DEPARTMENT OF THE AIR FORCE
30TH SPACE WING (AFSPC)

30 April 2019

MEMORANDUM FOR SANTA BARBARA COUNTY
AIR POLLUTION CONTROL DISTRICT
ATTN: MR. DAVID HARRIS

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

SUBJECT: Permit to Operate 13968-R1/Part 70 Operating Permit 13968, FID 00201

Vandenberg Air Force Base is pleased to submit a renewal application for Permit to Operate 13968-R1/Part 70 Operating Permit 13968. Please refer to the enclosures for details of the application. If you have any questions, please do not hesitate to contact me at (805) 606-6863.

KIMBERLEE HARDING, GS-12
Air Quality Program Manager
Installation Management Flight

4 Attachments:
1. Permit to Operate 13968-R1/Part 70 Operating Permit 13968 Application
2. APCD Form -01C
3. APCD Form -01A
4. CD containing Electronic Files

cc:
CH2M
Permit File

Draft

30th Space Wing
Vandenberg Air Force Base, California

Permit to Operate 13968-R1/
Part 70 Operating Permit 13968

Reevaluation/Renewal Application

1 May 2019

OPR: **30 CES/CEIEC**
1028 Iceland Avenue
Vandenberg Air Force Base, CA 93437

Prepared by:
ch2m
In association with:
CAPE

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1.0 SOURCE IDENTIFICATION

Print Form

Santa Barbara County
Air Pollution Control District

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)
- ☐ 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-R1/PT 70 13968

◉ 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 the completed application to the APCD's Engineering Division at the address listed above.

2. FILING FEE:
A $406 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 using the Credit Card Authorization Form at the end of this application.

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	201	Permit No.	Reeval 13968-R2	RECEIVED APR 30 2019 SBCAPCD
Project Name	Vandenberg AFB 30th Space Wing			
Filing Fee	$406		202.E? YES / NO	

CC# 7805 michael D Kalata

5. COMPANY/CONTACT INFORMATION:

Owner Info	◉ Yes ○ No	Use as Billing Contact?	
Company Name	The United States Air Force, Vandenberg Air Force Base, 30 CES/CEIE		
Doing Business As			
Contact Name	Thomas P. deVenoge	Position/Title	Chief, Environmental Section
Mailing Address	1028 Iceland Avenue		
City	Vandenberg Air Force Base	State	CA	Zip Code	93437
Telephone	(805) 605-2015	Fax	(805) 606-6137	Email	thomas.devenoge.1@us.af.mil

Operator Info	○ Yes ◉ No	Use as Billing Contact?	
Company Name	The United States Air Force, Vandenberg Air 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 Air Force Base	State	CA	Zip Code	93437
Telephone	(805) 606-6863	Fax	(805) 606-6137	Email	kimberlee.harding@us.af.mil

Authorized Agent Info*	○ Yes ◉ No	Use as Billing Contact?	
Company Name	CH2M Hill		
Doing Business As			
Contact Name	Breanne Whipple	Position/Title	Air Quality Specialist
Mailing Address	P.O. Box 6363		
City	Vandenberg Air Force Base	State	CA	Zip Code	93437
Telephone	(909) 223-1227	Fax		Email	breanne.whipple@ch2m.com

*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)*:

- ☒ 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 AFB	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 Permit to Operate 13968-R1/Part 70 Permit 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.

HARDING.KIMBERLEE.A.1231723443 Digitally signed by HARDING.KIMBERLEE.A.1231723443 Date: 2019.04.08 09:38:42 -07'00'	Apr 8, 2019
Signature of application preparer	Date
Kimberlee Harding	Untied States Air Force
Print name of application preparer	Employer name

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

☒ Application Filing Fee (Fee = $406. 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 the attached *Credit Card Authorization Form* and submit it with your application.

☐ 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* (http://www.sbcapcd.org/eng/dl/other/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, MICHAEL S. HOUGH, am employed by or represent

Type or Print Name of Authorized Company Representative

United States Air Force, Vandenberg Air 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: Michael S. Hough, Colonel, USAF Title: Commander, 30th Space Wing

Date: Apr 23, 2019 Phone: (805) 605-3000

Signature of Authorized Company Representative HOUGH.MICHAEL.S.1134099735 Digitally signed by HOUGH.MICHAEL.S.1134099735 Date: 2019.04.23 17:06:22 -07'00'

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

Santa Barbara County
Air Pollution Control District

Authorized Agent Form - 01A

AUTHORIZED AGENT FORM

I hereby designate Elizabeth Rehoreg, Craig Moran, Breanne Whipple, Naeem Gillan
(*agent's name- print*)

of CH2M
(*agent's business name - print*)

to serve as the Authorized Agent for my company: 30th Space Wing, United States Air Force

(*applicant or permitted company's name - print*)

at Vandenberg AFB
(*facility name(s) - print*)

in dealing with the Santa Barbara County Air Pollution Control District (APCD) in matters regarding (*check as appropriate*):

[x] Permitting
[x] Air Toxics/HRA
[x] Inspections and permit compliance
[ ] Other (*state purpose*): _____
[ ] Billing
[x] Source Testing
[ ] All of the above

This Designation includes written correspondence, telephone discussions and meetings and shall remain in effect until it is suspended in writing by my company or the following date: 15 July 2020 whichever is earlier.

As a designated Responsible Official, I hereby authorize the above mentioned agent to represent my company in the matters identified above:

Name (print)	J. Christopher Moss, Colonel, USAF
Title	Commander, 30th Space Wing
Phone	(805) 606-3000
Address	747 Nebraska Avenue, Ste A200
City, State, ZIP	Vandenberg Air Force Base, CA 93437
Signature	

APCD-01A (9/2011)

STATIONARY SOURCE SUMMARY
(Form 1302-A1)

APCD: Santa Barbara County Air Pollution Control District
COMPANY NAME: 30th Space Wing, Vandenberg Air 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 Air 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 A200, Vandenberg AFB 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: 30th Space Wing
10. Owner's Agent Name (if any): Title: Telephone #:
11. Responsible Official: Colonel Michael S. Hough Title: Commander, 30th Space Wing Telephone #: (805) 606-3000
12. Plant Site Manager/Contact: Thomas P. deVenoge Title: Chief, Environmental Section Telephone #: (805) 605-2015
13. Type of facility: Military Installation
14. General description of processes/products: The Vandenberg Air 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

STATIONARY SOURCE SUMMARY
(Form 1302-A2)

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

II. TYPE OF PERMIT ACTION

	CURRENT PERMIT (permit number)	EXPIRATION (date)
☐ Initial SBCAPCD's Regulation XIII Application		
x Permit Renewal	PT 70 13968	06 October 2019
☐ 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 reevaluation and renewal of Part 70 Permit to Operate 13968.

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

TOTAL STATIONARY SOURCE EMISSIONS
(Form 1302-B)

APCD:	► **APCD USE ONLY** ◄
Santa Barbara County Air Pollution Control District	**APCD IDS Processing ID:**
COMPANY NAME:	**SOURCE NAME:**

I. TOTAL STATIONARY SOURCE EMISSIONS

Provide a brief description of operating scenario:

POLLUTANT* (name)	**EMISSIONS** (tons per year)		**PRE-MODIFICATION EMISSIONS** (tons per year)		**EMISSIONS CHANGE** (tons per year)
NOx	135.31		147.69		-12.38
ROC	50.25		49.31		0.94
PM10	12.02		12.45		-0.43
CO	67.56		100.43		-32.87
SOx	6.01		8.21		-2.2
HAPS (see below)					
Acetaldehyde	Turbines	0.01	--	--	0.01
	Diesel IC Engines	0.05	--	--	0.05
	Total	0.06	--	--	0.06
Acrolein					
Acrylonitrile	Landfill Gas	0.03	--	--	0.03
Arsenic					
Benzene	Diesel IC Engines	0.01	--	--	0.01
	Solvent Usage	0.37	--	--	0.37
	Landfill Gas	0.07	--	--	0.07
	Mobile Vehicle Fueling	0.07	--	--	0.07
	Total	0.52	--	--	0.52
Beryllium					
1,3-butadiene	Diesel IC Engines	0.01	--	--	0.01
Cadmium					
Carbon disulfide					
Carbon tetrachloride					
Carbonyl sulfide					
Chlorobenzene					
Chloroform					
Chromium					
Cobalt					
Dichlorobenzene					
1,1-Dimethyl Hydrazine	Scrubber	0.03	--	--	0.03
Ethylbenzene	Turbines	0.01	--	--	0.01
	Coatings	0.08	--	--	0.08
	Landfill Gas	0.04	--	--	0.04
	Mobile Vehicle Fueling	0.05	--	--	0.05
	Total	0.18	--	--	0.18
Ethyl Chloride	Landfill Gas	0.01	--	--	0.01
Ethylidene Dichloride					
Ethylene Dichloride					
Ethylidene Dichloride	Landfill Gas	0.02	--	--	0.02

POLLUTANT* (name)	EMISSIONS (tons per year)		PRE-MODIFICATION EMISSIONS (tons per year)		EMISSIONS CHANGE (tons per year)
Formaldehyde	Turbines	0.19	--	--	0.19
	Diesel IC Engines	0.10	--	--	0.10
	Total	0.29			
Glycol Ethers	Coatings	0.46	--	--	0.46
HCL	Diesel IC Engines	0.01	--	--	0.01
Hexane	Landfill Gas	0.05	--	--	0.05
	Mobile Vehicle Fueling	0.04	--	--	0.04
	Total	0.09			
Hydrazine	Scrubber	0.03	--	--	0.03
Lead					
Manganese	Turbines	0.01	--	--	0.01
Mercury					
Methanol	Coatings	0.09	--	--	0.09
Methyl Chloride					
Methyl Chloroform	Landfill Gas	0.01	--	--	0.01
Methyl Hydrazine					
Methyl Isobutyl Ketone	Landfill Gas	0.02	--	--	0.02
Methylene Chloride	Landfill Gas	0.10	--	--	0.10
Naphthalene					
Nickel					
PAHs (excluding naphthalene)					
Propylene Dichloride					
Propylene Oxide	Turbines	0.01	--	--	0.01
Selenium					
Styrene	Coatings	0.02	--	--	0.02
1,1,2,2-Tetrachloroethane	Landfill Gas	0.02	--	--	0.02
Tetrachloroethylene	Landfill Gas	0.05	--	--	0.05
2,2,4-Trimethylpentane	Mobile Vehicle Fueling	0.16	--	--	0.16
Toluene	Coatings	1.40	Coatings	2.19	-0.79
	Solvent Usage	0.37	--	--	0.37
	Landfill Gas	1.28	Landfill Gas	1.28	0.00
	Mobile Vehicle Fueling	0.27	--	--	0.27
	Total	3.32	**Total**	4.17	-0.85
Trichloroethylene	Landfill Gas	0.03	--	--	0.03
Vinyl Chloride	Landfill Gas	0.04	--	--	0.04
Vinylidene Chloride					
Xylene	Turbines	0.02	--	--	0.02
	Coatings	0.39	--	--	0.39
	Solvent Usage	0.37	--	--	0.37
	Landfill Gas	0.10	--	--	0.10
	Mobile Vehicle Fueling	0.27	--	--	0.27
	Total	1.13	--	--	1.13

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

CERTIFICATION STATEMENT
(Form 1302-M)

APCD: **Santa Barbara County Air Pollution Control District**	**> APCD USE ONLY <** **APCD IDS PROCESSING ID:**
COMPANY NAME: 30th Space Wing	**SOURCE NAME:** Vandenberg Air 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.

23 Apr 19

Signature of Responsible Official **Date**

Print Name of Responsible Official: Colonel Michael S. Hough

Title of Responsible Official and Company Name: Commander, 30th Space Wing

CERTIFICATION STATEMENT
(Form 1302-M continued)

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

List Other Forms or Attachments (cont.)

From: NARCISO, DANILO G CIV USAF AFSPC 30 CES/CEIEC
To: HARDING, KIMBERLEE A CIV USAF AFSPC 30 CES/CEIEC
Subject: FW: Risk Management Plan (RMP) submission has been CERTIFIED
Date: Wednesday, January 06, 2016 2:59:13 PM

-----Original Message-----
From: KEPHART, BEATRICE L CIV USAF AFSPC 30 CES/CEI
Sent: Wednesday, January 06, 2016 10:14 AM
To: NARCISO, DANILO G CIV USAF AFSPC 30 CES/CEIEC; EDWARDS, ANDREW P CIV USAF AFSPC 30 CES/CEIEC; DEVENOGE, THOMAS P CIV USAF AFSPC 30 CES/CEIE
Subject: FW: Risk Management Plan (RMP) submission has been CERTIFIED

-----Original Message-----
From: EPA CDX [mailto:helpdesk@epacdx.net]
Sent: Wednesday, January 06, 2016 10:14 AM
To: kmcnamara@cape-inc.com
Cc: KEPHART, BEATRICE L CIV USAF AFSPC 30 CES/CEI
Subject: Risk Management Plan (RMP) submission has been CERTIFIED

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

Reference Transaction ID: _2fc275d1-040d-454e-a3bd-b07c6a7b9776
Document Name: RMP00012016010412160 3KMCNAMARA22
Prepared by: Kevin McNamara (KMCNAMARA22)
Date Prepared: 1/4/2016
Certifying Official:
Name: Beatrice Kephart (KEPHARTB)
Title:
Email: beatrice.kephart@vandenberg.af.mil
Date Certified and Sent to EPA: 1/6/2016

Submission Type: Resubmission

5 Year Anniversary Date: Jan 6, 2021
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 AFB
1028 Iceland Avenue
Vandenberg AFB 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.

United States Environmental Protection Agency

Ethyl acetylene	107-00-6	10,000
Ethyl chloride	75-00-3	10,000
Ethyl cyanide	107-12-0	10,000
Ethyl ether	60-29-7	10,000
Ethyl mercaptan	75-08-1	10,000
Ethyl nitrite	109-95-5	10,000
Ethylene	74-85-1	10,000
Ethylene oxide	75-21-8	10,000
Ethylenediamine	107-15-3	20,000
Ethyleneimine	151-56-4	10,000
Ethyne	74-86-2	10,000
Fluorine	7782-41-4	1,000
Formaldehyde	50-00-0	15,000
Formaldehyde (solution)	50-00-0	15,000
Formic acid, methyl ester	107-31-3	10,000
Furan	110-00-9	5,000
Hydrazine	302-01-2	15,000
Hydrazine, 1,1-dimethyl-	57-14-7	15,000
Hydrazine, methyl-	60-34-4	15,000
Hydrochloric acid (conc 37% or greater)	7647-01-0	15,000
Hydrocyanic acid	74-90-8	2,500
Hydrofluoric acid (conc. 50% or greater)	7664-39-3	1,000
Hydrogen	1333-74-0	10,000
Hydrogen chloride (anhydrous)	7647-01-0	5,000
Hydrogen chloride (gas only)	7647-01-0	5,000
Hydrogen cyanide	74-90-8	2,500
Hydrogen fluoride (anhydrous)	7664-39-3	1,000
Hydrogen selenide	7783-07-5	500
Hydrogen sulfide	7783-06-4	10,000
Iron carbonyl (Fe(CO)5), (TB-5-11)-	13463-40-6	2,500
Iron, pentacarbonyl-	13463-40-6	2,500
Isobutane	75-28-5	10,000
Isobutyronitrile	78-82-0	20,000
Isopentane	78-78-4	10,000
Isoprene	78-79-5	10,000
Isopropyl chloride	75-29-6	10,000
Isopropyl chloroformate	108-23-6	15,000
Isopropylamine	75-31-0	10,000
Methacrylonitrile	126-98-7	10,000
Methanamine	74-89-5	10,000
Methanamine, N,N-dimethyl-	75-50-3	10,000
Methanamine, N-methyl-	124-40-3	10,000
Methane	74-82-8	10,000
Methane, chloro-	74-87-3	10,000
Methane, chloromethoxy-	107-30-2	5,000
Methane, isocyanato-	624-83-9	10,000

1.7 List of Owners and Operators

Owners

I. United States Air 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 Air Force

II. RGNext

III. A.I. Solutions

IV. United Launch Alliance

V. The Boeing Company

VI. EMCOR

VII. Lockheed Martin IS&GS

VIII. Northrup Grumman

IX. Army Air Force Exchange Service

X. Call Henry, Inc.

XI. Katmai Technical Services

XII. United Paradyne Corporation

XIII. Alliance Technical Services, Inc.

Table 1-1. Equipment Owners/Operators

Owner	Operator	Operator ID	APCD Device ID	Building Number	Equipment
Army Air Force Exchange Service	Army Air Force Exchange Service	646769	384082	14400	UNDERGROUND STORAGE TANK, 12000 GAL-GASOLINE
Army Air Force Exchange Service	Army Air Force Exchange Service	646770	384083	14400	UNDERGROUND STORAGE TANK, 12000 GAL-GASOLINE
Army Air Force Exchange Service	Army Air Force Exchange Service	646771	384084	14400	UNDERGROUND STORAGE TANK, 12000 GAL-GASOLINE
Army Air Force Exchange Service	Army Air Force Exchange Service	3415	384085	14400	FUEL DISPENSER(S)
Missile Defense Agency	The Boeing Company/ Northrup Grumman	3548	384076	1914	EMERGENCY GENERATOR-DIESEL-680HP
Missile Defense Agency	The Boeing Company/ Northrup Grumman	3791	384077	1916	EMERGENCY GENERATOR-DIESEL-563HP
National Aeronautics and Space Administration	A.I. Solutions	4174	384032	831	PAINT BOOTH
National Aeronautics and Space Administration	A.I. Solutions	4130	384033	831	SPRAY GUN CLEANER
National Aeronautics and Space Administration	A.I. Solutions	3872	111100	836	BOILER-NATURAL GAS-2.16 MMBTU/HR
National Aeronautics and Space Administration	A.I. Solutions	3873	111101	836	BOILER-NATURAL GAS-2.16 MMBTU/HR
National Reconnaissance Office	Lockheed Martin IS&GS	3540	384071	764	EMERGENCY GENERATOR-DIESEL-685HP
National Reconnaissance Office	Lockheed Martin IS&GS	706728	391549	1731	PAINT BOOTH
National Reconnaissance Office	Lockheed Martin IS&GS	708765	391550	1731	PAINT BOOTH HEATER-NATURAL GAS-1.2 MMBTU/HR
National Reconnaissance Office	Lockheed Martin IS&GS	708766	391552	1731	SPRAY GUN CLEANER
National Reconnaissance Office	Lockheed Martin IS&GS	3181	384069	2500	EMERGENCY GENERATOR-DIESEL-1200HP
National Reconnaissance Office	Lockheed Martin IS&GS	3814	384066	2520	EMERGENCY GENERATOR-DIESEL-1490HP
National Reconnaissance Office	Lockheed Martin IS&GS	652248	386176	2520	BOILER-NATURAL GAS-4.6 MMBTU/HR
National Reconnaissance Office	Lockheed Martin IS&GS	652249	386177	2520	BOILER-NATURAL GAS-4.6 MMBTU/HR
National Reconnaissance Office	Lockheed Martin IS&GS	711280	391955	3000	EMERGENCY GENERATOR-1490BHP
National Reconnaissance Office	Lockheed Martin IS&GS	711384	391956	3000	EMERGENCY GENERATOR-1490BHP
National Reconnaissance Office	Lockheed Martin IS&GS	3174	384061	7437	PAINT BOOTH HEATER-NATURAL GAS-4.4 MMBTU/HR
National Reconnaissance Office	Lockheed Martin IS&GS	630176	384072	7437	PAINT BOOTH
National Reconnaissance Office	Lockheed Martin IS&GS	630109	384074	7437	SPRAY GUN CLEANER
National Reconnaissance Office	Lockheed Martin IS&GS	633703	384052	SLC-2	MISCELLANEOUS SOLVENT USE
United States Air Force	Alliance Technical Services, Inc	3599	107916	2007	ABRASIVE BLAST BOOTH
United States Air Force	Alliance Technical Services, Inc	1600	108716	2007	PAINT BOOTH
United States Air Force	Alliance Technical Services, Inc	4134	108717	2007	SPRAY GUN CLEANER
United States Air Force	Call Henry Inc.	1224	641883	525	ABOVEGROUND STORAGE TANK-2500 GAL-DIESEL
United States Air Force	Call Henry Inc.	1226	641884	525	ABOVEGROUND STORAGE TANK-2500 GAL-DIESEL

Table 1-1. Equipment Owners/Operators

Owner	Operator	Operator ID	APCD Device ID	Building Number	Equipment
United States Air Force	Call Henry Inc.	1228	641885	525	ABOVEGROUND STORAGE TANK-2500 GAL-DIESEL
United States Air Force	Call Henry Inc.	1229	641886	525	ABOVEGROUND STORAGE TANK-2500 GAL-DIESEL
United States Air Force	Call Henry Inc.	1230	641882	525	ABOVEGROUND STORAGE TANK-2500 GAL-DIESEL
United States Air Force	Call Henry Inc.	3980	386456	64	EMERGENCY GENERATOR-DIESEL-1490HP
United States Air Force	Call Henry Inc.	564	107135	185	EMERGENCY GENERATOR-DIESEL-314HP
United States Air Force	Call Henry Inc.	567	107136	185	EMERGENCY GENERATOR-DIESEL-314HP
United States Air Force	Call Henry Inc.	3976	112688	383	EMERGENCY GENERATOR-DIESEL-364HP
United States Air Force	Call Henry Inc.	3007	106942	425	EMERGENCY GENERATOR-DIESEL-210HP
United States Air Force	Call Henry Inc.	3008	106943	501	EMERGENCY GENERATOR-DIESEL-330HP
United States Air Force	Call Henry Inc.	4005	114491	511	EMERGENCY GENERATOR-DIESEL-755HP
United States Air Force	Call Henry Inc.	1286	6080	525	TURBINE GEN A-NATURAL GAS-44.08MMBTU/HR
United States Air Force	Call Henry Inc.	1287	6081	525	TURBINE GEN B-NATURAL GAS-44.08MMBTU/HR
United States Air Force	Call Henry Inc.	1288	6082	525	TURBINE GEN C-NATURAL GAS-44.08MMBTU/HR
United States Air Force	Call Henry Inc.	1289	6083	525	TURBINE GEN D-NATURAL GAS-44.08MMBTU/HR
United States Air Force	Call Henry Inc.	1290	6084	525	TURBINE GEN E-NATURAL GAS-44.08MMBTU/HR
United States Air Force	Call Henry Inc.	818	104867	525	PONY STARTER ENGINE A-DIESEL-160HP
United States Air Force	Call Henry Inc.	820	104868	525	PONY STARTER ENGINE B-DIESEL-160HP
United States Air Force	Call Henry Inc.	821	104869	525	PONY STARTER ENGINE C-DIESEL-160HP
United States Air Force	Call Henry Inc.	822	104870	525	PONY STARTER ENGINE D-DIESEL-160HP
United States Air Force	Call Henry Inc.	823	104871	525	PONY STARTER ENGINE E-DIESEL-160HP
United States Air Force	Call Henry Inc.	3012	106944	906	EMERGENCY GENERATOR-DIESEL-750HP
United States Air Force	Call Henry Inc.	3927	111765	929	EMERGENCY GENERATOR-DIESEL-470HP
United States Air Force	Call Henry Inc.	3390	106948	1639	EMERGENCY GENERATOR-DIESEL-850HP
United States Air Force	Call Henry Inc.	643	106939	1764	EMERGENCY GENERATOR-DIESEL-78HP
United States Air Force	Call Henry Inc.	3573	386330	1768	EMERGENCY GENERATOR-DIESEL-750HP
United States Air Force	Call Henry Inc.	678120	387721	1819	EMERGENCY GENERATOR-DIESEL-755 HP
United States Air Force	Call Henry Inc.	682870	388091	1819	BOILER-PROPANE-1.5 MMBTU/HR
United States Air Force	Call Henry Inc.	682871	388092	1819	BOILER-PROPANE-1.5 MMBTU/HR
United States Air Force	Call Henry Inc.	645	107141	1829	EMERGENCY FIRE PUMP-DIESEL-270HP
United States Air Force	Call Henry Inc.	649	107142	1829	EMERGENCY FIRE PUMP-DIESEL-270HP

Table 1-1. Equipment Owners/Operators

Owner	Operator	Operator ID	APCD Device ID	Building Number	Equipment
United States Air Force	Call Henry Inc.	3921	111769	1919	EMERGENCY FIRE PUMP-DIESEL-67HP
United States Air Force	Call Henry Inc.	3549	384058	1962	EMERGENCY GENERATOR-DIESEL-317HP
United States Air Force	Call Henry Inc.	3550	384057	1964	EMERGENCY GENERATOR-DIESEL-317HP
United States Air Force	Call Henry Inc.	3790	384060	1965	EMERGENCY GENERATOR-DIESEL-364HP
United States Air Force	Call Henry Inc.	3551	384056	1971	EMERGENCY GENERATOR-DIESEL-317HP
United States Air Force	Call Henry Inc.	3552	384055	1972	EMERGENCY GENERATOR-DIESEL-317HP
United States Air Force	Call Henry Inc.	3815	110735	6510	EMERGENCY GENERATOR-DIESEL-399HP
United States Air Force	Call Henry Inc.	706477	391691	7000	BOILER-NATURAL GAS-2.5MMBTU/HR
United States Air Force	Call Henry Inc.	706481	391690	7000	BOILER-NATURAL GAS-2.5MMBTU/HR
United States Air Force	Call Henry Inc.	661867	386557	7025	EMERGENCY GENERATOR-DIESEL-2923HP
United States Air Force	Call Henry Inc.	3747	110201	8401	EMERGENCY GENERATOR-DIESEL-755HP
United States Air Force	Call Henry Inc.	711413	391957	8401	EMERGENCY GENERATOR-DIESEL-755 BHP
United States Air Force	Call Henry Inc.	3052	106946	8510	EMERGENCY GENERATOR-DIESEL-1592HP
United States Air Force	Call Henry Inc.	3996	112964	8510	BOILER-NATURAL GAS-2 MMBTU/HR
United States Air Force	Call Henry Inc.	3997	112965	8510	BOILER-NATURAL GAS-2 MMBTU/HR
United States Air Force	Call Henry Inc.	713136	391888	21150	EMERGENCY GENERATOR-DIESEL-382HP
United States Air Force	Call Henry Inc.	3642	109236	21203	EMERGENCY GENERATOR-DIESEL-755HP
United States Air Force	EMCOR	678837	388044	10314	EMERGENCY GENERATOR-DIESEL-145 HP
United States Air Force	EMCOR	652230	386174	13850	BOILER-NATURAL GAS-2 MMBTU/HR
United States Air Force	EMCOR	652231	386175	13850	BOILER-NATURAL GAS-2 MMBTU/HR
United States Air Force	EMCOR	678768	388045	13850	EMERGENCY GENERATOR-DIESEL-464HP
United States Air Force	Katmai Technical Services	675217	113960	1701	ABOVEGROUND STORAGE TANK-126000 GAL-RP1
United States Air Force	Katmai Technical Services	645494	109896	1702	ABOVEGROUND STORAGE TANK-210000 GAL-JETA/JP8
United States Air Force	Katmai Technical Services	1987	109898	1706	FILL STAND-JETA/JP8
United States Air Force	Katmai Technical Services	648578	109899	1706	FILL STAND-JETA/JP8
United States Air Force	Katmai Technical Services	434	109369	10726	FUEL DISPENSER - GASOLINE
United States Air Force	Katmai Technical Services	646763	109372	10726	UNDERGROUND STORAGE TANK-10000 GAL-GASOLINE
United States Air Force	Katmai Technical Services	646772	115219	10726	UNDERGROUND STORAGE TANK-10000 GAL-E85- TANK 15
United States Air Force	Katmai Technical Services	678228	386791	10726	FUEL DISPENSER-E85-TANK 18
United States Air Force	Katmai Technical Services	646767	386792	10726	UNDERGROUND STORAGE TANK - 10000 GAL-E85-TANK 18

Table 1-1. Equipment Owners/Operators

Owner	Operator	Operator ID	APCD Device ID	Building Number	Equipment
United States Air Force	Katmai Technical Services	3508	387622	10726	FUEL DISPENSER - E85-TANK 15
United States Air Force	RGNext	1859	9890	9320	ABRASIVE BLAST BOOTH
United States Air Force	RGNext	1591	384028	9320	PAINT BOOTH #1
United States Air Force	RGNext	1592	384029	9320	PAINT BOOTH #2
United States Air Force	RGNext	4129	384030	9320	SPRAY GUN CLEANER
United States Air Force	The Boeing Company	701500	384078	1594	EMERGENCY GENERATOR-DIESEL-293HP
United States Air Force	The Boeing Company	3318	384051	1618	EMERGENCY GENERATOR-DIESEL-755HP
United States Air Force	The Boeing Company	3317	384050	1629	EMERGENCY GENERATOR-DIESEL-755HP
United States Air Force	The Boeing Company	3417	113616	Basewide	MICOWAVE SCRUBBER-FVSS
United States Air Force	The Boeing Company	3418	113621	Basewide	MICROWAVE SCRUBBER-OVSS
United States Air Force	The Boeing Company	4054	384034	SLC-2	FUEL (A-50) SCRUBBER
United States Air Force	The Boeing Company	4055	384038	SLC-2	OXIDIZER (N2O4) SCRUBBER
United States Air Force	The Boeing Company	641815	386453	SLC-2	ABOVEGROUND STORAGE TANK-15000 GALLONS-RP-1
United States Air Force	United Paradyne Corporation	1598	107926	875	PAINT BOOTH
United States Air Force	United Paradyne Corporation	4131	107928	875	SPRAY GUN CLEANER
United States Air Force	United Paradyne Corporation	4173	104788	974/975	OXIDIZER (N2O4) SCRUBBER-HSF
United States Air Force	United Paradyne Corporation	4172	104655	976/977	FUEL (A-50) SCRUBBER-HSF
United States Air Force	United States Air Force	652235	386163	61	EMERGENCY GENERATOR-DIESEL-757HP
United States Air Force	United States Air Force	3397	107000	830	EMERGENCY GENERATOR-DIESEL-685HP
United States Air Force	United States Air Force	3906	111766	830	EMERGENCY GENERATOR-DIESEL-1490HP
United States Air Force	United States Air Force	698284	388930	968	EMERGENCY FIRE PUMP-DIESEL-175BHP
United States Air Force	United States Air Force	698283	388931	968	EMERGENCY FIRE PUMP-DIESEL-175HP
United States Air Force	United States Air Force	3050	107006	1559	EMERGENCY GENERATOR-DIESEL-534HP
United States Air Force	United States Air Force	3411	107031	1561	EMERGENCY GENERATOR-DIESEL-449HP
United States Air Force	United States Air Force	704948	391670	1581	EMERGENCY GENERATOR-DIESEL-69HP
United States Air Force	United States Air Force	3626	108889	1604	EMERGENCY GENERATOR-DIESEL-490HP
United States Air Force	United States Air Force	4109	113916	1735	EMERGENCY GENERATOR-DIESEL-757HP
United States Air Force	United States Air Force	3639	112689	1747	EMERGENCY GENERATOR-DIESEL-755HP
United States Air Force	United States Air Force	642	107032	1748	EMERGENCY GENERATOR-DIESEL-166HP
United States Air Force	United States Air Force	3183	107007	1764	EMERGENCY GENERATOR-DIESEL-50HP

