	Boiler	202.G.1
e	4278	Raypak	H7-0500	NA	0.5	NG	Boiler	202.G.1
e	727983	Raypak	H7-0500A	NA	0.5	NG	Boiler	202.G.1
o	707839	American Water Heater Co	BCL3100T1996NOX	NA	0.199	NG	Water Heater	202.G.1
o	707840	Raypak	H3-HD401	NA	0.399	NG	Boiler	202.G.1
	676857	Weather Rite	ARTT218HHL	NA	0.85536	NG	Furnace	202.G.1
	676860	Reznor	PDH400A-2	NA	0.4	NG	Furnace	202.G.1
	676862	Reznor	PDH350-2	NA	0.35	NG	Furnace	202.G.1
	727984	Rheem	G75-75N-3	NA	0.0751	NG	Water Heater	202.G.1
	727985	Trane	DFIA120HLS	NA	0.825	NG	Heater	202.G.1
	736411	Trane	DFIA 218 HLS	NA	1.1	NG	Heater	202.G.1
	657197	Bryant	311JAV066110ADJA	NA	0.11	NG	Furnace	202.G.1
	727986	Bradford White	URG140T6N	NA	0.034	NG	Water Heater	202.G.1

Operator ID	Make	Model	Model Year	Rating (MMBtu/hr)	Fuel	Type of Unit	Basis Exemp
700461	York	LY8S100C20UH11C	NA	0.1	NG	Furnace	202.G.1
713405	Bradford White	URG240T6N	NA	0.04	NG	Water Heater	202.G.1
4321	American	HCG3100T1993N	NA	0.1999	NG	Water Heater	202.G.1
706417	Bradford White	URG140T6N	NA	0.034	NG	Water Heater	202.G.1
727987	Raypak	H3-HD401	NA	0.399	NG	Boiler	202.G.1
4220	American Water Heater Co	BFG6140T403NO	NA	0.04	NG	Water Heater	202.G.1
727988	Trane	TZ80MSS050A30XA	NA	0.05	NG	Furnace	202.G.1
727989	Trane	TZ80MSS050A30XA	NA	0.05	NG	Furnace	202.G.1
734989	Bradford White	URG240T6N	NA	0.04	NG	Water Heater	202.G.1
676865	Heat Transfer Products	PH199-55	NA	0.199	NG	Water Heater	202.G.1
676866	Heat Transfer Products	PH199-55	NA	0.199	NG	Water Heater	202.G.1
676868	Raypak	H7-0500A	NA	0.5	NG	Boiler	202.G.1
676871	Raypak	H7-0500A	NA	0.5	NG	Boiler	202.G.1
676875	Heat Transfer Products	PH199-55	NA	0.199	NG	Water Heater	202.G.1
676878	Heat Transfer Products	PH199-55	NA	0.199	NG	Water Heater	202.G.1
676881	Raypak	H7-0500A	NA	0.5	NG	Boiler	202.G.1
676882	Raypak	H7-0500A	NA	0.5	NG	Boiler	202.G.1
3141	Raypak	W1-0263B-BEDHDAA	NA	0.264	NG	Boiler	202.G.1
657204	Raypak	WH1-HD301	NA	0.299	NG	Boiler	202.G.1
694991	Reznor	RPB175-8-S	NA	0.175	NG	Furnace	202.G.1
694992	Reznor	RPB125-8-S	NA	0.125	NG	Furnace	202.G.1
694993	Reznor	RPB125-8-S-2-H	NA	0.125	NG	Furnace	202.G.1
694994	Reznor	RPB175-8-S	NA	0.175	NG	Furnace	202.G.1
694995	Reznor	RPB175-8-S	NA	0.175	NG	Furnace	202.G.1
694996	Reznor	RPB225-8-S	NA	0.25	NG	Furnace	202.G.1
694997	Reznor	RPB125-8-S-2-H	NA	0.125	NG	Furnace	202.G.1
694998	Reznor	RPB225-8-S	NA	0.25	NG	Furnace	202.G.1

	Operator ID	Make	Model	Model Year	Rating (MMBtu/hr)	Fuel	Type of Unit	Basis Exemp
e	694999	Reznor	RPB225-8-S	NA	0.25	NG	Furnace	202.G.1
e	695000	Reznor	RPB175-8-S	NA	0.175	NG	Furnace	202.G.1
e	695001	Reznor	RPB225-8-S	NA	0.225	NG	Furnace	202.G.1
e	695002	Reznor	RPB350-8-S	NA	0.35	NG	Furnace	202.G.1
e	695003	Reznor	RPB350-8-S	NA	0.35	NG	Furnace	202.G.1
e	695004	Reznor	RPBL500-8	NA	0.5	NG	Furnace	202.G.1
e	695005	Reznor	RPBL500-8	NA	0.5	NG	Furnace	202.G.1
e	695006	Reznor	RPBL500-8	NA	0.5	NG	Furnace	202.G.1
e	695007	Reznor	RPB175-8-S	NA	0.175	NG	Furnace	202.G.1
e	695008	Reznor	RPB125-8-S-2-H	NA	0.125	NG	Furnace	202.G.1
e	695009	Reznor	RPB175-8-S	NA	0.175	NG	Furnace	202.G.1
e	695010	Reznor	RPB175-8-S	NA	0.175	NG	Furnace	202.G.1
e	695011	Reznor	RPB175-8-S	NA	0.175	NG	Furnace	202.G.1
e	704759	Parker Boiler Co.	20L	NA	0.86	NG	Boiler	202.G.1
e	736637	Reznor	RPB125-8-S-2-H	NA	0.125	NG	Furnace	202.G.1
	659343	York	LY8S100C20UH11C	NA	0.1	NG	Furnace	202.G.1
	659346	York	GY8S160E30UH21C	NA	0.16	NG	Furnace	202.G.1
	659365	York	GY8S160E30UH21C	NA	0.16	NG	Furnace	202.G.1
	3260	Carrier	PG8UAA060111	NA	0.11	NG	Furnace	202.G.1
	3360	Bryant	376CAV060115	NA	0.115	NG	Furnace	202.G.1
	727990	Bradford White	URG240T6N	NA	0.04	NG	Water Heater	202.G.1
	704017	Bradford White	URG140T6N	NA	0.034	NG	Water Heater	202.G.1
	3361	Raypak	H1-0263	NA	0.264	NG	Boiler	202.G.1
	727991	Takagi	AT-H3M-DV-N	NA	0.12	NG	Water Heater	202.G.1
e	4344	Bradford White	M4403T6EN12	NA	0.04	NG	Water Heater	202.G.1
e	676888	Raypak	H4-0042R	NA	0.042	NG	Boiler	202.G.1
e	676890	Payne	PG8UAA066111	NA	0.11	NG	Furnace	202.G.1
e	676892	Payne	PG8UAA066111	NA	0.11	NG	Furnace	202.G.1

	Operator ID	Make	Model	Model Year	Rating (MMBtu/hr)	Fuel	Type of Unit	Basis Exemp
	730209	Mestek, Inc.	QVRT10	NA	0.1	NG	Furnace	202.G.1
	730211	Mestek, Inc.	QVRT10	NA	0.1	NG	Furnace	202.G.1
	730216	Mestek, Inc.	QVRT10	NA	0.1	NG	Furnace	202.G.1
	4350	Reznor	HCRG75-7	NA	0.075	NG	Furnace	202.G.1
	4351	Reznor	HCRG75-7	NA	0.075	NG	Furnace	202.G.1
	4352	Reznor	HCRG75-7	NA	0.075	NG	Furnace	202.G.1
	4353	Reznor	HCRG75-7	NA	0.075	NG	Furnace	202.G.1
	4354	Reznor	HCRG75-7	NA	0.075	NG	Furnace	202.G.1
	4355	Reznor	HCRG75-7	NA	0.075	NG	Furnace	202.G.1
	648941	Bradford White	U140T6FRN	NA	0.04	NG	Water Heater	202.G.1
	3637	Parker Boiler Co.	T760LR	NA	0.76	NG	Boiler	202.G.1
	676903	Trane	YCP036F3LOAD	NA	0.04	NG	Furnace	202.G.1
	676904	Trane	YCP036F3LOAD	NA	0.04	NG	Furnace	202.G.1
	730223	Carrier Corp	48ES-A6009050	NA	0.09	NG	Furnace	202.G.1
	701737	Trane	4YCZ6060A1120AB	NA	0.12	NG	Furnace	202.G.1
	701738	Trane	4YCZ6060A1120AB	NA	0.12	NG	Furnace	202.G.1
	656889	Raypak	WH1-HD251	NA	0.25	NG	Boiler	202.G.1
	727992	Bradford White	URG150T6N	NA	0.034	NG	Water Heater	202.G.1
	676911	York	P4HUC20L09201A	NA	0.115	NG	Furnace	202.G.1
	706527	Bradford White	U130T6FRN	NA	0.032	NG	Water Heater	202.G.1
ıd	3713	Bradford White	M4403T6EN12	NA	0.04	NG	Water Heater	202.G.1
	4110	Hydrotherm	KN-10	NA	1	NG	Boiler	202.G.1
	4111	Hydrotherm	KN-10	NA	1	NG	Boiler	202.G.1
	4346	Pvi	250P125A-TPL	NA	0.199	NG	Water Heater	202.G.1
	721569	Patterson-Kelley	N2000-MFD	NA	2	NG	Boiler	202.G.1
	721570	Patterson-Kelley	N2000-MFD	NA	2	NG	Boiler	202.G.1

Operator ID	Make	Model	Model Year	Rating (MMBtu/hr)	Fuel	Type of Unit	Basis Exemp
3371	Lennox	G20Q3X-75-7	NA	0.075	NG	Furnace	202.G.1
4224	Lennox	G20Q3X-75-7	NA	0.075	NG	Furnace	202.G.1
658409	A.O. Smith	BTL 199 104	NA	0.199	NG	Water Heater	202.G.1
4210	Bradford White	D100L1993N	NA	0.199999	NG	Water Heater	202.G.1
4225	Lennox	G20Q3X-75-7	NA	0.075	NG	Furnace	202.G.1
4226	Lennox	G20Q3X-75-7	NA	0.075	NG	Furnace	202.G.1
4227	Lennox	G20Q3X-75-7	NA	0.075	NG	Furnace	202.G.1
4228	Lennox	G20Q3X-75-7	NA	0.075	NG	Furnace	202.G.1
676921	American Water Heater Co	CG32-75T75-4NOV	NA	0.0751	NG	Water Heater	202.G.1
4229	Lennox	G20Q3X-75-7	NA	0.075	NG	Furnace	202.G.1
707841	Bradford White	URG140T6N	NA	0.034	NG	Water Heater	202.G.1
4213	American Appliance	DSID2501001	NA	0.25	NG	Water Heater	202.G.1
4230	Lennox	G20Q3X-75-7	NA	0.075	NG	Furnace	202.G.1
4231	Lennox	G20Q3X-75-7	NA	0.075	NG	Furnace	202.G.1
4214	Bradford White	M475S6CN12	NA	0.075	NG	Water Heater	202.G.1
4232	Lennox	G20Q3X-75-7	NA	0.075	NG	Furnace	202.G.1
4233	Lennox	G20Q3X-75-7	NA	0.075	NG	Furnace	202.G.1
4234	Lennox	G20Q3X-75-7	NA	0.075	NG	Furnace	202.G.1
4235	Lennox	G20Q3X-75-7	NA	0.075	NG	Furnace	202.G.1

	Operator ID	Make	Model	Model Year	Rating (MMBtu/hr)	Fuel	Type of Unit	Basis Exemp
	713407	Bradford White	UCG100H2703N	NA	0.27	NG	Water Heater	202.G.1
	3262	Carrier	58WAV091-16	NA	0.088	NG	Furnace	202.G.1
	3263	Carrier	58WAV091-16	NA	0.088	NG	Furnace	202.G.1
	3264	Carrier	58WAV091-16	NA	0.088	NG	Furnace	202.G.1
	3265	Carrier	58WAV091-16	NA	0.088	NG	Furnace	202.G.1
	4314	Reznor	CAUA250-S	NA	0.25	NG	Furnace	202.G.1
	676922	Frazer-Johnson	250-C-33	NA	0.75	NG	Furnace	202.G.1
	2661	Raypak	W1-0514A-DEDRDAA	NA	0.5115	NG	Boiler	202.G.1
	736414	Raypak	H7-0300B	NA	0.3	NG	Boiler	202.G.1
	736415	Raypak	H7-0300B	NA	0.3	NG	Boiler	202.G.1
a	730224	Raypak	H7-0300A	NA	0.3	NG	Boiler	202.G.1
a	730225	Raypak	H7-0300A	NA	0.3	NG	Boiler	202.G.1
	703917	Raypak	H7-0500A	NA	0.5	NG	Boiler	202.G.1
	703918	Raypak	H7-0500A	NA	0.5	NG	Boiler	202.G.1
	703919	Raypak	WH7-0500A	NA	0.5	NG	Boiler	202.G.1
	703920	Raypak	WH7-0500A	NA	0.5	NG	Boiler	202.G.1
s	1119	Raypak	H3-0624A-CCCRCAA	NA	0.627	NG	Boiler	202.G.1
s	1120	Raypak	H3-0624A-CCCRCAA	NA	0.627	NG	Boiler	202.G.1
	3270	Raypak	W2-0624	NA	0.627	NG	Boiler	202.G.1
	703942	Raypak	H7-0300A	NA	0.3	NG	Boiler	202.G.1
	704757	Raypak	H7-0300A	NA	0.3	NG	Boiler	202.G.1
	704758	Raypak	H7-0300A	NA	0.3	NG	Boiler	202.G.1
	4198	Raypak	H7-0300	NA	0.3	NG	Boiler	202.G.1

Operator ID	Make	Model	Model Year	Rating (MMBtu/hr)	Fuel	Type of Unit	Basis Exemp
4199	Raypak	H7-0300	NA	0.3	NG	Boiler	202.G.1
4200	Raypak	H7-0300	NA	0.3	NG	Boiler	202.G.1
656895	Raypak	WH3-0752B	NA	0.75	NG	Boiler	202.G.1
4100	Parker Boiler Co.	40L	NA	1.68	NG	Boiler	202.G.1
701726	Trane	GFAA10GDA	NA	0.1	NG	Furnace	202.G.1
701727	Trane	GLND035	NA	0.35	NG	Furnace	202.G.1
701728	Trane	GLND035	NA	0.35	NG	Furnace	202.G.1
701729	Trane	GLND035	NA	0.35	NG	Furnace	202.G.1
701730	Trane	GLND035	NA	0.35	NG	Furnace	202.G.1
736406	Lochinvar, Llc	AWN501PM	NA	0.5	NG	Furnace	202.G.1
736407	Lochinvar, Llc	AWN501PM	NA	0.5	NG	Furnace	202.G.1
707843	Lochinvar	CHN0992	NA	0.99	NG	Boiler	202.G.1
707844	A.O. Smith	BTN 199C 108	NA	0.199	NG	Water Heater	202.G.1
704072	Raypak	H7-0300A	NA	0.3	NG	Boiler	202.G.1
736409	Bradford White	D80T1993N	NA	0.199999	NG	Water Heater	202.G.1
707846	Raypak	H3-HD401	NA	0.399	NG	Boiler	202.G.1
815995	Bradford White	URG240T6N	NA	0.04	NG	Water Heater	202.G.1
732816	Bradford White	EF100T399E3NA2	NA	0.399	NG	Water Heater	202.G.1
732817	Bradford White	EF100T399E3NA2	NA	0.399	NG	Water Heater	202.G.1
4270	Heat Transfer Products	PH199-55	NA	0.199	NG	Boiler	202.G.1
734991	Heat Transfer Products	PH199-55	NA	0.199	NG	Boiler	202.G.1
710165	Heat Transfer Products	PH199-55	NA	0.199	NG	Boiler	202.G.1
4271	Heat Transfer Products	PH199-55	NA	0.199	NG	Boiler	202.G.1
4272	Heat Transfer Products	PH199-55	NA	0.199	NG	Boiler	202.G.1

Operator ID	Make	Model	Model Year	Rating (MMBtu/hr)	Fuel	Type of Unit	Basis Exemp
658408	Heat Transfer Products	PH199-55	NA	0.199	NG	Boiler	202.G.1
658411	Heat Transfer Products	PH199-55	NA	0.199	NG	Boiler	202.G.1
707847	Heat Transfer Products	PH199-55	NA	0.199	NG	Boiler	202.G.1
707848	Heat Transfer Products	PH199-55	NA	0.199	NG	Boiler	202.G.1
707849	Heat Transfer Products	PH199-55	NA	0.199	NG	Boiler	202.G.1
707850	Heat Transfer Products	PH199-55	NA	0.199	NG	Boiler	202.G.1
676923	Heat Transfer Products	PH199-55	NA	0.199	NG	Boiler	202.G.1
676924	Heat Transfer Products	PH199-55	NA	0.199	NG	Boiler	202.G.1
4274	Heat Transfer Products	PH199-55	NA	0.199	NG	Boiler	202.G.1
728031	Heat Transfer Products	PH199-55	NA	0.199	NG	Boiler	202.G.1
658410	Heat Transfer Products	PH199-55	NA	0.199	NG	Boiler	202.G.1
676925	Heat Transfer Products	PH199-55	NA	0.199	NG	Boiler	202.G.1
659473	Heat Transfer Products	PH199-55	NA	0.199	NG	Boiler	202.G.1
728032	Heat Transfer Products	PH199-55	NA	0.199	NG	Boiler	202.G.1
676927	Heat Transfer Products	PH199-55	NA	0.199	NG	Boiler	202.G.1
4303	Heat Transfer Products	PH199-55	NA	0.199	NG	Boiler	202.G.1
734992	Heat Transfer Products	PH199-55	NA	0.199	NG	Boiler	202.G.1
3918	Voyager	SSVH-130-45SB	NA	0.13	NG	Boiler	202.G.1
707851	Heat Transfer Products	PH199-55	NA	0.199	NG	Boiler	202.G.1

	Operator ID	Make	Model	Model Year	Rating (MMBtu/hr)	Fuel	Type of Unit	Basis Exemp
	707853	Heat Transfer Products	PH199-55	NA	0.199	NG	Boiler	202.G.1
	707854	Heat Transfer Products	PH199-55	NA	0.199	NG	Boiler	202.G.1
	707855	Heat Transfer Products	PH199-55	NA	0.199	NG	Boiler	202.G.1
	707856	Heat Transfer Products	PH199-55	NA	0.199	NG	Boiler	202.G.1
e	3732	A.O. Smith	BTH 300A 970	NA	0.3	NG	Water Heater	202.G.1
e	732805	A.O. smith	BTR 275 118	NA	0.275	NG	Water Heater	202.G.1
	4348	York	PS8A12L040UH11A	NA	0.04	NG	Furnace	202.G.1
	4349	York	P58C20L100UH11A	NA	0.1	NG	Furnace	202.G.1
	3299	York	P3HUD20L10401A	NA	0.13	NG	Furnace	202.G.1
	3300	York	P3HUD20L10401A	NA	0.13	NG	Furnace	202.G.1
	3301	York	P3HUD20L10401A	NA	0.13	NG	Furnace	202.G.1
	3302	York	P3HUD20L10401A	NA	0.13	NG	Furnace	202.G.1
	3155	Raypak	W2-0333C-BEAHDAA	NA	0.333	NG	Boiler	202.G.1
	735002	Raypak	H7-0850A	NA	0.85	NG	Boiler	202.G.1
	707858	Raypak	H9-1262B	NA	1.26	NG	Boiler	202.G.1
e	3372	Bryant	383KAV048091	NA	0.088	NG	Furnace	202.G.1
	727994	Carrier	CK5AXT04200AAAA	NA	0.8	NG	Furnace	202.G.1
	3258	Hydrotherm	MR-1200BPV	NA	0.3	LPG	Boiler	202.G.1
	4359	Hydrotherm	MR-1200BPV	NA	0.3	LPG	Boiler	202.G.1
	4360	Hydrotherm	MR-1200BPV	NA	0.3	LPG	Boiler	202.G.1
	4361	Hydrotherm	MR-1200BPV	NA	0.3	LPG	Boiler	202.G.1
	736668	Raypak	H7-0300A	NA	0.3	LPG	Boiler	202.G.1
	4059	Raypak	H3-0181	NA	0.181	NG	Boiler	202.G.1
	708772	Camus	DRNH-2000-MSI	NA	2	NG	Boiler	202.G.1
	708773	Camus	DRNH-2000-MSI	NA	2	NG	Boiler	202.G.1
	4266	Lennox	G51MP-60C-110-07	NA	0.11	NG	Furnace	202.G.1
	4267	Lennox	G51MP-60C-110-01	NA	0.11	NG	Furnace	202.G.1