Table 1-1. Equipment Owners/Operators

Owner	Operator	Operator ID	APCD Device ID	Building Number	Equipment
United States Air Force	United States Air Force	3329	107088	1937	EMERGENCY GENERATOR-DIESEL-251HP
United States Air Force	United States Air Force	655	107143	2305	EMERGENCY PUMP-DIESEL-231HP
United States Air Force	United States Air Force	679373	388149	7015	BOILER-NATURAL GAS-1.5 MMBTU/HR
United States Air Force	United States Air Force	679380	388150	7015	BOILER-NATURAL GAS-1.5 MMBTU/HR
United States Air Force	United States Air Force	1052	111731	7425	BOILER-NATURAL GAS-2.25 MMBTU/HR
United States Air Force	United States Air Force	3936	112253	7425	TRAINING GENERATOR-DIESEL-207HP
United States Air Force	United States Air Force	1603	105647	8190	PAINT BOOTH
United States Air Force	United States Air Force	4116	113917	8195	EMERGENCY GENERATOR-DIESEL-364HP
United States Air Force	United States Air Force	4123	114377	8317	EMERGENCY GENERATOR-DIESEL-250HP
United States Air Force	United States Air Force	3907	110229	9320	ABRASIVE BLAST BOOTH
United States Air Force	United States Air Force	4096	113676	9327	PAINT BOOTH
United States Air Force	United States Air Force	703426	388390	9360	PAINT BOOTH
United States Air Force	United States Air Force	703428	388392	9360	SPRAY GUN CLEANER
United States Air Force	United States Air Force	703427	388395	9360	PROCESS HEATER- NATURAL GAS-4.125MMBTU
United States Air Force	United States Air Force	3399	115291	9505	LANDFILL GAS
United States Air Force	United States Air Force	706879	390424	10525	EMERGENCY GENERATOR-DIESEL-325HP
United States Air Force	United States Air Force	589	107038	10579	EMERGENCY GENERATOR-DIESEL-750HP
United States Air Force	United States Air Force	698	107004	10660	EMERGENCY GENERATOR-DIESEL-68HP
United States Air Force	United States Air Force	1604	107930	10711	PAINT BOOTH
United States Air Force	United States Air Force	645869	107932	10711	SPRAY GUN CLEANER
United States Air Force	United States Air Force	3888	111748	10711	PAINT BOOTH HEATER-NATURAL GAS-3.7 MMBTU/HR
United States Air Force	United States Air Force	652232	386166	11439	EMERGENCY GENERATOR-DIESEL-145 HP
United States Air Force	United States Air Force	4268	114696	12000	EMERGENCY GENERATOR-DIESEL-1141 HP
United States Air Force	United States Air Force	3930	112251	12006	BOILER-NATURAL GAS-2 MMBTU/HR
United States Air Force	United States Air Force	3928	112255	12006	EMERGENCY GENERATOR-DIESEL-2922HP
United States Air Force	United States Air Force	3929	112256	12006	EMERGENCY GENERATOR-DIESEL-2922HP
United States Air Force	United States Air Force	646130	114903	12006	BOILER-NATURAL GAS-2.0 MMBTU/HR
United States Air Force	United States Air Force	699622	388045	22321	EMERGENCY GENERATOR-DIESEL-755 HP
United States Air Force	United States Air Force	3582	111125	23201	EMERGENCY GENERATOR-DIESEL-99HP
United States Air Force	United States Air Force	706693	391526	23209	EMERGENCY FIRE PUMP-DIESEL-86 HP

Table 1-1. Equipment Owners/Operators

Owner	Operator	Operator ID	APCD Device ID	Building Number	Equipment
United States Air Force	United States Air Force	652220	386257	23243	EMERGENCY GENERATOR-DIESEL-904HP
United States Air Force	United States Air Force	652224	386258	23243	EMERGENCY GENERATOR-DIESEL-904HP
United States Air Force	United States Air Force	685508	110309	Basewide	MISCELLANEOUS SOLVENT USE
United States Air Force	United States Air Force	4010	113280	Basewide	EMERGENCY GENERATOR-DIESEL-145HP
United States Air Force	United States Air Force	4011	113281	Basewide	EMERGENCY GENERATOR-DIESEL-145HP
United States Air Force	United States Air Force	4012	113282	Basewide	EMERGENCY GENERATOR-DIESEL-145HP
United States Air Force	United States Air Force	4013	113283	Basewide	EMERGENCY GENERATOR-DIESEL-145HP
United States Air Force	United States Air Force	4014	113284	Basewide	EMERGENCY GENERATOR-DIESEL-145HP
United States Air Force	United States Air Force	685507	114277	Basewide	MISCELLANEOUS SOLVENT USE

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.

Table 2-1. Permitted Prime Power/Emergency Standby Internal Combustion Engines

Building Number	Equipment Location	Device No.	Operator ID	Make	Model	Rating (bhp)	Fuel	Tier	EPA Family Name	Daily Hours	Annual Hours	Category	Year of Installation	NEI?	Current Permit	Historical Permit
Primer Power Internal Combustion Engines																
525	525 Coast Rd	104867	818	Duetz	BF6L913	160	Diesel	0	NA	NA	20	Pony Starter Engine	1983	N	13968	6117-R7
525	525 Coast Rd	104868	820	Duetz	BF6L913	160	Diesel	0	NA	NA	20	Pony Starter Engine	1983	N	13968	6117-R7
525	525 Coast Rd	104869	821	Duetz	BF6L913	160	Diesel	0	NA	NA	20	Pony Starter Engine	1983	N	13968	6117-R7
525	525 Coast Rd	104870	822	Duetz	BF6L913	160	Diesel	0	NA	NA	20	Pony Starter Engine	1983	N	13968	6117-R7
525	525 Coast Rd	104871	823	Duetz	BF6L913	160	Diesel	0	NA	NA	20	Pony Starter Engine	1983	N	13968	6117-R7
525	525 Coast Rd	006080	1286	Allison (GM)	501-KB	4090	NG	NA	NA	24	2326.4	Facility Power	1990	Y	13968	6117-R7
525	525 Coast Rd	006081	1287	Allison (GM)	501-KB	4090	NG	NA	NA	24	2326.4	Facility Power	1990	Y	13968	6117-R7
525	525 Coast Rd	006082	1288	Allison (GM)	501-KB	4090	NG	NA	NA	24	2326.4	Facility Power	1990	Y	13968	6117-R7
525	525 Coast Rd	006083	1289	Allison (GM)	501-KB	4090	NG	NA	NA	24	2326.4	Facility Power	1990	Y	13968	6117-R7
525	525 Coast Rd	006084	1290	Allison (GM)	501-KB	4090	NG	NA	NA	24	2326.4	Facility Power	1990	Y	13968	6117-R7
7425	386 10th St	112253	3936	Cummins	6CT8.3-G2	207	Diesel	I	NA	7.5	600	Training Engine	2009	Y	13968	12922
Emergency Standby Internal Combustion Engines																
NA	Various Locations	113280	4010	Cummins	QSB5-G3 NR3	145	Diesel	III	9CEXL0275AAG	8	50	Emergency Stand-by Generator	2011	Y	13968	13376
NA	Various Locations	113281	4011	Cummins	QSB5-G3 NR3	145	Diesel	III	9CEXL0275AAG	8	50	Emergency Stand-by Generator	2011	Y	13968	13376
NA	Various Locations	113282	4012	Cummins	QSB5-G3 NR3	145	Diesel	III	9CEXL0275AAG	8	50	Emergency Stand-by Generator	2011	Y	13968	13376
NA	Various Locations	113283	4013	Cummins	QSB5-G3 NR3	145	Diesel	III	9CEXL0275AAG	8	50	Emergency Stand-by Generator	2011	Y	13968	13376
NA	Various Locations	113284	4014	Cummins	QSB5-G3 NR3	145	Diesel	III	9CEXL0275AAG	8	50	Emergency Stand-by Generator	2011	Y	13968	13376
64	Oak Mountain	386456	3980	Cummins	QST30-G5	1490	Diesel	II	ACEXL030.AAD	8	50	Emergency Stand-by Generator	2010	Y	13968	13271
185	185 Honda Ridge Rd	107135	564	Caterpillar	3306B	314	Diesel	0	NA	24	30	Emergency Stand-by Generator	Unknown	N	13968	11673-R1
185	185 Honda Ridge Rd	107136	567	Caterpillar	3306B	314	Diesel	0	NA	24	30	Emergency Stand-by Generator	Unknown	N	13968	11673-R1
383	383 Lunar Rd	112688	3976	Cummins	QSL9-G2 NR3	364	Diesel	III	9CEXL0540AAB	24	50	Emergency Stand-by Generator	2009	Y	13968	13223
425	425 Arguello Rd	106942	3007	Detroit Diesel	10437305	210	Diesel	0	NA	20	20	Emergency Stand-by Generator	Unknown	N	13968	11672-R1
501	501 Perry Rd	106943	3008	Detroit Diesel	10637305	330	Diesel	0	NA	20	20	Emergency Stand-by Generator	Unknown	N	13968	11672-R1
511	511 CDT Access Rd	114491	4005	Cummins	QSX15-G9-NR2	755	Diesel	II	ACEXL015.AAJ	16.5	100	Command Transmitter E/S	2011	Y	13968	13847
661	661 Santa Ynez Rd	386163	4320	Volvo	TAD164GE	757	Diesel	II	CVPXL16.1ACB	3	50	Emergency Stand-by Generator	2013	Y	13968	14027
764	764 Nappa Rd	384071	3540	Caterpillar	3456 DITA	685	Diesel	II	3CPXL15.8ESK	24	50	Emergency Stand-by Generator	2004	N	13968	11675-R1
830	830 Lompoc St	107000	3397	Cummins	KTA19-G3	685	Diesel	I	NA	20	20	Emergency Stand-by Generator	2005	N	13968	11668-R1
830	830 Lompoc St	111766	3906	Cummins	QST30-G5	1490	Diesel	II	8CEXL030.AAD	8	50	Emergency Stand-by Generator	2009	Y	13968	12793
906	906 Mesa Rd	106944	3012	Detroit Diesel	71237406	750	Diesel	0	NA	20	20	Emergency Stand-by Generator	Unknown	N	13968	11672-R1
929	929 Wade Rd	111765	3927	Cummins	QSM11-G4-NR3	470	Diesel	III	8CEXL0661AAH	24	100	Command Transmitter E/S	2009	Y	13968	12843

Table 2-1. Permitted Prime Power/Emergency Standby Internal Combustion Engines

Building Number	Equipment Location	Device No.	Operator ID	Make	Model	Rating (bhp)	Fuel	Tier	EPA Family Name	Daily Hours	Annual Hours	Category	Year of Installation	NEI?	Current Permit	Historical Permit
968	968 Mesa Rd	388930	698284	John Deere	4045HFC28	175	Diesel	III	FJDXL06.8120	24	50	Emergency Fire Water Pump	2016	Y	13968	14782
968	968 Mesa Rd	388931	698283	John Deere	4045HFC28	175	Diesel	III	FJDXL06.8120	24	50	Emergency Fire Water Pump	2016	Y	13968	14782
1559	1559 Tonto Rd	107006	3050	Caterpillar	3406B	534	Diesel	0	NA	20	20	Emergency Stand-by Generator	1996	N	13968	11668-R1
1561	1561 Tonto Rd	107031	3411	Caterpillar	3406	449	Diesel	0	NA	20	20	Emergency Stand-by Generator	2005	N	13968	11668-R1
1581	1581 Tangair Rd	391670	704948	Cummins	4BT3.3G5	69	Diesel	III	GCEXL03.3BAA	24	50	Emergency Stand-by Generator	2019	Y	15043	15043
1594	1594 Tangair Rd	384078	4039	John Deere	6068HF485	315	Diesel	III	7JDXL06.8101	8	50	Emergency Stand-by Generator	2011	Y	13968	13405
1604	1604 Tangair Rd	108889	3626	Detroit Diesel	6063-HV35	490	Diesel	III	7DDXL14.0VLD	8	50	Emergency Stand-by Generator	2007	Y	13968	12133-R1
1618	1618 Aero Rd	384051	3318	Cummins	KTA19-G4	755	Diesel	0	NA	20	20	Emergency Stand-by Generator	2001	N	13968	11676-R1
1629	1629 Aero Rd	384050	3317	Cummins	KTA19-G4	755	Diesel	0	NA	20	20	Emergency Stand-by Generator	2001	N	13968	11676-R1
1639	1639 Tangair Rd	106948	3390	Detroit Diesel	8123-7305	850	Diesel	I	NA	20	20	Emergency Stand-by Generator	2001	N	13968	11672-R1
1735	325 Airfield Rd	113916	4109	Volvo	TAD1641GE	757	Diesel	II	BVPXL16.1ACB	8	50	Emergency Stand-by Generator	2011	Y	13968	13672
1747	390 Airfield Rd	112689	3639	Cummins	QSX15-G9	755	Diesel	II	7CEXL015.AAB	24	50	Emergency Stand-by Generator	2010	Y	13968	13224
1748	1748 Airfield Rd	107032	642	Cummins	6BT-5.9	166	Diesel	0	NA	20	20	Emergency Stand-by Generator	1987	N	13968	11668-R1
1762	1762 13th St	107007	3183	Cummins	6A3.4-G1	50	Diesel	0	NA	20	20	Emergency Stand-by Generator	2001	N	13968	11668-R1
1764	1764 13th St	106939	643	Caterpillar	D330	78	Diesel	0	NA	20	20	Emergency Stand-by Generator	Unknown	N	13968	11672-R1
1768	1768 Cross Rd	386330	3573	Cummins	QSX15-G9 NR2	750	Diesel	II	4CEXL015.AAB	24	50	Emergency Stand-by Generator	2004	N	13968	11678-R1
1819	1819 New South Rd	387721	678120	Cummins	QSX15-G9	755	Diesel	II	ECEXL015.AAJ	16	50	Emergency Stand-by Generator	2015	Y	13968	14574
1829	1829 Rhea Rd	107141	645	Caterpillar	3208	270	Diesel	0	NA	NA	NA	Emergency Fire Water Pump	1993	N	13968	12810
1829	1829 Rhea Rd	107142	649	Caterpillar	3208	270	Diesel	0	NA	NA	NA	Emergency Fire Water Pump	1993	N	13968	12810
1916	1916 El Rancho Rd	384077	3791	Caterpillar	C15 DITA	563	Diesel	III	7CPXL15.2ESK	24	50	Emergency Stand-by Generator	2008	Y	13968	12419
1917	1917 El Rancho Rd	384076	3548	Caterpillar	D3456	680	Diesel	II	4CPXL15.8ESK	24	50	Emergency Stand-by Generator	2004	N	13968	11680-R1
1919	1919 El Rancho Rd	111769	3921	John Deere	4045DF120	67	Diesel	II	40CFR Part 60	NA	NA	Emergency Fire Water Pump	2008	Y	13968	12820-R1
1937	1937 El Rancho Rd	107088	3329	John Deere	6081AF001C	251	Diesel	I	1JDXL08.1008	24	30	Emergency Stand-by Generator	2001	N	13968	11674-R1
1962	1962 Tow Rd	384058	3549	Cummins	6CTAA8.3G3	317	Diesel	II	4CEXL0505ACB	24	50	Emergency Stand-by Generator	2004	N	13968	11677-R1
1964	1964 Sercho Rd	13968	3550	Cummins	6CTAA8.3G3	317	Diesel	II	4CEXL0505ACB	24	50	Emergency Stand-by Generator	Unknown	N	13968	11677-R1
1965	1965 Parquee Rd	384060	3790	Cummins	QSL9-G2	364	Diesel	III	7CEXL0540.AAB	8	50	Emergency Stand-by Generator	2008	Y	13968	12356
1971	1971 Mina Rd	384056	3551	Cummins	6CTAA8.3G3	317	Diesel	II	4CEXL0505ACB	24	50	Emergency Stand-by Generator	2004	N	13968	11677-R1
1972	1972 Mina Rd	384055	3552	Cummins	6CTAA8.3G3	317	Diesel	II	4CEXL0505ACB	24	50	Emergency Stand-by Generator	Unknown	N	13968	11677-R1
2305	2305 33rd St	107143	655	Caterpillar	3306D1	231	Diesel	0	NA	NA	NA	Emergency Fire Water Pump	1994	N	13968	11671-R1
2500	2500 Arizona Ave	384069	3181	Caterpillar	3508DITA	1200	Diesel	0	NA	24	30	Emergency Stand-by Generator	1999	N	13968	11810-R1
2520	2520 Nevada Ave	384066	3814	Cummins	QST30-G5	1490	Diesel	II	8CEXL030.AAD	8	50	Emergency Stand-by Generator	2008	Y	13968	12455

Table 2-1. Permitted Prime Power/Emergency Standby Internal Combustion Engines

Building Number	Equipment Location	Device No.	Operator ID	Make	Model	Rating (bhp)	Fuel	Tier	EPA Family Name	Daily Hours	Annual Hours	Category	Year of Installation	NEI?	Current Permit	Historical Permit
3000	3000 29th St	391956	711384	Cummins	QST30-G5 NR2	1490	Diesel	II	HCEXL030.AAD	8	50	Emergency Stand-by Generator	2018	Y	15175	15175
3000	3000 29th St	391955	711280	Cummins	QST30-G5 NR2	1490	Diesel	II	HCEXL030.AAD	8	50	Emergency Stand-by Generator	2018	Y	15175	15175
6510	85 13th St	110735	3815	Cummins	QSL9-G3-NR3	399	Diesel	III	8CEXL0540AAB	24	50	Emergency Stand-by Generator	2008	Y	13968	12454
7025	1602 California	386557	661867	Mitsubishi	S16R-Y2PTAW2-1	2923	Diesel	II	DMVXL65.4BBB	4	50	Emergency Stand-by Generator	2013	Y	13968	14292
8195	1522 Nevada Ave	113917	4116	Cummins	QSL9-G2 NR3	364	Diesel	III	BCEXL0540AAB	8	50	Emergency Stand-by Generator	2011	Y	13968	13681
8317	344 8th Street	114377	4123	Cummins	QSB7-G3 NR3	250	Diesel	III	BCEXL0409AAB	8.0	50.0	Emergency Stand-by Generator	2012	Y	13968	13754
8401	1521 Utah Ave	110201	3747	Cummins	QSX15-G9	755	Diesel	II	7CEXL015.AAB	3	50	Emergency Stand-by Generator	2007	Y	13968	12330-R1
8401	1521 Utah Ave	391957	711413	Cummins	QSX15-G9	755	Diesel	II	HCEXL015.AAJ	15	50	Emergency Stand-by Generator	2018	Y	15181	15181
8510	1521 Iceland Ave	106946	3052	Caterpillar	3512STD	1592	Diesel	0	NA	20	20	Emergency Stand-by Generator	1990	N	13968	11672-R1
10314	1206 California Blvd	388044	678837	Cummins	QSB5-G3	145	Diesel	III	ECEXL0275AAG	8	50	Emergency Stand-by Generator	2015	Y	13968	14653
10525	1819 New South Rd	390424	706879	Cummins	QSB7-G5 NR3	325	Diesel	III	GCEXL0409AAD	24	50	Emergency Stand-by Generator	2017	Y	14926	14926
10579	747 Nebraska Ave	107038	589	Cummins	KTTA19-G2	750	Diesel	0	NA	20	20	Emergency Stand-by Generator	1998	N	13968	11668-R1
10660	1160 New Mexico Ave	107004	698	Cummins	L634T-I/10148C	68	Diesel	0	NA	20	20	Emergency Stand-by Generator	1988	N	13968	11668-R1
11439	1172 Iceland Ave	386166	4379	Cummins	QSB5-G3 NR3	145	Diesel	III	BCEXL0275.AAG	3	50	Emergency Stand-by Generator	2015	Y	13968	14073
12000	867 Washington Ave	114696	4268	Caterpillar	C27	1,141	Diesel	II	CCPXL27.ONZS	8	50	Emergency Stand-by Generator	2012	Y	13968	13886
12006	865 Washington Ave	112255	3928	Cummins	QSK60-G6 NR2	2922	Diesel	II	8CEXL060.AAD	24	50	Emergency Stand-by Generator	2009	Y	13968	12916
12006	865 Washington Ave	112256	3929	Cummins	QSK60-G6 NR2	2922	Diesel	II	8CEXL060.AAD	24	50	Emergency Stand-by Generator	2009	Y	13968	12916
13850	388 South Dakota Ave	388054	678768	Cummins	QSL9-G7	464	Diesel	III	ECEXL0540AAB	8	50	Emergency Stand-by Generator	2015	Y	13968	14654
21150	150 Cotar Rd	391888	713136	Volvo	TAD1350GE	382	Diesel	III	HVPXL12.8BCA	24	50	Emergency Stand-by Generator	2018	Y	15141	15141
21203	203 Firefighter Rd	109236	3642	Cummins	QSX15-G9	755	Diesel	II	7CEXL015.AAB	8	100	Command Transmitter E/S	2007	Y	13968	12205
22321	22321 San Antonio Rd	388045	652232	Cummins	QSX15-G9	755	Diesel	III	HVPXL12.8BCA	24	50	Emergency Stand-by Generator	2015	Y	13968	14663
23201	201 Bishop Rd	111125	3582	Cummins	4BT3.9-G4	99	Diesel	I	3CEXL0239AFA	24	30	Emergency Stand-by Generator	2004	N	13968	11679-R1
23209	209 Bishop Rd	107144	706	Cummins	6BTA5.9-F2	130	Diesel	0	NA	NA	NA	Emergency Fire Water Pump	1992	N	13968	11671-R1
23209	209 Bishop Rd	391526	706693	John Deere	4045HF280G	86	Diesel	III	GJDXLl04.5141	NA	NA	Emergency Fire Water Pump	2017	y	14969	14969
23243	23243 Bishop Rd	386257	4375	Volvo	TWD1643GE	904	Diesel	II	DVPXL16.1ACW	6	50	Emergency Stand-by Generator	2013	Y	13968	14104
23243	23243 Bishop Rd	386258	4376	Volvo	TWD1643GE	904	Diesel	II	DVPXL16.1ACW	6	50	Emergency Stand-by Generator	2013	Y	13968	14104

NA = Not Applicable
NG = Natural Gas

Table 2-2. Permitted External Combustion Equipment

Building Number	Equipment Location	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 of Install	NEI?	Current Permit	Historical Permit
836	836 Lompoc St	111100	3872	Parker Boiler	T2160L	2.16	NG	Biannual	Shared	No	30	400	361	No	May/Nov	2008	Y	13968	12640
836	836 Lompoc St	111101	3873	Parker Boiler	T2160L	2.16	NG	Biannual	Shared	No	30	400	361	No	May/Nov	2008	Y	13968	12640
1819	1819 New South Rd	388091	682870	Raypak	H7-1503	1.5	LPG	Annual	Shared	No	30	400	360	No	Jun	2015	Y	13968	14566
1819	1819 New South Rd	388092	682871	Raypak	H7-1503	1.5	LPG	Annual	Shared	No	30	400	360	No	Jun	2015	Y	13968	14566
2520	2520 Nevada Ave	386176	4371	Parker Boiler Co.	T-4600LR	4.6	NG	Biannual	Shared	No	30	400	361	No	Mar/Sep	2013	Y	13968	14081
2520	2520 Nevada Ave	386177	4372	Parker Boiler Co.	T-4600LR	4.6	NG	Biannual	Shared	No	30	400	361	No	Mar/Sep	-2013	Y	13968	14081
7000	816 13th St	706477	706477	Aerco	BMK 2500	2.5	NG	Biannual	Shared	No	30	400	361	No	Nov	2018	Y	15065	15065
7000	816 13th St	706481	706481	Aerco	BMK 2500	2.5	NG	Biannual	Shared	No	30	400	361	No	Nov	2018	Y	15065	15065
7015	806 13th St	679373	679373	Lockinvar	FBN1500	1.5	NG	Annual	Shared	No	30	400	360	No	Oct	2015	Y	13968	14062
7015	806 13th St	679380	679380	Lockinvar	FBN1500	1.5	NG	Annual	Shared	No	30	400	360	No	Oct	2015	Y	13968	14062
7425	386 10th St	111731	1052	Ajax	WGB-2250-D	2.25	NG	None	Dedicated	No	NA	NA	361	No	NA	1983	N	13968	12665-R1
8510	1521 Iceland Ave	112964	3996	Patterson-Kelley	N2000-MFD	2.0	NG	Annual	Shared	No	30	400	360	No	Mar	2010	Y	13968	13329
8510	1521 Iceland Ave	112965	3997	Patterson-Kelley	N2000-MFD	2.0	NG	Annual	Shared	No	30	400	360	No	Mar	2010	Y	13968	13329
9360	1318 New Mexico Ave	388395	703427	Midco	HMA-2	4.125	NG	None	Dedicated	No	NA	NA	361	No	NA	2016	Y	13968	14683
10711	433 Herado Ave	111748	3888	Hastings Industries	SBD-227-32-3700	3.7	NG	None	No Meter	No	NA	NA	361	No	NA	1992	N	13968	12672-R1
12006	865 Washington Ave	112251	3930	Aerco	BMK-2.0LN	2.0	NG	Annual	Shared	No	30	400	360	No	Aug	2009	Y	13968	12917
12006	865 Washington Ave	114903	4269	Patterson-Kelley	N2000-MFD	2.0	NG	Annual	Shared	No	30	400	360	No	Mar	2013	Y	13968	13897
13850	338 South Dakota Ave	393280	4369	Patterson-Kelley/Harsco	MACH C2000H	2.0	NG	Annual	Shared	No	30	400	360	No	Jun	2013 Burner 2019	Y	15258	14082
13850	338 South Dakota Ave	386175	4370	Patterson-Kelley/Harsco	MACH C2000H	2.0	NG	Annual	Shared	No	30	400	360	No	Jun	2013	Y	13968	14082

NA = Not Applicable
NG = Natural Gas
LPG = Liquefied Propane Gas

Table 2-3. Permitted Spray Paint Booths

Building Number	Equipment Location	Device No.	Operator ID	Booth Filter Type	Spray Gun Cleaner?	Booth Heater	Emissions		Year of Install	NEI?	Current Permit	Historical Permit
							lb/day	ton/year				
831	831 Clark St	384032	4174	Overspray Filters	Yes - OID 4130	No	11.2	0.55	1991	Y	13968	8350-R6
875	875 Sweeney Rd	107926	1598	Overspray Filters	Yes - OID 4131	No	5.61	0.73	1991	Y	13968	8580-R5
1731	320 Airfield	391549	706728	Dry Overspray Filters	Yes- OID 708766	Yes- OID 708765	2.3	0.025	2019	Y	14968	14968
2007	2007 Astral Rd	108716	1600	Dry Overspray Filters	Yes - OID 4134	No	7.76	1.01	2013	N	13968	8630-R7
8190	1580 Nevada Ave	105647	1603	Overspray Filters	No	Yes - OID 4106	9.36	1.21	1993	N	13968	9088-R4
9320	334 6th St	384028	1591	Water Wash Overspray System	Yes - OID 4129	No	2.4	0.31	1983	N	13968	8629-R6
9320	334 6th St	384029	1592	Overspray Filters	Yes - OID 4129	No	2.4	0.31	1983	N	13968	8629-R6
9327	1346 New Mexico Ave	113676	4096	Rear Exhaust Plenum	Yes - OID 4101	Yes	9.36	1.22	2011	Y	13968	13493
9360	1318 New Mexico Ave	388390	703426	Three Stage HEPA Filter	Yes- OID 703428	Yes- OID 703427			2016	Y	13968	14683
10711	433 Herado Ave	107930	1604	Dry Overspray Filters	Yes - OID 4374	Yes - OID 3888	11.26	1.47	1993	N	13968	8932-R5