	Operator ID	Make	Model	Model Year	Rating (MMBtu/hr)	Fuel	Type of Unit	Basis Exem
	694990	Nortek	F-100	NA	0.1	NG	Furnace	202.G.1
	704088	Heat Transfer Products	PH199-55	NA	0.199	NG	Boiler	202.G.1
	707852	Heat Transfer Products	PH199-55	NA	0.199	NG	Boiler	202.G.1
	714348	Raypak	H7-108AR-PS	NA	0.11	NG	Boiler	202.G.1
	731907	Rheem	PROG40-38U RH62 EC1-1	NA	0.038	NG	Water Heater	202.G.1
	714349	Bradford White	URG140T6N	NA	0.034	NG	Water Heater	202.G.1
a	732809	Raypak	H7-0500B	NA	0.5	NG	Boiler	202.G.1

uip. Location	Operator ID	Device Type	Hourly Limit	Daily Limit	Quarterly Limit	Annual Limit	Units
	648635	EOD Range	NA	500	NA	8000	lbs C-4 donor charge
gier Rds	3568		NA		NA	8.5	lbs TNT
	648634		NA		NA	440	lbs ANFO(a)
	648636		NA		NA	756	lbs dynamite
ia Blvd	3314	AST; Diesel; 400 Gallons	NA	24	NA	8760	Hr
ve	4374	Spray Gun Washer	NA	8	NA	2080	Hr
ve	703462	Abrasive Blasting Operations	NA	NA	NA	416	NA
ve	735925	Solvent Cleaning Machine	NA	8	NA	2080	Hr
ve	735926	Solvent Cleaning Machine	NA	8	NA	2080	Hr
ve	735924	Solvent Cleaning Machine	NA	8	NA	2080	Hr
ve	738844	Solvent Cleaning Machine	NA	8	NA	2080	Hr
	1214	AST; Diesel; 4,000 Gallons	NA	24	NA	8760	Hr
on Ave	695365	AST; Diesel; 5000 Gallons	NA	24	NA	8760	Hr
Ave	1217	AST; Diesel; 550 Gallons	NA	24	NA	8760	Hr
	718011	Soil Vapor Extraction System	NA	NA	NA	NA	Hr
on Ave	682748	AST; Unknown; 1555 Gallons	NA	24	NA	8760	Hr
on Ave	25122	AST; Diesel; 10000 Gallons	NA	24	NA	8760	Hr
on Ave	641816	AST; Diesel: 300 Gallons	NA	24	NA	8760	Hr
on Ave	641817	AST; Diesel: 300 Gallons	NA	24	NA	8760	Hr
Ave	730107	AST; Diesel; 250 Gallons	NA	24	NA	8760	Hr
ota Ave	695361	AST; Diesel; 550 Gallons	NA	24	NA	8760	Hr
d	3096	AST; Diesel; 280 Gallons	NA	24	NA	8760	Hr
	3741	Fire Training	NA	NA	NA	NA	NA
Rd	3098	AST; Diesel; 550 Gallons	NA	24	NA	8760	Hr
Rd	725374	AST; Diesel; 1800 Gallons	NA	24	NA	8760	Hr
Rd	1250	AST; Diesel; 20,000 Gallons	NA	24	NA	8760	Hr
d	1249	AST; Diesel; 20,000 Gallons	NA	24	NA	8760	Hr
d	685497	AST; Jet A; 6000 Gallons	NA	24	NA	8760	Hr
d	685498	AST; Jet A; 6000 Gallons	NA	24	NA	8760	Hr

uip. Location	Operator ID	Device Type	Hourly Limit	Daily Limit	Quarterly Limit	Annual Limit	Units
d	685499	AST; Jet A; 6000 Gallons	NA	24	NA	8760	Hr
d	685500	AST; Jet A; 6000 Gallons	NA	24	NA	8760	Hr
d	685501	AST; Diesel; 1200 Gallons	NA	24	NA	8760	Hr
d	685503	AST; Diesel; 1200 Gallons	NA	24	NA	8760	Hr
d	4137	Solvent Cleaning Machine	NA	8	NA	2080	Hr
d	4322	Solvent Cleaning Machine	NA	8	NA	2080	Hr
d	716263	AST; Diesel; 528 Gallons	NA	24	NA	8760	Hr
d	4280	AST; Diesel; 500 Gallons	NA	24	NA	8760	Hr
d	U-99900	AST; JP8; 600 Gallons	NA	24	NA	8760	Hr
d	3521	Abrasive Blasting Operations	NA	NA	NA	416	Hr
d	4050	AST; Diesel; 500 Gallons	NA	24	NA	8760	Hr
d	4158	Solvent Cleaning Machine	NA	8	NA	2080	Hr
d	728028	Abrasive Blasting Operations	NA	NA	NA	416	Hr
l	3574	AST; Diesel; 700 Gallons	NA	24	NA	8760	Hr
ES	698263	Soil Vapor Extraction System	NA	NA	NA	NA	Hr
th Rd	U-99900	AST; Diesel; 1000 Gallons	NA	24	NA	8760	Hr
ia Blvd	3104	AST; Diesel; 325 Gallons	NA	24	NA	8760	Hr
ia Blvd	3402	AST; Diesel; 325 Gallons	NA	24	NA	8760	Hr
ge Rd	815271	AST; Diesel: 1000 Gallons	NA	24	NA	8760	Hr
	815809	AST:Diesel: 660 Gallons	NA	24	NA	8760	Hr
d	740521	AST; Diesel: 2311 Gallons	NA	24	NA	8760	Hr
ho Rd	3909	AST; Diesel; 500 Gallons	NA	24	NA	8760	Hr
o Rd	3561	AST; Diesel; 500 Gallons	NA	24	NA	8760	Hr
o Rd	3499	AST; Diesel; 514 Gallons	NA	24	NA	8760	Hr
d	727885	AST; Diesel; 250 Gallons	NA	24	NA	8760	Hr
	3562	AST; Diesel; 388 Gallons	NA	24	NA	8760	Hr
Rd	3563	AST; Diesel; 388 Gallons	NA	24	NA	8760	Hr
Rd	3908	AST; Diesel; 350 Gallons	NA	24	NA	8760	Hr
	3564	AST; Diesel; 388 Gallons	NA	24	NA	8760	Hr

uip. Location	Operator ID	Device Type	Hourly Limit	Daily Limit	Quarterly Limit	Annual Limit	Units
	3565	AST; Diesel; 388 Gallons	NA	24	NA	8760	Hr
	1317	AST; Diesel; 1500 Gallons	NA	24	NA	8760	Hr
r Rd	3743	AST; Diesel; 425 Gallons	NA	24	NA	8760	Hr
io Rd	711744	AST; Unknown; 500 Gallons	NA	24	NA	8760	Hr
	3107	AST; Diesel; 300 Gallons	NA	24	NA	8760	Hr
d	3434	AST; Diesel; 290 Gallons	NA	24	NA	8760	Hr
d	740522	AST; Diesel: 10000 Gallons	NA	24	NA	8760	Hr
d	740523	AST; Diesel: 350 Gallons	NA	24	NA	8760	Hr
d	740525	AST; Diesel: 350 Gallons	NA	24	NA	8760	Hr
Rd	K012312	AST; Diesel; 2000 Gallons	NA	24	NA	8760	Hr
	3443	AST; Diesel; 528 Gallons	NA	24	NA	8760	Hr
Ave	725372	AST; Diesel; 2000 Gallons	NA	24	NA	8760	Hr
Ave	725373	AST; Diesel; 2000 Gallons	NA	24	NA	8760	Hr
Ave	3911	AST; Diesel; 1000 Gallons	NA	24	NA	8760	Hr
	4358	Solvent Cleaning Machine	NA	8	NA	2080	Hr
	641872	AST; Diesel; 2000 Gallons	NA	24	NA	8760	Hr
	644530	AST; Diesel; 2000 Gallons	NA	24	NA	8760	Hr
	702075	AST; Diesel; 528 Gallons	NA	24	NA	8760	Hr
	3977	AST; Diesel; 500 Gallons	NA	24	NA	8760	Hr
	3431	AST; Diesel; 425 Gallons	NA	24	NA	8760	Hr
	1224	AST; Diesel; 2500 Gallons	NA	24	NA	8760	Hr
	1226	AST; Diesel; 2500 Gallons	NA	24	NA	8760	Hr
	1228	AST; Diesel; 2500 Gallons	NA	24	NA	8760	Hr
	1229	AST; Diesel; 2500 Gallons	NA	24	NA	8760	Hr
	1230	AST; Diesel; 2500 Gallons	NA	24	NA	8760	Hr
	729315	AST; Diesel; 250 Gallons	NA	24	NA	8760	Hr
tain	1297	AST; Diesel; 4000 Gallons	NA	24	NA	8760	Hr
	3816	AST; Diesel; 500 Gallons	NA	24	NA	8760	Hr
e	728206	AST; Diesel; 500 Gallons	NA	24	NA	8760	Hr

uip. Location	Operator ID	Device Type	Hourly Limit	Daily Limit	Quarterly Limit	Annual Limit	Units
z ridge Rd	24851-0	AST; Diesel; 5000 Gallons	NA	24	NA	8760	Hr
z ridge Rd	U-99900	AST; Diesel; 250 Gallons	NA	24	NA	8760	Hr
	725658	AST; Diesel; 2074 Gallons	NA	24	NA	8760	Hr
	725663	AST; Diesel; 2074 Gallons	NA	24	NA	8760	Hr
	725664	AST; Diesel; 2074 Gallons	NA	24	NA	8760	Hr
	D-58201	AST; Diesel; 1530 Gallons	NA	24	NA	8760	Hr
ia Blvd	U-16334	AST; Diesel; 1500 Gallons	NA	24	NA	8760	Hr
	3108	AST; Diesel; 250 Gallons	NA	24	NA	8760	Hr
	696917	AST; Diesel; 264 Gallons	NA	24	NA	8760	Hr
	4054	Scrubber; Fuel (FVSS)	NA	NA	NA	NA	NA
	4055	Scrubber; Oxidizer (OVSS)	NA	NA	NA	NA	NA
	630173	Scrubber; Fuel (FVSS)	NA	NA	NA	NA	NA
	630174	Scrubber; Oxidizer (OVSS)	NA	NA	NA	NA	NA
	3541	AST; Diesel; 660 Gallons	NA	24	NA	8760	Hr
z ridge Rd	722067	AST; Diesel; 400 Gallons	NA	24	NA	8760	Hr
Ave	736712	Abrasive Blasting Operations	NA	NA	NA	416	NA
St	3542	AST; Diesel; 425 Gallons	NA	24	NA	8760	Hr
St	4362	AST; Diesel; 480 Gallons	NA	24	NA	8760	Hr
	4130	Spray Gun Washer	NA	8	NA	2080	Hr
	4138	Solvent Cleaning Machine	NA	NA	NA	NA	NA
	723357	Solvent Cleaning Machine	NA	NA	NA	NA	NA
	734261	Solvent Cleaning Machine	NA	8	NA	2080	Hr
	675249	AST; Diesel; 320 Gallons	NA	24	NA	8760	Hr
	737710	AST; Diesel: 2311 Gallons	NA	24	NA	8760	Hr
	737711	AST; Diesel: 2311 Gallons	NA	24	NA	8760	Hr
e	3807	AST; Diesel; 850 Gallons	NA	24	NA	8760	Hr
e	727934	AST; Diesel; 850 Gallons	NA	24	NA	8760	Hr
	4164	Abrasive Blasting Operations	NA	NA	NA	416	NA
	723563	Solvent Cleaning Machine	NA	8	NA	2080	Hr

uip. Location	Operator ID	Device Type	Hourly Limit	Daily Limit	Quarterly Limit	Annual Limit	Units
Ave	729663	AST; Diesel: 2350 Gallons	NA	24	NA	8760	Hr
Rd	3533	Solvent Cleaning Machine	NA	8	NA	2080	Hr
Rd	4131	Spray Gun Washer	NA	8	NA	2080	Hr
Rd	4157	Solvent Cleaning Machine	NA	8	NA	2080	Hr
Rd	726223	Abrasive Blasting Operations	NA	NA	NA	416	Hr
	3094	AST; Diesel; 350 Gallons	NA	24	NA	8760	Hr
	3959	AST; Diesel; 500 Gallons	NA	24	NA	8760	Hr
	4129	Spray Gun Washer	NA	8	NA	2080	Hr
	4318	Abrasive Blasting Operations	NA	NA	NA	416	NA
	705831	Abrasive Blasting Operations	NA	NA	NA	416	NA
xico Ave	4283	Abrasive Blasting Operations	NA	NA	NA	416	NA
xico Ave	734769	Solvent Cleaning Machine	NA	8	NA	2080	Hr
	675092	AST; Diesel; 253 Gallons	NA	24	NA	8760	Hr
	674105	AST; Diesel; 253 Gallons	NA	24	NA	8760	Hr
	3308	AST; Diesel; 300 Gallons	NA	24	NA	8760	Hr
	3309	AST; Diesel; 300 Gallons	NA	24	NA	8760	Hr
Rd	731803	AST; Diesel: 428 Gallons	NA	24	NA	8760	Hr
ions	736883	Wood Chipper	NA	24	NA	8760	Hr
ions	736885	Wood Chipper	NA	24	NA	8760	Hr
ions	650037	Wood Chipper	NA	24	NA	8760	Hr
	NA	Architectural Coating	NA	NA	NA	NA	NA
ions	NA	AST; Diesel; >55 Gallons and <250 Gallons (80 Tanks)	NA	NA	NA	NA	NA
ions	NA	AST; Gasoline ; >55 Gallons and <250 Gallons (2 Tanks)	NA	NA	NA	NA	NA
	3493	Small Arms Range	NA	NA	NA	NA	NA
	636301						
oad	641666						
	636300						
	636302						

uip. Location	Operator ID	Device Type	Hourly Limit	Daily Limit	Quarterly Limit	Annual Limit	Units
	733835						
	733836						

ediation Agreement

4.0 COMPLIANCE PLAN

4.1 Federally Enforceable District Rules

Table 4-1. Federally Enforceable District Rules
Part 70 Permit 13968 Renewal Application, Vandenberg Space Force Base

Rule Number	Rule Name	Affected Emission Units	In Compliance? (Yes/ No/ Exempt/ NA)
101	Title: Compliance by Existing Installation; Conflicts	VSFB	Yes
102	Definitions	VSFB	Yes
103	Severability	VSFB	Yes
104	Agricultural Burning	None	NA
105	Applicability	VSFB	Yes
201	Permits Required	VSFB	Yes
202	Exemptions to Rule 201, General	VSFB	Yes
203	Transfer	VSFB	Yes
204	Applications	VSFB	Yes
205	Standards for Granting Applications	VSFB	Yes
206	Conditional Approval of Authority to Construct or Permit to Operate	VSFB	Yes
212	Emission Statements	VSFB	Yes
301	Circumvention	VSFB	Yes
302	Visible Emissions	VSFB	Yes
303	Nuisance	VSFB	Yes
304	Particulate Matter - Northern Zone	VSFB	Yes
305	Particulate Matter - Southern Zone	None	NA
306	Dust and Fumes - Northern Zone	VSFB	Yes
307	Particulate Matter Emission Weight Rate - Southern Zone	None	NA
308	Incinerator Burning	None	NA
309	Specific Contaminants	VSFB	Yes
310	Odorous Organic Sulfides	VSFB	Yes
311	Sulfur Contents of Fuel	Combustion Units	Yes
312	Open Fires	VSFB	Yes

Table 4-1. Federally Enforceable District Rules
Part 70 Permit 13968 Renewal Application, Vandenberg Space Force Base

Rule Number	Rule Name	Affected Emission Units	In Compliance? (Yes/ No/ Exempt/ NA)
313	Fires Set Under Public Authority	VSFB	Yes
314	Reduction of Animal Matter	None	NA
315	Gasoline Specifications	Gasoline distributors, and sellers on VSFB	Yes
316	Storage and Transfer of Gasoline	Gasoline distributors, and sellers on VSFB	Yes
317	Organic Solvents	VSFB	Yes
319	Asphalt Air Blowing - Southern Zone	None	NA
320	Petroleum Solvent Dry Cleaners	None	NA
321	Solvent Cleaning Operations	VSFB	Yes
322	Metal Surface Coating Thinner and Reducer	VSFB	Yes
323	Architectural Coatings	VSFB	Yes
323.1	Architectural Coatings	VSFB	Yes
324	Disposal and Evaporation of Solvents	VSFB	Yes
325	Crude Oil Production and Separation Rule	None	NA
326	Storage of Reactive Organic Compound Liquids	Storage Tanks containing liquids with True Vapor Pressure > 0.5 psia.	Yes
327	Organic Liquid Cargo Vessel Loading	None	NA
328	Continuous Emission Monitoring	South Vandenberg Power Plant	Yes
329	Cutback Asphalt Paving Materials	VSFB	Yes
330	Surface Coating of Metal Parts and Products	VSFB	Yes
331	Refinery Valves and Flanges	None	NA
332	Petroleum Refinery Vacuum Producing Systems Wastewater Separators and Process Turnarounds	None	NA
333	Control of Emissions from Reciprocating Internal Combustion Engines	Stationary reciprocating ICE ≥ 50 bhp	Yes
337	Surface Coating of Aircraft or Aerospace Vehicle Parts and Products	VSFB	Yes
339	Motor Vehicle and Mobile Equipment Coating Operations	Spray Paints Booths	Yes

Table 4-1. Federally Enforceable District Rules
Part 70 Permit 13968 Renewal Application, Vandenberg Space Force Base

Rule Number	Rule Name	Affected Emission Units	In Compliance? (Yes/ No/ Exempt/ NA)
342	Boilers, Steam Generators, and Process Heaters	Heat input capacity ≥ 5 mmbtu/hr	NA
343	Petroleum Storage Tank Degassing	Gasoline UST greater than 500 gallons	Yes
344	Petroleum Sumps, Pits & Well Cellars	None	NA
345	Control of Fugitive Dust from Construction and Demolition Activities	VSFB	Yes
346	Loading of Organic Cargo Vessels	Trucks and trailers used to transfer organic liquids	Yes
349	Polyester Resin Operations	VSFB	Yes
351	Surface Coating of Wood Products	VSFB	Yes
352	Natural-Gas Fired Fan-Type Central Furnaces and Residential Water Heaters	Natural Gas fired fan type central furnaces and residential water heaters	Yes
353	Adhesives and Sealants	VSFB	Yes
354	Graphic Arts	VSFB	Yes
359	Flares and Thermal Oxidizers	None	NA
360	Boilers, Water Heaters, and Process Heaters	Heat input capacity ≥ 0.075 mmbtu/hr and ≤ 2 mmbtu/hr	Yes
361	Boilers, Steam Generators, and Process Heaters	Heat input capacity > 2 mmbtu/hr and < 5 mmbtu/hr	Yes
370	Potential to Emit-Limitation for Part 70 Sources	VSFB	Yes
401	Agricultural and Prescribed Burning	VSFB	Yes
403	Burning Permit for Non-Burning Days: Report Requirements	VSFB	Yes
505	Breakdown Conditions	VSFB	Yes
506	Emergency Variances for Breakdowns	VSFB	Yes
603	Emergency Episode Plans	VSFB	Yes
609	Interdistrict Coordination	NA	NA
702	General Conformity	VSFB	Yes
801	New Source Review	Not Enforceable	NA

Table 4-1. Federally Enforceable District Rules
Part 70 Permit 13968 Renewal Application, Vandenberg Space Force Base

Rule Number	Rule Name	Affected Emission Units	In Compliance? (Yes/ No/ Exempt/ NA)
802	Nonattainment Review	Not Enforceable	NA
804	Emission Offsets	Not Enforceable	NA
805	Air Quality Impact Analysis and Modeling	Not Enforceable	NA
806	Emission Reduction Credits	Not Enforceable	NA
808	New Source Review for Major Sources of Hazardous Air Pollutants	Not Enforceable	NA
810	Federal Prevention of Significant Deterioration (PSD)	Not Enforceable	NA
1301	General Information	VSFB	Yes
1302	Permit Application	Not Enforceable	NA
1303	Permits	Not Enforceable	NA
1304	Issuance, Renewal, Modification and Reopening	Not Enforceable	NA
1305	Enforcement	Not Enforceable	NA

4.2 Federally Enforceable Federal Regulations

Table 4-2. Federally Enforceable Federal Regulations
Part 70 Permit 13968 Renewal Application, Vandenberg Space Force Base

Rule Number	Rule Name	Affected Emission Units	In Compliance? (Yes/ No/ Exempt/ NA)	Effective Date
NSPS Subpart Cc	Emissions Guidelines and Compliance Times for Municipal Solid Waste Landfills [60.30c]	Landfills modified before May 30, 1991 and design capacity greater than 2.5 million Mg or 2.5 million meters^3	NA - <2.5 Mg design capacity	
NSPS Subpart GG	Standards of Performance for Stationary Gas Turbines [60.330]	Turbines with ≥ 10 MMBtu/hr heat input capacity, based on LHV	Yes	
NSPS Subpart Dc	Standards of Performance for Small Industrial- Commercial-Institutional Steam Generating Units [60.40c]	Steam generating units with 10< x ≤100MMBtu/hr heat input capacity	NA	
NSPS Subpart IIII	Standards of Performance for Stationary Compression Ignition Internal Combustion Engines [60.4200]	CI engines that commence construction after July 11, 2005	Yes	
NSPS Subpart JJJJ	Standards of Performance for Stationary Spark Ignition Internal Combustion Engines [60.4230]	SI engines that commence construction after June 12, 2006	Yes	
NSPS Subpart KKKK	Standards of Performance for Stationary Combustion Turbines [60.4300]	Turbines constructed after February 18, 2005 with a heat input ≥ 10 MMBtu/hr	NA	
NESHAP Subpart ZZZZ	NESHAP: for Stationary Reciprocating Internal Combustion Engines [63.6580]	Stationary RICE at a major or area source of HAP emissions	Yes	3 May 2013
NESHAP Subpart CCCCCC	NESHAP: for Source Category: Gasoline Dispensing Facilities	Gasoline distributors, and sellers on VSFB	Yes	
NESHAP Subpart HHHHHH	NESHAP: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources [63.11169]	Paint stripping or coating at an area source of HAP emissions	Exempt per 40 § 63.11169.(d)(1)	

5.0 APPLICATION CHECKLIST

☒ Attach a copy of each current District Permit to Operate.

☒ Attach calculations of the potential to emit for each permit-exempt unit. Base the calculations on the uncontrolled potential to emit of each unit based on the maximum physical and operational capacity of the unit. Physical or operational limits on each unit cannot be considered, unless the limit is federally enforceable.

☒ Provide all assumptions used for calculations, including process rate, fuel use, hours of operations, and emission factors. Provide data to support the emission factors used.

☐ Attach a compliance plan schedule for each applicable requirement with which the source does not comply.

☒ Application Filing Fee (Fee = $565. The application filing fee is COLA adjusted every July 1st. Please ensure you are remitting the current fee.) As a convenience to applicants, the District will accept credit card payments. If you wish to use this payment option, please complete the attached Credit Card Authorization Form and submit it with your application.

☒ Signature of the Responsible Official for the stationary source.

APPENDIX A – EMISSION CALCULATIONS

Emission Calculations for Permit-Exempt Emission Units – Other Operations

Abrasive Blasting Operations

The internal dimensions of the listed devices are less than 50 cubic feet. Please see the ABS tab in Vanderberg Space Force Base (VSFB) T-V Emissions Calcs spreadsheet for estimated emissions.

Architectural Coatings

The 2023 permit exempt questionnaire includes 0.57 tons of ROCs emitted from architectural coatings.

AST/UST – Diesel/Biodiesel/Used Oil

The emissions from the diesel, or biodiesel tanks were assumed to be negligible and were not estimated. Belly and day tanks for generators were not included after discussion with the APCD which they stated, "Since diesel storage tanks have a negligible PTE, we do not need to include them in their exempt equipment list."

AST – Gasoline

Emissions were calculated for gasoline storage tanks using the Air Emissions Guide for Air Force Stationary Sources dated June 2023.

Explosive Ordinance Disposal (EOD) Range

Emissions were estimated using information from AP-42 and are shown in the EOD tab in VSFB T-V Emissions Calcs spreadsheet.

Scrubbers, Fuel Vapor/Oxidizer Vapor

Two fuel vapor and two oxidizer vapor scrubbers were granted an exemption by SBCAPCD on 26 October 2021, E15788. Emissions of NOx and ROC are based on the application submitted for the exemption.

Small Arms Range

Emissions were estimated using information from AP-42 and are shown in the Small Arms Range tab in VSFB T-V Emissions Calcs spreadsheet.

Solvent Cleaning Machines

With implementation of Rule 321, the emissions from these sources are assumed to be de minimis and were not estimated.

Solvent Cleaning Machines – Vapor

From usage records, an estimated 57 pounds per year of HFE-7100 – a zero volatile organic compound (VOC) solvent, would be used.

Wood Chipper

Emissions were estimated using information from previous PERP Registration 123540 and are shown in the Wood Chipper tab in VSFB T-V Emissions Calcs spreadsheet.

Soil Vapor Extraction Systems

Building 1788/Site 13C/ABRES – This system is under regulatory review for deactivation. The system has reduced soil concentrations of trichloroethene to below the treatment target goal and may be shut down in the near future. Estimated emissions are shown in the Site 13C tab in VSFB T-V Emissions Calcs spreadsheet.

Building 11520- This system reduces soil concentrations of VOC's to below the treatment target goal. The amount of emissions per year is less than 0.002 tons.