OID = Operator ID

Table 2-4. Other Permitted Operations

Building Number	Equipment Location	Device No.	Operator ID	Device Type	Hourly Limit	Daily Limit	Quarterly Limit	Annual Limit	Units	Year of Installation	NEI?	Current Permit	Historical Permit
NA	Various Locations	113616	3417	Microwave Reactor System for Hypergolic Fuel Vapors	NA	NA	NA	2	event	2006	N	13968	13537
NA	Various Locations	113621	3418	Microwave Reactor System for Hypergolic Oxidizer Vapors	NA	NA	NA	2	event	2006	N	13968	13537
SLC-2	1623 Tangier Rd	384034	4054	SLC-2 Fuel Scrubber System; A-50	NA	NA	NA	6400	gallon	2010	Y	13968	13416
SLC-2	1623 Tangier Rd	384038	4055	SLC-2 Oxidizer Scrubber System; N2O4	NA	NA	NA	7550	gallon	2010	Y	13968	13416
SLC-2	1623 Tangier Rd	386453	2068	AST; RP-1; 15,000 Gallons	NA	NA	NA	114000	gallon	2000	Y	13968	8686-R4
974/975	974 Mesa Rd	104779	4166	28,000 Gallon Nitrogen Tetroxide AST	NA	NA	NA	NA	gallon	2001	N	13968	7988-R5
974/975	974 Mesa Rd	104780	4167	28,000 Gallon Nitrogen Tetroxide AST	NA	NA	NA	NA	gallon	2001	N	13968	7988-R5
974/975	974 Mesa Rd	104781	4168	28,000 Gallon Nitrogen Tetroxide AST	NA	NA	NA	NA	gallon	2001	N	13968	7988-R5
974/975	974 Mesa Rd	104782	4169	28,000 Gallon Nitrogen Tetroxide AST	NA	NA	NA	NA	gallon	2001	N	13968	7988-R5
974/975	974 Mesa Rd	104783	4170	28,000 Gallon Nitrogen Tetroxide AST	NA	NA	NA	NA	gallon	20-01	N	13968	7988-R5
974/975	974 Mesa Rd	104784	4171	28,000 Gallon Nitrogen Tetroxide AST	NA	NA	NA	NA	gallon	2001	N	13968	7988-R5
974/975	974 Mesa Rd	104788	4173	Scrubber (OVSS); Nitrogen Tetroxide	NA	62.16	NA	440	lbs	1991	Y	13968	7988-R5
976/977	976 Mesa Rd	104630	AST01	28,000 Gallon Aerozine50 AST	NA	NA	NA	NA	gallon	2001	N	13968	7987-R5
976/977	976 Mesa Rd	104631	AST02	28,000 Gallon Aerozine50 AST	NA	NA	NA	NA	gallon	2001	N	13968	7987-R5
976/977	976 Mesa Rd	104632	AST03	28,000 Gallon Aerozine50 AST	NA	NA	NA	NA	gallon	2001	N	13968	7987-R5
976/977	976 Mesa Rd	104633	AST04	28,000 Gallon Aerozine50 AST	NA	NA	NA	NA	gallon	2001	N	13968	7987-R5
976/977	976 Mesa Rd	104634	AST05	28,000 Gallon Aerozine50 AST	NA	NA	NA	NA	gallon	2001	N	13968	7987-R5
976/977	976 Mesa Rd	104635	AST06	28,000 Gallon Aerozine50 AST	NA	NA	NA	NA	gallon	2001	N	13968	7987-R5
976/977	976 Mesa Rd	104655	4172	Scrubber (FVSS); Aerozine-50 Fuel	NA	23.04	NA	100	lbs	1991	Y	13968	7987-R5
1705	173 Airfield Rd	109898	1987	Tanker Truck/Trailer Unloading Equipment; Jet-A, AST#1703	NA	NA	NA	2040000	gallon	1992	Y	13656-01	8688-R4
1705	173 Airfield Rd	109899	648578	Tanker Truck/Trailer Loading Equipment; Jet-A, AST#1702	NA	7.20	NA	0.20	lbs	1992	Y	13656-01	8688-R4
1706	173 Airfield Road	109896	1240	210,000 Gallon JET A AST #1702	NA	NA	NA	NA	gallon	1992	Y	13656-01	8688-R4
1706	173 Airfield Road	109897	1238	420,000 Gallon JET A AST #1703	NA	NA	NA	NA	gallon	1982	Y	13656-01	8688-R4
2007	2007 Astral Rd	107918	3599	Abrasive Blasting Operations	NA	2	NA	500	ton	2008	N	13968	12155
5500	Various Delta II Locations	114257	VOC003	Miscellaneous Solvent Usage – Delta II	NA	24	NA	6336	lbs	<1999	N	13968	10155-R2
5500	Various Locations	114277	4384	Miscellaneous Solvent Usage	NA	24	NA	6336	Lbs	<1999	N	13968	10156-R2
5500	Various Locations	110309	4385	Miscellaneous Solvent Usage	NA	22.73	500	2000	Lbs	2004	Y	13968	11143-R1
9320	334 6th St	009890	1859	Abrasive Blasting Operations	NA	2.4	NA	250	ton	Unknown	N	13968	10867-R2
9320	334 6th St	110229	3907	Abrasive Blasting Operations	NA	6.64	NA	1726	ton	2008	N	13968	12346

Table 2-4. Other Permitted Operations

Building Number	Equipment Location	Device No.	Operator ID	Device Type	Hourly Limit	Daily Limit	Quarterly Limit	Annual Limit	Units	Year of Installation	NEI?	Current Permit	Historical Permit
9505	180 Landfill Rd	115291	3399	Landfill Gas	NA	NA	NA	NA	NA	1941	N	13968	NA
10726	442 Washington Ave	109369	434	Military Gasoline Dispensing Facility	NA	NA	NA	1200000	gallon	Unknown	Y	13968	12233
10726	442 Washington Ave	387622	3508	E-85 GDF with Phase 1 VRS	NA	NA	NA	1200000	gallon	2015	N	13968	13139
10726	442 Washington Ave	109372	UST01	10,000 Gallon Tank #16 Gasoline UST	NA	NA	NA	NA	gallon	2014	N	13968	13998
10726	442 Washington Ave	115219	3507	10,000 Gallon Tank #15 E85 UST	NA	NA	NA	NA	gallon	2014	N	13968	13872
10726	442 Washington Ave	386792	UST04	10,000 Gallon Tank #18 E85 UST	NA	NA	NA	NA	gallon	2016	Y	14246	14246
14400	1107 Utah Ave	384085	3415	AAFES Gasoline Dispensing Facility	NA	NA	NA	4800000	gallon	2007	Y	13968	10791
14400	1107 Utah Ave	384082	3412	12,000 Gallon Gasoline UST	NA	NA	NA	NA	gallon	2007	Y	13968	10791
14400	1107 Utah Ave	384083	3413	12,000 Gallon Gasoline UST	NA	NA	NA	NA	gallon	2007	Y	13968	10791
14400	1107 Utah Ave	384084	3414	12,000 Gallon Gasoline UST	NA	NA	NA	NA	gallon	2007	Y	13968	10791

NA = Not Applicable

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.

Table 3-1. Permit Exempt Internal Combustion Engines

Building Number	Equipment Location	Operator ID	Make	Model	EPA Family Name/Tier	Rating (bhp)	Fuel	Category	Basis for Exemption
Stationary									
51	51 Station Rd	3063	Ford	LSG87516005A	NA	104	LPG	Emergency Stand-by Generator	202.F.1.d
475	475 Comm Ave	3083	Cummins	GTA 28	NA	500	LPG	Emergency Stand-by Generator	202.F.1.d
490	490 Arguello Rd	3914	Kubota	F2803-BG-ES02	0	44.8	Diesel	Emergency Stand-by Generator	202.F.1.e
518	518 CDT Access Rd	3603	Kubota	F2803-BG-ES	4KBXL02.8BCC/II	44.8	Diesel	Emergency Stand-by Generator	202.F.1.e
700	700 Kelp Rd	713358	Kubota	D1703-M-BG-ET01	NA	24.3	Diesel	Emergency Stand-by Generator	202.F.1.e
752	759 Napa Rd	3054	Cummins	F2803	0	42	Diesel	Emergency Stand-by Generator	202.F.1.e
752	759 Napa Rd	3932	Kubota	F2803-BG-ES	5KBXL02.8BCC/II	42	Diesel	Emergency Stand-by Generator	202.F.1.e
799	799 Coast Rd	703337	Kohler	KDI 1903TCR/G18C	NA	49	Diesel	Emergency Stand-by Generator	202.F.1.e
865	865 Arguello Rd	3072	Ford	CSG-6491-6005-A	NA	77	LPG	Emergency Stand-by Generator	202.F.1.d
866	866 Arguello Rd	3278	Lister	LP3A74	NA	27	LPG	Emergency Stand-by Generator	202.F.1.d
964	964 Mesa Rd	677064	John Deere	4024TF281D	NA	45	Diesel	Emergency Stand-by Generator	202.F.1.e
966	966 Mesa Rd	677065	John Deere	4024TF281D	NA	45	Diesel	Emergency Stand-by Generator	202.F.1.e
1501	1501 Tangair Rd	4177	John Deere	3029DF120	0	47	Diesel	Emergency Stand-by Generator	202.F.1.e
1524	Off Tangier and Shuttle Access Rds	3190	Lister	VL51.9V6DZRB	0	19	Diesel	Emergency Stand-by Generator	202.F.1.e
1530	1530 Rollo Rd	4067	Cummins	GGMC-7530039	NA	55	LPG	Emergency Stand-by Generator	202.F.1.d
1577	1577 May Rd	632	Ford	CSG-6491-6005A	NA	77	LPG	Emergency Stand-by Generator	202.F.1.d
1579	1579 June Rd	635	Hercules	D2300X308	0	45	Diesel	Emergency Stand-by Generator	202.F.1.e
1591	1591 Tangair	677066	Yanmar	4TNE84-EK	2YDXL2.00F4N	13	Diesel	Emergency Stand-by Generator	202.F.1.e
1592	1031 California	677067	Yanmar	4TNE84-EK	2YDXL2.00F4N	13	Diesel	Emergency Stand-by Generator	202.F.1.e
1735	325 Airfield Rd	677068	Caterpillar	XQ350	NA	569	Diesel	Generator, TSE RN 101091	202.F.2
1737	340 Airfield Rd	3804	Cummins	LPW4	0	18	Diesel	Emergency Stand-by Generator	202.F.1.e
1740	359 Airfield Rd	4003	Ford	ESG642	NA	77	LPG	Emergency Stand-by Generator	202.F.1.d
1743	355 Airfield Rd	3567	Ford	LSG-8751-6005-A	NA	173	LPG	Emergency Stand-by Generator	202.F.1.d
1841	1841 Rhea Rd	4113	Kubota	D1703	AKBXL02.2FCD/I-IV	25	Diesel	Emergency Stand-by Generator	202.F.1.e
1905	1905 Orion Rd	3019	Perkins	CM-335	NA	38	Diesel	Emergency Stand-by Generator	202.F.1.e
6601	1785 Utah Ave	3396	Generac	A4350	NA	173	LPG	Emergency Stand-by Generator	202.F.1.d
6670	1655 Utah Ave	3068	Generac	7.4 L	NA	173	NG	Emergency Stand-by Generator	202.F.1.d
6819	1031 California	3597	Kubota	F2803-BG-ES	NA	45	Diesel	Emergency Stand-by Generator	202.F.1.d
8310	351 8th St	869	Ford	LSG-4231-6005F	NA	50	LPG	Emergency Stand-by Generator	202.F.1.d
8510	1521 Iceland Ave	3053	Generac	93A013958	NA	170	NG	Emergency Stand-by Generator	202.F.1.d

Table 3-1. Permit Exempt Internal Combustion Engines

Building Number	Equipment Location	Operator ID	Make	Model	EPA Family Name/Tier	Rating (bhp)	Fuel	Category	Basis for Exemption
11477	1273 Utah Ave	3187	Yanmar	4TNV84T-BGKL	0	27	Diesel	Emergency Stand-by Generator	202.F.1.e
13675	108 Colorado Ave	766	Ford	CSG-6491-6005-F	NA	90	LPG	Emergency Stand-by Generator	202.F.1.d
13730	127 Colorado Ave	3952	Mitsubishi	SDS8450	NA	95	LPG	Emergency Stand-by Generator	202.F.1.d
14300	135 Wyoming	765	Ford	LSG-4231-6005-F	NA	57	LPG	Emergency Stand-by Generator	202.F.1.d
23160	160 Grant Rd	3605	Kubota	F2803-BG-ES	4KBXL02.8BCC/II	44.8	Diesel	Emergency Stand-by Generator	202.F.1.e
23215	215 Bishop Rd	770	Waukesha	L7042GL	NA	1466	NG	Emergency Stand-by Generator	202.F.1.d
23215	215 Bishop Rd	771	Waukesha	L7042GL	NA	1466	NG	Emergency Stand-by Generator	202.F.1.d
Portable									
Basewide	Various Locations	4293	John Deere	4045HF285	BJDXL06.8117/III	115	Diesel	Chipper Engine, PERP RN 157630	202.F.2
Basewide	Various Locations	645481	John Deere	4045HF285	BJDXL06.8117/III	140	Diesel	APU on Vacuum Truck, PERP RN 160694	202.F.2
Basewide	Various Locations	667306	Cummins	QSB3.3	ECEXL03.3ADA/I-IV	100	Diesel	Auxiliary Power, PERP RN 165532	202.F.2
Basewide	Various Locations	4368	John Deere	4045HF285	BJDXLO6.8117/III	140	Diesel	Vacuum Pump, PERP RN 160694	202.F.2
Basewide	Various Locations	594	Onan	DJC	0	22	Diesel	Generator	202.F.1.e
Basewide	Various Locations	3985	John Deere	6068HF485	8JDXL06.8101/III	315	Diesel	Generator, PERP RN 146695	202.F.2
Basewide	Various Locations	4015	John Deere	4045TF280	9JDXL04.5112/III	80	Diesel	Water Pump, PERP RN 149555	202.F.2
Basewide	Various Locations	4016	John Deere	4045TF280	9JDXL04.5112/III	80	Diesel	Water Pump, PERP RN 149556	202.F.2
Basewide	Various Locations	4017	John Deere	4045TF280	9JDXL04.5112/III	80	Diesel	Water Pump, PERP RN 149557	202.F.2
Basewide	Various Locations	4307	Cummins	QSC	ACEXL0505AAE/III	260	Diesel	Air Compressor, PERP RN 158388	202.F.2
Basewide	Various Locations	3903	John Deere	3029TF270D	4JDXL02.9050/II	64	Diesel	Generator, TSE RN 101091	202.F.2
Basewide	Various Locations	695013	Honda	GX620	Unknown	20	Gasoline	Pressure Washer	202.F.1.e
Basewide	Various Locations	700047	Kohler	KDI 2504TCR/G18A	FKHXL2.48TCR	74	Diesel	Generator, PERP RN 173572	202.F.1.e
Basewide	Various Locations	700099	Kohler	KDI 2504TCR/G18A	FKHXL2.48TCR	74	Diesel	Generator, PERP RN 173573	202.F.1.e
Basewide	Various Locations	700100	Volvo Penta	TAD1170VE	GVPXL10.8CJA	320	Diesel	Generator, PERP RN 173574	202.F.1.e
Basewide	Various Locations	709118	Onan	DJC	Unknown	22	Diesel	Generator	202.F.1.e
Basewide	Various Locations	709119	Onan	DJC	Unknown	22	Diesel	Generator	202.F.1.e
Basewide	Various Locations	709120	Onan	DJC	Unknown	22	Diesel	Generator	202.F.1.e
Basewide	Various Locations	714350	Hydro Engerineering	5/3000GHO	Unknown	12	Gasoline	Pressuer Washer	202.F.1.e
Basewide	Various Locations	717151	Cummins	QSB6.7	GCEXL06.7AAK	260	Diesel	Air Compressor, PERP RN 179153	202.F.1.e
Basewide	Various Locations	717152	Cummins	QSB6.7 260	GCEXL06.7AAK	260	Diesel	Air Compressor PERP RN 179154	202.F.1.e
Basewide	Various Locations	698117	Caterpillar	3738/2500	EFPXL03.4ADC	115	Diesel	Generator, PERP RN 172855	202.F.2
Basewide	Various Locations	702142	Cummins	QSB4.5	GCEXL04.5AAH	155	Diesel	Generator, PERP RN 174907	202.F.2

Table 3-1. Permit Exempt Internal Combustion Engines

Building Number	Equipment Location	Operator ID	Make	Model	EPA Family Name/Tier	Rating (bhp)	Fuel	Category	Basis for Exemption
Flightline	Various Locations	3613	Hollingsworth	A/M32A-86D	0	148	Diesel	Generator, TSE RN 101091	202.F.2
Flightline	Various Locations	3614	Hollingsworth	A/M32A-86D	0	148	Diesel	Generator, TSE RN 101091	202.F.2
Flightline	Various Locations	3615	Hollingsworth	A/M32A-86D	0	148	Diesel	Generator, TSE RN 101091	202.F.2
Flightline	Various Locations	3616	Hollingsworth	A/M32A-86D	0	148	Diesel	Generator, TSE RN 101091	202.F.2
Flightline	Various Locations	3617	Hollingsworth	A/M32A-86D	0	148	Diesel	Generator, TSE RN 101091	202.F.2
Flightline	Various Locations	3618	Hollingsworth	A/M32A-86D	0	148	Diesel	Generator, TSE RN 101091	202.F.2
81	81 Station Rd	3946	Isuzu	A-6BGIT	0	155	Diesel	Generator, TSE RN 101091	202.F.2
525	525 Coast Rd	3992	John Deere	4024TF281	8JDXL02.4074/IV	49	Diesel	Air Compressor	202.F.1.e
525	525 Coast Rd	3993	John Deere	4024TF281	8JDXL02.4074/IV	49	Diesel	Air Compressor	202.F.1.e
525	525 Coast Rd	3994	John Deere	4024TF281	8JDXL02.4074/IV	49	Diesel	Air Compressor	202.F.1.e
525	525 Coast Rd	3995	John Deere	4024TF281	8JDXL02.4074/IV	49	Diesel	Air Compressor	202.F.1.e
525	525 Coast Rd	4021	John Deere	4024TF281	8JDXL02.4074/IV	49	Diesel	Air Compressor	202.F.1.e
525	525 Coast Rd	4022	John Deere	4024TF281	8JDXL02.4074/IV	49	Diesel	Air Compressor	202.F.1.e
525	525 Coast Rd	4023	John Deere	4024TF281	8JDXL02.4074/IV	49	Diesel	Air Compressor	202.F.1.e
525	525 Coast Rd	4024	John Deere	4024TF281	8JDXL02.4074/IV	49	Diesel	Air Compressor	202.F.1.e
525	525 Coast Rd	4296	Perkins	GR65815	AH3XL2.22TCC/I-IV	49	Diesel	Generator	202.F.1.e
525	525 Coast Rd	707871	Duetz AG	D2.9 L4	GD2XL02.9021	49	Diesel	Air Compressor	202.F.1.e
525	525 Coast Rd	707880	Duetz AG	D2.9 L4	GD2XL02.9021	49	Diesel	Air Compressor	202.F.1.e
964	Mesa Rd	677064	John Deere	4024TF281D	DJDXL02.4215/I-IV	45	Diesel	Generator	202.F.1.e
966	Mesa Rd	677065	John Deere	4024TF281D	DJDXL02.4215/I-IV	45	Diesel	Generator	202.F.1.e
1620C	1620 Aero Rd	3316	Teledyne Continental	TM 20	0	38	Gasoline	Generator	202.F.1.e
1704	173 Airfield Rd	718068	Cummins	QSB5-G11	JCEXL04.5AAJ	169	Diesel	Generator, PERP RN 182216	202.F.2
1704	173 Airfield Rd	718669	Cummins	QSB5-G11	JCEXL04.5AAJ	169	Diesel	Generator, PERP RN 182217	202.F.2
1705	173 Airfield Rd	3421	Isuzu	SGNSC	0	49	Diesel	Self Generating Nitrogen Cart, TSE RN 101091	202.F.1.e and 202.F.4.a
1735	325 Airfield Rd	4298	Cummins	4BT3.9G4	I	99	Diesel	Generator, TSE RN 101091	202.F.2
1735	325 Airfield Rd	4299	Cummins	4BT3.9G4	I	99	Diesel	Generator, TSE RN 101091	202.F.2
1735	325 Airfield Rd	4300	Cummins	4BT3.9G4	I	99	Diesel	Generator, TSE RN 101091	202.F.2
1735	325 Airfield Rd	4301	Cummins	4BT3.9G4	I	99	Diesel	Generator, TSE RN 101091	202.F.2
1735	325 Airfield Rd	4310	Duetz	B4M1008	I	38.8	Diesel	Generator, TSE RN 101091	202.F.1.e and 202.F.4.a
1735	325 Airfield Rd	4311	Deutz	B4M1008	I	38.8	Diesel	Generator, TSE RN 101091	202.F.1.e and 202.F.4.a
1735	325 Airfield Rd	653788	Perkins	GP65664N	Unknown	38.8	JP-8	Start cart, TSE RN 101091	202.F.1.f and 202.D.2

Table 3-1. Permit Exempt Internal Combustion Engines

Building Number	Equipment Location	Operator ID	Make	Model	EPA Family Name/Tier	Rating (bhp)	Fuel	Category	Basis for Exemption
1735	325 Airfield Rd	653789	Perkins	GP65664N	Unknown	38.8	JP-8	Start cart, TSE RN 101091	202.F.1.f and 202.D.2
1735	325 Airfield Rd	677068	Caterpillar	XQ350	Unknown	569	Diesel	Auxiliary Power, TSE RN 101091	202.F.2
1746	373 Airfield Rd	ICE02	Garrett	GTCP85-180C	NA	100	JP-8	Turbine Compressor - Aircraft Engine Starting, TSE RN 101091	202.D.2
1746 and Flightline	Various Locations	2055	Garrett	GTCP85-180C	NA	100	JP-8	Turbine Compressor - Aircraft Engine Starting, TSE RN 101091	202.F.1.d
3000	3000 29th St	4072	Kubota	D1503 M BG ET02e	9KBXL01.5FCC/IV	24	Diesel	Generator	202.F.1.e
3000	3000 29th St	4073	Kubota	D1503 M BG ET02e	9KBXL01.5FCC/IV	24	Diesel	Generator	202.F.1.e
3000	3000 29th St	3516	Duetz	BF4M1013E	2DZXL07.1005/I	119	Diesel	Generator, PERP RN 120369	202.F.2
3000	3000 29th St	3517	Duetz	BF4M1013E	2DZXL07.1005/1	119	Diesel	Generator, PERP RN 123070	202.F.2
3000	3000 29th St	3912	Cummins	QSC 8.3	7CEXL0505AAE/III	260	Diesel	Generator, PERP RN 141898	202.F.2
3000	3000 29th St	3913	Cummins	QSC 8.3	7CEXL0505AAE/III	260	Diesel	Generator, PERP RN 141899	202.F.2
3000	3000 29th St	3949	Duetz	TCD2013L042V	8DZXL04.8064/III	172	Diesel	Generator, PERP RN 144722	202.F.2
3000	3000 29th St	3950	Duetz	TCD2013L042V	8DZXL04.8064/III	172	Diesel	Generator, PERP RN 144723	202.F.2
3000	3000 29th St	3982	Isuzu	BU-4JJ1T	8SZXL03.0UTB/I-IV	57	Diesel	Generator, PERP RN 146503	202.F.2
3000	3000 29th St	4317	Isuzu	BI-4HK1X	BSZXL05.21XB/III	173	Diesel	Payload Transport Spt, PERP RN 159459	202.F.2
3000	3000 29th St	652758	John Deere	4045HFG93A, B	CJDXL06.8210/I-IV	166	Diesel	Auxiliary Power, PERP RN 1692910	202.F.2
5425	2010 20th St	3602	Kawaski	BWT 200	0	23	Gasoline	Grounds Maintenance Equipment	202.F.1.f
7425	386 10th St	3735	John Deere	3029TF270D	4JDXL02.9050/II	64	Diesel	Air Compressor, TSE RN 101091	202.F.2
7425	386 10th St	3736	John Deere	3029TF270D	4JDXL02.9050/II	64	Diesel	Air Compressor, TSE RN 101091	202.F.2
7501	172 10th St	3419	John Deere	4045DF150	2JDXL06.8016/I	80	Diesel	Air Compressor, TSE RN 101091	202.F.2
8314	374 8th St	3820	John Deere	3029TF27OD	0	56	Diesel	Generator, TSE RN 101091	202.F.2
8314	374 8th St	3821	John Deere	3029TF270D	0	56	Diesel	Generator, TSE RN 101091	202.F.2
8425	1411 Utah Ave	4124	Isuzu	BH-6UZ1X	ASZXL09.8HXB/III	349	Diesel	Generator, PERP RN 154640	202.F.2
8425	1411 Utah Ave	696	Cummins	NT855G3	0	390	Diesel	Generator, TSE RN 101091	202.F.2
8425	1411 Utah Ave	708	Caterpillar	5R5635 (MEP-007B)	0	235	Diesel	Generator, TSE RN 101091	202.F.2
8425	1411 Utah Ave	3027	Cummins	NT-855-G3 (MEP-009B)	0	390	Diesel	Generator, TSE RN 101091	202.F.2
8425	1411 Utah Ave	3035	John Deere	6059T	0	80	Diesel	Generator, TSE RN 101091	202.F.2
8425	1411 Utah Ave	3037	John Deere	6059T (MEP-806A)	0	80	Diesel	Generator, TSE RN 101091	202.F.2
8425	1411 Utah Ave	3038	John Deere	6059T (MEP-806A)	0	80	Diesel	Generator, TSE RN 101091	202.F.2
8425	1411 Utah Ave	3193	Isuzu	C240	0	30	Diesel	Generator, TSE RN 101091	202.F.1.e and 202.F.4.a
8425	1411 Utah Ave	3194	Isuzu	C240	0	30	Diesel	Generator, TSE RN 101091	202.F.1.e and 202.F.4.a
8425	1411 Utah Ave	3817	Caterpillar	3126	III	216	Diesel	Generator, TSE RN 101091	202.F.2

Table 3-1. Permit Exempt Internal Combustion Engines

Building Number	Equipment Location	Operator ID	Make	Model	EPA Family Name/Tier	Rating (bhp)	Fuel	Category	Basis for Exemption
8425	1411 Utah Ave	3818	Caterpillar	3126	III	216	Diesel	Generator, TSE RN 101091	202.F.2
8425	1411 Utah Ave	4034	Onan	DN4M 1	0	24.1	Diesel	Generator, TSE RN 101091	202.F.1.e and 202.F.4.a
8425	1411 Utah Ave	4035	Onan	DN4M 1	0	24.1	Diesel	Generator, TSE RN 101091	202.F.1.e and 202.F.4.a
8425	1411 Utah Ave	4143	John Deere	4045TF151A	2JDXL06.8014/I	215	Diesel	Generator, TSE RN 101091	202.F.2
8425	1411 Utah Ave	712927	John Deere	4045TF151	2JDXL06.8014	92	Diesel	Generator, TSE RN 101091	202.F.2
9320	334 6th St	3328	Perkins	3.1524	NA	42	Diesel	Air Compressor	202.F.1.e
9320	334 6th St	4095	Caterpillar	C4.4	APKXL04.4NJ1/III	130	Diesel	Air Compressor, PERP RN 153516	202.F.2
9320	334 6th St	4097	Caterpillar	C4.4	APKXL04.4NJ1/III	130	Diesel	Air Compressor, PERP RN 153517	202.F.2
10711	433 Herado Ave	762	Teledyne Continental	TMD-20	0	32.5	Diesel	Generator	202.F.1.e
10715	416 Washington Ave	4294	Caterpillar	C2.2	BH3XL2.22N4T/I-IV	60	Diesel	Other, PERP RN 157631	202.F.2
10715	416 Washington Ave	3902	John Deere	4045DF150B	3JDXL04.8046/I	78	Diesel	Air Compressor, TSE RN 101091	202.F.2
10715	416 Washington Ave	703412	John Deere	4045TF275	6JDXL06.8082	110	Diesel	Generator, TSE RN 101091	202.F.2
10717	430 Washington Ave	3892	John Deere	4045DF150B	2JDXL06.8046/I	78	Diesel	Air Compressor, TSE RN 101091	202.F.2
10717	430 Washington Ave	3894	John Deere	4045TF270	5JDXL04.5083/II	99	Diesel	Sweeper, 2nd Engine, TSE RN 101091	202.F.2
10717	430 Washington Ave	4288	John Deere	4045HF280	AJDXL04.5111/III	50	Diesel	Generator, TSE RN 101091	202.F.2
10717	430 Washington Ave	4364	Kubota	V3600-T-ETO2	Unknown	63	Diesel	Water Pump, TSE RN 101091	202.F.2
10717	430 Washington Ave	644516	Kubota	V3600-T-ETO2	Unknown	63	Diesel	Water Pump, TSE RN 101091	202.F.2
12000	867 Washington Ave	3558	Onan	DNAE 4493833	0	16	Diesel	Generator, TSE RN 101091	202.F.1.e and 202.F.4.a
12000	867 Washington Ave	3559	Onan	DNAE 4493833	0	16	Diesel	Generator, TSE RN 101091	202.F.1.e and 202.F.4.a
12000	867 Washington Ave	3644	John Deere	606BTF151 (MEP-806B)	0	134	Diesel	Generator, TSE RN 101091	202.F.2
12000	867 Washington Ave	3808	Yanmar	40E0RZD	0	82	Diesel	Generator, TSE RN 101091	202.F.2
12000	867 Washington Ave	3809	Yanmar	40E0RZD	0	82	Diesel	Generator, TSE RN 101091	202.F.2
12000	867 Washington Ave	4008	John Deere	606BTF151 (MEP-806B)	0	134	Diesel	Generator, TSE RN 101091	202.F.2
12000	867 Washington Ave	4009	John Deere	606BTF151 (MEP-806B)	0	134	Diesel	Generator, TSE RN 101091	202.F.2
12000	867 Washington Ave	3394	Onan	DNAE 4493833	0	16	Diesel	Generator, TSE RN 101091	202.F.1.e and 202.F.4.a
12000	867 Washington Ave	703347	John Deere	6068TF151 (MEP-806B)	2JDXL06.8014	134	Diesel	Generator, TSE RN 101091	202.F.2

NA = Not Applicable
NG = Natural Gas
LPG = Liquefied Propane Gas
RN = Registration Number

Table 3-2. Permit Exempt External Combustion Equipment

Building Number	Equipment Location	Operator ID	Make	Model	Model Year	Rating (MMBtu/hr)	Fuel	Type of Unit	Basis for Exemption	Notes
75	75 Station Rd	3629	Patterson-Kelley	SN-700	NA	0.7	LPG	Boiler	202.G.1	
475	475 Comm Ave	705824	Cleaver Brooks	CFC-700-1500-125HW	NA	1.5	LPG	Boiler	202.G.1	
490	490 Arguello Rd	704772	York	TG9S120D16MP11A	NA	0.12	LPG	Boiler	202.G.1	
490	490 Arguello Rd	4156	Takag	T-K3	NA	0.199	LPG	Water Heater	202.G.1	
542	542 Coast Rd	704775	Duncane	FPBB100A5	NA	0.1	NG	Furnace	202.G.1	
542	542 Coast Rd	704778	American Water Heater Co	BFG6140T403NO	NA	0.04	NG	Water Heater	202.G.1	
657	657 VHF Rd	981	Lennox	G1404-60-13	NA	0.06	LPG	Furnace	202.G.1	
657	657 VHF Rd	676394	Dayton	GF9S060B12UP11J	NA	0.06	LPG	Furnace	202.G.1	
660	660 Santa Ynez Ridge Rd	707832	Lochinvar	CHL0502	NA	0.5	NG	Boiler	202.G.1	
765	765 Napa Rd	1007	Sterling-Alton	GMIF-50	NA	0.625	NG	Furnace	202.G.1	
789	Napa Rd	707833	Lennox	G50UH-60C-110X-05	NA	0.5	NG	Furnace	202.G.1	
789	Napa Rd	4333	Rheem	22DV50F	NA	0.038	NG	Water Heater	202.G.1	
799	799 Coast Rd	707834	Lochinvar	KBN106	NA	0.105	NG	Boiler	202.G.1	
799	799 Coast Rd	707835	Lochinvar	KBN106	NA	0.106	NG	Boiler	202.G.1	
799	799 Coast Rd	694968	A.O. Smith	BT 100 300	NA	0.075	NG	Water Heater	202.G.1	
840	840 Clark St	4001	Lochinvar	KBN285	NA	0.285	NG	Boiler	202.G.1	
840	840 Clark St	4002	Lochinvar	KBN285	NA	0.285	NG	Boiler	202.G.1	
848	848 Clark St	3223	Lennox	G16Q5X-100-5	NA	0.1	NG	Furnace	202.G.1	
860	860 Clark St	3228	Bryant	376CAV060115	NA	0.115	NG	Furnace	202.G.1	
860	860 Clark St	3229	Bryant	376CAV060115	NA	0.115	NG	Furnace	202.G.1	
861	891 Clark St	3646	Hydrotherm	KN-6	NA	0.6	NG	Boiler	202.G.1	
870	870 Stroop Rd	694919	Lochinvar	KBN400	NA	0.399	NG	Boiler	202.G.1	
871	871 Tuttle St	3811	Raypak	H3-0652B	NA	0.65	NG	Boiler	202.G.1	
871	871 Tuttle St	698766	Raypak	H7-0700A	NA	0.7	NG	Boiler	202.G.1	
875	875 Sweeney Rd	676461	Vangaurd	SA469	NA	0.038	NG	Boiler	202.G.1	
875	875 Sweeney Rd	4040	Ajax Boiler	WPG-1050	NA	1.05	NG	Boiler	202.G.1	
1335	1335 Koa Rd	3171	Day & Nite	383KAV048111	NA	0.11	LPG	Furnace	202.G.1	
1335	1335 Koa Rd	3172	Day & Nite	383KAV048111	NA	0.11	LPG	Furnace	202.G.1	
1335	1335 Koa Rd	3173	Day & Nite	383KAV36070	NA	0.11	LPG	Furnace	202.G.1	