Table A-1. Summary of Emissions from Permit Exempt Sources

Category	Emissions (Lbs/Yr)			Emissions (TPY)		
	NOx	PM	ROC	NOx	PM	ROC
Permit Exempt ICE	20,549	1,754	7,964	10.27	0.88	3.98
PERP Registered ICE	7,345	382	864	3.67	0.19	0.43
Tactical Support Equipment	62,848	4,423	5,344	31.42	2.21	2.67
External Combustion	23,682	3,824	2,753	11.84	1.91	1.38
Abrasive Blasting	NA	2,710	NA	NA	1.36	NA
Architectural Coatings	NA	NA	1,140	NA	NA	0.57
Fuel Storage Tanks	NA	NA	448	NA	NA	0.22
EOD Range	67	NE	4	0	NE	0
Scrubbers Fuel/Oxidizer	0	NA	0	0.33	NA	0.00
Small Arms Range	35	NE	NE	0	NE	NE
Soil Vapor Extraction Systems	NE	NE	13	NE	NE	0
Wood Chipper	NA	8,528	NA	NA	4	NA
Total	114,527	21,621	18,530	57.59	10.81	9.26

Notes:

NE = Not Estimated

NA = Not Applicable

Table A-2. Estimated Emissions from Permit Exempt Internal Combustion Engines

Description	Type	Location	Pri_ID	Fuel	Equation	Hours	Size	Emission Factors*			Emissions (Lbs/Yr)		
						PTE	(BHP)	NOx	PM	ROC	NOx	PM	ROC
Facility Power	Stationary	51	3063	LPG	HP HRS*EF/1000	199.90	104.00	24.20		1.90	503.11	0.00	39.50
Air Compressor	Portable	525	3993	Diesel	HP HRS*EF/1000	500.00	49.00	5.73	0.36	0.53	140.41	8.87	13.01
Air Compressor	Portable	525	3994	Diesel	HP HRS*EF/1000	500.00	49.00	5.73	0.36	0.53	140.41	8.87	13.01
Air Compressor	Portable	525	3995	Diesel	HP HRS*EF/1000	500.00	49.00	5.73	0.36	0.53	140.41	8.87	13.01
Air Compressor	Portable	525	4021	Diesel	HP HRS*EF/1000	500.00	49.00	5.73	0.36	0.53	140.41	8.87	13.01
Air Compressor	Portable	525	4022	Diesel	HP HRS*EF/1000	500.00	49.00	5.73	0.36	0.53	140.41	8.87	13.01
Air Compressor	Portable	525	4023	Diesel	HP HRS*EF/1000	500.00	49.00	5.73	0.36	0.53	140.41	8.87	13.01
Air Compressor	Portable	525	4024	Diesel	HP HRS*EF/1000	500.00	49.00	5.73	0.36	0.53	140.41	8.87	13.01
Air Compressor	Portable	525	707871	Diesel	HP HRS*EF/1000	500.00	49.00	5.73	0.36	0.53	140.41	8.87	13.01
Air Compressor	Portable	525	707880	Diesel	HP HRS*EF/1000	500.00	49.00	5.73	0.36	0.53	140.41	8.87	13.01
Generator	Portable	809	722066	Diesel	HP HRS*EF/1000	500.00	49.00	7.19	0.04	0.56	176.16	1.08	13.77
Trailer Mounted Floodlight	Portable	831	732760	Diesel	HP HRS*EF/1000	500.00	25.00	4.05	0.29	0.43	50.59	3.60	5.34
Trailer Mounted Floodlight	Portable	831	732761	Diesel	HP HRS*EF/1000	500.00	25.00	4.05	0.29	0.43	50.59	3.60	5.34
Trailer Mounted Floodlight	Portable	831	732762	Diesel	HP HRS*EF/1000	500.00	25.00	4.05	0.29	0.43	50.59	3.60	5.34
Air Compressor	Portable	1731	727890	Diesel	HP HRS*EF/1000	500.00	49.00	5.73	0.36	0.53	140.41	8.87	13.01
Aircraft Support	Portable	1755	3421	Diesel	HP HRS*EF/1000	500.00	49.00	35.70	2.51	2.79	874.65	61.50	68.36
Trailer Mounted Floodlight	Portable	1755	728018	Diesel	HP HRS*EF/1000	500.00	19.00	4.05	0.29	0.43	38.45	2.74	4.06
Trailer Mounted Floodlight	Portable	1755	728019	Diesel	HP HRS*EF/1000	500.00	19.00	4.05	0.29	0.43	38.45	2.74	4.06
Trailer Mounted Floodlight	Portable	1755	728020	Diesel	HP HRS*EF/1000	500.00	19.00	4.05	0.29	0.43	38.45	2.74	4.06
Trailer Mounted Floodlight	Portable	1755	728021	Diesel	HP HRS*EF/1000	500.00	19.00	4.05	0.29	0.43	38.45	2.74	4.06
Trailer Mounted Floodlight	Portable	1755	728022	Diesel	HP HRS*EF/1000	500.00	19.00	4.05	0.29	0.43	38.45	2.74	4.06
Trailer Mounted Floodlight	Portable	1755	728023	Diesel	HP HRS*EF/1000	500.00	19.00	4.05	0.29	0.43	38.45	2.74	4.06
Trailer Mounted Floodlight	Portable	1755	728024	Diesel	HP HRS*EF/1000	500.00	19.00	4.05	0.29	0.43	38.45	2.74	4.06
Air Compressor	Portable	1755	728025	Diesel	HP HRS*EF/1000	500.00	26.00	5.73	0.36	0.53	74.50	4.71	6.90
Heater New Generation	Portable	1755	728026	Diesel	HP HRS*EF/1000	500.00	6.70	4.05	0.29	0.43	13.56	0.96	1.43
Heater New Generation	Portable	1755	728027	Diesel	HP HRS*EF/1000	500.00	6.70	4.05	0.29	0.43	13.56	0.96	1.43
Generator	Portable	1905	719092	Diesel	HP HRS*EF/1000	500.00	20.20	11.50	0.66	0.90	116.15	6.68	9.08
Auxiliary Power	Portable	3000	4072	Diesel	HP HRS*EF/1000	500.00	49.00	4.09	0.19	0.42	100.25	4.70	10.36
Auxiliary Power	Portable	3000	4073	Diesel	HP HRS*EF/1000	500.00	49.00	4.09	0.19	0.42	100.25	4.70	10.36
Blower	Portable	5425	703351	Gasoline	HP HRS*EF/1000	199.90	25.00	4.36	18.42	113.58	21.77	92.04	567.60
Blower	Portable	5425	746201	Gasoline	HP HRS*EF/1000	199.90	35.00	4.36	18.42	113.58	30.48	128.86	794.63
Air Compressor	Portable	6523	723469	Diesel	HP HRS*EF/1000	500.00	49.00	5.73	0.36	0.53	140.41	8.87	13.01
Air Compressor	Portable	6523	723470	Diesel	HP HRS*EF/1000	500.00	49.00	5.73	0.36	0.53	140.41	8.87	13.01
Trailer Mounted Floodlight	Portable	8310	730034	Diesel	HP HRS*EF/1000	500.00	25.50	4.05	0.29	0.43	51.60	3.67	5.44
Trailer Mounted Floodlight	Portable	8310	730035	Diesel	HP HRS*EF/1000	500.00	25.50	4.05	0.29	0.43	51.60	3.67	5.44
Trailer Mounted Floodlight	Portable	8310	730036	Diesel	HP HRS*EF/1000	500.00	25.50	4.05	0.29	0.43	51.60	3.67	5.44
Trailer Mounted Floodlight	Portable	8310	730037	Diesel	HP HRS*EF/1000	500.00	25.50	4.05	0.29	0.43	51.60	3.67	5.44
Trailer Mounted Floodlight	Portable	8425	730542	Diesel	HP HRS*EF/1000	500.00	10.90	4.05	0.29	0.43	22.06	1.57	2.33
Trailer Mounted Floodlight	Portable	8425	730543	Diesel	HP HRS*EF/1000	500.00	10.90	4.05	0.29	0.43	22.06	1.57	2.33
Trailer Mounted Floodlight	Portable	8425	730544	Diesel	HP HRS*EF/1000	500.00	12.00	4.05	0.29	0.43	24.28	1.73	2.56
Trailer Mounted Floodlight	Portable	8425	730545	Diesel	HP HRS*EF/1000	500.00	12.00	4.05	0.29	0.43	24.28	1.73	2.56
Trailer Mounted Floodlight	Portable	8425	730546	Diesel	HP HRS*EF/1000	500.00	10.90	4.05	0.29	0.43	22.06	1.57	2.33
Trailer Mounted Floodlight	Portable	8425	730547	Diesel	HP HRS*EF/1000	500.00	26.00	4.05	0.29	0.43	52.61	3.74	5.55
Trailer Mounted Floodlight	Portable	8425	730548	Diesel	HP HRS*EF/1000	500.00	25.00	4.05	0.29	0.43	50.59	3.60	5.34
Trailer Mounted Floodlight	Portable	8425	815665	Diesel	HP HRS*EF/1000	500.00	26.00	4.05	0.29	0.43	52.61	3.74	5.55
Pressuer Washer	Portable	9320	703411	Diesel	HP HRS*EF/1000	500.00	12.00	35.70	2.51	2.79	214.20	15.06	16.74

Table A-2. Estimated Emissions from Permit Exempt Internal Combustion Engines

Description	Type	Location	Pri_ID	Fuel	Equation	Hours	Size	Emission Factors*			Emissions (Lbs/Yr)		
						PTE	(BHP)	NOx	PM	ROC	NOx	PM	ROC
Welding	Portable	10711	762	Diesel	HP HRS*EF/1000	500.00	32.50	35.70	2.51	2.79	580.13	40.79	45.34
Air Compressor	Portable	10711	653776	Diesel	HP HRS*EF/1000	500.00	15.00	5.73	0.36	0.53	42.98	2.72	3.98
Air Compressor	Portable	10717	723759	Diesel	HP HRS*EF/1000	500.00	49.00	5.73	0.36	0.53	140.41	8.87	13.01
Generator	Portable	Basewide	675288	Gasoline	HP HRS*EF/1000	199.90	28.00	11.00	0.72	13.40	61.57	4.04	75.00
Thatcher	Portable	Basewide	675355	Gasoline	HP HRS*EF/1000	199.90	5.50	5.25	17.57	113.75	5.77	19.32	125.06
Pressuer Washer	Portable	Basewide	695013	Gasoline	HP HRS*EF/1000	199.90	20.00	11.00	0.72	13.40	43.98	2.88	53.57
Auxiliary Power	Portable	Basewide	709118	Diesel	HP HRS*EF/1000	500.00	22.00	11.50	0.66	0.90	126.50	7.27	9.89
Auxiliary Power	Portable	Basewide	709119	Diesel	HP HRS*EF/1000	500.00	22.00	11.50	0.66	0.90	126.50	7.27	9.89
Generator	Portable	Basewide	726553	Diesel	HP HRS*EF/1000	500.00	9.00	35.70	2.51	2.79	160.65	11.30	12.56
Generator	Portable	Basewide	735003	Diesel	HP HRS*EF/1000	500.00	9.30	7.19	0.04	0.56	33.43	0.21	2.61
Generator	Portable	Basewide	735004	Diesel	HP HRS*EF/1000	500.00	9.30	7.19	0.04	0.56	33.43	0.21	2.61
Pressure Washer	Portable	Basewide	736710	Gasoline	HP HRS*EF/1000	199.90	24.00	11.00	0.72	13.40	52.77	3.46	64.29
Pump	Portable	Basewide	746250	Diesel	HP HRS*EF/1000	500.00	9.10	7.19	0.04	0.56	32.71	0.20	2.56
Auxiliary Power	Portable	Basewide	813948	Diesel	HP HRS*EF/1000	500.00	18.80	11.50	0.66	0.90	108.10	6.21	8.45
Pressuer Washer	Portable	Basewide	815390	Diesel	HP HRS*EF/1000	500.00	24.00	7.19	0.04	0.56	86.28	0.53	6.74
31 Trimmers < 2.5 Hp	Portable	Basewide	NA	Gasoline	HP HRS*EF/1000	199.90	2.50	5.26	16.41	125.78	81.55	254.27	1948.63
5 Chainsaw < 8 Hp	Portable	Basewide	NA	Gasoline	HP HRS*EF/1000	199.90	8.00	3.62	20.97	133.47	28.94	167.68	1067.21
8 Generators < 13 Hp	Portable	Basewide	NA	Gasoline	HP HRS*EF/1000	199.90	13.00	11.00	0.72	13.40	228.69	14.99	278.58
9 Blowers < 5 Hp	Portable	Basewide	NA	Gasoline	HP HRS*EF/1000	199.90	5.00	4.36	18.42	113.58	39.19	165.68	1021.67
11 Pressure Washers <13 Hp	Portable	Basewide	NA	Gasoline	HP HRS*EF/1000	199.90	13.00	5.03	0.42	13.96	143.90	11.86	398.94
Facility Power	Stationary	475	3083	LPG	HP HRS*EF/1000	199.90	500.00	24.20		1.90	2418.79	0.00	189.91
Facility Power	Stationary	490	814780	Diesel	HP HRS*EF/1000	500.00	26.50	11.50	0.49	0.90	152.38	6.43	11.91
Facility Power	Stationary	518	3603	Diesel	HP HRS*EF/1000	500.00	44.80	35.70	2.51	2.79	799.68	56.22	62.50
Facility Power	Stationary	752	3054	Diesel	HP HRS*EF/1000	500.00	42.00	11.50	0.49	0.90	241.50	10.19	18.88
Facility Power	Stationary	752	3932	Diesel	HP HRS*EF/1000	500.00	42.00	11.50	0.49	0.90	241.50	10.19	18.88
Facility Power	Stationary	753	814751	Diesel	HP HRS*EF/1000	500.00	49.00	11.50	0.49	0.90	281.75	11.88	22.03
Facility Power	Stationary	799	703337	Diesel	HP HRS*EF/1000	500.00	49.00	11.50	0.49	0.90	281.75	11.88	22.03
Facility Power	Stationary	865	3072	LPG	HP HRS*EF/1000	199.90	77.00	24.20		1.90	372.49	0.00	29.25
Facility Power	Stationary	964	677064	Diesel	HP HRS*EF/1000	500.00	45.00	35.70	2.51	2.79	803.25	56.48	62.78
Facility Power	Stationary	966	677065	Diesel	HP HRS*EF/1000	500.00	45.00	35.70	2.51	2.79	803.25	56.48	62.78
Facility Power	Stationary	1501	4177	Diesel	HP HRS*EF/1000	500.00	47.00	35.70	2.51	2.79	838.95	58.99	65.57
Facility Power	Stationary	1524	3190	Diesel	HP HRS*EF/1000	500.00	19.00	35.70	2.51	2.79	339.15	23.85	26.51
Facility Power	Stationary	1530	4067	LPG	HP HRS*EF/1000	199.90	55.00	24.20		1.90	266.07	0.00	20.89
Facility Power	Stationary	1579	635	Diesel	HP HRS*EF/1000	500.00	45.00	35.70	2.51	2.79	803.25	56.48	62.78
Facility Power	Stationary	1591	677066	Diesel	HP HRS*EF/1000	500.00	13.00	11.50	0.66	0.90	74.75	4.30	5.84
Facility Power	Stationary	1592	677067	Diesel	HP HRS*EF/1000	500.00	13.00	11.50	0.66	0.90	74.75	4.30	5.84
Facility Power	Stationary	1737	3804	Diesel	HP HRS*EF/1000	500.00	18.00	35.70	2.51	2.79	321.30	22.59	25.11
Facility Power	Stationary	1740	4003	LPG	HP HRS*EF/1000	199.90	77.00	24.20		1.90	372.49	0.00	29.25
Facility Power	Stationary	1743	3567	LPG	HP HRS*EF/1000	199.90	173.00	24.20		1.90	836.90	0.00	65.71
Facility Power	Stationary	1841	4113	Diesel	HP HRS*EF/1000	500.00	25.00	11.50	0.49	0.90	143.75	6.06	11.24
Facility Power	Stationary	6670	3068	NG	HP HRS*EF/1000	199.90	173.00	17.80	0.07	0.23	615.57	2.58	8.06
Facility Power	Stationary	6819	3597	Diesel	HP HRS*EF/1000	500.00	45.00	35.70	2.51	2.79	803.25	56.48	62.78
Facility Power	Stationary	8310	869	LPG	HP HRS*EF/1000	199.90	50.00	24.20		1.90	241.88	0.00	18.99
Facility Power	Stationary	11477	3187	Diesel	HP HRS*EF/1000	500.00	12.00	35.70	2.51	2.79	214.20	15.06	16.74
Facility Power	Stationary	13675	813523	Diesel	HP HRS*EF/1000	500.00	26.50	11.50	0.49	0.90	152.38	6.43	11.91
Facility Power	Stationary	14300	765	LPG	HP HRS*EF/1000	199.90	57.00	24.20		1.90	275.74	0.00	21.65

Table A-2. Estimated Emissions from Permit Exempt Internal Combustion Engines

Description	Type	Location	Pri_ID	Fuel	Equation	Hours	Size	Emission Factors*			Emissions (Lbs/Yr)		
						PTE	(BHP)	NOx	PM	ROC	NOx	PM	ROC
Facility Power	Stationary	23160	3605	Diesel	HP HRS*EF/1000	500.00	44.80	35.70	2.51	2.79	799.68	56.22	62.50
										Total (Lbs/yr)	**20549.28**	**1754.39**	**7963.87**
										Total (TPY)	**10.27**	**0.88**	**3.98**

Notes:
For spark ignited engines, hours for PTE is 199.9 hours; Emission Factors Units are lbs/1000 Bhp-Hr
For compression ignition engines, hours for PTE is 500 hours; Emission Factors are in lbs/1000 Bhp-Hr

Table A-3. Estimated Emissions from PERP Internal Combustion Engines

Description	Location	Pri_ID	Fuel	Engine Tier	Equation	Hours	Size	Emission Factors			Emissions (Lbs/Yr)		
						PTE	(BHP)	NOx	PM	ROC	NOx	PM	ROC
Generator	1703	718669	Diesel	OFF-RD TIER_4	HP HRS*EF/1000	500	169	0.66	0.02	0.33	55.85	1.86	27.89
Auxiliary Power	1704	718068	Diesel	OFF-RD TIER_4	HP HRS*EF/1000	500	169	0.66	0.02	0.33	55.85	1.86	27.89
Generator	3000	3517	Diesel	OFF-RD TIER_1	HP HRS*EF/1000	500	119	15.21	2.20	2.47	905.11	131.18	146.92
Generator	3000	3949	Diesel	OFF-RD TIER_3	HP HRS*EF/1000	500	172	6.17	0.49	0.44	530.87	41.71	37.88
Generator	3000	3950	Diesel	OFF-RD TIER_3	HP HRS*EF/1000	500	172	6.17	0.49	0.44	530.87	41.71	37.88
Generator	3000	4317	Diesel	OFF-RD TIER_3	HP HRS*EF/1000	500	173	6.17	0.49	0.44	533.96	41.95	38.10
Generator	3000	652758	Diesel	OFF-RD TIER_4	HP HRS*EF/1000	500	166	0.66	0.02	0.33	54.90	1.83	27.39
Auxiliary Power	8425	4124	Diesel	OFF-RD TIER_3	HP HRS*EF/1000	500	349	6.16	0.02	0.48	1074.92	3.84	83.93
Air Compressor	9320	4097	Diesel	OFF-RD TIER_3	HP HRS*EF/1000	500	130	6.16	0.49	0.48	400.40	31.53	31.27
Other	10715	4294	Diesel	OFF-RD TIER_4	HP HRS*EF/1000	500	60	7.19	0.04	0.56	215.70	1.32	16.86
Chipper Engine	Basewide	4293	Diesel	OFF-RD TIER_3	HP HRS*EF/1000	500	115	6.16	0.49	0.48	354.20	27.89	27.66
Air Compressor	Basewide	4307	Diesel	OFF-RD TIER_3	HP HRS*EF/1000	500	260	6.16	0.02	0.48	800.80	2.86	62.53
APU on Vacuum Truck	Basewide	645481	Diesel	OFF-RD TIER_3	HP HRS*EF/1000	500	140	6.16	0.49	0.48	431.20	33.95	33.67
Auxiliary Power	Basewide	698117	Diesel	OFF-RD TIER_4	HP HRS*EF/1000	500	115	0.66	0.02	0.33	38.01	1.27	18.98
Auxiliary Power	Basewide	700047	Diesel	OFF-RD TIER_4	HP HRS*EF/1000	500	74	7.19	0.04	0.56	266.03	1.63	20.79
Auxiliary Power	Basewide	700099	Diesel	OFF-RD TIER_4	HP HRS*EF/1000	500	74	7.19	0.04	0.56	266.03	1.63	20.79
Auxiliary Power	Basewide	700100	Diesel	OFF-RD TIER_4	HP HRS*EF/1000	500	320	0.66	0.02	0.33	105.76	3.52	52.80
Air Compressor	Basewide	717151	Diesel	OFF-RD TIER_4	HP HRS*EF/1000	500	260	0.66	0.02	0.33	85.93	2.86	42.90
Air Compressor	Basewide	717152	Diesel	OFF-RD TIER_4	HP HRS*EF/1000	500	260	0.66	0.02	0.33	85.93	2.86	42.90
Auxiliary Power	Basewide	728052	Diesel	OFF-RD TIER_4	HP HRS*EF/1000	500	155	0.66	0.02	0.33	51.23	1.71	25.58
Pump	Basewide	733837	Diesel	OFF-RD TIER_4	HP HRS*EF/1000	500	69.7	7.19	0.04	0.56	250.57	1.54	19.59
Pump	Basewide	736711	Diesel	OFF-RD TIER_4	HP HRS*EF/1000	500	69.7	7.19	0.04	0.56	250.57	1.54	19.59
Total (Lbs/yr)											**7,345**	**382**	**864**
Total (TPY)											**3.67**	**0.19**	**0.43**

Notes:
Emission factors are in lbs/1000 Bhp-Hr
PTE Usage is estimated at 500 hours/yr

Description	Location	Pri_ID	Fuel	Engine Tier	Equation	PTE	(BHP)	NOx	PM	ROC	NOx	PM
t	81	3946	Diesel	OFF-RD TIER_0	HP HRS*EF/1000	500	155	35.70	2.51	2.79	2766.75	194.53
	1735	4298	Diesel	OFF-RD TIER_1	HP HRS*EF/1000	500	99	15.20	2.51	2.79	752.40	124.25
	1735	4299	Diesel	OFF-RD TIER_1	HP HRS*EF/1000	500	99	15.20	2.51	2.79	752.40	124.25
	1735	4300	Diesel	OFF-RD TIER_1	HP HRS*EF/1000	500	99	15.20	2.51	2.79	752.40	124.25
	1735	4301	Diesel	OFF-RD TIER_1	HP HRS*EF/1000	500	99	15.20	2.51	2.79	752.40	124.25
	1735	4310	JP-8	OFF-RD TIER_0	HP HRS*EF/1000	500	38.8	35.70	2.51	2.79	692.58	48.69
	1735	4311	JP-8	OFF-RD TIER_0	HP HRS*EF/1000	500	38.8	35.70	2.51	2.79	692.58	48.69
	1735	653788	JP-8	OFF-RD TIER_0	HP HRS*EF/1000	500	38.8	35.70	2.51	2.79	692.58	48.69
	1735	653789	JP-8	OFF-RD TIER_0	HP HRS*EF/1000	500	38.8	35.70	2.51	2.79	692.58	48.69
wer	1735	677068	Diesel	OFF-RD TIER_3	HP HRS*EF/1000	500	569	6.16	0.02	0.48	1752.52	6.26
	1735	734977	Diesel	OFF-RD TIER_0	HP HRS*EF/1000	500	169	35.70	2.51	2.79	3016.65	212.10
	1735	813884	Diesel	OFF-RD TIER_0	HP HRS*EF/1000	500	99	35.70	2.51	2.79	1767.15	124.25
	1735	813895	Diesel	OFF-RD TIER_0	HP HRS*EF/1000	500	93	35.70	2.51	2.79	1660.05	116.72
	1735	813896	Diesel	OFF-RD TIER_0	HP HRS*EF/1000	500	93	35.70	2.51	2.79	1660.05	116.72
wer	7425	3735	Diesel	OFF-RD TIER_0	HP HRS*EF/1000	500	64	35.70	2.51	2.79	1142.40	80.32
	7425	729098	Diesel	OFF-RD TIER_0	HP HRS*EF/1000	500	64	35.70	2.51	2.79	1142.40	80.32
APU	8314	3820	Diesel	OFF-RD TIER_0	HP HRS*EF/1000	500	56	35.70	2.51	2.79	999.60	70.28
APU	8314	3821	Diesel	OFF-RD TIER_0	HP HRS*EF/1000	500	56	35.70	2.51	2.79	999.60	70.28
wer	8425	696	Diesel	OFF-RD TIER_0	HP HRS*EF/1000	500	390	35.70	2.51	2.79	6961.50	489.45
	8425	4034	Diesel	OFF-RD TIER_1	HP HRS*EF/1000	500	24.1	14.60	1.32	1.14	175.93	15.91
	8425	719726	Diesel	OFF-RD TIER_4	HP HRS*EF/1000	500	139	0.66	0.02	0.33	45.94	1.53
	8425	719728	Diesel	OFF-RD TIER_4	HP HRS*EF/1000	500	139	0.66	0.02	0.33	45.94	1.53
	8425	722304	Diesel	OFF-RD TIER_4	HP HRS*EF/1000	500	49	7.19	0.04	0.56	176.16	1.08
	8425	726921	Diesel	OFF-RD TIER_4	HP HRS*EF/1000	500	49	7.19	0.04	0.56	176.16	1.08
	10715	703412	Diesel	OFF-RD TIER_2	HP HRS*EF/1000	500	110	6.16	0.49	0.48	338.80	26.68
	10715	730530	Diesel	OFF-RD TIER_0	HP HRS*EF/1000	500	110	35.70	2.51	2.79	1963.50	138.05
	10717	4288	Diesel	OFF-RD TIER_4	HP HRS*EF/1000	500	50	7.19	0.04	0.56	179.75	1.10
	10717	644515	Diesel	OFF-RD TIER_2	HP HRS*EF/1000	500	63	11.50	0.66	0.90	362.25	20.82
	10717	644516	Diesel	OFF-RD TIER_0	HP HRS*EF/1000	500	63	35.70	2.51	2.79	1124.55	79.07
	12000	718452	Diesel	OFF-RD TIER_3	HP HRS*EF/1000	500	99	7.19	0.02	0.56	355.91	1.09
	12000	718453	Diesel	OFF-RD TIER_3	HP HRS*EF/1000	500	99	7.19	0.02	0.56	355.91	1.09
	12000	718454	Diesel	OFF-RD TIER_3	HP HRS*EF/1000	500	99	7.19	0.02	0.56	355.91	1.09
	12000	727958	Diesel	OFF-RD TIER_3	HP HRS*EF/1000	500	99	7.19	0.02	0.56	355.91	1.09
	12000	727959	Diesel	OFF-RD TIER_3	HP HRS*EF/1000	500	99	7.19	0.02	0.56	355.91	1.09
	12000	727960	Diesel	OFF-RD TIER_3	HP HRS*EF/1000	500	99	7.19	0.02	0.56	355.91	1.09
	12000	727961	Diesel	OFF-RD TIER_3	HP HRS*EF/1000	500	99	7.19	0.02	0.56	355.91	1.09
	12000	727963	Diesel	OFF-RD TIER_3	HP HRS*EF/1000	500	99	7.19	0.02	0.56	355.91	1.09
	12000	746797	Diesel	OFF-RD TIER_0	HP HRS*EF/1000	500	99	35.70	2.51	2.79	1767.15	124.25
ine Starting[(a)]	1746 and Flightline	2055	JP-8	OFF-RD TIER_0	HP HRS*EF/1000	500	100	35.70	2.51	2.79	1785.00	125.50
ine Starting[(a)]	1746 and Flightline	630175	JP-8	OFF-RD TIER_0	HP HRS*EF/1000	500	100	35.70	2.51	2.79	1785.00	125.50
	3000	3516	Diesel	OFF-RD TIER_1	HP HRS*EF/1000	500	119	15.21	2.20	2.47	905.11	131.18
wer	Basewide	3903	Diesel	OFF-RD TIER_2	HP HRS*EF/1000	500	64	11.50	0.66	0.90	368.00	21.15
	Basewide	732838	Diesel	OFF-RD TIER_0	HP HRS*EF/1000	500	39	35.70	2.51	2.79	696.15	48.95
	Basewide	732841	Diesel	OFF-RD TIER_0	HP HRS*EF/1000	500	39	35.70	2.51	2.79	696.15	48.95
	Basewide	732844	Diesel	OFF-RD TIER_0	HP HRS*EF/1000	500	39	35.70	2.51	2.79	696.15	48.95
	Basewide	732845	Diesel	OFF-RD TIER_0	HP HRS*EF/1000	500	39	35.70	2.51	2.79	696.15	48.95
	Basewide	732846	Diesel	OFF-RD TIER_0	HP HRS*EF/1000	500	39	35.70	2.51	2.79	696.15	48.95
	Basewide	732848	Diesel	OFF-RD TIER_0	HP HRS*EF/1000	500	39	35.70	2.51	2.79	696.15	48.95
	Basewide	732850	Diesel	OFF-RD TIER_0	HP HRS*EF/1000	500	39	35.70	2.51	2.79	696.15	48.95
	Basewide	736825	Diesel	OFF-RD TIER_0	HP HRS*EF/1000	500	20	35.70	2.51	2.79	357.00	25.10
	Basewide	736826	Diesel	OFF-RD TIER_0	HP HRS*EF/1000	500	20	35.70	2.51	2.79	357.00	25.10

Description	Location	Pri_ID	Fuel	Engine Tier	Equation	PTE	(BHP)	NOx	PM	ROC	NOx	PM
aintenance	Flightline	3613	Diesel	OFF-RD TIER_0	HP HRS*EF/1000	500	148	35.70	2.51	2.79	2641.80	185.74
aintenance	Flightline	3614	Diesel	OFF-RD TIER_0	HP HRS*EF/1000	500	148	35.70	2.51	2.79	2641.80	185.74
aintenance	Flightline	3615	Diesel	OFF-RD TIER_0	HP HRS*EF/1000	500	148	35.70	2.51	2.79	2641.80	185.74
aintenance	Flightline	3617	Diesel	OFF-RD TIER_0	HP HRS*EF/1000	500	148	35.70	2.51	2.79	2641.80	185.74
aintenance	Flightline	3618	Diesel	OFF-RD TIER_0	HP HRS*EF/1000	500	148	35.70	2.51	2.79	2641.80	185.74
										Total (Lbs/yr)	**62848.11**	**4422.70**
										Total (TPY)	**31.42**	**2.21**

tors are in lbs/1000 Bhp-hr
s estimated at 500 hours/yr

ble A-5. Estimated Emissions from Permit Exempt External Combustion Devices

Description	Location	Pri_ID	Capacity (MMBTU)	Fuel	Equation	Usage		Emission Factors			Emissions (Lbs/Yr)		
						PTE	Units	NOx	PM	ROC	NOx	PM	ROC
ler	75	732823	0.75	Propane/LPG	EF_FACTOR*GALS/1000	23,804.35	GALS	4.71	0.69	0.50	112.12	16.43	11.8
ler	475	705824	1.5	Propane/LPG	EF_FACTOR*GALS/1000	47,608.70	GALS	4.71	0.69	0.50	224.24	32.85	23.6
ter Heater	490	4156	0.199	Propane/LPG	EF_FACTOR*GALS/1000	6,316.09	GALS	8.56	0.69	0.50	54.07	4.36	3.1
ler	490	704772	0.12	Propane/LPG	EF_FACTOR*GALS/1000	3,808.70	GALS	8.56	0.69	0.50	32.60	2.63	1.8
ter Heater	542	704778	0.04	Natural Gas	EF_FACTOR*MMSCF	0.11	MMSCF	24.42	7.88	5.67	2.72	0.88	0.6
nace	542	735980	0.1	Natural Gas	EF_FACTOR*MMSCF	0.28	MMSCF	97.69	7.88	5.67	27.17	2.19	1.5
ler	660	707832	0.5	Natural Gas	EF_FACTOR*MMSCF	1.39	MMSCF	34.19	7.88	5.67	47.54	10.95	7.8
ler	764	723353	0.51	Natural Gas	EF_FACTOR*MMSCF	1.42	MMSCF	34.19	7.88	5.67	48.49	11.17	8.0
nace	765	1007	0.625	Natural Gas	EF_FACTOR*MMSCF	1.74	MMSCF	53.73	7.88	5.67	93.39	13.69	9.8
ter Heater	789	4333	0.038	Natural Gas	EF_FACTOR*MMSCF	0.11	MMSCF	97.69	7.88	5.67	10.32	0.83	0.6
nace	789	707833	0.5	Natural Gas	EF_FACTOR*MMSCF	1.39	MMSCF	34.19	7.88	5.67	47.54	10.95	7.8
ter Heater	799	694968	0.075	Natural Gas	EF_FACTOR*MMSCF	0.21	MMSCF	24.42	7.88	5.67	5.09	1.64	1.1
ler	799	707834	0.105	Natural Gas	EF_FACTOR*MMSCF	0.29	MMSCF	34.19	7.88	5.67	9.98	2.30	1.6
ler	799	707835	0.106	Natural Gas	EF_FACTOR*MMSCF	0.29	MMSCF	34.19	7.88	5.67	10.08	2.32	1.6
ler	840	727966	0.264	Natural Gas	EF_FACTOR*MMSCF	0.73	MMSCF	34.19	7.88	5.67	25.10	5.78	4.1
ler	840	735994	0.285	Natural Gas	EF_FACTOR*MMSCF	0.79	MMSCF	34.19	7.88	5.67	27.10	6.24	4.4
ter Heater	840	736011	0.1999	Natural Gas	EF_FACTOR*MMSCF	0.56	MMSCF	34.19	7.88	5.67	19.01	4.38	3.1
ler	848	727968	0.96	Natural Gas	EF_FACTOR*MMSCF	2.67	MMSCF	34.19	7.88	5.67	91.28	21.02	15.1
nace	860	3228	0.115	Natural Gas	EF_FACTOR*MMSCF	0.32	MMSCF	97.69	7.88	5.67	31.24	2.52	1.8
nace	860	3229	0.115	Natural Gas	EF_FACTOR*MMSCF	0.32	MMSCF	97.69	7.88	5.67	31.24	2.52	1.8
ter Heater	860	735988	0.38	Natural Gas	EF_FACTOR*MMSCF	1.06	MMSCF	34.19	7.88	5.67	36.13	8.32	5.9
nace	860	816005	0.044	Natural Gas	EF_FACTOR*MMSCF	0.12	MMSCF	97.69	7.88	5.67	11.95	0.96	0.6
ler	870	694919	0.399	Natural Gas	EF_FACTOR*MMSCF	1.11	MMSCF	34.19	7.88	5.67	37.94	8.74	6.2
ler	871	698766	0.7	Natural Gas	EF_FACTOR*MMSCF	1.95	MMSCF	34.19	7.88	5.67	66.56	15.33	11.0
ler	875	4040	1.05	Natural Gas	EF_FACTOR*MMSCF	2.92	MMSCF	53.73	7.88	5.67	156.89	23.00	16.5
ler	875	676461	0.038	Natural Gas	EF_FACTOR*MMSCF	0.11	MMSCF	24.42	7.88	5.67	2.58	0.83	0.6
ler	980	814990	0.3	Natural Gas	EF_FACTOR*MMSCF	0.83	MMSCF	34.19	7.88	5.67	28.52	6.57	4.7
ler	980	814991	0.3	Natural Gas	EF_FACTOR*MMSCF	0.83	MMSCF	34.19	7.88	5.67	28.52	6.57	4.7
ler	1506	4086	0.299	Natural Gas	EF_FACTOR*MMSCF	0.83	MMSCF	97.69	7.88	5.67	81.23	6.55	4.7
ler	1506	4087	0.299	Natural Gas	EF_FACTOR*MMSCF	0.83	MMSCF	97.69	7.88	5.67	81.23	6.55	4.7
nace	1521	745074	0.122	Propane/LPG	EF_FACTOR*GALS/1000	3,872.17	GALS	8.56	0.69	0.50	33.15	2.67	1.9
nace	1521	745075	0.122	Propane/LPG	EF_FACTOR*GALS/1000	3,872.17	GALS	8.56	0.69	0.50	33.15	2.67	1.9
nace	1530	814994	0.052	Natural Gas	EF_FACTOR*MMSCF	0.14	MMSCF	97.69	7.88	5.67	14.13	1.14	0.8
nace	1544	815008	0.072	Natural Gas	EF_FACTOR*MMSCF	0.20	MMSCF	97.69	7.88	5.67	19.56	1.58	1.1
nace	1544	815009	0.072	Natural Gas	EF_FACTOR*MMSCF	0.20	MMSCF	97.69	7.88	5.67	19.56	1.58	1.1
ler	1545	736655	0.399	Natural Gas	EF_FACTOR*MMSCF	1.11	MMSCF	34.19	7.88	5.67	37.94	8.74	6.2
ler	1545	736657	0.399	Natural Gas	EF_FACTOR*MMSCF	1.11	MMSCF	34.19	7.88	5.67	37.94	8.74	6.2
ler	1546	814995	0.725	Natural Gas	EF_FACTOR*MMSCF	2.02	MMSCF	34.19	7.88	5.67	68.93	15.88	11.4
ler	1546	814996	0.725	Natural Gas	EF_FACTOR*MMSCF	2.02	MMSCF	34.19	7.88	5.67	68.93	15.88	11.4
ler	1555	3652	0.99	Natural Gas	EF_FACTOR*MMSCF	2.75	MMSCF	53.73	7.88	5.67	147.93	21.68	15.6
ler	1555	3653	0.65	Natural Gas	EF_FACTOR*MMSCF	1.81	MMSCF	53.73	7.88	5.67	97.12	14.24	10.2
ter Heater	1555	732164	0.034	Natural Gas	EF_FACTOR*MMSCF	0.09	MMSCF	24.42	7.88	5.67	2.31	0.74	0.5
ter Heater	1555	732165	0.034	Natural Gas	EF_FACTOR*MMSCF	0.09	MMSCF	24.42	7.88	5.67	2.31	0.74	0.5
ler	1559	697049	0.399	Natural Gas	EF_FACTOR*MMSCF	1.11	MMSCF	34.19	7.88	5.67	37.94	8.74	6.2
ter Heater	1559	814672	0.04	Natural Gas	EF_FACTOR*MMSCF	0.11	MMSCF	24.42	7.88	5.67	2.72	0.88	0.6
nace	1577	910	0.1	Propane/LPG	EF_FACTOR*GALS/1000	3,173.91	GALS	8.56	0.69	0.50	27.17	2.19	1.5

ble A-5. Estimated Emissions from Permit Exempt External Combustion Devices

Description	Location	Pri_ID	Capacity (MMBTU)	Fuel	Equation	Usage		Emission Factors			Emissions (Lbs/Yr)		
						PTE	Units	NOx	PM	ROC	NOx	PM	ROC
nace	1579	707836	0.1	Propane/LPG	EF_FACTOR*GALS/1000	3,173.91	GALS	8.56	0.69	0.50	27.17	2.19	1.5
ler	1610	727972	0.54	Natural Gas	EF_FACTOR*MMSCF	1.50	MMSCF	34.19	7.88	5.67	51.34	11.83	8.5
nace	1628	676538	0.08	Propane/LPG	EF_FACTOR*GALS/1000	2,539.13	GALS	8.56	0.69	0.50	21.73	1.75	1.2
nace	1628	676539	0.08	Propane/LPG	EF_FACTOR*GALS/1000	2,539.13	GALS	8.56	0.69	0.50	21.73	1.75	1.2
nace	1628	676540	0.1	Propane/LPG	EF_FACTOR*GALS/1000	3,173.91	GALS	8.56	0.69	0.50	27.17	2.19	1.5
nace	1628	676712	0.05	Propane/LPG	EF_FACTOR*GALS/1000	1,586.96	GALS	8.56	0.69	0.50	13.58	1.10	0.7
nace	1628	676719	0.1	Propane/LPG	EF_FACTOR*GALS/1000	3,173.91	GALS	8.56	0.69	0.50	27.17	2.19	1.5
nace	1628	676722	0.1	Propane/LPG	EF_FACTOR*GALS/1000	3,173.91	GALS	8.56	0.69	0.50	27.17	2.19	1.5
ter Heater	1628	707800	0.04	Propane/LPG	EF_FACTOR*GALS/1000	1,269.57	GALS	2.14	0.69	0.50	2.72	0.88	0.6
nace	1628	707998	0.08	Propane/LPG	EF_FACTOR*GALS/1000	2,539.13	GALS	8.56	0.69	0.50	21.73	1.75	1.2
nace	1628	707999	0.1	Propane/LPG	EF_FACTOR*GALS/1000	3,173.91	GALS	8.56	0.69	0.50	27.17	2.19	1.5
ter Heater	1628	708000	0.04	Propane/LPG	EF_FACTOR*GALS/1000	1,269.57	GALS	2.14	0.69	0.50	2.72	0.88	0.6
nace	1705	700460	0.132	Natural Gas	EF_FACTOR*MMSCF	0.37	MMSCF	97.69	7.88	5.67	35.86	2.89	2.0
ter Heater	1705	701731	0.034	Natural Gas	EF_FACTOR*MMSCF	0.09	MMSCF	24.42	7.88	5.67	2.31	0.74	0.5
ter Heater	1707	701732	0.04	Natural Gas	EF_FACTOR*MMSCF	0.11	MMSCF	24.42	7.88	5.67	2.72	0.88	0.6
nace	1707	727973	0.8	Natural Gas	EF_FACTOR*MMSCF	2.22	MMSCF	34.19	7.88	5.67	76.06	17.52	12.6
ter Heater	1728	3833	0.075	Natural Gas	EF_FACTOR*MMSCF	0.21	MMSCF	97.69	7.88	5.67	20.38	1.64	1.1
ler	1728	733094	0.76	Natural Gas	EF_FACTOR*MMSCF	2.11	MMSCF	34.19	7.88	5.67	72.26	16.64	11.9
ter Heater	1731	708767	0.038	Natural Gas	EF_FACTOR*MMSCF	0.11	MMSCF	24.42	7.88	5.67	2.58	0.83	0.6
ler	1731	743304	0.75	Natural Gas	EF_FACTOR*MMSCF	2.09	MMSCF	34.19	7.88	5.67	71.31	16.43	11.8
ter Heater	1735	720648	0.065	Natural Gas	EF_FACTOR*MMSCF	0.18	MMSCF	24.42	7.88	5.67	4.41	1.42	1.0
ter Heater	1737	929	0.034	Natural Gas	EF_FACTOR*MMSCF	0.09	MMSCF	97.69	7.88	5.67	9.24	0.74	0.5
ter Heater	1737	4056	0.038	Natural Gas	EF_FACTOR*MMSCF	0.11	MMSCF	97.69	7.88	5.67	10.32	0.83	0.6
ler	1737	694920	1	Natural Gas	EF_FACTOR*MMSCF	2.78	MMSCF	34.19	7.88	5.67	95.08	21.90	15.7
ler	1737	694969	1	Natural Gas	EF_FACTOR*MMSCF	2.78	MMSCF	34.19	7.88	5.67	95.08	21.90	15.7
nace	1740	3236	0.074	Natural Gas	EF_FACTOR*MMSCF	0.21	MMSCF	97.69	7.88	5.67	20.10	1.62	1.1
nace	1740	3281	0.15	Natural Gas	EF_FACTOR*MMSCF	0.42	MMSCF	97.69	7.88	5.67	40.75	3.29	2.3
nace	1740	3282	0.075	Natural Gas	EF_FACTOR*MMSCF	0.21	MMSCF	97.69	7.88	5.67	20.38	1.64	1.1
ter Heater	1740	3988	0.751	Natural Gas	EF_FACTOR*MMSCF	2.09	MMSCF	53.73	7.88	5.67	112.21	16.45	11.8
ler	1743	3923	0.3	Natural Gas	EF_FACTOR*MMSCF	0.83	MMSCF	97.69	7.88	5.67	81.50	6.57	4.7
ler	1743	3924	0.3	Natural Gas	EF_FACTOR*MMSCF	0.83	MMSCF	97.69	7.88	5.67	81.50	6.57	4.7
ter Heater	1743	732133	0.04	Natural Gas	EF_FACTOR*MMSCF	0.11	MMSCF	24.42	7.88	5.67	2.72	0.88	0.6
ter Heater	1746	727974	0.125	Natural Gas	EF_FACTOR*MMSCF	0.35	MMSCF	34.19	7.88	5.67	11.89	2.74	1.9
nace	1749	947	0.1	Natural Gas	EF_FACTOR*MMSCF	0.28	MMSCF	97.69	7.88	5.67	27.17	2.19	1.5
nace	1749	3238	0.08	Natural Gas	EF_FACTOR*MMSCF	0.22	MMSCF	97.69	7.88	5.67	21.73	1.75	1.2
ter Heater	1749	658417	0.04	Natural Gas	EF_FACTOR*MMSCF	0.11	MMSCF	24.42	7.88	5.67	2.72	0.88	0.6
nace	1749	698205	0.075	Natural Gas	EF_FACTOR*MMSCF	0.21	MMSCF	97.69	7.88	5.67	20.38	1.64	1.1
nace	1749	698206	0.075	Natural Gas	EF_FACTOR*MMSCF	0.21	MMSCF	97.69	7.88	5.67	20.38	1.64	1.1
nace	1749	698207	0.075	Natural Gas	EF_FACTOR*MMSCF	0.21	MMSCF	97.69	7.88	5.67	20.38	1.64	1.1
nace	1749	698208	0.075	Natural Gas	EF_FACTOR*MMSCF	0.21	MMSCF	97.69	7.88	5.67	20.38	1.64	1.1
ler	1800	3942	0.84	Propane/LPG	EF_FACTOR*GALS/1000	26,660.87	GALS	4.71	0.69	0.50	125.57	18.40	13.2
ler	1806	4289	0.672	Natural Gas	EF_FACTOR*MMSCF	1.87	MMSCF	53.73	7.88	5.67	100.41	14.72	10.6
ter Heater	1810	648940	0.04	Propane/LPG	EF_FACTOR*GALS/1000	1,269.57	GALS	2.14	0.69	0.50	2.72	0.88	0.6
nace	1810	656947	0.06	Propane/LPG	EF_FACTOR*GALS/1000	1,904.35	GALS	8.56	0.69	0.50	16.30	1.31	0.9
nace	1810	657188	0.06	Propane/LPG	EF_FACTOR*GALS/1000	1,904.35	GALS	8.56	0.69	0.50	16.30	1.31	0.9
ter	1810	735997	0.11	Propane/LPG	EF_FACTOR*GALS/1000	3,491.30	GALS	8.56	0.69	0.50	29.89	2.41	1.7