Table 3-2. Permit Exempt External Combustion Equipment

Building Number	Equipment Location	Operator ID	Make	Model	Model Year	Rating (MMBtu/hr)	Fuel	Type of Unit	Basis for Exemption	Notes
1335	1335 Koa Rd	3368	Day & Nite	383KAV060111	NA	0.11	LPG	Furnace	202.G.1	
1335	1335 Koa Rd	3850	Rheem	RCD156-82-1	NA	0.156	NG	Water Heater	202.G.1	
1338	1338 Koa Rd	3216	Markel	HFSF	NA	0.1	LPG	Furnace	202.G.1	
1350	Koa Rd	4347	York	P4HUB12L08001B	NA	0.1	LPG	Furnace	202.G.1	
1350	Koa Rd	4337	Rheem	42VR40-34PF	NA	0.034	LPG	Water Heater	202.G.1	
1506	1559 Tonto Rd	4086	Raypak	H7-0753	NA	0.299	NG	Boiler	202.G.1	
1506	1559 Tonto Rd	4087	Raypak	H7-0753	NA	0.299	NG	Boiler	202.G.1	
1521	1521 Taco Rd	3116	Lennox	G23Q5/6-125-1	NA	0.125	LPG	Furnace	202.G.1	
1521	1521 Taco Rd	3117	Lennox	G23Q5/6-125-1	NA	0.125	LPG	Furnace	202.G.1	
1530	1530 Rollo Rd	3217	Payne	PH8UAA036065	NA	0.066	NG	Furnace	202.G.1	
1544	1544 35th St	3230	Payne	U-FURNACE-NATURAL GAS-BLDG 1544	NA	0.78	NG	Furnace	202.G.1	
1545	1545 35th St	3224	Teledyne Laars	HH0320MN20CCAKXX	NA	0.32	NG	Boiler	202.G.1	
1545	1545 35th St	3225	Teledyne Laars	HH0320MN20CCAKXX	NA	0.32	NG	Boiler	202.G.1	
1546	1546 Talo Rd	698361	Bradford White	URG140T6N	NA	0.034	NG	Water Heater	202.G.1	
1546A	1546A Talo Rd	3986	Patterson-Kelley	N2000-MFD	NA	2	NG	Boiler	202.G.1	
1546B	1546B Talo Rd	3987	Patterson-Kelley	N2000-MFD	NA	2	NG	Boiler	202.G.1	
1555	1555 Talo Rd	3653	Raypak	H3-0652A	NA	0.65	NG	Boiler	202.G.1	
1555	1555 Talo Rd	3652	Raypak	H8-0992A	NA	0.99	NG	Boiler	202.G.1	
1555	1555 Talo Rd	4179	American Proline	FG6140T403N0	NA	0.036	NG	Water Heater	202.G.1	
1555	1555 Talo Rd	4180	Bradford White	G52-40T34-3N	NA	0.036	NG	Water Heater	202.G.1	
1559	1559 Tonto Rd	697049	Rbi-Dominator	DB400	NA	0.399	NG	Boiler	202.G.1	
1559	1559 Tonto Rd	1032	Lochinvar	CBN1210	NA	1.21	NG	Boiler	202.G.1	
1559	1559 Tonto Rd	658416	Bradford White	U140T6FRN	NA	0.04	NG	Water Heater	202.G.1	
1577	1577 May Rd	910	Lennox	G14Q4-5-100-6	NA	0.1	LPG	Furnace	202.G.1	
1579	1579 June Rd	707836	Lennox	G61MP-60C-111-09	NA	0.1	LPG	Furnace	202.G.1	
1610	1610 Tangair Rd	913	Raypak	H8-0992	NA	0.99	LPG	Boiler	202.G.1	
1610	1610 Tangair Rd	912	Raypak	H8-0992	NA	0.99	LPG	Boiler	202.G.1	
1628	1628 Aero Rd	676712	York	DH036N014N2AAA1A	NA	0.05	LPG	Furnace	202.G.1	
1628	1628 Aero Rd	676538	Carrier	CNRVT4821ACAABAA	NA	0.08	LPG	Furnace	202.G.1	

Table 3-2. Permit Exempt External Combustion Equipment

Building Number	Equipment Location	Operator ID	Make	Model	Model Year	Rating (MMBtu/hr)	Fuel	Type of Unit	Basis for Exemption	Notes
1628	1628 Aero Rd	676539	Carrier	CNRVT4821ACAABAA	NA	0.08	LPG	Furnace	202.G.1	
1628	1628 Aero Rd	707998	York	CNRVT4821ACAAAAA	NA	0.08	LPG	Furnace	202.G.1	
1628	1628 Aero Rd	676540	Carrier	CNRVT6024ACAABAA	NA	0.1	LPG	Furnace	202.G.1	
1628	1628 Aero Rd	676719	York	DHUC-TO36N100A	NA	0.1	LPG	Furnace	202.G.1	
1628	1628 Aero Rd	676722	York	DHUC-TO36N100A	NA	0.1	LPG	Furnace	202.G.1	
1628	1628 Aero Rd	707999	York	DH036N014N2AAA1A	NA	0.1	LPG	Furnace	202.G.1	
1628	1628 Aero Rd	707800	Bradford White	U440T6FRN	NA	0.04	LPG	Water Heater	202.G.1	
1632	1632 Tangair Rd	3120	Reznor	TR125	NA	0.125	LPG	Furnace	202.G.1	
1632	1632 Tangair Rd	3203	Reznor	TR125	NA	0.125	LPG	Furnace	202.G.1	
1659	1659 Mono Rd	3235	Lennox	G23Q5/6-150-4	NA	0.15	LPG	Furnace	202.G.1	
1705	173 Airfield Rd	700460	Carrier	58STX135-16	NA	0.132	NG	Furnace	202.G.1	
1705	173 Airfield Rd	701731	American Water Heater Co	G62-40T34-3N	NA	0.034	NG	Water Heater	202.G.1	
1707	185 Airfield Rd	701732	Bradford White	M440T6FBN	NA	0.04	NG	Water Heater	202.G.1	
1728	302 Airfield Rd	3951	Lochinvar	CHN751	NA	0.75	NG	Boiler	202.G.1	
1728	302 Airfield Rd	3833	A.O. Smith	FCG-100 300	NA	0.075	NG	Water Heater	202.G.1	
1731	320 Airfield Rd	3654	Raypak	H3-0752A	NA	0.75	NG	Boiler	202.G.1	
1731	320 Airfield Rd	708767	Rheem	40T06EN38U0	NA	0.038	NG	Water Heater	202.G.1	
1735	325 Airfield Rd	713406	Bradford White	URG240T6N	NA	0.01	NG	Water Heater	202.G.1	
1737	340 Airfield Rd	694920	Patterson-Kelley	N1000-MFD	NA	1	NG	Boiler	202.G.1	
1737	340 Airfield Rd	694969	Patterson-Kelley	N1000-MFD	NA	1	NG	Boiler	202.G.1	
1737	340 Airfield Rd	929	American Standard	GSI-40T34-3N	NA	0.034	NG	Water Heater	202.G.1	
1737	340 Airfield Rd	4056	A.O. Smith	FGR 40 248E	NA	0.038	NG	Water Heater	202.G.1	
1740	359 Airfield Rd	3236	Day & Nite	376C	NA	0.074	NG	Furnace	202.G.1	
1740	359 Airfield Rd	3282	Reznor	TR75	NA	0.075	NG	Furnace	202.G.1	
1740	359 Airfield Rd	3281	Reznor	HCRGB175-S	NA	0.15	NG	Furnace	202.G.1	
1740	359 Airfield Rd	3988	A.O. Smith	FCG 100 300	NA	0.751	NG	Water Heater	202.G.1	
1743	355 Airfield Rd	3923	Raypak	H3-0302B	NA	0.3	NG	Boiler	202.G.1	
1743	355 Airfield Rd	3924	Raypak	H3-0302B	NA	0.3	NG	Boiler	202.G.1	
1743	355 Airfield Rd	4057	Bradford White	M4403T6EN12	NA	0.04	NG	Water Heater	202.G.1	

Table 3-2. Permit Exempt External Combustion Equipment

Building Number	Equipment Location	Operator ID	Make	Model	Model Year	Rating (MMBtu/hr)	Fuel	Type of Unit	Basis for Exemption	Notes
1746	373 Airfield Rd	4151	American Water Heater Co	G61-40T34-3N	NA	0.034	NG	Water Heater	202.G.1	
1749	391 Airfield Rd	698205	Reznor	UDAS-75	NA	0.075	NG	Furnace	202.G.1	
1749	391 Airfield Rd	698206	Reznor	UDAS-75	NA	0.075	NG	Furnace	202.G.1	
1749	391 Airfield Rd	698207	Reznor	UDAS-75	NA	0.075	NG	Furnace	202.G.1	
1749	391 Airfield Rd	698208	Reznor	UDAS-75	NA	0.075	NG	Furnace	202.G.1	
1749	391 Airfield Rd	3238	Lennox	GS11D2100	NA	0.08	NG	Furnace	202.G.1	
1749	391 Airfield Rd	947	Lennox	GS11D2100	NA	0.1	NG	Furnace	202.G.1	
1749	391 Airfield Rd	658417	Bradford White	U140T6FRN	NA	0.04	NG	Water Heater	202.G.1	
1785	1785 13th St	3239	Payne	395CAV048091	NA	0.088	LPG	Furnace	202.G.1	
1785	1785 13th St	950	Lennox	G14Q3-80-2	NA	0.85	LPG	Furnace	202.G.1	
1800	150 Taurus Rd	3942	Patterson-Kelley	N2000-MFD	NA	1.999	LPG	Boiler	202.G.1	
1806	1806 Taurus Rd	4289	Parker Boiler Co.	G672RL	NA	0.672	LPG	Boiler	202.G.1	
1810	1810 El Rancho Rd	656947	Dayton	3E407D	NA	0.06	LPG	Furnace	202.G.1	
1810	1810 El Rancho Rd	657188	Dayton	3E407D	NA	0.06	LPG	Furnace	202.G.1	
1810	1810 El Rancho Rd	3123	Tempstar	NTC5125BKB2	NA	0.125	LPG	Furnace	202.G.1	
1810	1810 El Rancho Rd	648940	Bradford White	M440T6FSX	NA	0.0436	LPG	Water Heater	202.G.1	
1824	1824 Brio Rd	3659	Hydrotherm	AM-150	NA	0.135	LPG	Boiler	202.G.1	
1833	1833 Tethys Rd	3660	Hydrotherm	AM-150	NA	0.135	LPG	Boiler	202.G.1	
1871	1871 Star Rd	3851	Polaris	PG10501302PV	NA	0.13	NG	Boiler	202.G.1	
1871	1871 Star Rd	3852	Polaris	PG10501302PV	NA	0.13	NG	Boiler	202.G.1	
1871	1871 Star Rd	3853	Polaris	PG10501302PV	NA	0.13	NG	Boiler	202.G.1	
1930	1930 Astral Rd	4356	Lennox	TGLS100C20MP11A	NA	0.1	LPG	Furnace	202.G.1	
1930	1930 Astral Rd	714341	Airtemp	VG 7SA 108C- 35C1	NA	1	LPG	Furnace	202.G.1	
1930	1930 Astral Rd	714343	Airtemp	VG 7SA 108C- 35C1	NA	1	LPG	Furnace	202.G.1	
1930	1930 Astral Rd	963	American Standard	G52-40T60-4PLPW	NA	0.06	LPG	Water Heater	202.G.1	
2500	2500 Arizona Ave	717170	Rbi	SW250	NA	0.25	NG	Boiler	202.G.1	
2500	2500 Arizona Ave	3373	Bryan Steam Corp	DR450-W-FDG-LX	NA	0.45	NG	Boiler	202.G.1	
2500	2500 Arizona Ave	4071	A.O. Smith	BTR-200-110	NA	0.199	NG	Water Heater	202.G.1	
2505	2505 32nd St	3375	Trane	TUD100C945H4	NA	0.1	NG	Furnace	202.G.1	

Table 3-2. Permit Exempt External Combustion Equipment

Building Number	Equipment Location	Operator ID	Make	Model	Model Year	Rating (MMBtu/hr)	Fuel	Type of Unit	Basis for Exemption	Notes
2530	2530 Arizona	703348	A.O. Smith	BT 100 230	NA	0.075	NG	Water Heater	202.G.1	
3000	3000 29th St	703338	Parker Boiler Co.	TC600L	NA	1.9	NG	Boiler	202.G.1	
3000	3000 29th St	703339	Parker Boiler Co.	TC600L	NA	1.9	NG	Boiler	202.G.1	
5002	Santa Barbara Ave	707837	Dayton	FG9B08012UP11C	NA	0.08	NG	Furnace	202.G.1	
5002	Santa Barbara Ave	676740	American	GVF443TV	NA	0.04	NG	Water Heater	202.G.1	
5010	Santa Barbara Ave	676752	Carrier	58MSA080---1--20	NA	0.08	NG	Furnace	202.G.1	
5010	Santa Barbara Ave	707838	A.O. Smith	BTN 200 108	NA	0.2	NG	Water Heater	202.G.1	
6005	6005 Santa Barbara Ave	3219	Rheem	RGDD-08NE-GR	NA	0.08	NG	Furnace	202.G.1	
6005	6005 Santa Barbara Ave	4290	American Water Heater Co	CG32-75T75-4NOV	NA	0.075	NG	Water Heater	202.G.1	
6015	6015 Santa Barbara Ave	4221	Dayton	FG9B08012UP11C	NA	0.075	NG	Furnace	202.G.1	
6015	6015 Santa Barbara Ave	4338	Bradford White	M4403T6EN12	NA	0.04	NG	Water Heater	202.G.1	
6419	6419 15th St	3666	Laars Heating Systems	JVS100NDJS	NA	0.1	NG	Boiler	202.G.1	
6444	351 14th St	3244	Tempstar	GNJ075M16C1	NA	0.075	NG	Furnace	202.G.1	
6447	6447 14th St	4222	Payne	PG8JAA048090ADJA	NA	0.088	NG	Furnace	202.G.1	
6447	6447 14th St	676761	Munching Contender	MC-50	NA	0.05	NG	Water Heater	202.G.1	
6510	85 13th St	4058	Raypak	H3-0752B	NA	0.75	NG	Boiler	202.G.1	
6510	85 13th St	676770	Carrier	58MSA080---2--20	NA	0.08	NG	Furnace	202.G.1	
6523	137 13th St	714349	Bradford White	URG140T6N	NA	0.034	NG	Water Heater	202.G.1	
6523	137 13th St	714348	Raypak	H7-108AR-PS	NA	0.11	NG	Boiler	202.G.1	
6523	137 13th St	707930	Raypak	H7-850A	NA	0.85	NG	Boiler	202.G.1	
6523	137 13th St	708039	Raypak	H7-850A	NA	0.85	NG	Boiler	202.G.1	
6523	137 13th St	676790	American Water Heater Co	DCG31100S1996N	NA	0.199	NG	Water Heater	202.G.1	
6525	105 13th St	676800	American Appliance Mfg Co	DSID250-100-1	NA	0.25	NG	Water Heater	202.G.1	
6527	65 13th St	3810	Raypak	H3-0652B	NA	0.65	NG	Boiler	202.G.1	
6601	1785 Utah Ave	661827	Raypak	H7-0500A	NA	0.5	NG	Boiler	202.G.1	
6601	1785 Utah Ave	664578	Raypak	H7-2004A	NA	1.99	NG	Boiler	202.G.1	
6601	1785 Utah Ave	3376	Lennox	G14Q4-80-6	NA	0.088	NG	Furnace	202.G.1	
6601	1785 Utah Ave	3667	American Water Heater Co	CG32-75T75-4NV	NA	0.0751	NG	Water Heater	202.G.1	
6601	1785 Utah Ave	4282	American Water Heater Co	CG32-75T75-4NOV	NA	0.0751	NG	Water Heater	202.G.1	

Table 3-2. Permit Exempt External Combustion Equipment

Building Number	Equipment Location	Operator ID	Make	Model	Model Year	Rating (MMBtu/hr)	Fuel	Type of Unit	Basis for Exemption	Notes
6607	1761 Utah Ave	704769	American Water Heater Co	BFG6140T403N0	NA	0.04	NG	Water Heater	202.G.1	
6607	1761 Utah Ave	704767	Rheem	RGD05NAUER	NA	0.05	NG	Water Heater	202.G.1	
6670	1655 Utah Ave	4121	Patterson-Kelley	N2000-MFD	NA	2	NG	Boiler	202.G.1	
6670	1655 Utah Ave	4122	Patterson-Kelley	N2000-MFD	NA	2	NG	Boiler	202.G.1	
6670	1655 Utah Ave	657189	Rheem	GNU100-250	NA	0.25	NG	Water Heater	202.G.1	
6710	32 13th St	3989	Raypak	H3-0401	NA	0.375	NG	Boiler	202.G.1	
6710	32 13th St	4182	American	G62 40T34-3N	NA	0.034	NG	Water Heater	202.G.1	
6816	6816 Igloo Rd	2619	Air-Fan	KE3-112	NA	0.2	NG	Furnace	202.G.1	
6817	50 13th St	4339	Lochinvar	CHN0502	NA	0.5	NG	Boiler	202.G.1	
7011	826 13th St	4068	Cleaver Brooks	CFC-700-750-60HW	NA	1.5	NG	Boiler	202.G.1	
7015	806 13th Street	698107	Bradford White	D100L199E3N	NA	0.199	NG	Water Heater	202.G.1	
7025	1602 California	708770	Patterson-Kelley	C1050	NA	1.05	NG	Boiler	202.G.1	
7025	1602 California	708771	Patterson-Kelley	C1050	NA	1.05	NG	Boiler	202.G.1	
7050	818 13th St	3627	Ajax Boiler	WPG1050	NA	1	NG	Boiler	202.G.1	
7050	818 13th St	3628	Ajax Boiler	WPG1050	NA	1	NG	Boiler	202.G.1	
7403	393 10th St	698034	Raypak	D1150600292	NA	0.6	NG	Boiler	202.G.1	
7403	393 10th St	701733	Bradford White	M4403T6EN12	NA	0.04	NG	Water Heater	202.G.1	
7403	393 10th St	676807	Bradford White	58MSA080-2-20	NA	0.08	NG	Water Heater	202.G.1	
7420	340 10th St	676815	York	P4HUC20L08001A	NA	0.1	NG	Furnace	202.G.1	
7420	340 10th St	676816	York	P4HUC20L08001A	NA	0.1	NG	Furnace	202.G.1	
7420	340 10th St	676817	Bradford White	MI40T6EN12	NA	0.04	NG	Water Heater	202.G.1	
7425	836 10th Street	698138	Raypak	H7-0500A	NA	0.5	NG	Boiler	202.G.1	
7425	836 10th Street	698139	Raypak	H7-0500A	NA	0.5	NG	Boiler	202.G.1	
7425	386 10th St	676818	Bradford White	M4403T6EN12	NA	0.04	NG	Water Heater	202.G.1	
7430	348 8th St	3379	Carrier	58SXC120-LG	NA	0.135	NG	Furnace	202.G.1	
7430	348 8th St	3378	Reznor	HCX225-6-S-2-E	NA	0.2	NG	Furnace	202.G.1	
7437	1556 New Mexico Ave	1053	Ajax Boiler	WG-350	NA	0.35	NG	Boiler	202.G.1	
7437	1556 New Mexico Ave	3941	Ajax Boiler	WRFG-840	NA	0.84	NG	Boiler	202.G.1	
7437	1556 New Mexico Ave	676819	Bradford White	M440T6FBN	NA	0.04	NG	Water Heater	202.G.1	

Table 3-2. Permit Exempt External Combustion Equipment

Building Number	Equipment Location	Operator ID	Make	Model	Model Year	Rating (MMBtu/hr)	Fuel	Type of Unit	Basis for Exemption	Notes
7501	172 10th St	3812	Lochinvar	CHN651	NA	0.65	NG	Boiler	202.G.1	
7501	172 10th St	3813	Lochinvar	CHN651	NA	0.65	NG	Boiler	202.G.1	
7501	172 10th St	3855	Bradford White	G52-40T34-3N	NA	0.034	NG	Water Heater	202.G.1	
7523	156th 10th Street	4060	Raypak	H7-2003	NA	1.999	NG	Boiler	202.G.1	
7523	156th 10th Street	4061	Raypak	H7-2003	NA	1.999	NG	Boiler	202.G.1	
7525	1579 Utah Ave	3919	American Water Heater Co	PG1034-100-2NV	NA	0.1	NG	Water Heater	202.G.1	
8173	1524 Nevada Ave	4319	Raypak	H7-2003	NA	1.999	NG	Boiler	202.G.1	
8173	1524 Nevada Ave	657191	Dristeam	GTS99-400-DI	NA	0.4	NG	Steam Humidifier	202.G.1	
8173	1524 Nevada Ave	659960	Dristeam	GTS99-400-DI	NA	0.4	NG	Steam Humidifier	202.G.1	
8173	1524 Nevada Ave	698745	Bradford White	ULG275H763N	NA	0.076	NG	Water Heater	202.G.1	
8175	1520 Nevada Ave	3677	Hydrotherm	AM-300	NA	0.299	NG	Boiler	202.G.1	
8175	1520 Nevada Ave	704761	Raypak	WH1-0402	NA	0.399	NG	Boiler	202.G.1	
8175	1520 Nevada Ave	701734	Rheem	G75-75N-2	NA	0.0751	NG	Water Heater	202.G.1	
8195	1522 Nevada Ave	4020	Laars Heating Systems	PNCH1000NACN2CXN	NA	0.99996	NG	Boiler	202.G.1	
8195	1522 Nevada Ave	698399	Bradford White	URG140T6N	NA	0.034	NG	Water Heater	202.G.1	
8250	1529 California Blvd	3680	Hydrotherm	AM-300	NA	0.299	NG	Boiler	202.G.1	
8250	1529 California Blvd	3826	Hydrotherm	AM-300	NA	0.299	NG	Boiler	202.G.1	
8290	1472 Nevada Ave	4184	Raypak	H9-1262B	NA	1.262	NG	Boiler	202.G.1	
8290	1472 Nevada Ave	3682	American Appliance Mfg Co	DSID199-85-1	NA	0.199	NG	Water Heater	202.G.1	
8305	385 8th St	3683	Ajax Boiler	WNG-350	NA	0.35	NG	Boiler	202.G.1	
8305	385 8th St	676821	American	ESG 41	NA	0.033	NG	Water Heater	202.G.1	
8305	385 8th St	701735	Bradford White	U140T6FRN	NA	0.04	NG	Water Heater	202.G.1	
8310	351 8th St	2627	Fulton Pulse Combut	PHW1000	NA	1	NG	Boiler	202.G.1	
8310	351 8th St	2670	Fulton Pulse Combut	PHW1000	NA	1	NG	Boiler	202.G.1	
8310	351 8th St	695764	Fulton Pulse Combut	PHW-1000LE	NA	1	NG	Boiler	202.G.1	
8310	351 8th St	653777	Vangaurd	6E763	NA	0.0343	NG	Water Heater	202.G.1	
8310	351 8th St	3684	A.O. Smith	BTR200 104	NA	0.16	NG	Water Heater	202.G.1	
8312	376 8th St	4308	Comfort Aire	GMUH125-E5A	NA	0.125	NG	Furnace	202.G.1	
8312	376 8th St	4309	Comfort Aire	GMUH125-E5A	NA	0.125	NG	Furnace	202.G.1	

Table 3-2. Permit Exempt External Combustion Equipment

Building Number	Equipment Location	Operator ID	Make	Model	Model Year	Rating (MMBtu/hr)	Fuel	Type of Unit	Basis for Exemption	Notes
8312	376 8th St	4219	A.O. Smith	FGR40240	NA	0.038	NG	Water Heater	202.G.1	
8314	374 8th St	4025	Patterson-Kelley	N750-MFD	NA	0.75	NG	Boiler	202.G.1	
8314	374 8th St	4026	Patterson-Kelley	N750-MFD	NA	0.75	NG	Boiler	202.G.1	
8314	374 8th St	3857	American Water Heater Co	G62-40T34-3N	NA	0.034	NG	Water Heater	202.G.1	
8317	344 8th Street	701736	Bradford White	G52-40T34-3N	NA	0.034	NG	Water Heater	202.G.1	
8337	321 6th St	3630	Patterson-Kelley	N-700	NA	0.7	NG	Boiler	202.G.1	
8337	321 6th St	3631	Patterson-Kelley	N-700	NA	0.7	NG	Boiler	202.G.1	
8337	321 6th St	1066	Raypak	H0824A CCCRCBX	NA	0.825	NG	Boiler	202.G.1	
8337	321 6th St	676822	Bradford White	M440T6FBN	NA	0.04	NG	Water Heater	202.G.1	
8339	308 8th St	4185	American Water Heater Co	G61-40T34-3N	NA	0.034	NG	Water Heater	202.G.1	
8401	1521 Utah Ave	648903	Raypak	H7-0300A	NA	0.3	NG	Boiler	202.G.1	
8401	1521 Utah Ave	648927	Raypak	H7-0300A	NA	0.3	NG	Boiler	202.G.1	
8401	1521 Utah Ave	4043	Raypak	H7-1503	NA	1.5	NG	Boiler	202.G.1	
8401	1521 Utah Ave	4044	Raypak	H7-1503	NA	1.5	NG	Boiler	202.G.1	
8415	178 8th St	1073	Ajax Boiler	WGB-1750	NA	1.75	NG	Boiler	202.G.1	
8425	1411 Utah Ave	3382	Lennox	G20Q5/6X-100-7	NA	0.08	NG	Furnace	202.G.1	
8425	1411 Utah Ave	3383	Lennox	G20Q5/6X-100-7	NA	0.1	NG	Furnace	202.G.1	
8500	1515 Iceland Ave	4088	Raypak	H7-2003	NA	1.999	NG	Boiler	202.G.1	
8500	1515 Iceland Ave	4089	Raypak	H7-2003	NA	1.999	NG	Boiler	202.G.1	
8500	1515 Iceland Ave	3745	Bradford White	D100L1993N	NA	0.199	NG	Water Heater	202.G.1	
8500	1515 Iceland Ave	3858	American Water Heater Co	DCG31100S1996N	NA	0.199	NG	Water Heater	202.G.1	
8505	1539 Iceland Ave	3688	American Appliance Mfg Co	DSID250-100	NA	0.25	NG	Water Heater	202.G.1	
8510	1521 Iceland Ave	4069	Patterson-Kelley	N-750MFD	NA	0.75	NG	Boiler	202.G.1	
8510	1521 Iceland Ave	4070	Patterson-Kelley	N-750MFD	NA	0.75	NG	Boiler	202.G.1	
8510	1521 Iceland Ave	4331	American Water Heater Co	G62-40T34-3N	NA	0.034	NG	Water Heater	202.G.1	
8510	1521 Iceland Ave	714347	General Electric	GG40T06TXK00	NA	0.038	NG	Water Heater	202.G.1	
9005	725 Washington Ave	3861	Lochinvar	EWN150PM	NA	0.15	NG	Boiler	202.G.1	
9005	725 Washington Ave	3862	Lochinvar	EWN150PM	NA	0.15	NG	Boiler	202.G.1	
9005	725 Washington Ave	3859	Lochinvar	CBN0745	NA	0.745	NG	Boiler	202.G.1	

Table 3-2. Permit Exempt External Combustion Equipment

Building Number	Equipment Location	Operator ID	Make	Model	Model Year	Rating (MMBtu/hr)	Fuel	Type of Unit	Basis for Exemption	Notes
9005	725 Washington Ave	3860	Lochinvar	CBN0745	NA	0.745	NG	Boiler	202.G.1	
9190	1382 Nevada Ave	676823	Patterson-Kelley	C-300LNX	NA	0.3	NG	Boiler	202.G.1	
9190	1382 Nevada Ave	709144	AO Smith	BTH-400A300	NA	0.399	NG	Boiler	202.G.1	
9190	1382 Nevada Ave	4186	Patterson-Kelley	C-300LNX	NA	0.3	NG	Boiler	202.G.1	
9192	1390 Nevada Ave	676358	Raypak	WH7-0300A	NA	0.3	NG	Boiler	202.G.1	
9192	1390 Nevada Ave	676359	Raypak	WH7-0300A	NA	0.3	NG	Boiler	202.G.1	
9192	1390 Nevada Ave	676360	Raypak	H7-0500A	NA	0.5	NG	Boiler	202.G.1	
9192	1390 Nevada Ave	676361	Raypak	H7-0500A	NA	0.5	NG	Boiler	202.G.1	
9307	356 6th St	3697	Raypak	H3-0902	NA	0.9	NG	Boiler	202.G.1	
9307	356 6th St	676824	Bradford White	U15036FRN	NA	0.04	NG	Water Heater	202.G.1	
9320	334 6th St	3636	Lochinvar	CBN1796	NA	1.79	NG	Boiler	202.G.1	
9320	334 6th St	676825	Modine	HFG400AMRHN23F2	NA	0.2	NG	Furnace	202.G.1	
9320	344 6th St	694974	Bradford White	U140T6FRN	NA	0.04	NG	Water Heater	202.G.1	
9334	360 6th St	3698	Raypak	WH3-0502	NA	0.5	NG	Boiler	202.G.1	
9334	360 6th St	4190	American Water Heater Co	FG140T403NO	NA	0.04	NG	Water Heater	202.G.1	
9340	372 6th St	3621	Trane	YCD150D4L0AA	NA	0.15	NG	Furnace	202.G.1	
9340	372 6th St	3623	Trane	YCD150C4L0BB	NA	0.15	NG	Furnace	202.G.1	
9340	372 6th St	3624	Trane	YCH180BN4L0DE	NA	0.25	NG	Furnace	202.G.1	
9340	372 6th St	3622	Trane	BYC130G4H0DA	NA	0.3	NG	Furnace	202.G.1	
9340	372 6th St	694975	Trane	Y1AC060A4RLA	NA	0.06	NG	Furnace	202.G.1	
9340	372 6th St	701725	Trane	YHC060A4RLAIM	NA	0.6	NG	Furnace	202.G.1	
9340	372 6th St	3247	Reznor	HCRGB75-5-2	NA	0.75	NG	Furnace	202.G.1	
9340	372 6th St	3625	Trane	BYC060F4L0BB	NA	0.875	NG	Furnace	202.G.1	
9340	372 6th St	4191	American Water Heater Co	GVF433TN	NA	0.033	NG	Water Heater	202.G.1	
9340	372 6th St	4192	Rheem	82V40-2	NA	0.033	NG	Water Heater	202.G.1	
9340	372 6th St	4193	A.O. Smith	FCG100270	NA	0.04	NG	Water Heater	202.G.1	
9340	372 6th St	3863	A.O. Smith	FCG 100 270	NA	0.075	NG	Water Heater	202.G.1	
9360	1318 New Mexico Ave	698360	Raypak	H3-HD301	NA	0.299	NG	Boiler	202.G.1	
9360	1318 New Mexico Ave	676826	Bradford White	U140T6FRN	NA	0.04	NG	Water Heater	202.G.1	

Table 3-2. Permit Exempt External Combustion Equipment

Building Number	Equipment Location	Operator ID	Make	Model	Model Year	Rating (MMBtu/hr)	Fuel	Type of Unit	Basis for Exemption	Notes
10122	706 Washington Ave	694976	Trane	TUE1D140A9601AD	NA	0.14	NG	Furnace	202.G.1	
10122	706 Washington Ave	676827	Reznor	SCE175-6	NA	0.175	NG	Furnace	202.G.1	
10122	706 Washington Ave	3250	Lennox	G20Q5/6X-100-7	NA	0.1	NG	Furnace	202.G.1	
10122	706 Washington Ave	676828	Reznor	SSCBL400-6-S-2	NA	0.4	NG	Furnace	202.G.1	
10122	706 Washington Ave	4194	A.O. Smith	FGR75232	NA	0.075	NG	Water Heater	202.G.1	
10130	737 Washington Ave	676831	Green Heck	IG-109-H10-HZ	NA	0.075	NG	Furnace	202.G.1	
10130	737 Washington Ave	676836	Trane	YHC072A4RYA2TD1B0A0A20600	NA	0.12	NG	Furnace	202.G.1	
10130	737 Washington Ave	676837	Trane	YHC072A4RYA2TD1B0A0A20600	NA	0.12	NG	Furnace	202.G.1	
10130	737 Washington Ave	676829	Green Heck	IGX-110-H12-HZ	NA	0.1	NG	Furnace	202.G.1	
10130	737 Washington Ave	676830	Green Heck	IGX-112-H22-HZ	NA	0.2	NG	Furnace	202.G.1	
10130	737 Washington Ave	676832	Green Heck	IG-112-H20-HZ	NA	0.2	NG	Furnace	202.G.1	
10130	737 Washington Ave	676833	Green Heck	IG-112-H20-HZ	NA	0.2	NG	Furnace	202.G.1	
10130	737 Washington Ave	676834	Trane	YHC092A4RZA2YD1B0A0A20600	NA	0.2	NG	Furnace	202.G.1	
10130	737 Washington Ave	676835	Trane	YHC092A4RZA2YD1B0A0A20600	NA	0.12	NG	Furnace	202.G.1	
10130	737 Washington Ave	694977	Trane	YHC092A4RZA2YD1B0A0A20600	NA	0.2	NG	Furnace	202.G.1	
10130	737 Washington Ave	4295	Riverside Hydronics	2000W	NA	2	NG	Water Heater	202.G.1	
10144	712 Washington Ave	656862	Raypak	P-2005	NA	1.5	NG	Boiler	202.G.1	
10144	712 Washington Ave	656863	Raypak	P-2005	NA	1.5	NG	Boiler	202.G.1	
10144	712 Washington Ave	658900	Bradford White	T65693N	NA	0.065	NG	Water Heater	202.G.1	
10144	712 Washington Ave	658898	Takag	T-M50-N	NA	0.38	NG	Water Heater	202.G.1	
10250	100 Alaska	694980	Reznor	FE50	NA	0.5	NG	Furnace	202.G.1	
10250	100 Alaska	694981	Reznor	FE50	NA	0.5	NG	Furnace	202.G.1	
10250	100 Alaska	694982	Reznor	FE50	NA	0.5	NG	Furnace	202.G.1	
10250	100 Alaska	694983	Reznor	FE50	NA	0.5	NG	Furnace	202.G.1	
10260	101 Community Loop	3351	Reznor	5CE125-6-5	NA	0.125	NG	Furnace	202.G.1	
10314	1206 California Blvd	656935	Bradford White	M2XR75S6BN	NA	0.07645	NG	Water Heater	202.G.1	
10317	1204 California Blvd	676839	Trane	TUD1C100A9601AB	NA	0.01	NG	Furnace	202.G.1	
10317	1204 California Blvd	694984	Trane	TUD1C100A9601AB	NA	0.1	NG	Furnace	202.G.1	
10317	1204 California Blvd	711980	Bradford White	URG240T6N	NA	0.04	NG	Water Heater	202.G.1	

Table 3-2. Permit Exempt External Combustion Equipment

Building Number	Equipment Location	Operator ID	Make	Model	Model Year	Rating (MMBtu/hr)	Fuel	Type of Unit	Basis for Exemption	Notes
10343	718 Community Loop	3252	Lennox	G50UH-60C-110X-07	NA	0.11	NG	Furnace	202.G.1	
10343	718 Community Loop	3253	Lennox	G50UH-60C-110X-07	NA	0.11	NG	Furnace	202.G.1	
10343	718 Community Loop	2614	Modine	DFG300SFRNN10A1	NA	0.3	NG	Furnace	202.G.1	
10343	718 Community Loop	2615	Modine	DFG300SFRNN10A1	NA	0.3	NG	Furnace	202.G.1	
10343	718 Community Loop	706526	Bradford White	URG240T6N	NA	0.04	NG	Water Heater	202.G.1	
10363	720 Community Loop	676842	Lennox	G50UH-60C-110X-05	NA	0.11	NG	Furnace	202.G.1	
10363	720 Community Loop	3355	Lennox	G20Q3/4X-125-3	NA	0.125	NG	Furnace	202.G.1	
10363	720 Community Loop	3356	Lennox	G20Q3/4X-125-3	NA	0.125	NG	Furnace	202.G.1	
10363	720 Community Loop	676841	Lennox	G20Q3/4X-125-7	NA	0.125	NG	Furnace	202.G.1	
10364	722 Community Loop	4197	Vangaurd	5AU69	NA	0.038	NG	Water Heater	202.G.1	
10366	730 Community Loop	3871	Accutemp	GF1201B4800	NA	0.095	NG	Food Prep Burner	202.K.1	
10366	730 Community Loop	694988	Unknown	U-BURNER-NATURAL GAS-BLDG 10366	NA	0.095	NG	Food Prep Burner	202.G.1	
10366	730 Community Loop	3287	Bryant	395CAV060111	NA	0.11	NG	Furnace	202.G.1	
10366	730 Community Loop	694985	Bryant	395CAV060111	NA	0.11	NG	Furnace	202.G.1	
10366	730 Community Loop	694986	Bryant	395CAV060111	NA	0.11	NG	Furnace	202.G.1	
10366	730 Community Loop	3353	Lennox	G16Q5X-100-5	NA	0.1	NG	Furnace	202.G.1	
10366	730 Community Loop	3354	Lennox	G16Q5X-100-5	NA	0.1	NG	Furnace	202.G.1	
10366	730 Community Loop	694987	Bradford White	U140T6FRN	NA	0.04	NG	Water Heater	202.G.1	
10366	730 Community Loop	3865	A.O. Smith	FCG 100 270	NA	0.075	NG	Water Heater	202.G.1	
10373	724 Community Loop	3357	Lennox	G20Q5/6X-100-2	NA	0.1	NG	Furnace	202.G.1	
10373	724 Community Loop	4202	A.O. Smith	40248E	NA	0.038	NG	Water Heater	202.G.1	
10375	CoastHills Credit Union	676849	Carrier	48GSN036060511--	NA	0.06	NG	Furnace	202.G.1	
10375	CoastHills Credit Union	676843	Lennox	TGA090H2B	NA	0.13	NG	Furnace	202.G.1	
10375	CoastHills Credit Union	676844	Lennox	TGA090H2B	NA	0.13	NG	Furnace	202.G.1	
10375	CoastHills Credit Union	676846	Lennox	TGA090H2B	NA	0.13	NG	Furnace	202.G.1	
10400	728 Community Loop	3701	Ajax Boiler	WFG-800-LN	NA	0.8	NG	Boiler	202.G.1	
10503	711 Nebraska Ave	4000	Raypak	WH1-0402	NA	0.399	NG	Boiler	202.G.1	
10503	711 Nebraska Ave	4203	Bradford White	M4403T6EN12	NA	0.04	NG	Water Heater	202.G.1	
10510	1142 California Blvd	1845	Duke	FBB-NC-120	NA	0.096	NG	Boiler	202.G.1	

Table 3-2. Permit Exempt External Combustion Equipment

Building Number	Equipment Location	Operator ID	Make	Model	Model Year	Rating (MMBtu/hr)	Fuel	Type of Unit	Basis for Exemption	Notes
10510	1142 California Blvd	4090	American Standard	BCG380T1506NOX	NA	0.154	NG	Water Heater	202.G.1	
10525	723 Nebraska Ave	1099	Ajax Boiler	WGH-850S	NA	0.85	NG	Boiler	202.G.1	
10525	723 Nebraska Ave	4340	Vangaurd	5AU69	NA	0.038	NG	Water Heater	202.G.1	
10525	723 Nebraska Ave	676854	Bradford White	M440T6FBN	NA	0.04	NG	Water Heater	202.G.1	
10577	747 Nebraska Ave	4276	Raypak	H7-0500	NA	0.5	NG	Boiler	202.G.1	
10577	747 Nebraska Ave	4277	Raypak	H7-0500	NA	0.5	NG	Boiler	202.G.1	
10577	747 Nebraska Ave	4278	Raypak	H7-0500	NA	0.5	NG	Boiler	202.G.1	
10577	747 Nebraska Ave	4279	Raypak	H7-0500	NA	0.5	NG	Boiler	202.G.1	
10660	1160 New Mexico Ave	707840	Raypak	H3-HD401	NA	0.399	NG	Boiler	202.G.1	
10660	1160 New Mexico Ave	707839	American Water Heater Co	BCL3100T1996NOX	NA	0.199	NG	Water Heater	202.G.1	
10711	433 Herado Ave	3134	Reznor	HXE350-6	NA	0.35	NG	Furnace	202.G.1	
10711	433 Herado Ave	676862	Reznor	PDH350-2	NA	0.35	NG	Furnace	202.G.1	
10711	433 Herado Ave	676860	Reznor	PDH400A-2	NA	0.4	NG	Furnace	202.G.1	
10711	433 Herado Ave	695630	Weater Rite	TOT-215-HH	NA	0.612	NG	Furnace	202.G.1	
10711	433 Herado Ave	676857	Weater Rite	ARTT218HHL	NA	0.855	NG	Furnace	202.G.1	
10711	433 Herado Ave	657194	Weater Rite	TOT-218-HH	NA	0.858	NG	Furnace	202.G.1	
10711	433 Herado Ave	694989	Weater Rite	TOT-221-HHR	NA	1.6	NG	Furnace	202.G.1	
10711	433 Herado Ave	4304	American Water Heater Co	CG32-75T75-4NOV	NA	0.075	NG	Water Heater	202.G.1	
10713	431 Herado Ave	657197	Bryant	311JAV066110ADJA	NA	0.11	NG	Furnace	202.G.1	
10713	431 Herado Ave	4205	Bradford White	M4403T6EN12	NA	0.04	NG	Water Heater	202.G.1	
10715	416 Washington Ave	694990	York	LY85100C20UH11C	NA	0.1	NG	Furnace	202.G.1	
10715	416 Washington Ave	700461	York	LY8S100C20UH11C	NA	0.01	NG	Furnace	202.G.1	
10715	416 Washington Ave	3358	Western	250-F9A	NA	0.25	NG	Furnace	202.G.1	
10717	430 Washington Ave	3359	Gaffers-Sattler	U80-3	NA	0.08	NG	Furnace	202.G.1	
10717	430 Washington Ave	4206	Bradford White	M4403T6EN12	NA	0.04	NG	Water Heater	202.G.1	
10717	430 Washington Ave	713405	Bradford White	URG240T6N	NA	0.04	NG	Water Heater	202.G.1	
10728	1251 California Blvd	4321	American	HCG3100T1993N	NA	0.1999	NG	Water Heater	202.G.1	
11013	1036 California Blvd	3971	Mestek Inc.	GT-400	NA	0.399	NG	Boiler	202.G.1	
11013	1036 California Blvd	706417	Bradford White	URG140T6N	NA	0.034	NG	Water Heater	202.G.1	

Table 3-2. Permit Exempt External Combustion Equipment

Building Number	Equipment Location	Operator ID	Make	Model	Model Year	Rating (MMBtu/hr)	Fuel	Type of Unit	Basis for Exemption	Notes
11025	964 Utah Ave	4220	American Water Heater Co	BFG6140T403NO	NA	0.04	NG	Water Heater	202.G.1	
11040	41 Santa Inez Ave	3137	Magic Chef	EG66-55D-5	NA	0.055	NG	Furnace	202.G.1	
11040	41 Santa Inez Ave	3138	Magic Chef	EG66-55D-5	NA	0.055	NG	Furnace	202.G.1	
11041	71 Santa Inez Ave	676868	Raypak	H7-0500A	NA	0.5	NG	Boiler	202.G.1	
11041	71 Santa Inez Ave	676871	Raypak	H7-0500A	NA	0.5	NG	Boiler	202.G.1	
11041	41 Santa Inez Ave	4315	Bradford White	M440T6FBN	NA	0.04	NG	Water Heater	202.G.1	
11041	71 Santa Inez Ave	676865	Heat Transfer Products	PH199-55	NA	0.199	NG	Water Heater	202.G.1	
11041	71 Santa Inez Ave	676866	Heat Transfer Products	PH199-55	NA	0.199	NG	Water Heater	202.G.1	
11042	91 Santa Inez Ave	676881	Raypak	H7-0500A	NA	0.5	NG	Boiler	202.G.1	
11042	91 Santa Inez Ave	676882	Raypak	H7-0500A	NA	0.5	NG	Boiler	202.G.1	
11042	91 Santa Inez Ave	676875	Heat Transfer Products	PH199-55	NA	0.199	NG	Water Heater	202.G.1	
11042	91 Santa Inez Ave	676878	Heat Transfer Products	PH199-55	NA	0.199	NG	Water Heater	202.G.1	
11070	758 Nebraska Ave	3141	Raypak	W1-0263B-BEDHDAA	NA	0.21648	NG	Boiler	202.G.1	
11070	758 Nebraska Ave	657204	Raypak	WH1-HD301	NA	0.299	NG	Boiler	202.G.1	
11070	758 Nebraska Ave	704759	Parker Boiler Co.	20L	NA	0.86	NG	Boiler	202.G.1	
11070	758 Nebraska Ave	695001	Reznor	RPB225-8-S	NA	0.225	NG	Furnace	202.G.1	
11070	758 Nebraska Ave	695002	Reznor	RPB350-8-S	NA	0.35	NG	Furnace	202.G.1	
11070	758 Nebraska Ave	695003	Reznor	RPB350-8-S	NA	0.35	NG	Furnace	202.G.1	
11070	758 Nebraska Ave	695004	Reznor	RPBL500-8	NA	0.5	NG	Furnace	202.G.1	
11070	758 Nebraska Ave	695005	Reznor	RPBL500-8	NA	0.5	NG	Furnace	202.G.1	
11070	758 Nebraska Ave	695006	Reznor	RPBL500-8	NA	0.5	NG	Furnace	202.G.1	
11070	758 Nebraska Ave	695007	Reznor	RPB175-8-S	NA	0.175	NG	Furnace	202.G.1	
11070	758 Nebraska Ave	695008	Reznor	RPB125-8-S-2-H	NA	0.125	NG	Furnace	202.G.1	
11070	758 Nebraska Ave	695009	Reznor	RPB175-8-S	NA	0.175	NG	Furnace	202.G.1	
11070	758 Nebraska Ave	695010	Reznor	RPB175-8-S	NA	0.175	NG	Furnace	202.G.1	
11070	758 Nebraska Ave	695011	Reznor	RPB175-8-S	NA	0.175	NG	Furnace	202.G.1	
11070	758 Nebraska Ave	694992	Reznor	RPB125-8-S	NA	0.125	NG	Furnace	202.G.1	
11070	758 Nebraska Ave	694993	Reznor	RPB125-8-S-2-H	NA	0.125	NG	Furnace	202.G.1	
11070	758 Nebraska Ave	694997	Reznor	RPB125-8-S-2-H	NA	0.125	NG	Furnace	202.G.1	

Table 3-2. Permit Exempt External Combustion Equipment

Building Number	Equipment Location	Operator ID	Make	Model	Model Year	Rating (MMBtu/hr)	Fuel	Type of Unit	Basis for Exemption	Notes
11070	758 Nebraska Ave	694991	Reznor	RPB175-8-S	NA	0.175	NG	Furnace	202.G.1	
11070	758 Nebraska Ave	694994	Reznor	RPB175-8-S	NA	0.175	NG	Furnace	202.G.1	
11070	758 Nebraska Ave	694995	Reznor	RPB175-8-S	NA	0.175	NG	Furnace	202.G.1	
11070	758 Nebraska Ave	695000	Reznor	RPB175-8-S	NA	0.175	NG	Furnace	202.G.1	
11070	758 Nebraska Ave	694996	Reznor	RPB225-8-S	NA	0.25	NG	Furnace	202.G.1	
11070	758 Nebraska Ave	694998	Reznor	RPB225-8-S	NA	0.25	NG	Furnace	202.G.1	
11070	758 Nebraska Ave	694999	Reznor	RPB225-8-S	NA	0.25	NG	Furnace	202.G.1	
11146	1028 Iceland Ave	659343	York	LY8S100C20UH11C	NA	0.1	NG	Furnace	202.G.1	
11146	1028 Iceland Ave	659365	York	GY8S160E30UH21C	NA	0.16	NG	Furnace	202.G.1	
11146	1028 Iceland Ave	659346	York	GY8S160E30UH21C	NA	0.16	NG	Furnace	202.G.1	
11152	301 Guam Ave	3260	Carrier	PG8UAA060111	NA	0.11	NG	Furnace	202.G.1	
11165	1207 New Mexico Ave	3360	Bryant	376CAV060115	NA	0.115	NG	Furnace	202.G.1	
11165	1207 New Mexico Ave	4341	Bradford White	M4403T6EN12	NA	0.04	NG	Water Heater	202.G.1	
11177	Iceland Ave	704017	Bradford White	URG140T6N	NA	0.034	NG	Water Heater	202.G.1	
11248	869 Iceland Ave	3361	Raypak	H1-0263	NA	0.264	NG	Boiler	202.G.1	
11248	869 Iceland Ave	4343	American Proline	FG6140T403N0	NA	0.04	NG	Water Heater	202.G.1	
11352	247 Nebraska Ave	676888	Raypak	H4-0042R	NA	0.042	NG	Boiler	202.G.1	
11352	247 Nebraska Ave	676890	Payne	PG8UAA066111	NA	0.11	NG	Furnace	202.G.1	
11352	247 Nebraska Ave	676892	Payne	PG8UAA066111	NA	0.11	NG	Furnace	202.G.1	
11352	247 Nebraska Ave	676894	Lennox	ML180UH110XP60C-01	NA	0.11	NG	Furnace	202.G.1	
11352	247 Nebraska Ave	4344	Bradford White	M4403T6EN12	NA	0.04	NG	Water Heater	202.G.1	
11432	1114 Iceland Ave	676897	Sterling	RTE-100-D	NA	0.085	NG	Furnace	202.G.1	
11432	1114 Iceland Ave	676899	Sterling	RTE-100-D	NA	0.085	NG	Furnace	202.G.1	
11432	1114 Iceland Ave	676901	Sterling	RTE-100-D	NA	0.085	NG	Furnace	202.G.1	
11433	1130 Iceland Ave	4350	Reznor	HCRGB75	NA	0.075	NG	Furnace	202.G.1	
11433	1130 Iceland Ave	4351	Reznor	HCRGB75	NA	0.075	NG	Furnace	202.G.1	
11433	1130 Iceland Ave	4352	Reznor	HCRGB75	NA	0.075	NG	Furnace	202.G.1	
11433	1130 Iceland Ave	4353	Reznor	HCRGB75	NA	0.075	NG	Furnace	202.G.1	
11433	1130 Iceland Ave	4354	Reznor	HCRGB75	NA	0.075	NG	Furnace	202.G.1	

Table 3-2. Permit Exempt External Combustion Equipment

Building Number	Equipment Location	Operator ID	Make	Model	Model Year	Rating (MMBtu/hr)	Fuel	Type of Unit	Basis for Exemption	Notes
11433	1130 Iceland Ave	4355	Reznor	HCRGB75	NA	0.075	NG	Furnace	202.G.1	
11433	1130 Iceland Ave	648941	Bradford White	U140T6FRN	NA	0.04	NG	Water Heater	202.G.1	
11439	1172 Iceland Ave	3637	Parker Boiler Co.	T760LR	NA	0.76	NG	Boiler	202.G.1	
11439	1172 Iceland Ave	676903	Trane	YCP036F3LOAD	NA	0.04	NG	Furnace	202.G.1	
11439	1172 Iceland Ave	676904	Trane	YCP036F3LOAD	NA	0.04	NG	Furnace	202.G.1	
11439	1172 Iceland Ave	4223	Lennox	G51MP-600-110-08	NA	0.11	NG	Furnace	202.G.1	
11439	1172 Iceland Ave	676905	Bradford White	M4403T6EN12	NA	0.036	NG	Water Heater	202.G.1	
11442	1115 Iceland Ave	701737	Trane	4YCZ6060A1120AB	NA	0.12	NG	Furnace	202.G.1	
11442	1115 Iceland Ave	701738	Trane	4YCZ6060A1120AB	NA	0.12	NG	Furnace	202.G.1	
11477	1273 Utah Ave	1110	Teledyne Laars	TL80-199NS	NA	0.199	NG	Boiler	202.G.1	
11477	1273 Utah Ave	656889	Raypak	WH1-HD251	NA	0.25	NG	Boiler	202.G.1	
11510	1209 Utah Ave	676911	York	P4HUC20L09201A	NA	0.115	NG	Furnace	202.G.1	
11510	1209 Utah Ave	706527	Bradford White	U130T6FRN	NA	0.032	NG	Water Heater	202.G.1	
11777	California Blvd and Utah Ave	3713	Bradford White	M4403T6EN12	NA	0.04	NG	Water Heater	202.G.1	
12000	867 Washington Ave	4110	Hydrotherm	KN-10	NA	1	NG	Boiler	202.G.1	
12000	867 Washington Ave	4111	Hydrotherm	KN-10	NA	1	NG	Boiler	202.G.1	
12006	865 Washington Ave	4346	Pvi	250P125A-TPL	NA	0.199	NG	Water Heater	202.G.1	
12901	1102 Buellton Drive	658409	A.O. Smith	BTL 199 104	NA	0.199	NG	Boiler	202.G.1	
12901	1102 Buellton Drive	3371	Lennox	G20Q3X-75-7	NA	0.075	NG	Furnace	202.G.1	
12901	1102 Buellton Drive	4224	Lennox	G20Q3X-75-7	NA	0.075	NG	Furnace	202.G.1	
12903	1104 Buellton Drive	4225	Lennox	G20Q3X-75-7	NA	0.075	NG	Furnace	202.G.1	
12903	1104 Buellton Drive	4226	Lennox	G20Q3X-75-7	NA	0.075	NG	Furnace	202.G.1	
12903	1104 Buellton Drive	4210	Bradford White	D100L1993N	NA	0.199999	NG	Water Heater	202.G.1	
12905	1106 Buellton Drive	4227	Lennox	G20Q3X-75-7	NA	0.075	NG	Furnace	202.G.1	
12905	1106 Buellton Drive	4228	Lennox	G20Q3X-75-7	NA	0.075	NG	Furnace	202.G.1	
12905	1106 Buellton Drive	676921	American Water Heater Co	CG32-75T75-4NOV	NA	0.0751	NG	Water Heater	202.G.1	
12907	1108 Buellton Drive	4229	Lennox	G20Q3X-75-7	NA	0.075	NG	Furnace	202.G.1	
12907	1108 Buellton Drive	707841	Bradford White	URG140T6N	NA	0.034	NG	Water Heater	202.G.1	
12911	1103 Buellton Drive	4230	Lennox	G20Q3X-75-7	NA	0.075	NG	Furnace	202.G.1	

Table 3-2. Permit Exempt External Combustion Equipment

Building Number	Equipment Location	Operator ID	Make	Model	Model Year	Rating (MMBtu/hr)	Fuel	Type of Unit	Basis for Exemption	Notes
12911	1103 Buellton Drive	4231	Lennox	G20Q3X-75-7	NA	0.075	NG	Furnace	202.G.1	
12911	1103 Buellton Drive	4213	American Appliance	DSID2501001	NA	0.25	NG	Water Heater	202.G.1	
12913	1105 Buellton Drive	4232	Lennox	G20Q3X-75-7	NA	0.075	NG	Furnace	202.G.1	
12913	1105 Buellton Drive	4233	Lennox	G20Q3X-75-7	NA	0.075	NG	Furnace	202.G.1	
12913	1105 Buellton Drive	4214	Bradford White	M475S6CN12	NA	0.075	NG	Water Heater	202.G.1	
12915	1107 Buellton Drive	4234	Lennox	G20Q3X-75-7	NA	0.075	NG	Furnace	202.G.1	
12915	1107 Buellton Drive	4235	Lennox	G20Q3X-75-7	NA	0.075	NG	Furnace	202.G.1	
12915	1107 Buellton Drive	4215	American Appliance	DSID200-100G	NA	0.199	NG	Water Heater	202.G.1	
12915	1107 Buellton Drive	713407	Bradford White	UC6100M2703N	NA	0.27	NG	Water Heater	202.G.1	
13001	181 Oregon Ave	3262	Carrier	58WAV091-16	NA	0.088	NG	Furnace	202.G.1	
13001	181 Oregon Ave	3263	Carrier	58WAV091-16	NA	0.088	NG	Furnace	202.G.1	
13001	181 Oregon Ave	3264	Carrier	58WAV091-16	NA	0.088	NG	Furnace	202.G.1	
13001	181 Oregon Ave	3265	Carrier	58WAV091-16	NA	0.088	NG	Furnace	202.G.1	
13005	189 Oregon Ave	4314	Reznor	CAUA250-S	NA	0.25	NG	Furnace	202.G.1	
13005	189 Oregon Ave	676922	Frazer-Johnson	250-C-33	NA	0.75	NG	Furnace	202.G.1	
13007	251 Oregon Ave	1114	Raypak	H1-0624	NA	0.627	NG	Boiler	202.G.1	
13007	251 Oregon Ave	3718	A.O. Smith	BTR198100	NA	0.199	NG	Water Heater	202.G.1	
13007	251 Oregon Ave	3720	Bradford White	D100L1993N	NA	0.19999	NG	Water Heater	202.G.1	
13007	251 Oregon Ave	3719	Bradford White	D100L1993N	NA	0.19999	NG	Water Heater	202.G.1	
13022	285 Kansas Ave	3143	Reznor	XE400-8-S-E	NA	0.4	NG	Furnace	202.G.1	
13022	285 Kansas Ave	707842	Bradford White	M4403T6EN12	NA	0.036	NG	Water Heater	202.G.1	
13121	377 South Dakota Ave	2679	Hydrotherm	AM-300	NA	0.299	NG	Boiler	202.G.1	
13121	377 South Dakota Ave	3916	Hydrotherm	AM-300	NA	0.299	NG	Boiler	202.G.1	
13121	377 South Dakota Ave	3917	Hydrotherm	AM-300	NA	0.299	NG	Boiler	202.G.1	
13121	377 South Dakota Ave	2661	Raypak	W1-0514A-DEDRDAA	NA	0.5119	NG	Boiler	202.G.1	
13123	2151 South Dakota Ave	3722	Hydrotherm	AM-300	NA	0.299	NG	Boiler	202.G.1	
13123	2151 South Dakota Ave	3723	Hydrotherm	AM-300	NA	0.299	NG	Boiler	202.G.1	
13123	2151 South Dakota Ave	3990	Hydrotherm	AM-300	NA	0.299	NG	Boiler	202.G.1	
13123	2151 South Dakota Ave	2660	Raypak	W1-0514A-DEDRDAA	NA	0.512	NG	Boiler	202.G.1	