ble A-5. Estimated Emissions from Permit Exempt External Combustion Devices

Description	Location	Pri_ID	Capacity (MMBTU)	Fuel	Equation	Usage		Emission Factors			Emissions (Lbs/Yr)		
						PTE	Units	NOx	PM	ROC	NOx	PM	ROC
nace	1930	4356	0.1	Propane/LPG	EF_FACTOR*GALS/1000	3,173.91	GALS	8.56	0.69	0.50	27.17	2.19	1.5
nace	1930	714341	1	Propane/LPG	EF_FACTOR*GALS/1000	31,739.13	GALS	4.71	0.69	0.50	149.49	21.90	15.7
nace	1930	714343	1	Propane/LPG	EF_FACTOR*GALS/1000	31,739.13	GALS	4.71	0.69	0.50	149.49	21.90	15.7
ter Heater	1930	816004	0.036	Propane/LPG	EF_FACTOR*GALS/1000	1,142.61	GALS	2.14	0.69	0.50	2.45	0.79	0.5
ler	2500	731776	0.399	Natural Gas	EF_FACTOR*MMSCF	1.11	MMSCF	34.19	7.88	5.67	37.94	8.74	6.2
nace	2505	736315	0.08	Natural Gas	EF_FACTOR*MMSCF	0.22	MMSCF	97.69	7.88	5.67	21.73	1.75	1.2
ler	2510	723354	0.399	Natural Gas	EF_FACTOR*MMSCF	1.11	MMSCF	34.19	7.88	5.67	37.94	8.74	6.2
ler	2510	723355	0.399	Natural Gas	EF_FACTOR*MMSCF	1.11	MMSCF	34.19	7.88	5.67	37.94	8.74	6.2
ter Heater	2530	731907	0.038	Natural Gas	EF_FACTOR*MMSCF	0.11	MMSCF	24.42	7.88	5.67	2.58	0.83	0.6
ter Heater	2530	734785	0.0751	Natural Gas	EF_FACTOR*MMSCF	0.21	MMSCF	24.42	7.88	5.67	5.10	1.64	1.1
ler	3000	703338	1.9	Natural Gas	EF_FACTOR*MMSCF	5.28	MMSCF	34.19	7.88	5.67	180.65	41.61	29.9
ler	3000	703339	1.9	Natural Gas	EF_FACTOR*MMSCF	5.28	MMSCF	34.19	7.88	5.67	180.65	41.61	29.9
nace	5010	676752	0.08	Natural Gas	EF_FACTOR*MMSCF	0.22	MMSCF	97.69	7.88	5.67	21.73	1.75	1.2
ter Heater	5010	707838	0.2	Natural Gas	EF_FACTOR*MMSCF	0.56	MMSCF	34.19	7.88	5.67	19.02	4.38	3.1
nace	6005	3219	0.08	Natural Gas	EF_FACTOR*MMSCF	0.22	MMSCF	97.69	7.88	5.67	21.73	1.75	1.2
ter Heater	6005	4290	0.075	Natural Gas	EF_FACTOR*MMSCF	0.21	MMSCF	97.69	7.88	5.67	20.38	1.64	1.1
nace	6015	4221	0.075	Natural Gas	EF_FACTOR*MMSCF	0.21	MMSCF	97.69	7.88	5.67	20.38	1.64	1.1
ter Heater	6015	4338	0.04	Natural Gas	EF_FACTOR*MMSCF	0.11	MMSCF	97.69	7.88	5.67	10.87	0.88	0.6
nace	6444	3244	0.075	Natural Gas	EF_FACTOR*MMSCF	0.21	MMSCF	97.69	7.88	5.67	20.38	1.64	1.1
ter Heater	6447	676761	0.05	Natural Gas	EF_FACTOR*MMSCF	0.14	MMSCF	24.42	7.88	5.67	3.40	1.10	0.7
nace	6447	734161	0.085	Natural Gas	EF_FACTOR*MMSCF	0.24	MMSCF	97.69	7.88	5.67	23.09	1.86	1.3
ler	6510	4058	0.75	Natural Gas	EF_FACTOR*MMSCF	2.09	MMSCF	53.73	7.88	5.67	112.07	16.43	11.8
ler	6523	707930	0.85	Natural Gas	EF_FACTOR*MMSCF	2.36	MMSCF	34.19	7.88	5.67	80.82	18.62	13.4
ler	6523	708039	0.85	Natural Gas	EF_FACTOR*MMSCF	2.36	MMSCF	34.19	7.88	5.67	80.82	18.62	13.4
ler	6523	714348	0.11	Natural Gas	EF_FACTOR*MMSCF	0.31	MMSCF	34.19	7.88	5.67	10.46	2.41	1.7
ter Heater	6523	714349	0.034	Natural Gas	EF_FACTOR*MMSCF	0.09	MMSCF	24.42	7.88	5.67	2.31	0.74	0.5
ter Heater	6523	732806	0.04	Natural Gas	EF_FACTOR*MMSCF	0.11	MMSCF	24.42	7.88	5.67	2.72	0.88	0.6
ter Heater	6525	676800	0.25	Natural Gas	EF_FACTOR*MMSCF	0.70	MMSCF	34.19	7.88	5.67	23.77	5.48	3.9
ter Heater	6601	3667	0.751	Natural Gas	EF_FACTOR*MMSCF	2.09	MMSCF	53.73	7.88	5.67	112.21	16.45	11.8
ler	6601	661827	0.5	Natural Gas	EF_FACTOR*MMSCF	1.39	MMSCF	34.19	7.88	5.67	47.54	10.95	7.8
ler	6601	664578	1.99	Natural Gas	EF_FACTOR*MMSCF	5.53	MMSCF	34.19	7.88	5.67	189.21	43.58	31.3
ter Heater	6601	727976	0.76	Natural Gas	EF_FACTOR*MMSCF	2.11	MMSCF	34.19	7.88	5.67	72.26	16.64	11.9
nace	6601	734148	0.1	Natural Gas	EF_FACTOR*MMSCF	0.28	MMSCF	97.69	7.88	5.67	27.17	2.19	1.5
nace	6601	734153	0.1	Natural Gas	EF_FACTOR*MMSCF	0.28	MMSCF	97.69	7.88	5.67	27.17	2.19	1.5
nace	6601	734156	0.1	Natural Gas	EF_FACTOR*MMSCF	0.28	MMSCF	97.69	7.88	5.67	27.17	2.19	1.5
ter Heater	6601	815790	0.076	Natural Gas	EF_FACTOR*MMSCF	0.21	MMSCF	34.19	7.88	5.67	7.23	1.66	1.2
ter Heater	6607	704767	0.05	Natural Gas	EF_FACTOR*MMSCF	0.14	MMSCF	24.42	7.88	5.67	3.40	1.10	0.7
ter Heater	6607	704769	0.04	Natural Gas	EF_FACTOR*MMSCF	0.11	MMSCF	24.42	7.88	5.67	2.72	0.88	0.6
ter Heater	6670	657189	0.25	Natural Gas	EF_FACTOR*MMSCF	0.70	MMSCF	34.19	7.88	5.67	23.77	5.48	3.9
ler	6670	734158	1	Natural Gas	EF_FACTOR*MMSCF	2.78	MMSCF	34.19	7.88	5.67	95.08	21.90	15.7
ler	6670	734159	1	Natural Gas	EF_FACTOR*MMSCF	2.78	MMSCF	34.19	7.88	5.67	95.08	21.90	15.7
ler	6710	3989	0.375	Natural Gas	EF_FACTOR*MMSCF	1.04	MMSCF	97.69	7.88	5.67	101.88	8.21	5.9
ter Heater	6710	736002	0.04	Natural Gas	EF_FACTOR*MMSCF	0.11	MMSCF	24.42	7.88	5.67	2.72	0.88	0.6
nace	6816	720649	0.1	Natural Gas	EF_FACTOR*MMSCF	0.28	MMSCF	97.69	7.88	5.67	27.17	2.19	1.5
nace	6816	720650	0.1	Natural Gas	EF_FACTOR*MMSCF	0.28	MMSCF	97.69	7.88	5.67	27.17	2.19	1.5
ler	6817	4339	0.5	Natural Gas	EF_FACTOR*MMSCF	1.39	MMSCF	53.73	7.88	5.67	74.71	10.95	7.8

ble A-5. Estimated Emissions from Permit Exempt External Combustion Devices

Description	Location	Pri_ID	Capacity (MMBTU)	Fuel	Equation	Usage		Emission Factors			Emissions (Lbs/Yr)		
						PTE	Units	NOx	PM	ROC	NOx	PM	ROC
ler	7011	4068	1.5	Natural Gas	EF_FACTOR*MMSCF	4.17	MMSCF	53.73	7.88	5.67	224.13	32.85	23.6
ter Heater	7015	698107	0.199	Natural Gas	EF_FACTOR*MMSCF	0.55	MMSCF	34.19	7.88	5.67	18.92	4.36	3.1
ler	7025	708770	1.05	Natural Gas	EF_FACTOR*MMSCF	2.92	MMSCF	34.19	7.88	5.67	99.83	23.00	16.5
ler	7025	708771	1.05	Natural Gas	EF_FACTOR*MMSCF	2.92	MMSCF	34.19	7.88	5.67	99.83	23.00	16.5
ler	7050	3627	1	Natural Gas	EF_FACTOR*MMSCF	2.78	MMSCF	53.73	7.88	5.67	149.42	21.90	15.7
ler	7050	3628	1	Natural Gas	EF_FACTOR*MMSCF	2.78	MMSCF	53.73	7.88	5.67	149.42	21.90	15.7
ler	7403	698034	0.6	Natural Gas	EF_FACTOR*MMSCF	1.67	MMSCF	34.19	7.88	5.67	57.05	13.14	9.4
ter Heater	7403	734162	0.04	Natural Gas	EF_FACTOR*MMSCF	0.11	MMSCF	24.42	7.88	5.67	2.72	0.88	0.6
ter Heater	7403	734164	0.1195	Natural Gas	EF_FACTOR*MMSCF	0.33	MMSCF	34.19	7.88	5.67	11.36	2.62	1.8
ter Heater	7403	734165	0.1195	Natural Gas	EF_FACTOR*MMSCF	0.33	MMSCF	34.19	7.88	5.67	11.36	2.62	1.8
nace	7420	676815	0.1	Natural Gas	EF_FACTOR*MMSCF	0.28	MMSCF	97.69	7.88	5.67	27.17	2.19	1.5
nace	7420	676816	0.1	Natural Gas	EF_FACTOR*MMSCF	0.28	MMSCF	97.69	7.88	5.67	27.17	2.19	1.5
ter Heater	7420	676817	0.04	Natural Gas	EF_FACTOR*MMSCF	0.11	MMSCF	24.42	7.88	5.67	2.72	0.88	0.6
ter Heater	7425	676818	0.199	Natural Gas	EF_FACTOR*MMSCF	0.55	MMSCF	34.19	7.88	5.67	18.92	4.36	3.1
ler	7425	698138	0.5	Natural Gas	EF_FACTOR*MMSCF	1.39	MMSCF	34.19	7.88	5.67	47.54	10.95	7.8
ler	7425	698139	0.5	Natural Gas	EF_FACTOR*MMSCF	1.39	MMSCF	34.19	7.88	5.67	47.54	10.95	7.8
ter Heater	7425	724495	0.04	Natural Gas	EF_FACTOR*MMSCF	0.11	MMSCF	24.42	7.88	5.67	2.72	0.88	0.6
nace	7430	3379	0.135	Natural Gas	EF_FACTOR*MMSCF	0.38	MMSCF	97.69	7.88	5.67	36.68	2.96	2.1
ler	7437	3941	0.84	Natural Gas	EF_FACTOR*MMSCF	2.34	MMSCF	53.73	7.88	5.67	125.51	18.40	13.2
ter Heater	7437	676819	0.04	Natural Gas	EF_FACTOR*MMSCF	0.11	MMSCF	24.42	7.88	5.67	2.72	0.88	0.6
ler	7437	744816	0.3	Natural Gas	EF_FACTOR*MMSCF	0.83	MMSCF	34.19	7.88	5.67	28.52	6.57	4.7
ler	7501	3812	0.65	Natural Gas	EF_FACTOR*MMSCF	1.81	MMSCF	53.73	7.88	5.67	97.12	14.24	10.2
ler	7501	3813	0.65	Natural Gas	EF_FACTOR*MMSCF	1.81	MMSCF	53.73	7.88	5.67	97.12	14.24	10.2
ter Heater	7501	3855	0.034	Natural Gas	EF_FACTOR*MMSCF	0.09	MMSCF	97.69	7.88	5.67	9.24	0.74	0.5
ler	7523	4060	1.999	Natural Gas	EF_FACTOR*MMSCF	5.56	MMSCF	53.73	7.88	5.67	298.69	43.78	31.5
ler	7523	732807	2	Natural Gas	EF_FACTOR*MMSCF	5.56	MMSCF	34.19	7.88	5.67	190.16	43.80	31.5
ter Heater	7525	734178	0.04	Natural Gas	EF_FACTOR*MMSCF	0.11	MMSCF	24.42	7.88	5.67	2.72	0.88	0.6
ler	8173	4319	1.999	Natural Gas	EF_FACTOR*MMSCF	5.56	MMSCF	53.73	7.88	5.67	298.69	43.78	31.5
ter Heater	8173	698745	0.076	Natural Gas	EF_FACTOR*MMSCF	0.21	MMSCF	34.19	7.88	5.67	7.23	1.66	1.2
midifier	8173	734171	0.4	Natural Gas	EF_FACTOR*MMSCF	1.11	MMSCF	34.19	7.88	5.67	38.03	8.76	6.3
midifier	8173	734173	0.4	Natural Gas	EF_FACTOR*MMSCF	1.11	MMSCF	34.19	7.88	5.67	38.03	8.76	6.3
ler	8175	3677	0.299	Natural Gas	EF_FACTOR*MMSCF	0.83	MMSCF	97.69	7.88	5.67	81.23	6.55	4.7
ter Heater	8175	701734	0.0751	Natural Gas	EF_FACTOR*MMSCF	0.21	MMSCF	24.42	7.88	5.67	5.10	1.64	1.1
ler	8175	734175	0.3	Natural Gas	EF_FACTOR*MMSCF	0.83	MMSCF	34.19	7.88	5.67	28.52	6.57	4.7
ter	8190	4106	1.2	Natural Gas	EF_FACTOR*MMSCF	3.34	MMSCF	53.73	7.88	5.67	179.30	26.28	18.9
ler	8195	4020	0.999	Natural Gas	EF_FACTOR*MMSCF	2.78	MMSCF	53.73	7.88	5.67	149.27	21.88	15.7
ter Heater	8195	698399	0.034	Natural Gas	EF_FACTOR*MMSCF	0.09	MMSCF	24.42	7.88	5.67	2.31	0.74	0.5
ler	8250	734169	0.3	Natural Gas	EF_FACTOR*MMSCF	0.83	MMSCF	34.19	7.88	5.67	28.52	6.57	4.7
ler	8250	734170	0.3	Natural Gas	EF_FACTOR*MMSCF	0.83	MMSCF	34.19	7.88	5.67	28.52	6.57	4.7
ter Heater	8290	3682	0.199	Natural Gas	EF_FACTOR*MMSCF	0.55	MMSCF	97.69	7.88	5.67	54.06	4.36	3.1
ler	8290	4184	1.262	Natural Gas	EF_FACTOR*MMSCF	3.51	MMSCF	53.73	7.88	5.67	188.57	27.64	19.9
ler	8305	3683	0.35	Natural Gas	EF_FACTOR*MMSCF	0.97	MMSCF	97.69	7.88	5.67	95.08	7.67	5.5
ter Heater	8305	701735	0.04	Natural Gas	EF_FACTOR*MMSCF	0.11	MMSCF	24.42	7.88	5.67	2.72	0.88	0.6
ler	8310	731904	0.97	Natural Gas	EF_FACTOR*MMSCF	2.70	MMSCF	34.19	7.88	5.67	92.23	21.24	15.2
ler	8310	731906	0.97	Natural Gas	EF_FACTOR*MMSCF	2.70	MMSCF	34.19	7.88	5.67	92.23	21.24	15.2
ter Heater	8310	743120	0.038	Natural Gas	EF_FACTOR*MMSCF	0.11	MMSCF	24.42	7.88	5.67	2.58	0.83	0.6

ble A-5. Estimated Emissions from Permit Exempt External Combustion Devices

Description	Location	Pri_ID	Capacity (MMBTU)	Fuel	Equation	Usage		Emission Factors			Emissions (Lbs/Yr)		
						PTE	Units	NOx	PM	ROC	NOx	PM	ROC
ler	8310	743121	1	Natural Gas	EF_FACTOR*MMSCF	2.78	MMSCF	34.19	7.88	5.67	95.08	21.90	15.7
ter Heater	8312	4219	0.038	Natural Gas	EF_FACTOR*MMSCF	0.11	MMSCF	97.69	7.88	5.67	10.32	0.83	0.6
nace	8312	4308	0.125	Natural Gas	EF_FACTOR*MMSCF	0.35	MMSCF	97.69	7.88	5.67	33.96	2.74	1.9
nace	8312	4309	0.125	Natural Gas	EF_FACTOR*MMSCF	0.35	MMSCF	97.69	7.88	5.67	33.96	2.74	1.9
ter Heater	8314	3857	0.034	Natural Gas	EF_FACTOR*MMSCF	0.09	MMSCF	97.69	7.88	5.67	9.24	0.74	0.5
ler	8314	4025	0.75	Natural Gas	EF_FACTOR*MMSCF	2.09	MMSCF	53.73	7.88	5.67	112.07	16.43	11.8
ler	8314	4026	0.75	Natural Gas	EF_FACTOR*MMSCF	2.09	MMSCF	53.73	7.88	5.67	112.07	16.43	11.8
ter Heater	8317	701736	0.034	Natural Gas	EF_FACTOR*MMSCF	0.09	MMSCF	24.42	7.88	5.67	2.31	0.74	0.5
ler	8337	1066	0.825	Natural Gas	EF_FACTOR*MMSCF	2.29	MMSCF	53.73	7.88	5.67	123.27	18.07	13.0
ler	8337	3630	0.7	Natural Gas	EF_FACTOR*MMSCF	1.95	MMSCF	53.73	7.88	5.67	104.59	15.33	11.0
ler	8337	3631	0.7	Natural Gas	EF_FACTOR*MMSCF	1.95	MMSCF	53.73	7.88	5.67	104.59	15.33	11.0
ter Heater	8337	744968	0.16	Natural Gas	EF_FACTOR*MMSCF	0.44	MMSCF	34.19	7.88	5.67	15.21	3.50	2.5
ter Heater	8339	744967	0.1999	Natural Gas	EF_FACTOR*MMSCF	0.56	MMSCF	34.19	7.88	5.67	19.01	4.38	3.1
ler	8401	4043	1.5	Natural Gas	EF_FACTOR*MMSCF	4.17	MMSCF	53.73	7.88	5.67	224.13	32.85	23.6
ler	8401	4044	1.5	Natural Gas	EF_FACTOR*MMSCF	4.17	MMSCF	53.73	7.88	5.67	224.13	32.85	23.6
ler	8401	648903	0.3	Natural Gas	EF_FACTOR*MMSCF	0.83	MMSCF	34.19	7.88	5.67	28.52	6.57	4.7
ler	8401	648927	0.3	Natural Gas	EF_FACTOR*MMSCF	0.83	MMSCF	34.19	7.88	5.67	28.52	6.57	4.7
ler	8415	1073	1.75	Natural Gas	EF_FACTOR*MMSCF	4.87	MMSCF	53.73	7.88	5.67	261.49	38.33	27.5
nace	8425	3382	0.08	Natural Gas	EF_FACTOR*MMSCF	0.22	MMSCF	97.69	7.88	5.67	21.73	1.75	1.2
nace	8425	3383	0.1	Natural Gas	EF_FACTOR*MMSCF	0.28	MMSCF	97.69	7.88	5.67	27.17	2.19	1.5
ter Heater	8500	3858	0.199	Natural Gas	EF_FACTOR*MMSCF	0.55	MMSCF	97.69	7.88	5.67	54.06	4.36	3.1
ler	8500	4088	1.999	Natural Gas	EF_FACTOR*MMSCF	5.56	MMSCF	53.73	7.88	5.67	298.69	43.78	31.5
ler	8500	732808	2	Natural Gas	EF_FACTOR*MMSCF	5.56	MMSCF	34.19	7.88	5.67	190.16	43.80	31.5
ter Heater	8500	734194	0.0751	Natural Gas	EF_FACTOR*MMSCF	0.21	MMSCF	24.42	7.88	5.67	5.10	1.64	1.1
ter Heater	8505	3688	0.25	Natural Gas	EF_FACTOR*MMSCF	0.70	MMSCF	97.69	7.88	5.67	67.92	5.48	3.9
ter Heater	8510	724497	0.038	Natural Gas	EF_FACTOR*MMSCF	0.11	MMSCF	24.42	7.88	5.67	2.58	0.83	0.6
ler	8510	727882	0.5	Natural Gas	EF_FACTOR*MMSCF	1.39	MMSCF	34.19	7.88	5.67	47.54	10.95	7.8
ler	8510	727883	0.5	Natural Gas	EF_FACTOR*MMSCF	1.39	MMSCF	34.19	7.88	5.67	47.54	10.95	7.8
ter Heater	8510	732819	0.038	Natural Gas	EF_FACTOR*MMSCF	0.11	MMSCF	24.42	7.88	5.67	2.58	0.83	0.6
ler	9005	3859	0.745	Natural Gas	EF_FACTOR*MMSCF	2.07	MMSCF	53.73	7.88	5.67	111.32	16.32	11.7
ler	9005	3860	0.745	Natural Gas	EF_FACTOR*MMSCF	2.07	MMSCF	53.73	7.88	5.67	111.32	16.32	11.7
ler	9005	3861	0.15	Natural Gas	EF_FACTOR*MMSCF	0.42	MMSCF	97.69	7.88	5.67	40.75	3.29	2.3
ler	9005	3862	0.15	Natural Gas	EF_FACTOR*MMSCF	0.42	MMSCF	97.69	7.88	5.67	40.75	3.29	2.3
ler	9190	709144	0.399	Natural Gas	EF_FACTOR*MMSCF	1.11	MMSCF	34.19	7.88	5.67	37.94	8.74	6.2
ler	9190	815788	0.3	Natural Gas	EF_FACTOR*MMSCF	0.83	MMSCF	34.19	7.88	5.67	28.52	6.57	4.7
ler	9190	815789	0.3	Natural Gas	EF_FACTOR*MMSCF	0.83	MMSCF	34.19	7.88	5.67	28.52	6.57	4.7
ler	9192	734190	0.3	Natural Gas	EF_FACTOR*MMSCF	0.83	MMSCF	34.19	7.88	5.67	28.52	6.57	4.7
ler	9192	734191	0.3	Natural Gas	EF_FACTOR*MMSCF	0.83	MMSCF	34.19	7.88	5.67	28.52	6.57	4.7
ler	9192	734192	0.5	Natural Gas	EF_FACTOR*MMSCF	1.39	MMSCF	34.19	7.88	5.67	47.54	10.95	7.8
ler	9192	734193	0.5	Natural Gas	EF_FACTOR*MMSCF	1.39	MMSCF	34.19	7.88	5.67	47.54	10.95	7.8
ter Heater	9307	676824	0.04	Natural Gas	EF_FACTOR*MMSCF	0.11	MMSCF	24.42	7.88	5.67	2.72	0.88	0.6
ler	9307	734182	0.3	Natural Gas	EF_FACTOR*MMSCF	0.83	MMSCF	34.19	7.88	5.67	28.52	6.57	4.7
ler	9307	734183	0.3	Natural Gas	EF_FACTOR*MMSCF	0.83	MMSCF	34.19	7.88	5.67	28.52	6.57	4.7
ler	9320	3636	1.79	Natural Gas	EF_FACTOR*MMSCF	4.98	MMSCF	53.73	7.88	5.67	267.46	39.20	28.2
nace	9327	734197	0.11	Natural Gas	EF_FACTOR*MMSCF	0.31	MMSCF	97.69	7.88	5.67	29.88	2.41	1.7
nace	9340	3247	0.75	Natural Gas	EF_FACTOR*MMSCF	2.09	MMSCF	53.73	7.88	5.67	112.07	16.43	11.8