Table 3-2. Permit Exempt External Combustion Equipment

Building Number	Equipment Location	Operator ID	Make	Model	Model Year	Rating (MMBtu/hr)	Fuel	Type of Unit	Basis for Exemption	Notes
13137	1031 California	703917	Raypak	H7-0500A	NA	0.5	NG	Boiler	202.G.1	
13137	1031 California	703918	Raypak	H7-0500A	NA	0.5	NG	Boiler	202.G.1	
13137	1031 California	703919	Raypak	H7-0500A	NA	0.5	NG	Boiler	202.G.1	
13137	1031 California	703920	Raypak	H7-0500A	NA	0.5	NG	Boiler	202.G.1	
13143	"O" St and Kansas Ave	1119	Raypak	H3-0624A-CCCRCAA	NA	0.627	NG	Boiler	202.G.1	
13143	"O" St and Kansas Ave	1120	Raypak	H3-0624A-CCCRCAA	NA	0.627	NG	Boiler	202.G.1	
13321	261 South Dakota Ave	703942	Raypak	H7-0300A	NA	0.3	NG	Boiler	202.G.1	
13321	261 South Dakota Ave	704757	Raypak	H7-0300A	NA	0.3	NG	Boiler	202.G.1	
13321	261 South Dakota Ave	704758	Raypak	H7-0300A	NA	0.3	NG	Boiler	202.G.1	
13321	261 South Dakota Ave	3270	Raypak	W2-0624	NA	0.627	NG	Boiler	202.G.1	
13323	215 South Dakota Ave	4198	Raypak	H7-0300	NA	0.3	NG	Boiler	202.G.1	
13323	215 South Dakota Ave	4199	Raypak	H7-0300	NA	0.3	NG	Boiler	202.G.1	
13323	215 South Dakota Ave	4200	Raypak	H7-0300	NA	0.3	NG	Boiler	202.G.1	
13323	215 South Dakota Ave	656895	Raypak	WH3-0752B	NA	0.75	NG	Boiler	202.G.1	
13330	781 "N" St	701726	Trane	GFAA10GDA	NA	0.1	NG	Furnace	202.G.1	
13330	781 "N" St	701727	Trane	GLND035	NA	0.35	NG	Furnace	202.G.1	
13330	781 "N" St	701728	Trane	GLND035	NA	0.35	NG	Furnace	202.G.1	
13330	781 "N" St	701729	Trane	GLND035	NA	0.35	NG	Furnace	202.G.1	
13330	781 "N" St	701730	Trane	GLND035	NA	0.35	NG	Furnace	202.G.1	
13330	781 "N" St	4115	Takag	T-M50	NA	0.36	NG	Water Heater	202.G.1	
13330	781 "N" St	4099	Parker Boiler Co.	40L	NA	1.68	NG	Boiler	202.G.1	
13330	781 "N" St	4100	Parker Boiler Co.	40L	NA	1.68	NG	Boiler	202.G.1	
13640	641 Utah Ave	707843	Lochinvar	CHN0992	NA	0.99	NG	Boiler	202.G.1	
13640	641 Utah Ave	707844	A.O. Smith	BTN 199C 108	NA	0.199	NG	Water Heater	202.G.1	
13675	108 Colorado Ave	704072	Raypak	H7-0300A	NA	0.3	NG	Boiler	202.G.1	
13675	108 Colorado Ave	3727	A.O. Smith	BTC 200 920	NA	0.199	NG	Water Heater	202.G.1	
13700	124 South Dakota Ave	3868	Bradford White	D100L1993N	NA	0.199999	NG	Water Heater	202.G.1	
13848	278 South Dakota Ave	707846	Raypak	H3-HD401	NA	0.399	NG	Boiler	202.G.1	
13848	278 South Dakota Ave	707845	American Standard	HE100-199 AS	NA	0.199	NG	Water Heater	202.G.1	

Table 3-2. Permit Exempt External Combustion Equipment

Building Number	Equipment Location	Operator ID	Make	Model	Model Year	Rating (MMBtu/hr)	Fuel	Type of Unit	Basis for Exemption	Notes
13850	338 South Dakota Ave	667596	Bradford White	EF100T399E3NA2	NA	0.39	NG	Water Heater	202.G.1	
13850	338 South Dakota Ave	667598	Bradford White	EF-100T399E3N2	NA	0.39	NG	Water Heater	202.G.1	
13851	1200 Santa Maria Ave	4270	Heat Transfer Products	PH199-55	NA	0.199	NG	Boiler	202.G.1	
13852	1201 Santa Maria Ave	4041	Heat Transfer Products	PH199-55	NA	0.199	NG	Boiler	202.G.1	
13852	1201 Santa Maria Ave	4092	Heat Transfer Products	PH199-55	NA	0.199	NG	Boiler	202.G.1	
13852	1201 Santa Maria Ave	710165	Heat Transfer Products	PH199-55	NA	0.199	NG	Boiler	202.G.1	
13853	1101 Santa Maria Ave	4271	Heat Transfer Products	PH199-55	NA	0.199	NG	Boiler	202.G.1	
13853	1101 Santa Maria Ave	4272	Heat Transfer Products	PH199-55	NA	0.199	NG	Boiler	202.G.1	
13854	1103 Santa Maria Ave	658408	Heat Transfer Products	PH199-55	NA	0.199	NG	Boiler	202.G.1	
13854	1103 Santa Maria Ave	658411	Heat Transfer Products	PH199-55	NA	0.199	NG	Boiler	202.G.1	
13855	1001 Santa Maria Ave	707847	Heat Transfer Products	PH199-55	NA	0.199	NG	Boiler	202.G.1	
13855	1001 Santa Maria Ave	707848	Heat Transfer Products	PH199-55	NA	0.199	NG	Boiler	202.G.1	
13856	1002 Santa Maria Ave	707849	Heat Transfer Products	PH199-55	NA	0.199	NG	Boiler	202.G.1	
13856	1002 Santa Maria Ave	7078450	Heat Transfer Products	PH199-55	NA	0.199	NG	Boiler	202.G.1	
13857	1104 Guadalupe Ave	676923	Heat Transfer Products	PH199-55	NA	0.199	NG	Boiler	202.G.1	
13857	1104 Guadalupe Ave	676924	Heat Transfer Products	PH199-55	NA	0.199	NG	Boiler	202.G.1	
13858	1102 Guadalupe Ave	4274	Heat Transfer Products	PH199-55	NA	0.199	NG	Boiler	202.G.1	
13858	1102 Guadalupe Ave	4275	Heat Transfer Products	PH199-55	NA	0.199	NG	Boiler	202.G.1	
13859	1202 Guadalupe Ave	658410	Heat Transfer Products	PH199-55	NA	0.199	NG	Boiler	202.G.1	
13859	1202 Guadalupe Ave	676925	Heat Transfer Products	PH199-55	NA	0.199	NG	Boiler	202.G.1	
13860	1200 Guadalupe Ave	4042	Heat Transfer Products	PH199-55	NA	0.199	NG	Boiler	202.G.1	
13860	1200 Guadalupe Ave	659473	Heat Transfer Products	PH199-55	NA	0.199	NG	Boiler	202.G.1	
13861	1201 Guadalupe Ave	676926	Heat Transfer Products	PH199-55	NA	0.199	NG	Boiler	202.G.1	
13861	1201 Guadalupe Ave	676927	Heat Transfer Products	PH199-55	NA	0.199	NG	Boiler	202.G.1	
13862	1101 Guadalupe Ave	4303	Heat Transfer Products	PH199-55	NA	0.199	NG	Boiler	202.G.1	
13862	1101 Guadalupe Ave	3779	Lennox	HM30-100-1	NA	0.1	NG	Boiler	202.G.1	
13863	1103 Guadalupe Ave	3918	Heat Transfer Products	SSVH-130-45SB	NA	0.13	NG	Boiler	202.G.1	
13863	1103 Guadalupe Ave	704088	Heat Transfer Products	PH199-55	NA	0.199	NG	Boiler	202.G.1	
13864	1105 Guadalupe Ave	707851	Heat Transfer Products	PH199-55	NA	0.199	NG	Boiler	202.G.1	
13864	1105 Guadalupe Ave	707852	Heat Transfer Products	PH199-55	NA	0.199	NG	Boiler	202.G.1	

Table 3-2. Permit Exempt External Combustion Equipment

Building Number	Equipment Location	Operator ID	Make	Model	Model Year	Rating (MMBtu/hr)	Fuel	Type of Unit	Basis for Exemption	Notes
13865	1001 Guadalupe Ave	707853	Heat Transfer Products	PH199-55	NA	0.199	NG	Boiler	202.G.1	
13865	1001 Guadalupe Ave	707854	Heat Transfer Products	PH199-55	NA	0.199	NG	Boiler	202.G.1	
13866	1103 Guadalupe Ave	707855	Heat Transfer Products	PH199-55	NA	0.199	NG	Boiler	202.G.1	
13866	1103 Guadalupe Ave	707856	Heat Transfer Products	PH199-55	NA	0.199	NG	Boiler	202.G.1	
14300	135 Wyoming Ave	707857	A.O. Smith	BTR 275 118	NA	0.275	NG	Water Heater	202.G.1	
14300	135 Wyoming Ave	3732	A.O. Smith	BTH 300A 970	NA	0.3	NG	Water Heater	202.G.1	
14400	1107 Utah Ave	4348	York	PS8A12L040UH11A	NA	0.04	NG	Furnace	202.G.1	
14400	1107 Utah Ave	4349	York	P58C20L100UH11A	NA	0.1	NG	Furnace	202.G.1	
16130	201 Korina Ave	3299	York	P3HUD20L10401A	NA	0.13	NG	Furnace	202.G.1	
16135	203 Korina Ave	3300	York	P3HUD20L10401A	NA	0.13	NG	Furnace	202.G.1	
16140	205 Korina Ave	3301	York	P3HUD20L10401A	NA	0.13	NG	Furnace	202.G.1	
16140	205 Korina Ave	3302	York	P3HUD20L10401A	NA	0.13	NG	Furnace	202.G.1	
16170	100 Montana Ave	3155	Raypak	W2-0333C-BEAHDAA	NA	0.333	NG	Boiler	202.G.1	
16170	100 Montana Ave	3154	Raypak	H6-1468A-CEBRCDB	NA	1.467	NG	Boiler	202.G.1	
16200	587 Summersill Ave	707858	Raypak	H9-1262B	NA	1.26	NG	Boiler	202.G.1	
17595	800 California Blvd	3372	Bryant	383KAV048091	NA	0.088	NG	Furnace	202.G.1	
21150	150 Cotar Rd	3258	Hydrotherm	MR-1200BPV	NA	0.3	LPG	Boiler	202.G.1	
21150	150 Cotar Rd	4359	Hydrotherm	MR-1200BPV	NA	0.3	LPG	Boiler	202.G.1	
21150	150 Cotar Rd	4360	Hydrotherm	MR-1200BPV	NA	0.3	LPG	Boiler	202.G.1	
21150	150 Cotar Rd	4361	Hydrotherm	MR-1200BPV	NA	0.3	LPG	Boiler	202.G.1	
21308	End of Gun Rd	3273	Raypak	H1-0183	NA	0.186	LPG	Boiler	202.G.1	
21308	End of Gun Rd	714346	Bradford White	RG240T6X	NA	0.036	NG	Water Heater	202.G.1	
23201	201 Bishop Rd	4059	Raypak	H3-0181	NA	0.181	NG	Boiler	202.G.1	
23225	225 Bishop Rd	708772	Camus	DRNH-2000-WSI	NA	2	NG	Boiler	202.G.1	
23225	225 Bishop Rd	708773	Camus	DRNH-2000-WSI	NA	2	NG	Boiler	202.G.1	
23228	228 Bishop Rd	4266	Lennox	G51MP-60C-110-07	NA	0.11	NG	Furnace	202.G.1	
23228	228 Bishop Rd	4267	Lennox	G51MP-60C-110-01	NA	0.11	NG	Furnace	202.G.1	
23235	235 Bishop Rd	2683	Hydrotherm	AM-100	NA	0.1	NG	Boiler	202.G.1	

NA = Not Available
NG = Natural Gas
LPG = Liquefied Propane Gas

Table 3-3. Other Permit Exempt Operations

Building Number	Equip. Location	Operator ID	Device Type	Hourly Limit	Daily Limit	Quarterly Limit	Annual Limit	Units	Basis for Exemption
NA	Mira and Tangier Rds	648635	EOD Range	NA	500	NA	8000	lbs C-4 donor charge	202.P.13
		3568		NA		NA	8.5	lbs TNT	202.P.13
		648634		NA		NA	440	lbs ANFO(a)	202.P.13
		648636		NA		NA	756	lbs dynamite	202.P.13
NA	Various Locations	650037	Wood Chipper	NA	24	NA	8760	Hr	202
Various	Entire Base	NA	Architectural Coating	NA	NA	NA	NA	NA	202.D.14
976/977	976 Mesa Rd	674098	AST; Aerozine50; 2528 Gallons	NA	24	NA	8760	Hr	202.V.2
81	81 Station Rd	3947	AST; Diesel; 205 Gallons	NA	24	NA	8760	Hr	202.V.2
525	525 Coast Rd	1230	AST; Diesel; 2500 Gallons	NA	24	NA	8760	Hr	202.V.2
525	525 Coast Rd	1226	AST; Diesel; 2500 Gallons	NA	24	NA	8760	Hr	202.V.2
525	525 Coast Rd	1228	AST; Diesel; 2500 Gallons	NA	24	NA	8760	Hr	202.V.2
525	525 Coast Rd	1224	AST; Diesel; 2500 Gallons	NA	24	NA	8760	Hr	202.V.2
525	525 Coast Rd	1229	AST; Diesel; 2500 Gallons	NA	24	NA	8760	Hr	202.V.2
753	853 Arguello Rd	4172	Scrubber; Fuel (FVSS)	NA	NA	NA	NA	NA	202.D.6
753	853 Arguello Rd	4173	Scrubber; Nitrogen Tetroxide (OVSS)	NA	NA	NA	NA	NA	202.D.6
831	831 Clark St	4130	Spray Gun Washer	NA	8	NA	2080	Hr	202.U.2-3
854	864 Arguello Rd	3533	Solvent Cleaning Machine	NA	8	NA	2080	Hr	202.U.2-3
875	875 Sweeney Rd	1854	Abrasive Blasting Operations	NA	NA	NA	97500	lbs	202.H.1
875	875 Sweeney Rd	4131	Spray Gun Washer	NA	8	NA	2080	Hr	202.U.2-3
875	875 Sweeney Rd	4157	Solvent Cleaning Machine	NA	8	NA	2080	Hr	202.U.2-3
1345	1350 Koa Rd	3277	AST; Diesel; 1,000 Gallons	NA	24	NA	8760	Hr	202.V.2
1583	1583 Tangair	3741	Fire Training Facility	NA	NA	NA	NA	NA	202.P.11
1624	1624 Aero Rd	1220	AST; Diesel; 235 Gallons	NA	24	NA	8760	Hr	202.V.2
1624	1624 Aero Rd	1232	AST; Gasoline; 235 Gallons	NA	24	NA	8760	Hr	202.V.7
1624	1624 Aero Rd	1234	AST; Gasoline; 235 Gallons	NA	24	NA	8760	Hr	202.V.7
1699	1699 Airfield Rd	1250	AST; Diesel; 20,000 Gallons	NA	24	NA	8760	Hr	202.V.2
1704	173 Airfield Rd	1249	AST; Diesel; 20,000 Gallons	NA	24	NA	8760	Hr	202.V.2
1728	302 Airfield Rd	4137	Solvent Cleaning Machine	NA	8	NA	2080	Hr	202.U.2-3
1731	320 Airfield Rd	4139	AST; Diesel; 500 Gallons	NA	24	NA	8760	Hr	202.V.2
1731	320 Airfield Rd	4322	Solvent Cleaning Machine	NA	8	NA	2080	Hr	202.U.2-3
1737	340 Airfield Rd	3521	Abrasive Blasting Operations	NA	NA	NA	416	Hr	202.H.1
1749	391Airfield Rd	3633	Abrasive Blasting Operations	NA	NA	NA	416	Hr	202.H.1
1749	391 Airfield Rd	4158	Solvent Cleaning Machine	NA	8	NA	2080	Hr	202.U.2-3

Table 3-3. Other Permit Exempt Operations

Building Number	Equip. Location	Operator ID	Device Type	Hourly Limit	Daily Limit	Quarterly Limit	Annual Limit	Units	Basis for Exemption
1788	Site 13C/ABRES	698263	Soil Vapor Extraction System	NA	NA	NA	NA	Hr	FFSRA
3000	3000 29th St	4358	Solvent Cleaning Machine	NA	8	NA	2080	Hr	202.U.2-3
5425	2010 20th St	3438	AST; Diesel; 240 Gallons	NA	24	NA	8760	Hr	202.V.2
5425	2010 20th St	3439	AST; Gasoline; 240 Gallons	NA	24	NA	8760	Hr	202.V.7
7437	1556 New Mexico Ave	SK002	Spray Gun Washer	NA	8	NA	2080	Hr	202.U.2-3
8190	1580 Nevada Ave	3978	Abrasive Blasting Operations	NA	NA	NA	416	Hr	202.H.1
8310	351 8th St	4138	Solvent Cleaning Machine - Vapor	NA	NA	NA	NA	NA	202.U.2-3
8415	178 8th St	4164	Abrasive Blasting Operations	NA	NA	NA	NA	NA	202.H.1
8415	178 8th St	4153	Solvent Cleaning Machine	NA	8	NA	2080	Hr	202.U.2-3
9320	334 6th St	4129	Spray Gun Washer	NA	8	NA	2080	Hr	202.U.2-3
9320	334 6th St	4152	Solvent Cleaning Machine	NA	8	NA	2080	Hr	202.U.2-3
9320	334 6th St	4318	Abrasive Blasting Operations	NA	NA	NA	NA	NA	202.H.1
9320	334 6th St	705831	Abrasive Blasting Operations	NA	NA	NA	NA	NA	202.H.1
9360	1318 New Mexico Ave	4283	Abrasive Blasting Operations	NA	NA	NA	NA	NA	202.H.1
9360	1318 New Mexico Ave	4165	Solvent Cleaning Machine	NA	8	NA	2080	Hr	202.U.2-3
9505	180 Landfill Rd	3164	AST; Diesel; 500 Gallons	NA	24	NA	8760	Hr	202.V.2
10711	433 Herado Ave	4126	Solvent Cleaning Machine	NA	8	NA	2080	Hr	202.U.2-3
10711	433 Herado Ave	4374	Spray Gun Washer	NA	8	NA	2080	Hr	202.U.2-3
10711	433 Herado Ave	703462	Abrasive Blasting Operations	NA	NA	NA	NA	NA	202.H.1
10713	431 Herado Ave	3954	Solvent Cleaning Machine	NA	8	NA	2080	Hr	202.U.2-3
10723	Nevada Ave	1214	AST; Diesel; 4,000 Gallons	NA	24	NA	8760	Hr	202.V.2
10726	442 Washington Ave	UST04	UST; Biodiesel; 10,000 gallons	NA	24	NA	8760	Hr	202.V.2
21155	155 Corral Rd	4165	Solvent Cleaning Machine	NA	8	NA	2080	Hr	202.U.2-3
21330	End of Gun Road	3493	Small Arms Range	NA	NA	NA	NA	NA	202.D.10
		636301							
		641666							
		636300							
		636302							

NA = Not Available
RN = Registered Number
FFSRA = Federal Facility Site Remediation Agreement

4.0 COMPLIANCE PLAN

4.1 Federally Enforceable District Rules

Table 4-1. Federally Enforceable District Rules

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

Table 4-1. Federally Enforceable District Rules

Rule Number	Rule Name	Affected Emission Units	In Compliance? (Yes/ No/ Exempt/ NA)
315	Gasoline Specifications	Gasoline distributors, and sellers on VAFB	Yes
316	Storage and Transfer of Gasoline	Gasoline distributors, and sellers on VAFB	Yes
317	Organic Solvents	VAFB	Yes
319	Asphalt Air Blowing - Southern Zone	None	NA
320	Petroleum Solvent Dry Cleaners	None	NA
321	Solvent Cleaning Operations	VAFB	Yes
322	Metal Surface Coating Thinner and Reducer	VAFB	Yes
323	Architectural Coatings	VAFB	Yes
323.1	Architectural Coatings	VAFB	Yes
324	Disposal and Evaporation of Solvents	VAFB	Yes
325	Crude Oil Production and Separation Rule	None	NA
326	Storage of Reactive Organic Compound Liquids	None	NA
327	Organic Liquid Cargo Vessel Loading	None	NA
328	Continuous Emission Monitoring	South Vandenberg Power Plant	Yes
329	Cutback Asphalt Paving Materials	VAFB	Yes
330	Surface Coating of Manufactured Metal Parts	VAFB	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	VAFB	Yes
339	Motor Vehicle and Mobile Equipment Coating Operations	Spray Paints Booths	Yes
342	Control of NOx from Boilers Steam Generators and Process Heaters	None	NA
343	Petroleum Storage Tank Degassing	Gasoline UST greater than 500 gallons	Yes

Table 4-1. Federally Enforceable District Rules

Rule Number	Rule Name	Affected Emission Units	In Compliance? (Yes/ No/ Exempt/ NA)
344	Petroleum Sumps, Pits & Well Cellars	None	NA
346	Loading of Organic Cargo Vessels	Trucks and trailers used to transfer organic liquids	Yes
349	Polyester Resin Operations	VAFB	Yes
351	Surface Coating of Wood Products	VAFB	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	VAFB	Yes
354	Graphic Arts	VAFB	Yes
359	Flares and Thermal Oxidizers	None	NA
360	Emissions of Oxides of Nitrogen from Large Water Heaters and Small Boilers	Boilers, water heaters, steam generators or process heaters with a rated heat input capacity ≥ 0.75 mbtu/hr and ≤ 2 mmbtu/hr	Yes
361	Small Boilers, Steam Generators and Process Heaters	Boilers, steam generators, and process heaters with heat input capacity > 2 mmbtu/hr and < 5 mmbtu/hr	Yes
370	Potential to Emit-Limitation for Part 70 Sources	VAFB	Yes
401	Agricultural and Prescribed Burning	VAFB	Yes
403	Burning Permit for Non-Burning Days: Report Requirements	VAFB	Yes
505	Breakdown Conditions	VAFB	Yes
603	Emergency Episode Plans	VAFB	Yes
609	Interdistrict Coordination	NA	NA
702	General Conformity	VAFB	Yes
801	New Source Review – Definitions and General Requirements	Not Enforceable	NA
802	New Source Review	Not Enforceable	NA
804	-Offsets	Not Enforceable	NA

Table 4-1. Federally Enforceable District Rules

Rule Number	Rule Name	Affected Emission Units	In Compliance? (Yes/ No/ Exempt/ NA)
805	Air Quality Impact Analysis, Modeling, Monitoring, and Air Quality Increment Consumption	Not Enforceable	NA
806	Emission Reduction Credits	Not Enforceable	NA
808	New Source Review for Major Sources of Hazardous Air Pollutants	Not Enforceable	NA
809	Federal Minor Source New Source Review	Not Enforceable	NA
810	Federal Prevention of Significant Deterioration (PSD)	Not Enforceable	NA
1301	General Information	VAFB	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

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 VAFB	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)	

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 Air Force Base (VAFB) T-V Emissions Calcs spreadsheet for estimated emissions.

Architectural Coatings

The 2018 HazMart records indicate VAFB emitted 16.43 tons of ROCs 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

The APCD spreadsheet GDF Emissions Ver 1.0 was used to generate the emissions in the Storage Tanks tab in VAFB T-V Emissions Calcs spreadsheet.

Explosive Ordinance Disposal (EOD) Range

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

Scrubbers, Fuel/Nitrogen Tetroxide

These two scrubbers were permitted under PTO 9171-R2. The PTO was cancelled because the emissions going into the scrubber come from permit exempt operations and therefore a permit is not required for the scrubbers. The current emissions from the scrubbers can reasonably be estimated as the permitted emissions. The ROC emissions from the scrubber are taken directly from the permit and include isopropyl alcohol emissions that are now recorded and reported under the VAFB miscellaneous solvent report, Device ID 114277.

Small Arms Range

Emissions were estimated using information from AP-42 and are shown in the Small Arms Range tab in VAFB 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 VAFB 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 VAFB 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	ROC	PM10	NOX	ROC	PM10
Permit Exempt ICE	24,574	3,497	NE	12.29	1.75	0.00
PERP Registered ICE	14,026	4,727	NE	7.01	2.36	0.00
Tactical Support Equipment	76,520	6,758	NE	38.26	3.38	0.00
External Combustion	53,380	2,894	NE	26.69	1.45	0.00
Abrasive Blasting	NE	NE	1961.44	0.00	0.00	0.98
Architectural Coatings	NE	32,854	NE	0.00	16.43	0.00
Fuel Storage Tanks	NE	201	NE	0.00	0.10	0.00
EOD Range	80	7	NE	0.04	0.00	0.00
Scrubbers Fuel/Nitrogen Tetroxide	320	52	NE	0.16	0.03	0.00
Small Arms Range	49	NE	NE	0.02	0.00	0.00
Soil Vapor Extraction Systems	NE	13.50	NE	0.00	0.01	0.00
Wood Chipper	NE	NE	8,528	0.00	0.00	4.26
Total	168,949	51,005	10,489	84.47	25.50	5.24

Notes:

NE = Not Estimated

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

Description	Location	Pri_ID	Fuel	Equation	Hours PTE	Size (BHP)	Emission Factors NOx*	Emission Factors ROC*	Emissions (Lbs/Yr) NOx	Emissions (Lbs/Yr) ROC
Stationary										
Facility Power	1577	632	LPG	HRS_YR*HP*EF_FACTOR*0.1148/1000	199.9	77	139.08	30.195	245.76	37.12
Facility Power	1579	635	Diesel	HRS_YR*HP*EF_FACTOR/453.6	500	45	14.1	1.12	699.40	55.56
Facility Power	14300	765	LPG	HRS_YR*HP*EF_FACTOR*0.1148/1000	199.9	57	139.08	30.195	181.93	27.48
Facility Power	13675	766	LPG	HRS_YR*HP*EF_FACTOR*0.1148/1000	199.9	90	139.08	30.195	287.25	43.39
Facility Power	23215	770	NG	HP*EF_FACTOR*10*HRS_YR/1000000	199.9	1466	863.94	120.36	2531.81	352.72
Facility Power	23215	771	NG	HP*EF_FACTOR*10*HRS_YR/1000000	199.9	1466	863.94	120.36	2531.81	352.72
Facility Power	8310	869	LPG	HRS_YR*HP*EF_FACTOR*0.1148/1000	199.9	50	139.08	30.195	159.58	24.11
Facility Power	1905	3019	Diesel	HRS_YR*HP*EF_FACTOR/453.6	500	38	14.1	1.12	590.61	46.91
Facility Power	8510	3053	NG	HP*EF_FACTOR*10*HRS_YR/1000000	199.9	170	863.94	120.36	293.59	40.90
Facility Power	752	3054	Diesel	HRS_YR*HP*EF_FACTOR/453.6	500	42	14.1	1.12	652.78	51.85
Facility Power	51	3063	LPG	HRS_YR*HP*EF_FACTOR*0.1148/1000	199.9	104	139.08	30.195	331.93	50.14
Facility Power	6670	3068	NG	HP*EF_FACTOR*10*HRS_YR/1000000	199.9	173	863.94	120.36	298.77	41.62
Facility Power	865	3072	LPG	HRS_YR*HP*EF_FACTOR*0.1148/1000	199.9	77	139.08	30.195	245.76	37.12
Facility Power	475	3083	LPG	HRS_YR*HP*EF_FACTOR*0.1148/1000	199.9	500	139.08	30.195	1595.84	241.05
Facility Power	11477	3187	Diesel	HRS_YR*HP*EF_FACTOR/453.6	500	12	14.1	1.12	186.51	14.81
Facility Power	1524	3190	Diesel	HRS_YR*HP*EF_FACTOR/453.6	500	19	14.1	1.12	295.30	23.46
Facility Power	866	3278	LPG	HRS_YR*HP*EF_FACTOR*0.1148/1000	199.9	27	139.08	30.195	86.18	13.02
Facility Power	6601	3396	LPG	HRS_YR*HP*EF_FACTOR*0.1148/1000	199.9	173	139.08	30.195	552.16	83.40
Facility Power	1743	3567	LPG	HRS_YR*HP*EF_FACTOR*0.1148/1000	199.9	173	139.08	30.195	552.16	83.40
Facility Power	518	3603	Diesel	HRS_YR*HP*EF_FACTOR/453.6	500	44.8	5.2	0.4	256.79	19.75
Facility Power	23160	3605	Diesel	HRS_YR*HP*EF_FACTOR/453.6	500	44.8	5.2	0.4	256.79	19.75
Facility Power	1737	3804	Diesel	HRS_YR*HP*EF_FACTOR/453.6	500	18	14.1	1.12	279.76	22.22
Facility Power	490	3914	Diesel	HRS_YR*HP*EF_FACTOR/453.6	500	44.8	14.1	1.12	696.30	55.31
Facility Power	752	3932	Diesel	HRS_YR*HP*EF_FACTOR/453.6	500	42	14.1	1.12	652.78	51.85
Facility Power	13730	3952	LPG	HRS_YR*HP*EF_FACTOR*0.1148/1000	199.9	95	139.08	30.195	303.21	45.80
Facility Power	1740	4003	LPG	HRS_YR*HP*EF_FACTOR*0.1148/1000	199.9	77	139.08	30.195	245.76	37.12
Facility Power	1530	4067	LPG	HRS_YR*HP*EF_FACTOR*0.1148/1000	199.9	55	139.08	30.195	175.54	26.52
Facility Power	1841	4113	Diesel	HRS_YR*HP*EF_FACTOR/453.6	500	25	5.2	0.4	143.30	11.02
Facility Power	1501	4177	Diesel	HRS_YR*HP*EF_FACTOR/453.6	500	47	14.1	1.12	730.49	58.02
Facility Power	7	4296	Diesel	HRS_YR*HP*EF_FACTOR/453.6	500	49	14.1	1.12	761.57	60.49
Facility Power	964	677064	Diesel	HRS_YR*HP*EF_FACTOR/453.6	500	45	14.1	1.12	699.40	55.56
Facility Power	966	677065	Diesel	HRS_YR*HP*EF_FACTOR/453.6	500	45	14.1	1.12	699.40	55.56
Facility Power	1591	677066	Diesel	HRS_YR*HP*EF_FACTOR/453.6	500	13	14.1	1.12	202.05	16.05
Facility Power	1592	677067	Diesel	HRS_YR*HP*EF_FACTOR/453.6	500	13	14.1	1.12	202.05	16.05
Facility Power	799	703337	Diesel	HRS_YR*HP*EF_FACTOR/453.6	500	49	14.1	1.12	761.57	60.49
Facility Power	700	713358	Diesel	HRS_YR*HP*EF_FACTOR/453.6	500	24.3	14.1	1.12	377.68	30.00
Portable										
Trailer/Van APU	VARIOUS LOCATIONS	594	Diesel	HRS_YR*HP*EF_FACTOR/453.6	500	22	14.1	1.12	341.93	27.16
Welding	10711	762	Diesel	HRS_YR*HP*EF_FACTOR/453.6	500	32.5	14.1	1.12	505.13	40.12
Welding [(a)]	1620C	3316	Gasoline	HRS_YR*HP*EF_FACTOR*0.0808/1000	500	38	203.75	365	312.80	560.35

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

Description	Location	Pri_ID	Fuel	Equation	Hours PTE	Size (BHP)	Emission Factors NOx*	Emission Factors ROC*	Emissions (Lbs/Yr) NOx	Emissions (Lbs/Yr) ROC
Auxiliary Power	9320	3328	Diesel	HRS_YR*HP*EF_FACTOR/453.6	500	42	14.1	1.12	652.78	51.85
Leaf Blower[(a)]	5425	3602	Gasoline	FUEL /1000*EF_FACTOR	500	23	203.75	365	189.32	339.16
Air Compressor	525	3992	Diesel	HRS_YR*HP*EF_FACTOR/453.6	500	49	5.2	0.4	280.86	21.60
Air Compressor	525	3993	Diesel	HRS_YR*HP*EF_FACTOR/453.6	500	49	5.2	0.4	280.86	21.60
Air Compressor	525	3994	Diesel	HRS_YR*HP*EF_FACTOR/453.6	500	49	5.2	0.4	280.86	21.60
Air Compressor	525	3995	Diesel	HRS_YR*HP*EF_FACTOR/453.6	500	49	5.2	0.4	280.86	21.60
Air Compressor	525	4021	Diesel	HRS_YR*HP*EF_FACTOR/453.6	500	49	5.2	0.4	280.86	21.60
Air Compressor	525	4022	Diesel	HRS_YR*HP*EF_FACTOR/453.6	500	49	5.2	0.4	280.86	21.60
Air Compressor	525	4023	Diesel	HRS_YR*HP*EF_FACTOR/453.6	500	49	5.2	0.4	280.86	21.60
Air Compressor	525	4024	Diesel	HRS_YR*HP*EF_FACTOR/453.6	500	49	5.2	0.4	280.86	21.60
Auxiliary Power	3000	4072	Diesel	HRS_YR*HP*EF_FACTOR/453.6	500	49	5.2	0.4	280.86	21.60
Auxiliary Power	3000	4073	Diesel	HRS_YR*HP*EF_FACTOR/453.6	500	49	5.2	0.4	280.86	21.60
Pressuer Washer[(a)]	VARIOUS LOCATIONS	695013	Gasoline	FUEL /1000*EF_FACTOR	500	20	203.75	365	4491.84	8046.74
Air Compressor	525	707871	Diesel	HRS_YR*HP*EF_FACTOR/453.6	500	49	5.2	0.4	280.86	21.60
Air Compressor	525	707880	Diesel	HRS_YR*HP*EF_FACTOR/453.6	500	49	5.2	0.4	280.86	21.60
Auxiliary Power	VARIOUS LOCATIONS	709118	Diesel	HRS_YR*HP*EF_FACTOR/453.6	500	22	14.1	1.12	341.93	27.16
Auxiliary Power	VARIOUS LOCATIONS	709119	Diesel	HRS_YR*HP*EF_FACTOR/453.6	500	22	14.1	1.12	341.93	27.16
Auxiliary Power	VARIOUS LOCATIONS	709120	Diesel	HRS_YR*HP*EF_FACTOR/453.6	500	22	14.1	1.12	341.93	27.16
Pressure Washer[(a)]	VARIOUS LOCATIONS	714350	Gasoline	FUEL /1000*EF_FACTOR	500	12	203.75	365	2695.11	4828.04
								Total (Lbs/yr)	**24,574.18**	**3,497.05**
								Total (TPY)	**12.29**	**1.75**

Notes:
For spark ignited engines, hours for PTE is 199.9 hours; Emission Factors Units are - LPG = lbs/1000 gal; NG = lbs/MMSCF
For compression ignition engines, hours for PTE is 500 hours; Emission Factors are in gms/hp-hr
(a)For this source, hours are the annual fuel usage in gallons with a PTE of 500 gallons/year; Emission Factors Units are lbs/1000 gal.

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

Description	Registration #	Location	Pri_ID	Fuel	Engine Tier	Equation	Hours PTE	Size (BHP)	Emission Factors NOx*	Emission Factors ROC*	Emissions (Lbs/Yr) NOx	Emissions (Lbs/Yr) ROC
Auxiliary Power	120369	VARIOUS LOCATIONS	3516	Diesel	OFF-RD TIER_1 100-175 HP	HRS_YR*HP*EF_FACTOR/453.6	500	119	6.9	1.12	905.09	146.91
APU for Transports	120370	VARIOUS LOCATIONS	3517	Diesel	OFF-RD TIER_1 100-175 HP	HRS_YR*HP*EF_FACTOR/453.6	500	119	6.9	1.12	905.09	146.91
Air Compressor	141898	VARIOUS LOCATIONS	3912	Diesel	OFF-RD TIER_3 175-300 HP	HRS_YR*HP*EF_FACTOR/453.6	500	260	2.8	0.3996	802.47	114.52
Air Compressor	141899	VARIOUS LOCATIONS	3913	Diesel	OFF-RD TIER_3 175-300 HP	HRS_YR*HP*EF_FACTOR/453.6	500	260	2.8	0.3996	802.47	114.52
ATS Prime Mover APU	144722	VARIOUS LOCATIONS	3949	Diesel	OFF-RD TIER_3 100-175 HP	HRS_YR*HP*EF_FACTOR/453.6	500	172	2.8	1.12	530.86	212.35
ATS Prime Mover APU	144723	VARIOUS LOCATIONS	3950	Diesel	OFF-RD TIER_3 100-175 HP	HRS_YR*HP*EF_FACTOR/453.6	500	172	2.8	1.12	530.86	212.35
Auxiliary Power	146503	VARIOUS LOCATIONS	3982	Diesel	OFF-RD TIER_4i 50-75 HP	HRS_YR*HP*EF_FACTOR/453.6	500	57	3.5	1.12	219.91	70.37
Auxiliary Power	146695	VARIOUS LOCATIONS	3985	Diesel	OFF-RD TIER_3 300-600 HP	HRS_YR*HP*EF_FACTOR/453.6	500	315	2.8	0.1998	972.22	69.38
Wastewater Pump	149555	VARIOUS LOCATIONS	4015	Diesel	OFF-RD TIER_3 75-100 HP	HRS_YR*HP*EF_FACTOR/453.6	500	80	3.3	0.1998	291.01	17.62
Wastewater Pump	149556	VARIOUS LOCATIONS	4016	Diesel	OFF-RD TIER_3 75-100 HP	HRS_YR*HP*EF_FACTOR/453.6	500	80	3.3	0.1998	291.01	17.62
Wastewater Pump	149557	VARIOUS LOCATIONS	4017	Diesel	OFF-RD TIER_3 75-100 HP	HRS_YR*HP*EF_FACTOR/453.6	500	80	3.3	0.1998	291.01	17.62
Air Compressor	153516	VARIOUS LOCATIONS	4095	Diesel	OFF-RD TIER_3 100-175 HP	HRS_YR*HP*EF_FACTOR/453.6	500	130	2.8	1.12	401.23	160.49
Air Compressor	153517	VARIOUS LOCATIONS	4097	Diesel	OFF-RD TIER_3 100-175 HP	HRS_YR*HP*EF_FACTOR/453.6	500	130	2.8	1.12	401.23	160.49
Auxiliary Power	154640	VARIOUS LOCATIONS	4124	Diesel	OFF-RD TIER_3 300-600 HP	HRS_YR*HP*EF_FACTOR/453.6	500	349	2.8	0.1998	1077.16	76.86
Other	157631	VARIOUS LOCATIONS	4294	Diesel	OFF-RD TIER_4i 50-75 HP	HRS_YR*HP*EF_FACTOR/453.6	500	60	3.5	1.12	231.48	74.07
Air Compressor	158388	VARIOUS LOCATIONS	4307	Diesel	OFF-RD TIER_3 175-300 HP	HRS_YR*HP*EF_FACTOR/453.6	500	260	2.8	0.3996	802.47	114.52
Vacuum Pump	160694	VARIOUS LOCATIONS	4368	Diesel	OFF-RD TIER_3 100-175 HP	HRS_YR*HP*EF_FACTOR/453.6	500	140	2.8	1.12	432.10	172.84
Chipper Engine	157630	VARIOUS LOCATIONS	4293	Diesel	OFF-RD TIER_3 100-175 HP	HRS_YR*HP*EF_FACTOR/453.6	500	115	2.8	1.12	354.94	141.98
Payload Transport Spt	159459	VARIOUS LOCATIONS	4317	Diesel	OFF-RD TIER_3 100-175 HP	HRS_YR*HP*EF_FACTOR/453.6	500	173	2.8	1.12	533.95	213.58
APU on Vacuum Truck	160694	VARIOUS LOCATIONS	645481	Diesel	OFF-RD TIER_3 100-175 HP	HRS_YR*HP*EF_FACTOR/453.6	500	140	2.8	1.12	432.10	172.84
Auxiliary Power	162910	VARIOUS LOCATIONS	652758	Diesel	OFF-RD TIER_1 100-175 HP	HRS_YR*HP*EF_FACTOR/453.6	500	166	6.9	1.12	1262.57	204.94
Auxiliary Power	165532	VARIOUS LOCATIONS	667306	Diesel	OFF-RD TIER_1 100-175 HP	HRS_YR*HP*EF_FACTOR/453.6	500	100	6.9	1.12	760.58	123.46
Auxiliary Power	172855	VARIOUS LOCATIONS	698117	Diesel	OFF-RD TIER_4 100-175 HP	HRS_YR*HP*EF_FACTOR/453.6	500	115	0.14	1.12	17.75	141.98
Auxiliary Power	173572	VARIOUS LOCATIONS	700047	Diesel	OFF-RD TIER_4 50-75 HP	HRS_YR*HP*EF_FACTOR/453.6	500	74	3.5	1.12	285.49	91.36
Auxiliary Power	173573	VARIOUS LOCATIONS	700099	Diesel	OFF-RD TIER_4 50-75 HP	HRS_YR*HP*EF_FACTOR/453.6	500	74	3.5	1.12	285.49	91.36
Auxiliary Power	173574	VARIOUS LOCATIONS	700100	Diesel	OFF-RD TIER_4 300-600 HP	HRS_YR*HP*EF_FACTOR/453.6	500	320	0.14	1.12	49.38	395.06
Auxiliary Power	174907	VARIOUS LOCATIONS	702142	Diesel	OFF-RD TIER_4 100-175 HP	HRS_YR*HP*EF_FACTOR/453.7	500	155	0.14	1.12	23.92	191.36
Air Compressor	179153	VARIOUS LOCATIONS	717151	Diesel	OFF-RD TIER_4 175-300 HP	HRS_YR*HP*EF_FACTOR/453.6	500	260	0.14	1.12	40.12	320.99
Air Compressor	179154	VARIOUS LOCATIONS	717152	Diesel	OFF-RD TIER_4 175-300 HP	HRS_YR*HP*EF_FACTOR/453.6	500	260	0.14	1.12	40.12	320.99
Auxiliary Power	182216	VARIOUS LOCATIONS	718068	Diesel	OFF-RD TIER_4 100-175 HP	HRS_YR*HP*EF_FACTOR/453.6	500	169	0.14	1.12	26.08	208.64
Auxiliary Power	182217	VARIOUS LOCATIONS	718669	Diesel	OFF-RD TIER_4 100-175 HP	HRS_YR*HP*EF_FACTOR/453.6	500	169	0.14	1.12	26.08	208.64
										Total (Lbs/yr)	**14,026.26**	**4,726.62**
										Total (TPY)	**7.01**	**2.36**

Notes:
Emission factors are in gm/hp-hr
PTE Usage is estimated at 500 hours/yr

Table A-4. Estimated Emissions from TSE Internal Combustion Engines

Description	Location	Pri ID	Fuel	Engine Tier	Equation	Hours PTE	Size (BHP)	Emission Factors NOx*	Emission Factors ROC*	Emissions (Lbs/Yr) NOx	Emissions (Lbs/Yr) ROC
Auxiliary Power	VARIOUS LOCATIONS	696	Diesel	OFF-RD TIER_0	HRS_YR*HP*EF_FACTOR/453.6	500	390	14.1	1.12	6061.51	481.48
Auxiliary Power	VARIOUS LOCATIONS	708	Diesel	OFF-RD TIER_0	HRS_YR*HP*EF_FACTOR/453.6	500	148	14.1	1.12	2300.26	182.72
Aircraft Engine Starting[a]	VARIOUS LOCATIONS	2055	JP-8	JP-8/PTO 8585	FUEL /1000*EF_FACTOR	250	100	67.8	4.77	16.95	1.19
Auxiliary Power	VARIOUS LOCATIONS	3027	Diesel	OFF-RD TIER_0	HRS_YR*HP*EF_FACTOR/453.6	500	390	14.1	1.12	6061.51	481.48
Generator	VARIOUS LOCATIONS	3035	Diesel	OFF-RD TIER_1	HRS_YR*HP*EF_FACTOR/453.5	500	79	14.1	1.12	1227.84	97.53
Auxiliary Power	VARIOUS LOCATIONS	3037	Diesel	OFF-RD TIER_0	HRS_YR*HP*EF_FACTOR/453.6	500	80	14.1	1.12	1243.39	98.77
Auxiliary Power	VARIOUS LOCATIONS	3038	Diesel	OFF-RD TIER_0	HRS_YR*HP*EF_FACTOR/453.6	500	80	14.1	1.12	1243.39	98.77
Auxiliary Power	VARIOUS LOCATIONS	3193	Diesel	OFF-RD TIER_0	HRS_YR*HP*EF_FACTOR/453.6	500	30	14.1	1.12	466.27	37.04
Auxiliary Power	VARIOUS LOCATIONS	3194	Diesel	OFF-RD TIER_0	HRS_YR*HP*EF_FACTOR/453.6	500	30	14.1	1.12	466.27	37.04
Optical Tracking	VARIOUS LOCATIONS	3394	Diesel	OFF-RD TIER_0	HRS_YR*HP*EF_FACTOR/453.6	250	16	14.1	1.12	124.34	9.88
Pumping Operations	VARIOUS LOCATIONS	3419	Diesel	OFF-RD TIER_1 75-100 HP	HRS_YR*HP*EF_FACTOR/453.6	500	80	6.9	1.12	608.47	98.77
Aircraft Support	VARIOUS LOCATIONS	3421	Diesel	OFF-RD TIER_0	HRS_YR*HP*EF_FACTOR/453.6	250	49	14.1	1.12	380.79	30.25
Optical Tracking	VARIOUS LOCATIONS	3558	Diesel	OFF-RD TIER_0	HRS_YR*HP*EF_FACTOR/453.6	250	16	14.1	1.12	124.34	9.88
Optical Tracking	VARIOUS LOCATIONS	3559	Diesel	OFF-RD TIER_0	HRS_YR*HP*EF_FACTOR/453.6	250	16	14.1	1.12	124.34	9.88
Transient Maintenance	VARIOUS LOCATIONS	3613	Diesel	OFF-RD TIER_0	HRS_YR*HP*EF_FACTOR/453.6	500	148	14.1	1.12	2300.26	182.72
Transient Maintenance	VARIOUS LOCATIONS	3614	Diesel	OFF-RD TIER_0	HRS_YR*HP*EF_FACTOR/453.6	500	148	14.1	1.12	2300.26	182.72
Transient Maintenance	VARIOUS LOCATIONS	3615	Diesel	OFF-RD TIER_0	HRS_YR*HP*EF_FACTOR/453.6	500	148	14.1	1.12	2300.26	182.72
Transient Maintenance	VARIOUS LOCATIONS	3616	Diesel	OFF-RD TIER_0	HRS_YR*HP*EF_FACTOR/453.6	500	148	14.1	1.12	2300.26	182.72
Transient Maintenance	VARIOUS LOCATIONS	3617	Diesel	OFF-RD TIER_0	HRS_YR*HP*EF_FACTOR/453.6	500	148	14.1	1.12	2300.26	182.72
Transient Maintenance	VARIOUS LOCATIONS	3618	Diesel	OFF-RD TIER_0	HRS_YR*HP*EF_FACTOR/453.6	500	148	14.1	1.12	2300.26	182.72
Optical Tracking	VARIOUS LOCATIONS	3644	Diesel	OFF-RD TIER_0	HRS_YR*HP*EF_FACTOR/453.6	500	134	14.1	1.12	2082.67	165.43
Auxiliary Power	VARIOUS LOCATIONS	3735	Diesel	OFF-RD TIER_0	HRS_YR*HP*EF_FACTOR/453.6	500	64	14.1	1.12	994.71	79.01
Auxiliary Power	VARIOUS LOCATIONS	3736	Diesel	OFF-RD TIER_0	HRS_YR*HP*EF_FACTOR/453.6	500	64	14.1	1.12	994.71	79.01
Optical Tracking	VARIOUS LOCATIONS	3808	Diesel	OFF-RD TIER_0	HRS_YR*HP*EF_FACTOR/453.6	500	82	14.1	1.12	1274.47	101.23
Optical Tracking	VARIOUS LOCATIONS	3809	Diesel	OFF-RD TIER_0	HRS_YR*HP*EF_FACTOR/453.6	500	82	14.1	1.12	1274.47	101.23
Auxiliary Power	VARIOUS LOCATIONS	3817	Diesel	OFF-RD TIER_3 175-300 HP	HRS_YR*HP*EF_FACTOR/453.6	500	216	2.8	0.3996	666.67	95.14
Auxiliary Power	VARIOUS LOCATIONS	3818	Diesel	OFF-RD TIER_3 175-300 HP	HRS_YR*HP*EF_FACTOR/453.6	500	216	2.8	0.3996	666.67	95.14
Trailer/Van APU	VARIOUS LOCATIONS	3820	Diesel	OFF-RD TIER_0	HRS_YR*HP*EF_FACTOR/453.6	500	56	14.1	1.12	870.37	69.14
Trailer/Van APU	VARIOUS LOCATIONS	3821	Diesel	OFF-RD TIER_0	HRS_YR*HP*EF_FACTOR/453.6	500	56	14.1	1.12	870.37	69.14
Compressor	VARIOUS LOCATIONS	3892	Diesel	OFF-RD TIER_1 75-100 HP	HRS_YR*HP*EF_FACTOR/453.6	500	78	6.9	1.12	593.25	96.30
Pump & Blower	VARIOUS LOCATIONS	3894	Diesel	OFF-RD TIER_2 75-100 HP	HRS_YR*HP*EF_FACTOR/453.6	500	99	5.2	0.3996	567.46	43.61
Compressor	VARIOUS LOCATIONS	3902	Diesel	OFF-RD TIER_0	HRS_YR*HP*EF_FACTOR/453.6	500	78	14.1	1.12	1212.30	96.30
Auxiliary Power	VARIOUS LOCATIONS	3903	Diesel	OFF-RD TIER_2 50-75 HP	HRS_YR*HP*EF_FACTOR/453.6	500	64	5.2	0.3996	366.84	28.19
TRS Support	VARIOUS LOCATIONS	3946	Diesel	OFF-RD TIER_0	HRS_YR*HP*EF_FACTOR/453.6	500	155	14.1	1.12	2409.06	191.36
Optical Tracking	VARIOUS LOCATIONS	4008	Diesel	OFF-RD TIER_0	HRS_YR*HP*EF_FACTOR/453.6	500	134	14.1	1.12	2082.67	165.43
Optical Tracking	VARIOUS LOCATIONS	4009	Diesel	OFF-RD TIER_0	HRS_YR*HP*EF_FACTOR/453.6	500	134	14.1	1.12	2082.67	165.43
Generator	VARIOUS LOCATIONS	4034	Diesel	OFF-RD TIER_1	HRS_YR*HP*EF_FACTOR/453.7	500	24.1	14.1	1.12	374.57	29.75
Generator	VARIOUS LOCATIONS	4035	Diesel	OFF-RD TIER_2	HRS_YR*HP*EF_FACTOR/453.8	500	24.1	14.1	1.12	374.57	29.75
Auxiliary Power	VARIOUS LOCATIONS	4143	Diesel	OFF-RD TIER_1 175-300 HP	HRS_YR*HP*EF_FACTOR/453.6	500	215	6.9	0.999	1635.25	236.76
Sweeper[b]	VARIOUS LOCATIONS	4288	Diesel	OFF-RD TIER_4i 50-75 HP	HRS_YR*HP*EF_FACTOR/453.6	1000	50	3.5	1.12	385.80	123.46
Generator	VARIOUS LOCATIONS	4298	Diesel	OFF-RD TIER_1 75-100 HP	HRS_YR*HP*EF_FACTOR/453.6	500	99	6.9	1.12	752.98	122.22
Generator	VARIOUS LOCATIONS	4299	Diesel	OFF-RD TIER_1 75-100 HP	HRS_YR*HP*EF_FACTOR/453.6	500	99	6.9	1.12	752.98	122.22
Generator	VARIOUS LOCATIONS	4300	Diesel	OFF-RD TIER_1 75-100 HP	HRS_YR*HP*EF_FACTOR/453.6	500	99	6.9	1.12	752.98	122.22
Generator	VARIOUS LOCATIONS	4301	Diesel	OFF-RD TIER_1 75-100 HP	HRS_YR*HP*EF_FACTOR/453.6	500	99	6.9	1.12	752.98	122.22
Start Cart[a]	VARIOUS LOCATIONS	4310	JP-8	JP-8/PTO 8585	FUEL /1000*EF_FACTOR	250	38.8	67.8	4.77	1449.87	102.00
Start Cart[a]	VARIOUS LOCATIONS	4311	JP-8	JP-8/PTO 8585	FUEL /1000*EF_FACTOR	250	38.8	67.8	4.77	1449.87	102.00
Water Pump	VARIOUS LOCATIONS	4364	Diesel	OFF-RD TIER_2 50-75 HP	HRS_YR*HP*EF_FACTOR/453.6	500	63	5.2	0.3996	361.11	27.75
Start Cart[a]	VARIOUS LOCATIONS	653788	JP-8	JP-8	FUEL /1000*EF_FACTOR	250	38.8	67.8	4.77	1449.87	102.00
Start Cart[a]	VARIOUS LOCATIONS	653789	JP-8	JP-8	FUEL /1000*EF_FACTOR	250	38.8	67.8	4.77	1449.87	102.00
Aircraft Engine Starting[a]	VARIOUS LOCATIONS	630175	JP-8	JP-8	FUEL /1000*EF_FACTOR	250	100	67.8	4.77	3736.77	262.90
Water Pump	VARIOUS LOCATIONS	644515	Diesel	OFF-RD TIER_0	HRS_YR*HP*EF_FACTOR/453.6	500	63	14.1	1.12	979.17	77.78
Water Pump	VARIOUS LOCATIONS	644516	Diesel	OFF-RD TIER_0	HRS_YR*HP*EF_FACTOR/453.6	500	63	14.1	1.12	979.17	77.78
Auxiliary Power	VARIOUS LOCATIONS	677068	Diesel	OFF-RD TIER_3 300-600 HP	HRS_YR*HP*EF_FACTOR/453.6	500	569	5.2	0.4	3271.75	256.05
Generator	VARIOUS LOCATIONS	703347	Diesel	OFF-RD TIER_1 75-100 HP	HRS_YR*HP*EF_FACTOR/453.6	500	134	6.9	1.12	1019.18	165.43
Generator	VARIOUS LOCATIONS	703412	Diesel	OFF-RD TIER_2 100-175 HP	HRS_YR*HP*EF_FACTOR/453.6	500	110	5.2	0.3996	630.51	48.45

Table A-4. Estimated Emissions from TSE Internal Combustion Engines

Description	Location	Pri_ID	Fuel	Engine Tier	Equation	Hours PTE	Size (BHP)	Emission Factors NOx*	Emission Factors ROC*	Emissions (Lbs/Yr) NOx	Emissions (Lbs/Yr) ROC
Generator	VARIOUS LOCATIONS	712927	Diesel	OFF-RD TIER_1 75-100 HP	HRS_YR*HP*EF_FACTOR/453.6	500	92	6.9	1.12	699.74	113.58
									Total (Lbs/yr)	**76,519.58**	**6,758.38**
									Total (TPY)	**38.26**	**3.38**

Notes:
Emission factors are in gm/hp-hr
PTE Usage is estimated at 500 hours/yr
(a) For this source, Hours are gallons of fuel; Emission Factors Units are lbs/1000 gal.
(b) For this source, PTE Usage is estimated at 1000 hours/yr

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

Description	Location	Pri ID	Capacity (MMBTU)	Fuel	Equation	Usage PTE	Usage Units	Emission Factors NOx*	Emission Factors ROC*	Emissions (Lbs/Yr) NOx	Emissions (Lbs/Yr) ROC
Furnace	1577	910	0.1	Propane/LPG	EF_FACTOR*GALS/1000	3,173.91	GALS	13.5	0.47	42.85	1.49
Boiler	1610	912	0.7	Propane/LPG	EF_FACTOR*GALS/1000	22,217.39	GALS	13.45	0.49	298.82	10.89
Boiler	1610	913	0.7	Propane/LPG	EF_FACTOR*GALS/1000	22,217.39	GALS	13.45	0.49	298.82	10.89
Furnace	1749	947	0.1	Natural Gas	EF_FACTOR*MMSCF	0.28	MMSCF	96.60	5.67	26.86	1.58
Furnace	1785	950	0.85	Propane/LPG	EF_FACTOR*GALS/1000	26,978.26	GALS	13.5	0.47	364.21	12.68
Water Heater	1930	963	0.06	Propane/LPG	EF_FACTOR*GALS/1000	1,904.35	GALS	13.45	0.49	25.61	0.93
Furnace	657	981	0.06	Propane/LPG	EF_FACTOR*GALS/1000	1,904.35	GALS	13.45	0.49	25.61	0.93
Furnace	765	1007	0.625	Natural Gas	EF_FACTOR*MMSCF	1.74	MMSCF	102.90	5.67	178.85	9.86
Boiler	1559	1032	1.21	Natural Gas	EF_FACTOR*MMSCF	3.36	MMSCF	102.90	5.67	346.25	19.08
Boiler	7437	1053	0.35	Natural Gas	EF_FACTOR*MMSCF	0.97	MMSCF	96.60	5.67	94.02	5.52
Boiler	8337	1066	0.825	Natural Gas	EF_FACTOR*MMSCF	2.29	MMSCF	102.90	5.67	236.08	13.01
Boiler	8415	1073	1.75	Natural Gas	EF_FACTOR*MMSCF	4.87	MMSCF	102.90	5.67	500.78	27.59
Boiler	10525	1099	0.85	Natural Gas	EF_FACTOR*MMSCF	2.36	MMSCF	102.90	5.67	243.24	13.40
Boiler	11477	1110	0.199	Natural Gas	EF_FACTOR*MMSCF	0.55	MMSCF	96.60	5.67	53.46	3.14
Boiler	13007	1114	0.627	Natural Gas	EF_FACTOR*MMSCF	1.74	MMSCF	102.90	5.67	179.42	9.89
Boiler	13143	1119	0.627	Natural Gas	EF_FACTOR*MMSCF	1.74	MMSCF	102.90	5.67	179.42	9.89
Boiler	13143	1120	0.627	Natural Gas	EF_FACTOR*MMSCF	1.74	MMSCF	102.90	5.67	179.42	9.89
Furnace	10343	2614	0.3	Natural Gas	EF_FACTOR*MMSCF	0.83	MMSCF	96.60	5.67	80.59	4.73
Furnace	10343	2615	0.3	Natural Gas	EF_FACTOR*MMSCF	0.83	MMSCF	96.60	5.67	80.59	4.73
Furnace	6816	2619	0.2	Natural Gas	EF_FACTOR*MMSCF	0.56	MMSCF	96.60	5.67	53.73	3.15
Boiler	8310	2627	1	Natural Gas	EF_FACTOR*MMSCF	2.78	MMSCF	102.90	5.67	286.16	15.77
Boiler	13123	2660	0.512	Natural Gas	EF_FACTOR*MMSCF	1.42	MMSCF	102.90	5.67	146.51	8.07
Boiler	13121	2661	0.512	Natural Gas	EF_FACTOR*MMSCF	1.42	MMSCF	102.90	5.67	146.51	8.07
Boiler	8310	2670	1	Natural Gas	EF_FACTOR*MMSCF	2.78	MMSCF	102.90	5.67	286.16	15.77
Boiler	13121	2679	0.299	Natural Gas	EF_FACTOR*MMSCF	0.83	MMSCF	96.60	5.67	80.32	4.71
Boiler	23235	2683	0.1	Natural Gas	EF_FACTOR*MMSCF	0.28	MMSCF	96.60	5.67	26.86	1.58
Furnace	1521	3116	0.125	Propane/LPG	EF_FACTOR*GALS/1000	3,967.39	GALS	13.5	0.47	53.56	1.86
Furnace	1521	3117	0.125	Propane/LPG	EF_FACTOR*GALS/1000	3,967.39	GALS	13.5	0.47	53.56	1.86
Furnace	1632	3120	0.125	Propane/LPG	EF_FACTOR*GALS/1000	3,967.39	GALS	13.5	0.47	53.56	1.86
Furnace	1810	3123	0.125	Propane/LPG	EF_FACTOR*GALS/1000	3,967.39	GALS	13.5	0.47	53.56	1.86
Furnace	10711	3134	0.35	Natural Gas	EF_FACTOR*MMSCF	0.97	MMSCF	96.60	5.67	94.02	5.52
Furnace	11040	3137	0.055	Natural Gas	EF_FACTOR*MMSCF	0.15	MMSCF	96.60	5.67	14.78	0.87
Furnace	11040	3138	0.055	Natural Gas	EF_FACTOR*MMSCF	0.15	MMSCF	96.60	5.67	14.78	0.87
Boiler	11070	3141	0.264	Natural Gas	EF_FACTOR*MMSCF	0.73	MMSCF	96.60	5.67	70.92	4.16
Furnace	13022	3143	0.4	Natural Gas	EF_FACTOR*MMSCF	1.11	MMSCF	96.60	5.67	107.46	6.31
Boiler	16170	3154	1.467	Natural Gas	EF_FACTOR*MMSCF	4.08	MMSCF	102.90	5.67	419.80	23.13
Boiler	16170	3155	0.333	Natural Gas	EF_FACTOR*MMSCF	0.93	MMSCF	96.60	5.67	89.46	5.25
Furnace	1335	3171	0.11	Propane/LPG	EF_FACTOR*GALS/1000	3,491.30	GALS	13.5	0.47	47.13	1.64
Furnace	1335	3172	0.11	Propane/LPG	EF_FACTOR*GALS/1000	3,491.30	GALS	13.5	0.47	47.13	1.64
Furnace	1335	3173	0.11	Propane/LPG	EF_FACTOR*GALS/1000	3,491.30	GALS	13.5	0.47	47.13	1.64
Furnace	1632	3203	0.125	Propane/LPG	EF_FACTOR*GALS/1000	3,967.39	GALS	13.5	0.47	53.56	1.86
Furnace	1338	3216	0.1	Propane/LPG	EF_FACTOR*GALS/1000	3,173.91	GALS	13.5	0.47	42.85	1.49
Furnace	1530	3217	0.066	Natural Gas	EF_FACTOR*MMSCF	0.18	MMSCF	96.60	5.67	17.73	1.04
Furnace	6005	3219	0.08	Natural Gas	EF_FACTOR*MMSCF	0.22	MMSCF	96.60	5.67	21.49	1.26
Furnace	848	3223	0.1	Natural Gas	EF_FACTOR*MMSCF	0.28	MMSCF	96.60	5.67	26.86	1.58
Boiler	1545	3224	0.32	Natural Gas	EF_FACTOR*MMSCF	0.89	MMSCF	96.60	5.67	85.96	5.05
Boiler	1545	3225	0.32	Natural Gas	EF_FACTOR*MMSCF	0.89	MMSCF	96.60	5.67	85.96	5.05
Furnace	860	3228	0.115	Natural Gas	EF_FACTOR*MMSCF	0.32	MMSCF	96.60	5.67	30.89	1.81
Furnace	860	3229	0.115	Natural Gas	EF_FACTOR*MMSCF	0.32	MMSCF	96.60	5.67	30.89	1.81
Furnace	1544	3230	0.78	Natural Gas	EF_FACTOR*MMSCF	2.17	MMSCF	102.90	5.67	223.20	12.30
Furnace	1659	3235	0.15	Propane/LPG	EF_FACTOR*GALS/1000	4,760.87	GALS	13.5	0.47	64.27	2.24
Furnace	1740	3236	0.074	Natural Gas	EF_FACTOR*MMSCF	0.21	MMSCF	96.60	5.67	19.88	1.17
Furnace	1749	3238	0.08	Natural Gas	EF_FACTOR*MMSCF	0.22	MMSCF	96.60	5.67	21.49	1.26
Furnace	1785	3239	0.088	Propane/LPG	EF_FACTOR*GALS/1000	2,793.04	GALS	13.5	0.47	37.71	1.31
Furnace	6444	3244	0.075	Natural Gas	EF_FACTOR*MMSCF	0.21	MMSCF	96.60	5.67	20.15	1.18
Furnace	9340	3247	0.75	Natural Gas	EF_FACTOR*MMSCF	2.09	MMSCF	102.90	5.67	214.62	11.83
Furnace	10122	3250	0.1	Natural Gas	EF_FACTOR*MMSCF	0.28	MMSCF	96.60	5.67	26.86	1.58
Furnace	10343	3252	0.1	Natural Gas	EF_FACTOR*MMSCF	0.28	MMSCF	96.60	5.67	26.86	1.58
Furnace	10343	3253	0.1	Natural Gas	EF_FACTOR*MMSCF	0.28	MMSCF	96.60	5.67	26.86	1.58
Boiler	21150	3258	0.3	Propane/LPG	EF_FACTOR*GALS/1000	9,521.74	GALS	13.45	0.49	128.07	4.67
Furnace	11152	3260	0.11	Natural Gas	EF_FACTOR*MMSCF	0.31	MMSCF	96.60	5.67	29.55	1.73
Furnace	13001	3262	0.088	Natural Gas	EF_FACTOR*MMSCF	0.24	MMSCF	96.60	5.67	23.64	1.39
Furnace	13001	3263	0.088	Natural Gas	EF_FACTOR*MMSCF	0.24	MMSCF	96.60	5.67	23.64	1.39
Furnace	13001	3264	0.088	Natural Gas	EF_FACTOR*MMSCF	0.24	MMSCF	96.60	5.67	23.64	1.39
Furnace	13001	3265	0.088	Natural Gas	EF_FACTOR*MMSCF	0.24	MMSCF	96.60	5.67	23.64	1.39
Boiler	13321	3270	0.627	Natural Gas	EF_FACTOR*MMSCF	1.74	MMSCF	102.90	5.67	179.42	9.89
Boiler	21330	3273	0.186	Propane/LPG	EF_FACTOR*GALS/1000	5,903.48	GALS	13.45	0.49	79.40	2.89
Furnace	1740	3281	0.15	Natural Gas	EF_FACTOR*MMSCF	0.42	MMSCF	96.60	5.67	40.30	2.37
Furnace	1740	3282	0.075	Natural Gas	EF_FACTOR*MMSCF	0.21	MMSCF	96.60	5.67	20.15	1.18
Furnace	10366	3287	0.11	Natural Gas	EF_FACTOR*MMSCF	0.31	MMSCF	96.60	5.67	29.55	1.73
Furnace	16130	3299	0.13	Natural Gas	EF_FACTOR*MMSCF	0.36	MMSCF	96.60	5.67	34.92	2.05
Furnace	16135	3300	0.13	Natural Gas	EF_FACTOR*MMSCF	0.36	MMSCF	96.60	5.67	34.92	2.05
Furnace	16140	3301	0.13	Natural Gas	EF_FACTOR*MMSCF	0.36	MMSCF	96.60	5.67	34.92	2.05
Furnace	16140	3302	0.13	Natural Gas	EF_FACTOR*MMSCF	0.36	MMSCF	96.60	5.67	34.92	2.05
Furnace	10260	3351	0.125	Natural Gas	EF_FACTOR*MMSCF	0.35	MMSCF	96.60	5.67	33.58	1.97
Furnace	10366	3353	0.1	Natural Gas	EF_FACTOR*MMSCF	0.28	MMSCF	96.60	5.67	26.86	1.58
Furnace	10366	3354	0.1	Natural Gas	EF_FACTOR*MMSCF	0.28	MMSCF	96.60	5.67	26.86	1.58
Furnace	10363	3355	0.125	Natural Gas	EF_FACTOR*MMSCF	0.35	MMSCF	96.60	5.67	33.58	1.97
Furnace	10363	3356	0.125	Natural Gas	EF_FACTOR*MMSCF	0.35	MMSCF	96.60	5.67	33.58	1.97
Furnace	10373	3357	0.1	Natural Gas	EF_FACTOR*MMSCF	0.28	MMSCF	96.60	5.67	26.86	1.58
Furnace	10715	3358	0.25	Natural Gas	EF_FACTOR*MMSCF	0.70	MMSCF	96.60	5.67	67.16	3.94
Furnace	10717	3359	0.08	Natural Gas	EF_FACTOR*MMSCF	0.22	MMSCF	96.60	5.67	21.49	1.26
Furnace	11165	3360	0.115	Natural Gas	EF_FACTOR*MMSCF	0.32	MMSCF	96.60	5.67	30.89	1.81
Boiler	11248	3361	0.264	Natural Gas	EF_FACTOR*MMSCF	0.73	MMSCF	96.60	5.67	70.92	4.16
Furnace	1335	3368	0.11	Propane/LPG	EF_FACTOR*GALS/1000	3,491.30	GALS	13.5	0.47	47.13	1.64
Furnace	12901	3371	0.075	Natural Gas	EF_FACTOR*MMSCF	0.21	MMSCF	96.60	5.67	20.15	1.18
Furnace	17595	3372	0.088	Natural Gas	EF_FACTOR*MMSCF	0.24	MMSCF	96.60	5.67	23.64	1.39
Boiler	2500	3373	0.45	Natural Gas	EF_FACTOR*MMSCF	1.25	MMSCF	102.90	5.67	128.77	7.10