ble A-5. Estimated Emissions from Permit Exempt External Combustion Devices

Description	Location	Pri_ID	Capacity (MMBTU)	Fuel	Equation	Usage		Emission Factors			Emissions (Lbs/Yr)		
						PTE	Units	NOx	PM	ROC	NOx	PM	ROC
nace	9340	3621	0.15	Natural Gas	EF_FACTOR*MMSCF	0.42	MMSCF	97.69	7.88	5.67	40.75	3.29	2.3
nace	9340	3622	0.3	Natural Gas	EF_FACTOR*MMSCF	0.83	MMSCF	97.69	7.88	5.67	81.50	6.57	4.7
nace	9340	3623	0.15	Natural Gas	EF_FACTOR*MMSCF	0.42	MMSCF	97.69	7.88	5.67	40.75	3.29	2.3
nace	9340	3624	0.25	Natural Gas	EF_FACTOR*MMSCF	0.70	MMSCF	97.69	7.88	5.67	67.92	5.48	3.9
nace	9340	3625	0.88	Natural Gas	EF_FACTOR*MMSCF	2.45	MMSCF	53.73	7.88	5.67	131.49	19.27	13.8
nace	9340	694975	0.06	Natural Gas	EF_FACTOR*MMSCF	0.17	MMSCF	97.69	7.88	5.67	16.30	1.31	0.9
ter Heater	9340	736004	0.04	Natural Gas	EF_FACTOR*MMSCF	0.11	MMSCF	24.42	7.88	5.67	2.72	0.88	0.6
ler	9360	698360	0.299	Natural Gas	EF_FACTOR*MMSCF	0.83	MMSCF	34.19	7.88	5.67	28.43	6.55	4.7
ter Heater	9360	727980	0.4	Natural Gas	EF_FACTOR*MMSCF	1.11	MMSCF	34.19	7.88	5.67	38.03	8.76	6.3
nace	10122	676827	0.175	Natural Gas	EF_FACTOR*MMSCF	0.49	MMSCF	97.69	7.88	5.67	47.54	3.83	2.7
nace	10122	676828	0.4	Natural Gas	EF_FACTOR*MMSCF	1.11	MMSCF	34.19	7.88	5.67	38.03	8.76	6.3
nace	10122	694976	0.14	Natural Gas	EF_FACTOR*MMSCF	0.39	MMSCF	97.69	7.88	5.67	38.03	3.07	2.2
ter Heater	10122	724648	0.04	Natural Gas	EF_FACTOR*MMSCF	0.11	MMSCF	24.42	7.88	5.67	2.72	0.88	0.6
ter Heater	10130	4295	2	Natural Gas	EF_FACTOR*MMSCF	5.56	MMSCF	53.73	7.88	5.67	298.84	43.80	31.5
nace	10130	676829	0.1	Natural Gas	EF_FACTOR*MMSCF	0.28	MMSCF	97.69	7.88	5.67	27.17	2.19	1.5
nace	10130	676830	0.2	Natural Gas	EF_FACTOR*MMSCF	0.56	MMSCF	34.19	7.88	5.67	19.02	4.38	3.1
nace	10130	676831	0.075	Natural Gas	EF_FACTOR*MMSCF	0.21	MMSCF	97.69	7.88	5.67	20.38	1.64	1.1
nace	10130	676832	0.2	Natural Gas	EF_FACTOR*MMSCF	0.56	MMSCF	34.19	7.88	5.67	19.02	4.38	3.1
nace	10130	676833	0.2	Natural Gas	EF_FACTOR*MMSCF	0.56	MMSCF	34.19	7.88	5.67	19.02	4.38	3.1
nace	10130	676834	0.2	Natural Gas	EF_FACTOR*MMSCF	0.56	MMSCF	34.19	7.88	5.67	19.02	4.38	3.1
nace	10130	676835	0.12	Natural Gas	EF_FACTOR*MMSCF	0.33	MMSCF	97.69	7.88	5.67	32.60	2.63	1.8
nace	10130	676836	0.12	Natural Gas	EF_FACTOR*MMSCF	0.33	MMSCF	97.69	7.88	5.67	32.60	2.63	1.8
nace	10130	676837	0.12	Natural Gas	EF_FACTOR*MMSCF	0.33	MMSCF	97.69	7.88	5.67	32.60	2.63	1.8
nace	10130	694977	0.2	Natural Gas	EF_FACTOR*MMSCF	0.56	MMSCF	34.19	7.88	5.67	19.02	4.38	3.1
ler	10145	656862	1.5	Natural Gas	EF_FACTOR*MMSCF	4.17	MMSCF	34.19	7.88	5.67	142.62	32.85	23.6
ler	10145	656863	1.5	Natural Gas	EF_FACTOR*MMSCF	4.17	MMSCF	34.19	7.88	5.67	142.62	32.85	23.6
ter Heater	10145	734980	0.38	Natural Gas	EF_FACTOR*MMSCF	1.06	MMSCF	34.19	7.88	5.67	36.13	8.32	5.9
nace	10250	694980	0.5	Natural Gas	EF_FACTOR*MMSCF	1.39	MMSCF	34.19	7.88	5.67	47.54	10.95	7.8
nace	10250	694981	0.5	Natural Gas	EF_FACTOR*MMSCF	1.39	MMSCF	34.19	7.88	5.67	47.54	10.95	7.8
nace	10250	694982	0.5	Natural Gas	EF_FACTOR*MMSCF	1.39	MMSCF	34.19	7.88	5.67	47.54	10.95	7.8
nace	10250	694983	0.5	Natural Gas	EF_FACTOR*MMSCF	1.39	MMSCF	34.19	7.88	5.67	47.54	10.95	7.8
ter Heater	10250	734984	0.065	Natural Gas	EF_FACTOR*MMSCF	0.18	MMSCF	24.42	7.88	5.67	4.41	1.42	1.0
nace	10260	727981	0.8	Natural Gas	EF_FACTOR*MMSCF	2.22	MMSCF	34.19	7.88	5.67	76.06	17.52	12.6
ter Heater	10314	656935	0.0745	Natural Gas	EF_FACTOR*MMSCF	0.21	MMSCF	24.42	7.88	5.67	5.06	1.63	1.1
ter Heater	10314	735854	0.085	Natural Gas	EF_FACTOR*MMSCF	0.24	MMSCF	34.19	7.88	5.67	8.08	1.86	1.3
ter Heater	10317	711980	0.04	Natural Gas	EF_FACTOR*MMSCF	0.11	MMSCF	24.42	7.88	5.67	2.72	0.88	0.6
nace	10343	2614	0.3	Natural Gas	EF_FACTOR*MMSCF	0.83	MMSCF	97.69	7.88	5.67	81.50	6.57	4.7
nace	10343	2615	0.3	Natural Gas	EF_FACTOR*MMSCF	0.83	MMSCF	97.69	7.88	5.67	81.50	6.57	4.7
nace	10343	3252	0.1	Natural Gas	EF_FACTOR*MMSCF	0.28	MMSCF	97.69	7.88	5.67	27.17	2.19	1.5
nace	10343	3253	0.1	Natural Gas	EF_FACTOR*MMSCF	0.28	MMSCF	97.69	7.88	5.67	27.17	2.19	1.5
ter Heater	10343	706526	0.04	Natural Gas	EF_FACTOR*MMSCF	0.11	MMSCF	24.42	7.88	5.67	2.72	0.88	0.6
nace	10363	676841	0.125	Natural Gas	EF_FACTOR*MMSCF	0.35	MMSCF	97.69	7.88	5.67	33.96	2.74	1.9
nace	10363	676842	0.11	Natural Gas	EF_FACTOR*MMSCF	0.31	MMSCF	97.69	7.88	5.67	29.88	2.41	1.7
ter Heater	10364	4197	0.038	Natural Gas	EF_FACTOR*MMSCF	0.11	MMSCF	97.69	7.88	5.67	10.32	0.83	0.6
nace	10366	3287	0.11	Natural Gas	EF_FACTOR*MMSCF	0.31	MMSCF	97.69	7.88	5.67	29.88	2.41	1.7
nace	10366	3353	0.1	Natural Gas	EF_FACTOR*MMSCF	0.28	MMSCF	97.69	7.88	5.67	27.17	2.19	1.5

ble A-5. Estimated Emissions from Permit Exempt External Combustion Devices

Description	Location	Pri_ID	Capacity (MMBTU)	Fuel	Equation	Usage		Emission Factors			Emissions (Lbs/Yr)		
						PTE	Units	NOx	PM	ROC	NOx	PM	ROC
nace	10366	3354	0.1	Natural Gas	EF_FACTOR*MMSCF	0.28	MMSCF	97.69	7.88	5.67	27.17	2.19	1.5
ter Heater	10366	3865	0.075	Natural Gas	EF_FACTOR*MMSCF	0.21	MMSCF	97.69	7.88	5.67	20.38	1.64	1.1
nace	10366	694985	0.11	Natural Gas	EF_FACTOR*MMSCF	0.31	MMSCF	97.69	7.88	5.67	29.88	2.41	1.7
nace	10366	694986	0.11	Natural Gas	EF_FACTOR*MMSCF	0.31	MMSCF	97.69	7.88	5.67	29.88	2.41	1.7
ter Heater	10366	694987	0.04	Natural Gas	EF_FACTOR*MMSCF	0.11	MMSCF	24.42	7.88	5.67	2.72	0.88	0.6
nace	10373	3357	0.1	Natural Gas	EF_FACTOR*MMSCF	0.28	MMSCF	97.69	7.88	5.67	27.17	2.19	1.5
ter Heater	10373	4202	0.038	Natural Gas	EF_FACTOR*MMSCF	0.11	MMSCF	97.69	7.88	5.67	10.32	0.83	0.6
nace	10375	676843	0.13	Natural Gas	EF_FACTOR*MMSCF	0.36	MMSCF	97.69	7.88	5.67	35.32	2.85	2.0
nace	10375	676844	0.13	Natural Gas	EF_FACTOR*MMSCF	0.36	MMSCF	97.69	7.88	5.67	35.32	2.85	2.0
nace	10375	676846	0.13	Natural Gas	EF_FACTOR*MMSCF	0.36	MMSCF	97.69	7.88	5.67	35.32	2.85	2.0
nace	10375	676849	0.06	Natural Gas	EF_FACTOR*MMSCF	0.17	MMSCF	97.69	7.88	5.67	16.30	1.31	0.9
ler	10400	734986	0.8	Natural Gas	EF_FACTOR*MMSCF	2.22	MMSCF	34.19	7.88	5.67	76.06	17.52	12.6
ler	10503	4000	0.399	Natural Gas	EF_FACTOR*MMSCF	1.11	MMSCF	97.69	7.88	5.67	108.40	8.74	6.2
ter Heater	10503	736008	0.027	Natural Gas	EF_FACTOR*MMSCF	0.08	MMSCF	24.42	7.88	5.67	1.83	0.59	0.4
ter Heater	10510	4090	0.075	Natural Gas	EF_FACTOR*MMSCF	0.21	MMSCF	97.69	7.88	5.67	20.38	1.64	1.1
ter Heater	10525	4340	0.038	Natural Gas	EF_FACTOR*MMSCF	0.11	MMSCF	97.69	7.88	5.67	10.32	0.83	0.6
ler	10525	727982	0.75	Natural Gas	EF_FACTOR*MMSCF	2.09	MMSCF	34.19	7.88	5.67	71.31	16.43	11.8
ler	10577	4276	0.5	Natural Gas	EF_FACTOR*MMSCF	1.39	MMSCF	53.73	7.88	5.67	74.71	10.95	7.8
ler	10577	4277	0.5	Natural Gas	EF_FACTOR*MMSCF	1.39	MMSCF	53.73	7.88	5.67	74.71	10.95	7.8
ler	10577	4278	0.5	Natural Gas	EF_FACTOR*MMSCF	1.39	MMSCF	53.73	7.88	5.67	74.71	10.95	7.8
ler	10577	727983	0.5	Natural Gas	EF_FACTOR*MMSCF	1.39	MMSCF	34.19	7.88	5.67	47.54	10.95	7.8
ter Heater	10660	707839	0.199	Natural Gas	EF_FACTOR*MMSCF	0.55	MMSCF	34.19	7.88	5.67	18.92	4.36	3.1
ler	10660	707840	0.399	Natural Gas	EF_FACTOR*MMSCF	1.11	MMSCF	34.19	7.88	5.67	37.94	8.74	6.2
nace	10711	676857	0.855	Natural Gas	EF_FACTOR*MMSCF	2.38	MMSCF	34.19	7.88	5.67	81.29	18.72	13.4
nace	10711	676860	0.04	Natural Gas	EF_FACTOR*MMSCF	0.11	MMSCF	97.69	7.88	5.67	10.87	0.88	0.6
nace	10711	676862	0.035	Natural Gas	EF_FACTOR*MMSCF	0.10	MMSCF	97.69	7.88	5.67	9.51	0.77	0.5
ter Heater	10711	727984	0.75	Natural Gas	EF_FACTOR*MMSCF	2.09	MMSCF	34.19	7.88	5.67	71.31	16.43	11.8
ler	10711	727985	0.58	Natural Gas	EF_FACTOR*MMSCF	1.61	MMSCF	34.19	7.88	5.67	55.15	12.70	9.1
ter	10711	736411	1.1	Natural Gas	EF_FACTOR*MMSCF	3.06	MMSCF	34.19	7.88	5.67	104.59	24.09	17.3
nace	10713	657197	0.11	Natural Gas	EF_FACTOR*MMSCF	0.31	MMSCF	97.69	7.88	5.67	29.88	2.41	1.7
ter Heater	10713	727986	0.034	Natural Gas	EF_FACTOR*MMSCF	0.09	MMSCF	24.42	7.88	5.67	2.31	0.74	0.5
nace	10715	694990	0.1	Natural Gas	EF_FACTOR*MMSCF	0.28	MMSCF	97.69	7.88	5.67	27.17	2.19	1.5
nace	10715	700461	0.01	Natural Gas	EF_FACTOR*MMSCF	0.03	MMSCF	97.69	7.88	5.67	2.72	0.22	0.1
ter Heater	10717	713405	0.04	Natural Gas	EF_FACTOR*MMSCF	0.11	MMSCF	24.42	7.88	5.67	2.72	0.88	0.6
ter Heater	10728	4321	0.199	Natural Gas	EF_FACTOR*MMSCF	0.55	MMSCF	97.69	7.88	5.67	54.06	4.36	3.1
ter Heater	11013	706417	0.034	Natural Gas	EF_FACTOR*MMSCF	0.09	MMSCF	24.42	7.88	5.67	2.31	0.74	0.5
ler	11013	727987	0.239	Natural Gas	EF_FACTOR*MMSCF	0.66	MMSCF	34.19	7.88	5.67	22.72	5.23	3.7
ter Heater	11025	4220	0.04	Natural Gas	EF_FACTOR*MMSCF	0.11	MMSCF	97.69	7.88	5.67	10.87	0.88	0.6
nace	11040	727988	0.5	Natural Gas	EF_FACTOR*MMSCF	1.39	MMSCF	34.19	7.88	5.67	47.54	10.95	7.8
nace	11040	727989	0.5	Natural Gas	EF_FACTOR*MMSCF	1.39	MMSCF	34.19	7.88	5.67	47.54	10.95	7.8
ter Heater	11040	734989	0.04	Natural Gas	EF_FACTOR*MMSCF	0.11	MMSCF	24.42	7.88	5.67	2.72	0.88	0.6
ter Heater	11041	676865	0.199	Natural Gas	EF_FACTOR*MMSCF	0.55	MMSCF	34.19	7.88	5.67	18.92	4.36	3.1
ter Heater	11041	676866	0.199	Natural Gas	EF_FACTOR*MMSCF	0.55	MMSCF	34.19	7.88	5.67	18.92	4.36	3.1
ler	11041	676868	0.5	Natural Gas	EF_FACTOR*MMSCF	1.39	MMSCF	34.19	7.88	5.67	47.54	10.95	7.8
ler	11041	676871	0.5	Natural Gas	EF_FACTOR*MMSCF	1.39	MMSCF	34.19	7.88	5.67	47.54	10.95	7.8
ter Heater	11042	676875	0.199	Natural Gas	EF_FACTOR*MMSCF	0.55	MMSCF	34.19	7.88	5.67	18.92	4.36	3.1

ble A-5. Estimated Emissions from Permit Exempt External Combustion Devices

Description	Location	Pri_ID	Capacity (MMBTU)	Fuel	Equation	Usage		Emission Factors			Emissions (Lbs/Yr)		
						PTE	Units	NOx	PM	ROC	NOx	PM	ROC
ter Heater	11042	676878	0.199	Natural Gas	EF_FACTOR*MMSCF	0.55	MMSCF	34.19	7.88	5.67	18.92	4.36	3.1
ler	11042	676881	0.5	Natural Gas	EF_FACTOR*MMSCF	1.39	MMSCF	34.19	7.88	5.67	47.54	10.95	7.8
ler	11042	676882	0.5	Natural Gas	EF_FACTOR*MMSCF	1.39	MMSCF	34.19	7.88	5.67	47.54	10.95	7.8
ler	11070	3141	0.264	Natural Gas	EF_FACTOR*MMSCF	0.73	MMSCF	97.69	7.88	5.67	71.72	5.78	4.1
ler	11070	657204	0.299	Natural Gas	EF_FACTOR*MMSCF	0.83	MMSCF	34.19	7.88	5.67	28.43	6.55	4.7
nace	11070	694991	0.175	Natural Gas	EF_FACTOR*MMSCF	0.49	MMSCF	97.69	7.88	5.67	47.54	3.83	2.7
nace	11070	694992	0.125	Natural Gas	EF_FACTOR*MMSCF	0.35	MMSCF	97.69	7.88	5.67	33.96	2.74	1.9
nace	11070	694993	0.125	Natural Gas	EF_FACTOR*MMSCF	0.35	MMSCF	97.69	7.88	5.67	33.96	2.74	1.9
nace	11070	694994	0.175	Natural Gas	EF_FACTOR*MMSCF	0.49	MMSCF	97.69	7.88	5.67	47.54	3.83	2.7
nace	11070	694995	0.175	Natural Gas	EF_FACTOR*MMSCF	0.49	MMSCF	97.69	7.88	5.67	47.54	3.83	2.7
nace	11070	694996	0.25	Natural Gas	EF_FACTOR*MMSCF	0.70	MMSCF	34.19	7.88	5.67	23.77	5.48	3.9
nace	11070	694997	0.125	Natural Gas	EF_FACTOR*MMSCF	0.35	MMSCF	97.69	7.88	5.67	33.96	2.74	1.9
nace	11070	694998	0.25	Natural Gas	EF_FACTOR*MMSCF	0.70	MMSCF	34.19	7.88	5.67	23.77	5.48	3.9
nace	11070	694999	0.25	Natural Gas	EF_FACTOR*MMSCF	0.70	MMSCF	34.19	7.88	5.67	23.77	5.48	3.9
nace	11070	695000	0.175	Natural Gas	EF_FACTOR*MMSCF	0.49	MMSCF	97.69	7.88	5.67	47.54	3.83	2.7
nace	11070	695001	0.225	Natural Gas	EF_FACTOR*MMSCF	0.63	MMSCF	34.19	7.88	5.67	21.39	4.93	3.5
nace	11070	695002	0.35	Natural Gas	EF_FACTOR*MMSCF	0.97	MMSCF	34.19	7.88	5.67	33.28	7.67	5.5
nace	11070	695003	0.35	Natural Gas	EF_FACTOR*MMSCF	0.97	MMSCF	34.19	7.88	5.67	33.28	7.67	5.5
nace	11070	695004	0.5	Natural Gas	EF_FACTOR*MMSCF	1.39	MMSCF	34.19	7.88	5.67	47.54	10.95	7.8
nace	11070	695005	0.5	Natural Gas	EF_FACTOR*MMSCF	1.39	MMSCF	34.19	7.88	5.67	47.54	10.95	7.8
nace	11070	695006	0.5	Natural Gas	EF_FACTOR*MMSCF	1.39	MMSCF	34.19	7.88	5.67	47.54	10.95	7.8
nace	11070	695007	0.175	Natural Gas	EF_FACTOR*MMSCF	0.49	MMSCF	97.69	7.88	5.67	47.54	3.83	2.7
nace	11070	695008	0.125	Natural Gas	EF_FACTOR*MMSCF	0.35	MMSCF	97.69	7.88	5.67	33.96	2.74	1.9
nace	11070	695009	0.175	Natural Gas	EF_FACTOR*MMSCF	0.49	MMSCF	97.69	7.88	5.67	47.54	3.83	2.7
nace	11070	695010	0.175	Natural Gas	EF_FACTOR*MMSCF	0.49	MMSCF	97.69	7.88	5.67	47.54	3.83	2.7
nace	11070	695011	0.175	Natural Gas	EF_FACTOR*MMSCF	0.49	MMSCF	97.69	7.88	5.67	47.54	3.83	2.7
ler	11070	704759	0.86	Natural Gas	EF_FACTOR*MMSCF	2.39	MMSCF	34.19	7.88	5.67	81.77	18.83	13.5
nace	11070	736637	0.125	Natural Gas	EF_FACTOR*MMSCF	0.35	MMSCF	97.69	7.88	5.67	33.96	2.74	1.9
nace	11146	659343	0.1	Natural Gas	EF_FACTOR*MMSCF	0.28	MMSCF	97.69	7.88	5.67	27.17	2.19	1.5
nace	11146	659346	0.16	Natural Gas	EF_FACTOR*MMSCF	0.44	MMSCF	97.69	7.88	5.67	43.47	3.50	2.5
nace	11146	659365	0.16	Natural Gas	EF_FACTOR*MMSCF	0.44	MMSCF	97.69	7.88	5.67	43.47	3.50	2.5
nace	11152	3260	0.11	Natural Gas	EF_FACTOR*MMSCF	0.31	MMSCF	97.69	7.88	5.67	29.88	2.41	1.7
nace	11165	3360	0.115	Natural Gas	EF_FACTOR*MMSCF	0.32	MMSCF	97.69	7.88	5.67	31.24	2.52	1.8
ter Heater	11165	727990	0.04	Natural Gas	EF_FACTOR*MMSCF	0.11	MMSCF	24.42	7.88	5.67	2.72	0.88	0.6
ter Heater	11177	704017	0.034	Natural Gas	EF_FACTOR*MMSCF	0.09	MMSCF	24.42	7.88	5.67	2.31	0.74	0.5
ler	11248	3361	0.264	Natural Gas	EF_FACTOR*MMSCF	0.73	MMSCF	97.69	7.88	5.67	71.72	5.78	4.1
ter Heater	11248	727991	0.12	Natural Gas	EF_FACTOR*MMSCF	0.33	MMSCF	34.19	7.88	5.67	11.41	2.63	1.8
ter Heater	11352	4344	0.04	Natural Gas	EF_FACTOR*MMSCF	0.11	MMSCF	97.69	7.88	5.67	10.87	0.88	0.6
ler	11352	676888	0.042	Natural Gas	EF_FACTOR*MMSCF	0.12	MMSCF	24.42	7.88	5.67	2.85	0.92	0.6
nace	11352	676890	0.11	Natural Gas	EF_FACTOR*MMSCF	0.31	MMSCF	97.69	7.88	5.67	29.88	2.41	1.7
nace	11352	676892	0.11	Natural Gas	EF_FACTOR*MMSCF	0.31	MMSCF	97.69	7.88	5.67	29.88	2.41	1.7
nace	11352	676894	0.11	Natural Gas	EF_FACTOR*MMSCF	0.31	MMSCF	97.69	7.88	5.67	29.88	2.41	1.7
nace	11432	730209	0.1	Natural Gas	EF_FACTOR*MMSCF	0.28	MMSCF	97.69	7.88	5.67	27.17	2.19	1.5
nace	11432	730211	0.1	Natural Gas	EF_FACTOR*MMSCF	0.28	MMSCF	97.69	7.88	5.67	27.17	2.19	1.5
nace	11432	730216	0.1	Natural Gas	EF_FACTOR*MMSCF	0.28	MMSCF	97.69	7.88	5.67	27.17	2.19	1.5
nace	11433	4350	0.075	Natural Gas	EF_FACTOR*MMSCF	0.21	MMSCF	97.69	7.88	5.67	20.38	1.64	1.1

ble A-5. Estimated Emissions from Permit Exempt External Combustion Devices

Description	Location	Pri_ID	Capacity (MMBTU)	Fuel	Equation	Usage		Emission Factors			Emissions (Lbs/Yr)		
						PTE	Units	NOx	PM	ROC	NOx	PM	ROC
nace	11433	4351	0.075	Natural Gas	EF_FACTOR*MMSCF	0.21	MMSCF	97.69	7.88	5.67	20.38	1.64	1.1
nace	11433	4352	0.075	Natural Gas	EF_FACTOR*MMSCF	0.21	MMSCF	97.69	7.88	5.67	20.38	1.64	1.1
nace	11433	4353	0.075	Natural Gas	EF_FACTOR*MMSCF	0.21	MMSCF	97.69	7.88	5.67	20.38	1.64	1.1
nace	11433	4354	0.075	Natural Gas	EF_FACTOR*MMSCF	0.21	MMSCF	97.69	7.88	5.67	20.38	1.64	1.1
nace	11433	4355	0.075	Natural Gas	EF_FACTOR*MMSCF	0.21	MMSCF	97.69	7.88	5.67	20.38	1.64	1.1
ter Heater	11433	648941	0.04	Natural Gas	EF_FACTOR*MMSCF	0.11	MMSCF	24.42	7.88	5.67	2.72	0.88	0.6
ler	11439	3637	0.76	Natural Gas	EF_FACTOR*MMSCF	2.11	MMSCF	53.73	7.88	5.67	113.56	16.64	11.9
nace	11439	676903	0.04	Natural Gas	EF_FACTOR*MMSCF	0.11	MMSCF	97.69	7.88	5.67	10.87	0.88	0.6
nace	11439	676904	0.04	Natural Gas	EF_FACTOR*MMSCF	0.11	MMSCF	97.69	7.88	5.67	10.87	0.88	0.6
nace	11439	730223	0.09	Natural Gas	EF_FACTOR*MMSCF	0.25	MMSCF	97.69	7.88	5.67	24.45	1.97	1.4
nace	11442	701737	0.12	Natural Gas	EF_FACTOR*MMSCF	0.33	MMSCF	97.69	7.88	5.67	32.60	2.63	1.8
nace	11442	701738	0.12	Natural Gas	EF_FACTOR*MMSCF	0.33	MMSCF	97.69	7.88	5.67	32.60	2.63	1.8
ler	11477	656889	0.199	Natural Gas	EF_FACTOR*MMSCF	0.55	MMSCF	34.19	7.88	5.67	18.92	4.36	3.1
ter Heater	11477	727992	0.034	Natural Gas	EF_FACTOR*MMSCF	0.09	MMSCF	24.42	7.88	5.67	2.31	0.74	0.5
nace	11510	676911	0.115	Natural Gas	EF_FACTOR*MMSCF	0.32	MMSCF	97.69	7.88	5.67	31.24	2.52	1.8
ter Heater	11510	706527	0.032	Natural Gas	EF_FACTOR*MMSCF	0.09	MMSCF	24.42	7.88	5.67	2.17	0.70	0.5
ter Heater	11777	3713	0.04	Natural Gas	EF_FACTOR*MMSCF	0.11	MMSCF	97.69	7.88	5.67	10.87	0.88	0.6
ler	12000	4110	1	Natural Gas	EF_FACTOR*MMSCF	2.78	MMSCF	53.73	7.88	5.67	149.42	21.90	15.7
ler	12000	4111	1	Natural Gas	EF_FACTOR*MMSCF	2.78	MMSCF	53.73	7.88	5.67	149.42	21.90	15.7
ter Heater	12006	4346	0.199	Natural Gas	EF_FACTOR*MMSCF	0.55	MMSCF	97.69	7.88	5.67	54.06	4.36	3.1
ler	12006	721569	2	Natural Gas	EF_FACTOR*MMSCF	5.56	MMSCF	34.19	7.88	5.67	190.16	43.80	31.5
ler	12006	721570	2	Natural Gas	EF_FACTOR*MMSCF	5.56	MMSCF	34.19	7.88	5.67	190.16	43.80	31.5
nace	12901	3371	0.075	Natural Gas	EF_FACTOR*MMSCF	0.21	MMSCF	97.69	7.88	5.67	20.38	1.64	1.1
nace	12901	4224	0.075	Natural Gas	EF_FACTOR*MMSCF	0.21	MMSCF	97.69	7.88	5.67	20.38	1.64	1.1
ter Heater	12901	658409	0.199	Natural Gas	EF_FACTOR*MMSCF	0.55	MMSCF	34.19	7.88	5.67	18.92	4.36	3.1
ter Heater	12903	4210	0.199	Natural Gas	EF_FACTOR*MMSCF	0.55	MMSCF	97.69	7.88	5.67	54.06	4.36	3.1
nace	12903	4225	0.075	Natural Gas	EF_FACTOR*MMSCF	0.21	MMSCF	97.69	7.88	5.67	20.38	1.64	1.1
nace	12903	4226	0.075	Natural Gas	EF_FACTOR*MMSCF	0.21	MMSCF	97.69	7.88	5.67	20.38	1.64	1.1
nace	12905	4227	0.075	Natural Gas	EF_FACTOR*MMSCF	0.21	MMSCF	97.69	7.88	5.67	20.38	1.64	1.1
nace	12905	4228	0.075	Natural Gas	EF_FACTOR*MMSCF	0.21	MMSCF	97.69	7.88	5.67	20.38	1.64	1.1
ter Heater	12905	676921	0.075	Natural Gas	EF_FACTOR*MMSCF	0.21	MMSCF	24.42	7.88	5.67	5.09	1.64	1.1
nace	12907	4229	0.075	Natural Gas	EF_FACTOR*MMSCF	0.21	MMSCF	97.69	7.88	5.67	20.38	1.64	1.1
ter Heater	12907	707841	0.034	Natural Gas	EF_FACTOR*MMSCF	0.09	MMSCF	24.42	7.88	5.67	2.31	0.74	0.5
ter Heater	12911	4213	0.25	Natural Gas	EF_FACTOR*MMSCF	0.70	MMSCF	97.69	7.88	5.67	67.92	5.48	3.9
nace	12911	4230	0.075	Natural Gas	EF_FACTOR*MMSCF	0.21	MMSCF	97.69	7.88	5.67	20.38	1.64	1.1
nace	12911	4231	0.075	Natural Gas	EF_FACTOR*MMSCF	0.21	MMSCF	97.69	7.88	5.67	20.38	1.64	1.1
ter Heater	12913	4214	0.075	Natural Gas	EF_FACTOR*MMSCF	0.21	MMSCF	97.69	7.88	5.67	20.38	1.64	1.1
nace	12913	4232	0.075	Natural Gas	EF_FACTOR*MMSCF	0.21	MMSCF	97.69	7.88	5.67	20.38	1.64	1.1
nace	12913	4233	0.075	Natural Gas	EF_FACTOR*MMSCF	0.21	MMSCF	97.69	7.88	5.67	20.38	1.64	1.1
nace	12915	4234	0.075	Natural Gas	EF_FACTOR*MMSCF	0.21	MMSCF	97.69	7.88	5.67	20.38	1.64	1.1
nace	12915	4235	0.075	Natural Gas	EF_FACTOR*MMSCF	0.21	MMSCF	97.69	7.88	5.67	20.38	1.64	1.1
ter Heater	12915	713407	0.27	Natural Gas	EF_FACTOR*MMSCF	0.75	MMSCF	34.19	7.88	5.67	25.67	5.91	4.2
nace	13001	3262	0.088	Natural Gas	EF_FACTOR*MMSCF	0.24	MMSCF	97.69	7.88	5.67	23.91	1.93	1.3
nace	13001	3263	0.088	Natural Gas	EF_FACTOR*MMSCF	0.24	MMSCF	97.69	7.88	5.67	23.91	1.93	1.3
nace	13001	3264	0.088	Natural Gas	EF_FACTOR*MMSCF	0.24	MMSCF	97.69	7.88	5.67	23.91	1.93	1.3
nace	13001	3265	0.088	Natural Gas	EF_FACTOR*MMSCF	0.24	MMSCF	97.69	7.88	5.67	23.91	1.93	1.3

ble A-5. Estimated Emissions from Permit Exempt External Combustion Devices

Description	Location	Pri_ID	Capacity (MMBTU)	Fuel	Equation	Usage		Emission Factors			Emissions (Lbs/Yr)		
						PTE	Units	NOx	PM	ROC	NOx	PM	ROC
nace	13005	4314	0.125	Natural Gas	EF_FACTOR*MMSCF	0.35	MMSCF	97.69	7.88	5.67	33.96	2.74	1.9
nace	13005	676922	0.75	Natural Gas	EF_FACTOR*MMSCF	2.09	MMSCF	34.19	7.88	5.67	71.31	16.43	11.8
ler	13121	2661	0.512	Natural Gas	EF_FACTOR*MMSCF	1.42	MMSCF	53.73	7.88	5.67	76.50	11.21	8.0
ler	13121	736414	0.3	Natural Gas	EF_FACTOR*MMSCF	0.83	MMSCF	34.19	7.88	5.67	28.52	6.57	4.7
ler	13121	736415	0.3	Natural Gas	EF_FACTOR*MMSCF	0.83	MMSCF	34.19	7.88	5.67	28.52	6.57	4.7
ler	13123	730224	0.3	Natural Gas	EF_FACTOR*MMSCF	0.83	MMSCF	34.19	7.88	5.67	28.52	6.57	4.7
ler	13123	730225	0.3	Natural Gas	EF_FACTOR*MMSCF	0.83	MMSCF	34.19	7.88	5.67	28.52	6.57	4.7
ler	13137	703917	0.5	Natural Gas	EF_FACTOR*MMSCF	1.39	MMSCF	34.19	7.88	5.67	47.54	10.95	7.8
ler	13137	703918	0.5	Natural Gas	EF_FACTOR*MMSCF	1.39	MMSCF	34.19	7.88	5.67	47.54	10.95	7.8
ler	13137	703919	0.5	Natural Gas	EF_FACTOR*MMSCF	1.39	MMSCF	34.19	7.88	5.67	47.54	10.95	7.8
ler	13137	703920	0.5	Natural Gas	EF_FACTOR*MMSCF	1.39	MMSCF	34.19	7.88	5.67	47.54	10.95	7.8
ler	13143	1119	0.627	Natural Gas	EF_FACTOR*MMSCF	1.74	MMSCF	53.73	7.88	5.67	93.69	13.73	9.8
ler	13143	1120	0.627	Natural Gas	EF_FACTOR*MMSCF	1.74	MMSCF	53.73	7.88	5.67	93.69	13.73	9.8
ler	13321	3270	0.627	Natural Gas	EF_FACTOR*MMSCF	1.74	MMSCF	53.73	7.88	5.67	93.69	13.73	9.8
ler	13321	703942	0.3	Natural Gas	EF_FACTOR*MMSCF	0.83	MMSCF	34.19	7.88	5.67	28.52	6.57	4.7
ler	13321	704757	0.3	Natural Gas	EF_FACTOR*MMSCF	0.83	MMSCF	34.19	7.88	5.67	28.52	6.57	4.7
ler	13321	704758	0.3	Natural Gas	EF_FACTOR*MMSCF	0.83	MMSCF	34.19	7.88	5.67	28.52	6.57	4.7
ler	13321	732809	0.5	Natural Gas	EF_FACTOR*MMSCF	1.39	MMSCF	34.19	7.88	5.67	47.54	10.95	7.8
ler	13323	656895	0.75	Natural Gas	EF_FACTOR*MMSCF	2.09	MMSCF	34.19	7.88	5.67	71.31	16.43	11.8
ler	13323	656896	0.3	Natural Gas	EF_FACTOR*MMSCF	0.83	MMSCF	34.19	7.88	5.67	28.52	6.57	4.7
ler	13323	656914	0.3	Natural Gas	EF_FACTOR*MMSCF	0.83	MMSCF	34.19	7.88	5.67	28.52	6.57	4.7
ler	13323	656915	0.3	Natural Gas	EF_FACTOR*MMSCF	0.83	MMSCF	34.19	7.88	5.67	28.52	6.57	4.7
ler	13330	656918	1.68	Natural Gas	EF_FACTOR*MMSCF	4.67	MMSCF	34.19	7.88	5.67	159.74	36.79	26.4
nace	13330	701726	0.1	Natural Gas	EF_FACTOR*MMSCF	0.28	MMSCF	97.69	7.88	5.67	27.17	2.19	1.5
nace	13330	701727	0.35	Natural Gas	EF_FACTOR*MMSCF	0.97	MMSCF	34.19	7.88	5.67	33.28	7.67	5.5
nace	13330	701728	0.35	Natural Gas	EF_FACTOR*MMSCF	0.97	MMSCF	34.19	7.88	5.67	33.28	7.67	5.5
nace	13330	701729	0.35	Natural Gas	EF_FACTOR*MMSCF	0.97	MMSCF	34.19	7.88	5.67	33.28	7.67	5.5
nace	13330	701730	0.35	Natural Gas	EF_FACTOR*MMSCF	0.97	MMSCF	34.19	7.88	5.67	33.28	7.67	5.5
nace	13330	736406	0.5	Natural Gas	EF_FACTOR*MMSCF	1.39	MMSCF	34.19	7.88	5.67	47.54	10.95	7.8
nace	13330	736407	0.5	Natural Gas	EF_FACTOR*MMSCF	1.39	MMSCF	34.19	7.88	5.67	47.54	10.95	7.8
ler	13640	707843	0.99	Natural Gas	EF_FACTOR*MMSCF	2.75	MMSCF	34.19	7.88	5.67	94.13	21.68	15.6
ter Heater	13640	707844	0.199	Natural Gas	EF_FACTOR*MMSCF	0.55	MMSCF	34.19	7.88	5.67	18.92	4.36	3.1
ler	13675	704072	0.3	Natural Gas	EF_FACTOR*MMSCF	0.83	MMSCF	34.19	7.88	5.67	28.52	6.57	4.7
ter Heater	13675	736409	0.199999	Natural Gas	EF_FACTOR*MMSCF	0.56	MMSCF	34.19	7.88	5.67	19.02	4.38	3.1
ler	13848	707846	0.399	Natural Gas	EF_FACTOR*MMSCF	1.11	MMSCF	34.19	7.88	5.67	37.94	8.74	6.2
ter Heater	13848	815995	0.04	Natural Gas	EF_FACTOR*MMSCF	0.11	MMSCF	24.42	7.88	5.67	2.72	0.88	0.6
ter Heater	13850	732816	0.399	Natural Gas	EF_FACTOR*MMSCF	1.11	MMSCF	34.19	7.88	5.67	37.94	8.74	6.2
ter Heater	13850	732817	0.399	Natural Gas	EF_FACTOR*MMSCF	1.11	MMSCF	34.19	7.88	5.67	37.94	8.74	6.2
ler	13851	4270	0.199	Natural Gas	EF_FACTOR*MMSCF	0.55	MMSCF	97.69	7.88	5.67	54.06	4.36	3.1
ler	13851	734991	0.199	Natural Gas	EF_FACTOR*MMSCF	0.55	MMSCF	34.19	7.88	5.67	18.92	4.36	3.1
ler	13852	710165	0.199	Natural Gas	EF_FACTOR*MMSCF	0.55	MMSCF	34.19	7.88	5.67	18.92	4.36	3.1
ler	13853	4271	0.199	Natural Gas	EF_FACTOR*MMSCF	0.55	MMSCF	97.69	7.88	5.67	54.06	4.36	3.1
ler	13853	4272	0.199	Natural Gas	EF_FACTOR*MMSCF	0.55	MMSCF	97.69	7.88	5.67	54.06	4.36	3.1
ler	13854	658408	0.199	Natural Gas	EF_FACTOR*MMSCF	0.55	MMSCF	34.19	7.88	5.67	18.92	4.36	3.1
ler	13854	658411	0.199	Natural Gas	EF_FACTOR*MMSCF	0.55	MMSCF	34.19	7.88	5.67	18.92	4.36	3.1
ler	13855	707847	0.199	Natural Gas	EF_FACTOR*MMSCF	0.55	MMSCF	34.19	7.88	5.67	18.92	4.36	3.1

ble A-5. Estimated Emissions from Permit Exempt External Combustion Devices

Description	Location	Pri_ID	Capacity (MMBTU)	Fuel	Equation	Usage		Emission Factors			Emissions (Lbs/Yr)		
						PTE	Units	NOx	PM	ROC	NOx	PM	ROC
ler	13855	707848	0.199	Natural Gas	EF_FACTOR*MMSCF	0.55	MMSCF	34.19	7.88	5.67	18.92	4.36	3.1
ler	13856	707849	0.199	Natural Gas	EF_FACTOR*MMSCF	0.55	MMSCF	34.19	7.88	5.67	18.92	4.36	3.1
ler	13856	707850	0.199	Natural Gas	EF_FACTOR*MMSCF	0.55	MMSCF	34.19	7.88	5.67	18.92	4.36	3.1
ler	13857	676923	0.199	Natural Gas	EF_FACTOR*MMSCF	0.55	MMSCF	34.19	7.88	5.67	18.92	4.36	3.1
ler	13857	676924	0.199	Natural Gas	EF_FACTOR*MMSCF	0.55	MMSCF	34.19	7.88	5.67	18.92	4.36	3.1
ler	13858	4274	0.199	Natural Gas	EF_FACTOR*MMSCF	0.55	MMSCF	97.69	7.88	5.67	54.06	4.36	3.1
ler	13858	728031	0.199	Natural Gas	EF_FACTOR*MMSCF	0.55	MMSCF	34.19	7.88	5.67	18.92	4.36	3.1
ler	13859	658410	0.1	Natural Gas	EF_FACTOR*MMSCF	0.28	MMSCF	34.19	7.88	5.67	9.51	2.19	1.5
ler	13859	676925	0.1	Natural Gas	EF_FACTOR*MMSCF	0.28	MMSCF	34.19	7.88	5.67	9.51	2.19	1.5
ler	13860	659473	0.199	Natural Gas	EF_FACTOR*MMSCF	0.55	MMSCF	34.19	7.88	5.67	18.92	4.36	3.1
ler	13860	728032	0.199	Natural Gas	EF_FACTOR*MMSCF	0.55	MMSCF	34.19	7.88	5.67	18.92	4.36	3.1
ler	13861	676927	0.199	Natural Gas	EF_FACTOR*MMSCF	0.55	MMSCF	34.19	7.88	5.67	18.92	4.36	3.1
ler	13862	4303	0.199	Natural Gas	EF_FACTOR*MMSCF	0.55	MMSCF	97.69	7.88	5.67	54.06	4.36	3.1
ler	13862	734992	0.199	Natural Gas	EF_FACTOR*MMSCF	0.55	MMSCF	34.19	7.88	5.67	18.92	4.36	3.1
ler	13863	3918	0.13	Natural Gas	EF_FACTOR*MMSCF	0.36	MMSCF	97.69	7.88	5.67	35.32	2.85	2.0
ler	13863	704088	0.199	Natural Gas	EF_FACTOR*MMSCF	0.55	MMSCF	34.19	7.88	5.67	18.92	4.36	3.1
ler	13864	707851	0.199	Natural Gas	EF_FACTOR*MMSCF	0.55	MMSCF	34.19	7.88	5.67	18.92	4.36	3.1
ler	13864	707852	0.199	Natural Gas	EF_FACTOR*MMSCF	0.55	MMSCF	34.19	7.88	5.67	18.92	4.36	3.1
ler	13865	707853	0.199	Natural Gas	EF_FACTOR*MMSCF	0.55	MMSCF	34.19	7.88	5.67	18.92	4.36	3.1
ler	13865	707854	0.199	Natural Gas	EF_FACTOR*MMSCF	0.55	MMSCF	34.19	7.88	5.67	18.92	4.36	3.1
ler	13866	707855	0.199	Natural Gas	EF_FACTOR*MMSCF	0.55	MMSCF	34.19	7.88	5.67	18.92	4.36	3.1
ler	13866	707856	0.199	Natural Gas	EF_FACTOR*MMSCF	0.55	MMSCF	34.19	7.88	5.67	18.92	4.36	3.1
er Heater	14300	3732	0.3	Natural Gas	EF_FACTOR*MMSCF	0.83	MMSCF	97.69	7.88	5.67	81.50	6.57	4.7
er Heater	14300	732805	0.275	Natural Gas	EF_FACTOR*MMSCF	0.76	MMSCF	34.19	7.88	5.67	26.15	6.02	4.3
nace	14400	4348	0.04	Natural Gas	EF_FACTOR*MMSCF	0.11	MMSCF	97.69	7.88	5.67	10.87	0.88	0.6
nace	14400	4349	0.1	Natural Gas	EF_FACTOR*MMSCF	0.28	MMSCF	97.69	7.88	5.67	27.17	2.19	1.5
nace	16130	3299	0.13	Natural Gas	EF_FACTOR*MMSCF	0.36	MMSCF	97.69	7.88	5.67	35.32	2.85	2.0
nace	16135	3300	0.13	Natural Gas	EF_FACTOR*MMSCF	0.36	MMSCF	97.69	7.88	5.67	35.32	2.85	2.0
nace	16140	3301	0.13	Natural Gas	EF_FACTOR*MMSCF	0.36	MMSCF	97.69	7.88	5.67	35.32	2.85	2.0
nace	16140	3302	0.13	Natural Gas	EF_FACTOR*MMSCF	0.36	MMSCF	97.69	7.88	5.67	35.32	2.85	2.0
ler	16170	3155	0.333	Natural Gas	EF_FACTOR*MMSCF	0.93	MMSCF	97.69	7.88	5.67	90.47	7.29	5.2
ler	16170	735002	0.85	Natural Gas	EF_FACTOR*MMSCF	2.36	MMSCF	34.19	7.88	5.67	80.82	18.62	13.4
ler	16200	707858	1.26	Natural Gas	EF_FACTOR*MMSCF	3.50	MMSCF	34.19	7.88	5.67	119.80	27.59	19.8
nace	17595	3372	0.088	Natural Gas	EF_FACTOR*MMSCF	0.24	MMSCF	97.69	7.88	5.67	23.91	1.93	1.3
nace	17595	727994	0.8	Natural Gas	EF_FACTOR*MMSCF	2.22	MMSCF	34.19	7.88	5.67	76.06	17.52	12.6
ler	21150	3258	0.3	Propane/LPG	EF_FACTOR*GALS/1000	9,521.74	GALS	8.56	0.69	0.50	81.51	6.57	4.7
ler	21150	4359	0.3	Propane/LPG	EF_FACTOR*GALS/1000	9,521.74	GALS	8.56	0.69	0.50	81.51	6.57	4.7
ler	21150	4360	0.3	Propane/LPG	EF_FACTOR*GALS/1000	9,521.74	GALS	8.56	0.69	0.50	81.51	6.57	4.7
ler	21150	4361	0.3	Propane/LPG	EF_FACTOR*GALS/1000	9,521.74	GALS	8.56	0.69	0.50	81.51	6.57	4.7
ler	21308	736668	0.3	Propane/LPG	EF_FACTOR*GALS/1000	9,521.74	GALS	8.56	0.69	0.50	81.51	6.57	4.7
ler	23201	4059	0.181	Natural Gas	EF_FACTOR*MMSCF	0.50	MMSCF	97.69	7.88	5.67	49.17	3.96	2.8
ler	23225	708772	2	Natural Gas	EF_FACTOR*MMSCF	5.56	MMSCF	34.19	7.88	5.67	190.16	43.80	31.5
ler	23225	708773	2	Natural Gas	EF_FACTOR*MMSCF	5.56	MMSCF	34.19	7.88	5.67	190.16	43.80	31.5
nace	23228	4266	0.11	Natural Gas	EF_FACTOR*MMSCF	0.31	MMSCF	97.69	7.88	5.67	29.88	2.41	1.7
nace	23228	4267	0.11	Natural Gas	EF_FACTOR*MMSCF	0.31	MMSCF	97.69	7.88	5.67	29.88	2.41	1.7
ler	23235	2683	0.1	Natural Gas	EF_FACTOR*MMSCF	0.28	MMSCF	97.69	7.88	5.67	27.17	2.19	1.5

ble A-5. Estimated Emissions from Permit Exempt External Combustion Devices

Description	Location	Pri_ID	Capacity (MMBTU)	Fuel	Equation	Usage		Emission Factors			Emissions (Lbs/Yr)		
						PTE	Units	NOx	PM	ROC	NOx	PM	ROC
										Total (lbs)	23682	3824	27
										Total (tons)	11.84	1.91	1.3

es:

E Usage is capacity x hours per year x conversion factor (btu/units); Hours = 2920; 1050 btu/scf NG, and 92000 btu/gal LPG

nission Factors Units: Propane & LPG = lbs/1000 gal; Natural Gas = lbs/MMSCF

Table A-6. Abrasive Blasting Cabinet Emissions

Building Number	Equip. Location	Operator ID	Equation	Rate (Lbs/Hr)	Hours	Emission (Lbs)
875	875 Sweeney Rd	726223	EM = 0.041 *Q*(100-CF)	60	416	124.8
1737	340 Airfield Rd	3521	EM = 0.041 *Q*(100-CF)	95	416	197.6
1749	1749 Airfield Rd	728028	EM = 0.041 *Q*(100-CF)	150	416	312
8190	1580 Nevada Ave	736712	EM = 0.041 *Q*(100-CF)	98	416	203.8
8415	178 8th St	4164	EM = 0.041 *Q*(100-CF)	180	416	374.4
9320	334 6th St	4318	EM = 0.041 *Q*(100-CF)	180	416	374.4
9320	334 6th St	705831	EM = 0.041 *Q*(100-CF)	180	416	374.4
9360	1318 New Mexico Ave	4283	EM = 0.041 *Q*(100-CF)	180	416	374.4
10711	433 Herado Ave	703462	EM = 0.041 *Q*(100-CF)	180	416	374.4
					Total (Lbs/yr)	**2,710.24**
					Total (TPY)	**1.36**

Notes:
EM - Emission Rates
0.041 = SBCAPCD emission factor of lbs of PM10/lb of throughput
Q = annual throughput = annual hours x usage rate
CF = control efficiency of filters which is assumed to 99.5%.
Rate = mass test value or highest mass tests from blasting cabinets. See ABS Survey tab.
Hours of operation = 8 hrs/day x 1 day/wk x 52 wks/yr.

Table A-7. Estimated Emissions from Permit Exempt Storage Tanks

Description	Location	Pri_ID	Content	Equation Source	Capacity (gal)	PTE Throughput (gal)	ROC (lbs/yr)
Fueling Generator	64	641892	Diesel	Assumed to be negligible	4000		NE
Fueling Generators	75	696917	Diesel	Assumed to be negligible	264		NE
Fueling Generator	185	815271	Diesel	Assumed to be negligible	1000		NE
Fueling Generator	383	641873	Diesel	Assumed to be negligible	500		NE
Fueling Generator	501	815809	Diesel	Assumed to be negligible	660		NE
Fueling Generator	511	641877	Diesel	Assumed to be negligible	425		NE
Fueling Generators	525	641882	Diesel	Assumed to be negligible	2500		NE
Fueling Generators	525	641883	Diesel	Assumed to be negligible	2500		NE
Fueling Generators	525	641884	Diesel	Assumed to be negligible	2500		NE
Fueling Generators	525	641885	Diesel	Assumed to be negligible	2500		NE
Fueling Generators	525	641886	Diesel	Assumed to be negligible	2500		NE
Fueling Generator	542	729315	Diesel	Assumed to be negligible	250		NE
Fueling Generators	661	670464	Diesel	Assumed to be negligible	5000		NE
Fueling Generators	661	675337	Diesel	Assumed to be negligible	250		NE
Fueling Generator	764	641904	Diesel	Assumed to be negligible	660		NE
Fueling Equipment	809	722067	Diesel	Assumed to be negligible	400		NE
Fueling Generator	830	641907	Diesel	Assumed to be negligible	425		NE
Fueling Generators	830	642747	Diesel	Assumed to be negligible	480		NE
Fueling Generator	906	641912	Diesel	Assumed to be negligible	350		NE
Fueling Generators	929	642166	Diesel	Assumed to be negligible	500		NE
Fueling Generators	964	675092	Diesel	Assumed to be negligible	253		NE
Fueling Generators	966	674105	Diesel	Assumed to be negligible	253		NE
Fueling Fire Water Pump	968	641916	Diesel	Assumed to be negligible	300		NE
Fueling Fire Water Pump	968	641917	Diesel	Assumed to be negligible	300		NE
Fueling Generator	980	731803	Diesel	Assumed to be negligible	428		NE
Fueling Generator	1561	641827	Diesel	Assumed to be negligible	280		NE
Fueling Generator	1604	641832	Diesel	Assumed to be negligible	550		NE
Fueling Equipment	1639	725374	Diesel	Assumed to be negligible	1800		NE
Fueling Equipment	1699	645465	Diesel	Assumed to be negligible	20000		NE
Fueling Equipment	1704	645464	Diesel	Assumed to be negligible	20000		NE
Fueling Equipment	1705	685497	Jet A	Assumed to be negligible	6000		NE
Fueling Equipment	1705	685498	Jet A	Assumed to be negligible	6000		NE
Fueling Equipment	1705	685499	Jet A	Assumed to be negligible	6000		NE
Fueling Equipment	1705	685500	Jet A	Assumed to be negligible	6000		NE
Fueling Equipment	1705	685501	Diesel	Assumed to be negligible	1200		NE
Fueling Equipment	1705	685503	Diesel	Assumed to be negligible	1200		NE
Fueling Equipment	1731	716263	Diesel	Assumed to be negligible	528		NE
Fueling Equipment	1735	641915	Diesel	Assumed to be negligible	500		NE

Table A-7. Estimated Emissions from Permit Exempt Storage Tanks

Description	Location	Pri_ID	Content	Equation Source	Capacity (gal)	PTE Throughput (gal)	ROC (lbs/yr)
Fueling Equipment	1735	679443	JP-8	Assumed to be negligible	600		NE
Fueling Generator	1747	641839	Diesel	Assumed to be negligible	500		NE
Fueling Generator	1768	641843	Diesel	Assumed to be negligible	700		NE
Fueling Generators	1819	684195	Diesel	Assumed to be negligible	1000		NE
Fueling Fire Water Pump	1829	641845	Diesel	Assumed to be negligible	325		NE
Fueling Fire Water Pump	1829	641846	Diesel	Assumed to be negligible	325		NE
Fueling Generator	1900	740521	Diesel	Assumed to be negligible	2311		NE
Fueling Generator	1916	641855	Diesel	Assumed to be negligible	500		NE
Fueling Generator	1917	641854	Diesel	Assumed to be negligible	500		NE
Fueling Generator	1937	641857	Diesel	Assumed to be negligible	514		NE
Fueling Equipment	1959	727885	Diesel	Assumed to be negligible	250		NE
Fueling Generator	1962	641858	Diesel	Assumed to be negligible	388		NE
Fueling Generator	1964	641859	Diesel	Assumed to be negligible	388		NE
Fueling Generator	1965	641860	Diesel	Assumed to be negligible	350		NE
Fueling Generator	1971	641861	Diesel	Assumed to be negligible	388		NE
Fueling Generator	1972	641862	Diesel	Assumed to be negligible	388		NE
Fueling Fire Water Pump	2305	641866	Diesel	Assumed to be negligible	300		NE
Fueling Generator	2500	641870	Diesel	Assumed to be negligible	500		NE
Fueling Equipment	2500	725372	Diesel	Assumed to be negligible	2000		NE
Fueling Equipment	2500	725373	Diesel	Assumed to be negligible	2000		NE
Fueling Generator	2520	644532	Diesel	Assumed to be negligible	1000		NE
Fueling Generators	3000	641872	Diesel	Assumed to be negligible	2000		NE
Fueling Generators	3000	644530	Diesel	Assumed to be negligible	2000		NE
Fueling Generators	3000	702075	Diesel	Assumed to be negligible	500		NE
Fueling Generator	6510	641893	Diesel	Assumed to be negligible	500		NE
Fueling Equipment	6601	728206	Diesel	Assumed to be negligible	500		NE
Fueling Equipment	7000	725658	Diesel	Assumed to be negligible	2074		NE
Fueling Equipment	7000	725663	Diesel	Assumed to be negligible	2074		NE
Fueling Equipment	7000	725664	Diesel	Assumed to be negligible	2074		NE
Fueling Equipment	7011	732523	Diesel	Assumed to be negligible	1530		NE
Fueling Generators	7025	699069	Diesel	Assumed to be negligible	1500		NE
Fueling Generator	7425	641899	Diesel	Assumed to be negligible	250		NE
Fueling Generators	8317	675249	Diesel	Assumed to be negligible	320		NE
Fueling Generator	8337	737710	Diesel	Assumed to be negligible	2311		NE
Fueling Generator	8339	737711	Diesel	Assumed to be negligible	2311		NE
Fueling Generator	8401	641910	Diesel	Assumed to be negligible	850		NE
Fueling Equipment	8401	727934	Diesel	Assumed to be negligible	850		NE
Fueling Generator	8510	729663	Diesel	Assumed to be negligible	2350		NE

Table A-7. Estimated Emissions from Permit Exempt Storage Tanks

Description	Location	Pri_ID	Content	Equation Source	Capacity (gal)	PTE Throughput (gal)	ROC (lbs/yr)
Fueling Generator	10579	641805	Diesel	Assumed to be negligible	400		NE
Fueling Equipment	10723	641811	Diesel	Assumed to be negligible	4000		NE
Fueling Equipment	10726	695365	Biodiesel	Assumed to be negligible	5000		NE
Fueling Equipment	11439	641812	Diesel	Assumed to be negligible	550		NE
Fueling Generators	12000	682748	Diesel	Assumed to be negligible	1555		NE
Fueling Generators	12008	25122	Diesel	Assumed to be negligible	10000		NE
Fueling Generator	12008	641816	Diesel	Assumed to be negligible	235		NE
Fueling Generator	12008	641817	Diesel	Assumed to be negligible	235		NE
Fueling Generator	12008	674300	Diesel	Assumed to be negligible	10000		NE
Fueling Equipment	13730	730107	Diesel	Assumed to be negligible	250		NE
Fueling Generators	13850	695361	Diesel	Assumed to be negligible	550		NE
Fueling Generator	21150	641864	Diesel	Assumed to be negligible	1500		NE
Fueling Generator	21203	641865	Diesel	Assumed to be negligible	425		NE
Fueling Generators	22312	711744	Diesel	Assumed to be negligible	500		**NE**
Fueling Fire Water Pump	23209	641869	Diesel	Assumed to be negligible	290		NE
Fueling Generator	23215	740522	Diesel	Assumed to be negligible	10000		NE
Fueling Generator	23215	740523	Diesel	Assumed to be negligible	350		NE
Fueling Generator	23215	740525	Diesel	Assumed to be negligible	350		NE
Fueling Generators	23243	661432	Diesel	Assumed to be negligible	2000		NE
Fueling Equipment	976/977	674098	Aerozine50	Assumed to be negligible	2528		NE
Fuel Storage (80 tanks)	Various	Various	Diesel	Assumed to be negligible	>55 and < 250		NE
Fuel Storage (2 tanks)	Various	Various	Gasoline	Air Force Guide	>55 and < 250	24960.0	447.74
					Total	**24,960.0**	447.74
NE-Not Estimated.					**Total (tpy)**		0.22

Table A-8. Emissions from EOD Operations at EOD Range

Type of Ordnance	Amount of Charge (NEW Lbs/Year) [b]	Emission Factor (Lb/Lb NEW)		Emissions		Emission Factor Source
		NOX	NMHC	NOX	NMHC	
C-4 donor Charge	8000	6.30E-03	2.72E-04	50.40	2.17	AP-42; Table 15.9.1-1; Summation of Table 15.9.1-2 less metals
Ordnance	96	7.70E-02	2.10E-02	7.39	2.02	AP-42; Table 15.9.1 through 15.9.41-2. Largest values found
TNT	66	1.50E-02	4.70E-03	0.99	0.31	AP-42; Table 15.9.3-1 and -2
ANFO[a]	440	17	NA	3.74	0.00	AP-42; Table 13.3-1.
Dynamite	756	6.50E-03	NA	4.91	0.00	AP-42; Table 15.9.17-1.
			Total (Lbs/Year)	67.44	4.50	
			Total (Tons/Year)	0.03	0.00	

Notes:

NEW = Net Explosive Weight

NA = Not Available

[a] For this source, the emission factor is in lbs/ton

[b] For this source, the amount of charge is the highest annual consumption from CY 2011-2014

Table A-9. Emissions from Small Arms Range

Type of Ammunition	Number of Rounds[a]	Emission Factor (Lb NOX /Round)	Emissions NOX (Lbs)	Emission Factor Source
12 Gauge	1,761	4.20E-05	0.07	AP-42; Tables 15.1.2-1
40 mm	770	1.60E-03	1.23	AP-42; Highest Values from Tables 15.2.2-1 through 15.2.7-1.
5.56 mm	268,500	8.50E-05	22.82	AP-42; Highest Value from Tables 15.1.4-1 through15.1.9-1.
7.62 mm	96,700	9.70E-05	9.38	AP-42; Highest Value from Tables 15.1.12-1 through 15.1.16-1
9 mm	73,227	1.50E-05	1.10	AP-42; Tables 15.1.21-1 .
		Total (Lbs/Year)	34.61	
		Total (Tons/Year)	0.02	

Notes:

[a] For this source, the amount of charge is the highest annual consumption from CY 2011-2014

Table A-10. Wood Chipper Emissions

Building Number	Equip. Location	Operator ID	Equation	Emission Rate	Annual Tons	PM10 Emission (Lbs)
NA	Various Locations	650037, 736883, 736885	EM = 0.1 *Q	0.1	85280	8528
					Total (Lbs PM10/Year)	**8,528.00**
					Total (Tons PM10/Year)	**4.26**

Notes:
EM - Emission Rates
0.1 lbs PM/ton of material processed = PERP Registration 123540
Q = annual throughput = 820 tons/day x 2 days/week x 52 weeks/year

Table A-11. Site 13C SVE Readings

Date	Concentrations (PPM TCE)			Decrease	Control Efficiency
	Inlet	Mid point	Outlet		
05/10/10	428	2.4	0.2	427.8	99.953%
10/12/10	438	24.1	0	438.0	100.000%
10/18/10	384	148	0.1	383.9	99.974%
10/26/10	380	0.8	13.5	366.5	96.447%
11/02/10	373	0.3	9.2	363.8	97.534%
11/09/10	362	0.4	5.8	356.2	98.398%
11/16/10	375	0.6	3.7	371.3	99.013%
11/23/10	330	8.3	2.9	327.1	99.121%
11/30/10	328	90.1	2	326.0	99.390%
12/07/10	376	380	4.6	371.4	98.777%
12/14/10	343	378	24.5	318.5	92.857%
12/21/10	122	153	0.2	121.8	99.836%
12/22/10	100	147	1.3	98.7	98.700%
12/28/10	138	189	0	138.0	100.000%
01/04/11	190	175	0.2	189.8	99.895%
01/13/11	144	0.4	0.2	143.8	99.861%
01/19/11	123	0.4	0.2	122.8	99.837%
01/25/11	141	0.5	0.4	140.6	99.716%
02/01/11	165	0.3	0.3	164.7	99.818%
02/08/11	152	0.3	0.4	151.6	99.737%
02/14/11	147	0.4	0.4	146.6	99.728%
02/15/11	130	0.4	0.3	129.7	99.769%
02/21/11	127	0.3	0.3	126.7	99.764%
02/24/11	380	0.3	0.3	379.7	99.921%
02/25/11	71.8	0.4	0.3	71.5	99.582%
03/01/11	183	0.2	0.2	182.8	99.891%
03/08/11	150	0.2	0.1	149.9	99.933%
03/15/11	163	0.3	0.2	162.8	99.877%
03/23/11	144	0.4	0.3	143.7	99.792%
03/29/11	112	0.2	0.2	111.8	99.821%
				Average May 10 - Mar 11	99.231%

Table A-12. TCE Removal and Emissions from Site 13C

Reporting Period	Flowrate (CFM)	Hours of Operation	TCE Concentration (PPM)	Mass Captured (Lbs)	Emissions (Lbs)
23-31 Mar 10	145	190.5	2.10E+06	215	1.65
1 Apr - 30 Sep 10	170	3950	1.01E+06	3100	23.82
1 Oct -31 Mar 11	129	4085	5.90E+05	1150	8.84
1 Apr - 20 Dec 11	134	5446	2.00E+05	545	4.19
Estimated emissions 1 Jan through 20 Dec 2011					8.61

Source Table 4; Preliminary Draft Technical Memorandum, Achieve Asymptotic Air Effluent through Operation of SVE System, IRP Site 13C; Apr 2012; Shaw Corporation

The mass captured was calculated using the daily flowrates and concentrations which is slightly different from the calculations based upon averages in table. The average control efficiency (CE) from May 10 through Mar 11 was used to estimate the emissions from the SVE system. Emissions were estimated by multiplying the captured mass by the quantity 1-CE. Assuming linear capture from 1 Oct 10 through 31 Mar 11, a total of 575 lbs of TCE was removed while 4.42 lbs were emitted for the period 1 Jan through 31 Mar 2011. The total emissions therefore are 8.61 lbs

80	29	3,808	99.24%
55	15	5,515	99.73%
89	28	3,688	99.25%
89	32	3,573	99.11%
89	32	3,276	99.03%
258	58	5,470	98.95%
222	30	3,567	99.17%
652	66	3,423	98.11%
306	31	3,081	99.00%
3,448	12	3,233	99.63%
		Average	99.04%

val and Emissions from Building 11520

Operation Period	SVE Hours Operated		Effluent Sample Date[A,E]	Vapor Flow[B]	Effluent VOC Laboratory Reported Concentrations	Effluent VOC Emission Rate[C]	Effluent VOC Emission Rate[C]	Effluent ROC Laboratory Reported Concentrations	Effluent ROC Emission Rate[C]	Effluent ROC Emission Rate[C]	Total VOCs Emitted in Operating Period	Cumulative VOCs Emitted	Total Emitt Oper Per
	During Operating Period[F]	Cumulative											
	(hours)	(hours)		(scfm)	(µg/m^3)	(lbs/hr)	(lbs/day)	(µg/m^3)	(lbs/hr)	(lbs/day)	(lbs)	(lbs)	
1/1/18 - 1/23/18	471.7	471.7	12/19/2017	130	72	0.00004	0.0008	31	0.00002	0.0004	0.02	0.02	
1/23/18 - 1/31/18	201.2	672.9	12/19/2017	139	72	0.00004	0.0009	31	0.00002	0.0004	0.03	0.04	
2/1/18 - 2/13/18	295.7	968.6	12/19/2017	142	72	0.00004	0.0009	31	0.00002	0.0004	0.04	0.08	
2/13/18 - 2/28/18	385.4	1,354.0	2/13/2018	149	117	0.00007	0.0016	64	0.00004	0.0009	0.09	0.17	
3/1/18 - 3/6/18	132.7	1,486.7	2/13/2018	141	117	0.00006	0.0015	64	0.00003	0.0008	0.09	0.26	
3/6/18 - 3/31/18	609.9	2,096.6	3/6/2018	123	51 J	0.00002	0.0006	51 J	0.00002	0.0006	0.05	0.31	
4/1/18 - 4/19/18	442.9	2,539.5	3/6/2018	119	51 J	0.00002	0.0005	51 J	0.00002	0.0005	0.06	0.37	
4/19/18 - 4/30/18	276.5	2,816.0	4/19/2018	120	93 J	0.00004	0.0010	56 J	0.00003	0.0006	0.12	0.48	
5/1/18 - 5/15/18	347.1	3,163.1	4/19/2018	118	93 J	0.00004	0.0010	56 J	0.00002	0.0006	0.13	0.61	
5/15/18 - 5/31/18	396.7	3,559.8	5/15/2018	117	130	0.00006	0.0014	95	0.00004	0.0010	0.20	0.82	
6/1/18 - 6/11/18	253.1	3,812.9	5/15/2018	115	130	0.00006	0.0013	95	0.00004	0.0010	0.21	1.03	
6/11/18 - 6/30/18	432.1	4,245.0	6/11/2018	112	161	0.00007	0.0016	118	0.00005	0.0012	0.29	1.32	
7/1/18 - 7/24/18	95.2	4,340.2	6/11/2018	108	161	0.00007	0.0016	118	0.00005	0.0011	0.28	1.60	
7/24/18 - 7/31/18	179.6	4,519.8	7/24/2018	108	209	0.00008	0.0020	154	0.00006	0.0015	0.38	1.98	
8/1/18 - 8/14/18	301.9	4,821.7	7/24/2018	107	209	0.00008	0.0020	154	0.00006	0.0015	0.40	2.39	
8/14/18 - 8/31/18	420.5	5,242.2	8/14/2018	110	116	0.00005	0.0011	102	0.00004	0.0010	0.25	2.64	
9/1/18 - 9/13/18	298.8	5,541.0	8/14/2018	113	116	0.00005	0.0012	102	0.00004	0.0010	0.27	2.91	
9/13/18 - 9/30/18	419.9	5,960.9	9/13/2018	123	225	0.00010	0.0025	175	0.00008	0.0019	0.62	3.53	
10/1/18 - 10/8/18	151.2	6,112.1	9/13/2018	113	225	0.00009	0.0023	175	0.00007	0.0018	0.58	4.11	
10/8/18 - 10/31/18	523.9	6,636.0	10/8/2018	125	112	0.00005	0.0013	96	0.00004	0.0011	0.35	4.45	
11/1/18 - 11/7/18	156.4	6,792.4	10/8/2018	116	112	0.00005	0.0012	96	0.00004	0.0010	0.33	4.78	
11/7/18 - 11/15/18	191.5	6,983.9	11/7/2018	110	37	0.00002	0.0004	22	0.00001	0.0002	0.11	4.89	
11/15/18 - 11/30/18	0.0	6,983.9	--	--	--	--	--	--	--	--	--	4.89	--
12/1/18 - 12/31/18	0.0	6,983.9	--	--	--	--	--	--	--	--	--	4.89	--

of VOCs Emitted during 2018:	**4.89 pounds**

APPENDIX B – LIST OF CURRENT PERMITS

Table B-1. Current Permits in Title V Renewal Application

Incorporated PTOs	New PTOs	ATCs Awaiting PTO
6117-R7	15365	16037
7987-R5	15830	16149
7988-R5	15839	16210
8350-R6	15840	16218-01
8362-R7	15926-01	16247
8433-R7	16047	16257
8580-R5	16225	16292
8629-R6		16295
8630-R7		16297
8658-R5		
8686-R4		
8688-R4		
8766-R5		
8932-R5		
9088-R4		
10155-R2		
10156-R2		
10791		
10867-R2		
10900-R2		
11143-R1		
11668-R1		
11671-R1		
11672-R1		
11673-R1		
11674-R1		
11676-R1		
11677-R1		
11678-R1		
11679-R1		
11680-R1		
11810-R1		
12133-R1		
12820-R1		
12155		
12205		
12233		
12330-R1		
12346		
12356		
12419		
12454		
12455		
12640		
12661-R1		
12665-R1		
12666		
12672-R1		
12673-R1		
12676		
12739		
12793		
12810		

Incorporated PTOs	New PTOs	ATCs Awaiting PTO
12843		
12896		
12916		
12917		
12922		
13139		
13223		
13224		
13267		
13271		
13329		
13349		
13376		
13405		
13416		
13493		
13537		
13656		
13672		
13681		
13754		
13847		
13886		
13872		
13897		
13998		
14027		
14073		
14081		
14082		
14027		
14104		
14292		
14366		
14566		
14574		
14602		
14625		
14653		
14654		
14663		
14683		
14782		
14073		
14246-01		
14366		
14362		
14566		
14574		
14653		
14654		
14602		
14625		
14663		

Incorporated PTOs	New PTOs	ATCs Awaiting PTO
14683		
14782		
14926		
14968		
14969		
15012		
15043		
15065		
15141		
15142		
15175		
15181		
15222		
15258		
15283		
15325		
15363		
15381		
15434		
15490		
15599		
15632		
15714		
15786		
15815		

APPENDIX C. LIST OF CHANGES FROM PTO 13968-R3/TITLE V PART 70 PERMIT 13968

-R3/Title V Part 70 68	Section 3.66	386166	652232	Operator ID should be 652232 for consi with Tables 5.1-1b, 5.1-2b, 5.1-3b, 5.1-4 and Attachment 10.3
-R3/Title V Part 70 68	Attachment 10.2	386176 and 386177	4371 and 4372	Tune-Up frequency should be Biannual are between 2-5 MMBtu/hr and are subj 361.
-R3/Title V Part 70 68	Tables 5.1c, Attachment 10.4	107926	1598	Spray gun cleaner Operator ID should b The permit lists 4157 which is a solvent machine.
-R3/Title V Part 70 68	Table 5.1c, Attachment 10.4	391549 and 391550	706728	Spray gun cleaner Operator ID should b The permit states the booth does not hav gun cleaner; however, permit 14968 inc paint gun cleaner with Device ID 39155
-R3/Title V Part 70 68	Table 5.1c, Attachment 10.4	391549 and 391550	706728	Paint booth heater should be Yes - DID The permit does not provide the Operato the paint booth heater. VSFB has assig Operator ID of 708765 to the paint boot which is exempt from permitting but has ID 391550.
-R3/Title V Part 70 68	Table 5.1c, Attachment 10.4	113676	4096	The paint gun cleaner has gone to 3M sy The booth does not have a heater.
-R3/Title V Part 70 68	Table 5.1c, 5.4-5, Attachment 10.4	388395	703426	Device ID should be 388390. The perm 388395 as the Device ID of the paint bo However, 388395 is the Device ID of th booth heater. The Device ID of the pain 388390 (see Section 4.8.1 of the permit)
-R3/Title V Part 70 68	Table 5.1c, Attachment 10.4	388395	703426	The paint gun cleaner has gone to 3M sy
-R3/Title V Part 70 68	Table 5.1c, Attachment 10.4	107930	1604	Spray gun cleaner Operator ID should b The permit lists 3632 as the Operator ID spray gun cleaner. The PTO 8932 does provide an Operator ID for the spray gu listed as Device ID 107932. VSFB has Operator ID 4374 to the paint gun clean
-R3/Title V Part 70 68	Section 7.4	109896	1240	Operator ID should be 1702. The refere condition lists the Operator ID as 1240.
-R3/Title V Part 70 68	Section 7.3	109897	1238	Operator ID should be 1703. The refere conditions list the Operator ID as 1238.
-R3/Title V Part 70 68	Table 5.1d, Attachment 10.5	107916	3599	Equipment location should be 2007 Astr
-R3/Title V Part 70 68	Table 5.1d, 5.4-6, Section 9.2, Attachment 10.5	114277	4384	Operator ID should be 4384. The perm HAZMART.
-R3/Title V Part 70 68	Table 5.1d, 5.4-6, Section 9.1, Attachment 10.5	110309	4385	Operator ID should be 4385. The permi HAZMART2
-R3/Title V Part 70 68	Table 5.1d, Section 6.8, Attachment 10.5	386791	672228	Operator ID should be 672228. The per the Operator ID as 21446D. 21446D is