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

Description	Location	Pri ID	Capacity (MMBTU)	Fuel	Equation	Usage PTE	Usage Units	Emission Factors NOx*	Emission Factors ROC*	Emissions (Lbs/Yr) NOx	Emissions (Lbs/Yr) ROC
Furnace	2505	3375	0.1	Natural Gas	EF FACTOR*MMSCF	0.28	MMSCF	96.60	5.67	26.86	1.58
Furnace	6601	3376	0.088	Natural Gas	EF FACTOR*MMSCF	0.24	MMSCF	96.60	5.67	23.64	1.39
Furnace	7430	3378	0.2	Natural Gas	EF FACTOR*MMSCF	0.56	MMSCF	96.60	5.67	53.73	3.15
Furnace	7430	3379	0.135	Natural Gas	EF FACTOR*MMSCF	0.38	MMSCF	96.60	5.67	36.27	2.13
Furnace	8425	3382	0.08	Natural Gas	EF FACTOR*MMSCF	0.22	MMSCF	96.60	5.67	21.49	1.26
Furnace	8425	3383	0.1	Natural Gas	EF FACTOR*MMSCF	0.28	MMSCF	96.60	5.67	26.86	1.58
Furnace	9340	3621	0.15	Natural Gas	EF FACTOR*MMSCF	0.42	MMSCF	96.60	5.67	40.30	2.37
Furnace	9340	3622	0.3	Natural Gas	EF FACTOR*MMSCF	0.83	MMSCF	96.60	5.67	80.59	4.73
Furnace	9340	3623	0.15	Natural Gas	EF FACTOR*MMSCF	0.42	MMSCF	96.60	5.67	40.30	2.37
Furnace	9340	3624	0.25	Natural Gas	EF FACTOR*MMSCF	0.70	MMSCF	96.60	5.67	67.16	3.94
Furnace	9340	3625	0.88	Natural Gas	EF FACTOR*MMSCF	2.45	MMSCF	102.90	5.67	251.82	13.88
Boiler	7050	3627	1	Natural Gas	EF FACTOR*MMSCF	2.78	MMSCF	102.90	5.67	286.16	15.77
Boiler	7050	3628	1	Natural Gas	EF FACTOR*MMSCF	2.78	MMSCF	102.90	5.67	286.16	15.77
Boiler	75	3629	0.7	Propane/LPG	EF FACTOR*GALS/1000	22,217.39	GALS	13.45	0.49	298.82	10.89
Boiler	8337	3630	0.7	Natural Gas	EF FACTOR*GALS/1000	1.95	MMSCF	102.90	5.67	200.31	11.04
Boiler	8337	3631	0.7	Natural Gas	EF FACTOR*GALS/1000	1.95	MMSCF	102.90	5.67	200.31	11.04
Boiler	9320	3636	1.79	Natural Gas	EF FACTOR*MMSCF	4.98	MMSCF	102.90	5.67	512.23	28.22
Boiler	11439	3637	0.76	Natural Gas	EF FACTOR*MMSCF	2.11	MMSCF	102.90	5.67	217.48	11.98
Boiler	861	3646	0.6	Natural Gas	EF FACTOR*MMSCF	1.67	MMSCF	102.90	5.67	171.70	9.46
Boiler	1555	3652	0.99	Natural Gas	EF FACTOR*MMSCF	2.75	MMSCF	102.90	5.67	283.30	15.61
Boiler	1555	3653	0.65	Natural Gas	EF FACTOR*MMSCF	1.81	MMSCF	102.90	5.67	186.00	10.25
Boiler	1731	3654	0.75	Natural Gas	EF FACTOR*MMSCF	2.09	MMSCF	102.90	5.67	214.62	11.83
Boiler	1824	3659	0.135	Propane/LPG	EF FACTOR*GALS/1000	4,284.78	GALS	13.45	0.49	57.63	2.10
Boiler	1833	3660	0.135	Propane/LPG	EF FACTOR*GALS/1000	4,284.78	GALS	13.45	0.49	57.63	2.10
Boiler	6419	3666	0.1	Natural Gas	EF FACTOR*MMSCF	0.28	MMSCF	96.60	5.67	26.86	1.58
Water Heater	6601	3667	0.751	Natural Gas	EF FACTOR*MMSCF	2.09	MMSCF	102.90	5.67	214.91	11.84
Boiler	8175	3677	0.299	Natural Gas	EF FACTOR*MMSCF	0.83	MMSCF	96.60	5.67	80.32	4.71
Boiler	8250	3680	0.299	Natural Gas	EF FACTOR*MMSCF	0.83	MMSCF	96.60	5.67	80.32	4.71
Water Heater	8290	3682	0.199	Natural Gas	EF FACTOR*MMSCF	0.55	MMSCF	96.60	5.67	53.46	3.14
Boiler	8305	3683	0.35	Natural Gas	EF FACTOR*MMSCF	0.97	MMSCF	96.60	5.67	94.02	5.52
Water Heater	8310	3684	0.16	Natural Gas	EF FACTOR*MMSCF	0.44	MMSCF	96.60	5.67	42.98	2.52
Water Heater	8505	3688	0.25	Natural Gas	EF FACTOR*MMSCF	0.70	MMSCF	96.60	5.67	67.16	3.94
Boiler	9307	3697	0.9	Natural Gas	EF FACTOR*MMSCF	2.50	MMSCF	102.90	5.67	257.54	14.19
Boiler	9334	3698	0.5	Natural Gas	EF FACTOR*MMSCF	1.39	MMSCF	102.90	5.67	143.08	7.88
Boiler	10400	3701	0.8	Natural Gas	EF FACTOR*MMSCF	2.22	MMSCF	102.90	5.67	228.93	12.61
Water Heater	11777	3713	0.04	Natural Gas	EF FACTOR*MMSCF	0.11	MMSCF	96.60	5.67	10.75	0.63
Water Heater	13007	3718	0.199	Natural Gas	EF FACTOR*MMSCF	0.55	MMSCF	96.60	5.67	53.46	3.14
Water Heater	13007	3719	0.2	Natural Gas	EF FACTOR*MMSCF	0.56	MMSCF	96.60	5.67	53.73	3.15
Water Heater	13007	3720	0.199	Natural Gas	EF FACTOR*MMSCF	0.55	MMSCF	96.60	5.67	53.46	3.14
Boiler	13123	3722	0.299	Natural Gas	EF FACTOR*MMSCF	0.83	MMSCF	96.60	5.67	80.32	4.71
Boiler	13123	3723	0.299	Natural Gas	EF FACTOR*MMSCF	0.83	MMSCF	96.60	5.67	80.32	4.71
Water Heater	13675	3727	0.199	Natural Gas	EF FACTOR*MMSCF	0.55	MMSCF	96.60	5.67	53.46	3.14
Water Heater	14300	3732	0.3	Natural Gas	EF FACTOR*MMSCF	0.83	MMSCF	96.60	5.67	80.59	4.73
Water Heater	8500	3745	0.199	Natural Gas	EF FACTOR*MMSCF	0.55	MMSCF	96.60	5.67	53.46	3.14
Boiler	13862	3779	0.1	Natural Gas	EF FACTOR*MMSCF	0.28	MMSCF	96.60	5.67	26.86	1.58
Boiler	6527	3810	0.65	Natural Gas	EF FACTOR*MMSCF	1.81	MMSCF	102.90	5.67	186.00	10.25
Boiler	871	3811	0.65	Natural Gas	EF FACTOR*MMSCF	1.81	MMSCF	102.90	5.67	186.00	10.25
Boiler	7501	3812	0.65	Natural Gas	EF FACTOR*MMSCF	1.81	MMSCF	102.90	5.67	186.00	10.25
Boiler	7501	3813	0.65	Natural Gas	EF FACTOR*MMSCF	1.81	MMSCF	102.90	5.67	186.00	10.25
Boiler	8250	3826	0.299	Natural Gas	EF FACTOR*MMSCF	0.83	MMSCF	96.60	5.67	80.32	4.71
Water Heater	1728	3833	0.075	Natural Gas	EF FACTOR*MMSCF	0.21	MMSCF	96.60	5.67	20.15	1.18
Water Heater	1335	3850	0.156	Natural Gas	EF FACTOR*MMSCF	0.43	MMSCF	96.60	5.67	41.91	2.46
Boiler	1871	3851	0.13	Natural Gas	EF FACTOR*MMSCF	0.36	MMSCF	96.60	5.67	34.92	2.05
Boiler	1871	3852	0.13	Natural Gas	EF FACTOR*MMSCF	0.36	MMSCF	96.60	5.67	34.92	2.05
Boiler	1871	3853	0.13	Natural Gas	EF FACTOR*MMSCF	0.36	MMSCF	96.60	5.67	34.92	2.05
Water Heater	7501	3855	0.034	Natural Gas	EF FACTOR*MMSCF	0.09	MMSCF	96.60	5.67	9.13	0.54
Water Heater	8314	3857	0.034	Natural Gas	EF FACTOR*MMSCF	0.09	MMSCF	96.60	5.67	9.13	0.54
Water Heater	8500	3858	0.199	Natural Gas	EF FACTOR*MMSCF	0.55	MMSCF	96.60	5.67	53.46	3.14
Boiler	9005	3859	0.745	Natural Gas	EF FACTOR*MMSCF	2.07	MMSCF	102.90	5.67	213.19	11.75
Boiler	9005	3860	0.745	Natural Gas	EF FACTOR*MMSCF	2.07	MMSCF	102.90	5.67	213.19	11.75
Boiler	9005	3861	0.15	Natural Gas	EF FACTOR*MMSCF	0.42	MMSCF	96.60	5.67	40.30	2.37
Boiler	9005	3862	0.15	Natural Gas	EF FACTOR*MMSCF	0.42	MMSCF	96.60	5.67	40.30	2.37
Water Heater	9340	3863	0.075	Natural Gas	EF FACTOR*MMSCF	0.21	MMSCF	96.60	5.67	20.15	1.18
Water Heater	10366	3865	0.075	Natural Gas	EF FACTOR*MMSCF	0.21	MMSCF	96.60	5.67	20.15	1.18
Water Heater	13700	3868	0.199	Natural Gas	EF FACTOR*MMSCF	0.55	MMSCF	96.60	5.67	53.46	3.14
Food Prep Burner	10366	3871	0.095	Natural Gas	EF FACTOR*MMSCF	0.26	MMSCF	96.60	5.67	25.52	1.50
Boiler	13121	3916	0.299	Natural Gas	EF FACTOR*MMSCF	0.83	MMSCF	96.60	5.67	80.32	4.71
Boiler	13121	3917	0.299	Natural Gas	EF FACTOR*MMSCF	0.83	MMSCF	96.60	5.67	80.32	4.71
Boiler	13863	3918	0.13	Natural Gas	EF FACTOR*MMSCF	0.36	MMSCF	96.60	5.67	34.92	2.05
Water Heater	7525	3919	0.1	Natural Gas	EF FACTOR*MMSCF	0.28	MMSCF	96.60	5.67	26.86	1.58
Boiler	1743	3923	0.3	Natural Gas	EF FACTOR*MMSCF	0.83	MMSCF	96.60	5.67	80.59	4.73
Boiler	1743	3924	0.3	Natural Gas	EF FACTOR*MMSCF	0.83	MMSCF	96.60	5.67	80.59	4.73
Boiler	7437	3941	0.84	Natural Gas	EF FACTOR*MMSCF	2.34	MMSCF	102.90	5.67	240.37	13.25
Boiler	1800	3942	0.84	Propane/LPG	EF FACTOR*MMSCF	26,660.87	GALS	13.45	0.49	358.59	13.06
Boiler	1728	3951	0.75	Natural Gas	EF FACTOR*MMSCF	2.09	MMSCF	102.90	5.67	214.62	11.83
Boiler	11013	3971	0.399	Natural Gas	EF FACTOR*MMSCF	1.11	MMSCF	96.60	5.67	107.19	6.29
Boiler	1546A	3986	2	Natural Gas	EF FACTOR*MMSCF	5.56	MMSCF	102.90	5.67	572.32	31.54
Boiler	1546B	3987	2	Natural Gas	EF FACTOR*MMSCF	5.56	MMSCF	102.90	5.67	572.32	31.54
Water Heater	1740	3988	0.751	Natural Gas	EF FACTOR*MMSCF	2.09	MMSCF	102.90	5.67	214.91	11.84
Boiler	6710	3989	0.375	Natural Gas	EF FACTOR*MMSCF	1.04	MMSCF	96.60	5.67	100.74	5.91
Boiler	13123	3990	0.299	Natural Gas	EF FACTOR*MMSCF	0.83	MMSCF	96.60	5.67	80.32	4.71
Boiler	10503	4000	0.399	Natural Gas	EF FACTOR*MMSCF	1.11	MMSCF	96.60	5.67	107.19	6.29
Boiler	840	4001	0.285	Natural Gas	EF FACTOR*MMSCF	0.79	MMSCF	96.60	5.67	76.56	4.49
Boiler	840	4002	0.285	Natural Gas	EF FACTOR*MMSCF	0.79	MMSCF	96.60	5.67	76.56	4.49
Boiler	8195	4020	0.999	Natural Gas	EF FACTOR*MMSCF	2.78	MMSCF	102.90	5.67	285.87	15.75
Boiler	8314	4025	0.75	Natural Gas	EF FACTOR*MMSCF	2.09	MMSCF	102.90	5.67	214.62	11.83
Boiler	8314	4026	0.75	Natural Gas	EF FACTOR*MMSCF	2.09	MMSCF	102.90	5.67	214.62	11.83
Boiler	875	4040	1.05	Natural Gas	EF FACTOR*MMSCF	2.92	MMSCF	102.90	5.67	300.47	16.56

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

Description	Location	Pri ID	Capacity (MMBTU)	Fuel	Equation	Usage PTE	Usage Units	Emission Factors NOx*	Emission Factors ROC*	Emissions (Lbs/Yr) NOx	Emissions (Lbs/Yr) ROC
Boiler	13852	4041	0.199	Natural Gas	EF_FACTOR*MMSCF	0.55	MMSCF	96.60	5.67	53.46	3.14
Boiler	13860	4042	0.199	Natural Gas	EF_FACTOR*MMSCF	0.55	MMSCF	96.60	5.67	53.46	3.14
Boiler	8401	4043	1.5	Natural Gas	EF_FACTOR*MMSCF	4.17	MMSCF	102.90	5.67	429.24	23.65
Boiler	8401	4044	1.5	Natural Gas	EF_FACTOR*MMSCF	4.17	MMSCF	102.90	5.67	429.24	23.65
Water Heater	1737	4056	0.038	Natural Gas	EF_FACTOR*MMSCF	0.11	MMSCF	96.60	5.67	10.21	0.60
Water Heater	1743	4057	0.04	Natural Gas	EF_FACTOR*MMSCF	0.11	MMSCF	96.60	5.67	10.75	0.63
Boiler	6510	4058	0.75	Natural Gas	EF_FACTOR*MMSCF	2.09	MMSCF	102.90	5.67	214.62	11.83
Boiler	23201	4059	0.181	Natural Gas	EF_FACTOR*MMSCF	0.50	MMSCF	96.60	5.67	48.62	2.85
Boiler	7523	4060	1.999	Natural Gas	EF_FACTOR*GALS/1000	5.56	MMSCF	102.90	5.67	572.03	31.52
Boiler	7523	4061	1.999	Natural Gas	EF_FACTOR*GALS/1000	5.56	MMSCF	102.90	5.67	572.03	31.52
Boiler	7011	4068	1.5	Natural Gas	EF_FACTOR*MMSCF	4.17	MMSCF	102.90	5.67	429.24	23.65
Boiler	8510	4069	0.75	Natural Gas	EF_FACTOR*MMSCF	2.09	MMSCF	102.90	5.67	214.62	11.83
Boiler	8510	4070	0.75	Natural Gas	EF_FACTOR*MMSCF	2.09	MMSCF	102.90	5.67	214.62	11.83
Water Heater	2500	4071	0.199	Natural Gas	EF_FACTOR*MMSCF	0.55	MMSCF	96.60	5.67	53.46	3.14
Boiler	1506	4086	0.299	Natural Gas	EF_FACTOR*MMSCF	0.83	MMSCF	96.60	5.67	80.32	4.71
Boiler	1506	4087	0.299	Natural Gas	EF_FACTOR*MMSCF	0.83	MMSCF	96.60	5.67	80.32	4.71
Boiler	8500	4088	1.999	Natural Gas	EF_FACTOR*MMSCF	5.56	MMSCF	102.90	5.67	572.03	31.52
Boiler	8500	4089	1.999	Natural Gas	EF_FACTOR*MMSCF	5.56	MMSCF	102.90	5.67	572.03	31.52
Water Heater	10510	4090	0.075	Natural Gas	EF_FACTOR*MMSCF	0.21	MMSCF	96.60	5.67	20.15	1.18
Boiler	13852	4092	0.199	Natural Gas	EF_FACTOR*MMSCF	0.55	MMSCF	96.60	5.67	53.46	3.14
Boiler	13330	4099	1.68	Natural Gas	EF_FACTOR*MMSCF	4.67	MMSCF	102.90	5.67	480.75	26.49
Boiler	13330	4100	1.68	Natural Gas	EF_FACTOR*MMSCF	4.67	MMSCF	102.90	5.67	480.75	26.49
Boiler	12000	4110	1	Natural Gas	EF_FACTOR*MMSCF	2.78	MMSCF	102.90	5.67	286.16	15.77
Boiler	12000	4111	1	Natural Gas	EF_FACTOR*MMSCF	2.78	MMSCF	102.90	5.67	286.16	15.77
Water Heater	13330	4115	0.36	Natural Gas	EF_FACTOR*MMSCF	1.00	MMSCF	96.60	5.67	96.71	5.68
Boiler	6670	4121	2	Natural Gas	EF_FACTOR*MMSCF	5.56	MMSCF	102.90	5.67	572.32	31.54
Boiler	6670	4122	2	Natural Gas	EF_FACTOR*MMSCF	5.56	MMSCF	102.90	5.67	572.32	31.54
Water Heater	1746	4151	0.034	Natural Gas	EF_FACTOR*MMSCF	0.09	MMSCF	96.60	5.67	9.13	0.54
Water Heater	490	4156	0.199	Propane/LPG	EF_FACTOR*GALS/1000	6,316.09	GALS	13.45	0.49	84.95	3.09
Water Heater	1555	4179	0.036	Natural Gas	EF_FACTOR*MMSCF	0.10	MMSCF	96.60	5.67	9.67	0.57
Water Heater	1555	4180	0.036	Natural Gas	EF_FACTOR*MMSCF	0.10	MMSCF	96.60	5.67	9.67	0.57
Water Heater	6710	4182	0.034	Natural Gas	EF_FACTOR*MMSCF	0.09	MMSCF	96.60	5.67	9.13	0.54
Boiler	8290	4184	1.262	Natural Gas	EF_FACTOR*MMSCF	3.51	MMSCF	102.90	5.67	361.13	19.90
Water Heater	8339	4185	0.034	Natural Gas	EF_FACTOR*MMSCF	0.09	MMSCF	96.60	5.67	9.13	0.54
Boiler	9190	4186	0.3	Natural Gas	EF_FACTOR*MMSCF	0.83	MMSCF	96.60	5.67	80.59	4.73
Water Heater	9334	4190	0.04	Natural Gas	EF_FACTOR*MMSCF	0.11	MMSCF	96.60	5.67	10.75	0.63
Water Heater	9340	4191	0.033	Natural Gas	EF_FACTOR*MMSCF	0.09	MMSCF	96.60	5.67	8.87	0.52
Water Heater	9340	4192	0.033	Natural Gas	EF_FACTOR*MMSCF	0.09	MMSCF	96.60	5.67	8.87	0.52
Water Heater	9340	4193	0.04	Natural Gas	EF_FACTOR*MMSCF	0.11	MMSCF	96.60	5.67	10.75	0.63
Water Heater	10122	4194	0.075	Natural Gas	EF_FACTOR*MMSCF	0.21	MMSCF	96.60	5.67	20.15	1.18
Water Heater	10364	4197	0.038	Natural Gas	EF_FACTOR*MMSCF	0.11	MMSCF	96.60	5.67	10.21	0.60
Boiler	13323	4198	0.3	Natural Gas	EF_FACTOR*GALS/1000	0.83	MMSCF	96.60	5.67	80.59	4.73
Boiler	13323	4199	0.3	Natural Gas	EF_FACTOR*GALS/1000	0.83	MMSCF	96.60	5.67	80.59	4.73
Boiler	13323	4200	0.3	Natural Gas	EF_FACTOR*GALS/1000	0.83	MMSCF	96.60	5.67	80.59	4.73
Water Heater	10373	4202	0.038	Natural Gas	EF_FACTOR*MMSCF	0.11	MMSCF	96.60	5.67	10.21	0.60
Water Heater	10503	4203	0.033	Natural Gas	EF_FACTOR*MMSCF	0.09	MMSCF	96.60	5.67	8.87	0.52
Water Heater	10713	4205	0.04	Natural Gas	EF_FACTOR*MMSCF	0.11	MMSCF	96.60	5.67	10.75	0.63
Water Heater	10717	4206	0.04	Natural Gas	EF_FACTOR*MMSCF	0.11	MMSCF	96.60	5.67	10.75	0.63
Water Heater	12903	4210	0.199	Natural Gas	EF_FACTOR*MMSCF	0.55	MMSCF	96.60	5.67	53.46	3.14
Water Heater	12911	4213	0.25	Natural Gas	EF_FACTOR*MMSCF	0.70	MMSCF	96.60	5.67	67.16	3.94
Water Heater	12913	4214	0.075	Natural Gas	EF_FACTOR*MMSCF	0.21	MMSCF	96.60	5.67	20.15	1.18
Water Heater	12915	4215	0.199	Natural Gas	EF_FACTOR*MMSCF	0.55	MMSCF	96.60	5.67	53.46	3.14
Water Heater	8312	4219	0.038	Natural Gas	EF_FACTOR*MMSCF	0.11	MMSCF	96.60	5.67	10.21	0.60
Water Heater	11025	4220	0.04	Natural Gas	EF_FACTOR*MMSCF	0.11	MMSCF	96.60	5.67	10.75	0.63
Furnace	6015	4221	0.075	Natural Gas	EF_FACTOR*MMSCF	0.21	MMSCF	96.60	5.67	20.15	1.18
Furnace	6447	4222	0.08	Natural Gas	EF_FACTOR*MMSCF	0.22	MMSCF	96.60	5.67	21.49	1.26
Furnace	11439	4223	0.11	Natural Gas	EF_FACTOR*MMSCF	0.31	MMSCF	96.60	5.67	29.55	1.73
Furnace	12901	4224	0.075	Natural Gas	EF_FACTOR*MMSCF	0.21	MMSCF	96.60	5.67	20.15	1.18
Furnace	12903	4225	0.075	Natural Gas	EF_FACTOR*MMSCF	0.21	MMSCF	96.60	5.67	20.15	1.18
Furnace	12903	4226	0.075	Natural Gas	EF_FACTOR*MMSCF	0.21	MMSCF	96.60	5.67	20.15	1.18
Furnace	12905	4227	0.075	Natural Gas	EF_FACTOR*MMSCF	0.21	MMSCF	96.60	5.67	20.15	1.18
Furnace	12905	4228	0.075	Natural Gas	EF_FACTOR*MMSCF	0.21	MMSCF	96.60	5.67	20.15	1.18
Furnace	12907	4229	0.075	Natural Gas	EF_FACTOR*MMSCF	0.21	MMSCF	96.60	5.67	20.15	1.18
Furnace	12911	4230	0.075	Natural Gas	EF_FACTOR*MMSCF	0.21	MMSCF	96.60	5.67	20.15	1.18
Furnace	12911	4231	0.075	Natural Gas	EF_FACTOR*MMSCF	0.21	MMSCF	96.60	5.67	20.15	1.18
Furnace	12913	4232	0.075	Natural Gas	EF_FACTOR*MMSCF	0.21	MMSCF	96.60	5.67	20.15	1.18
Furnace	12913	4233	0.075	Natural Gas	EF_FACTOR*MMSCF	0.21	MMSCF	96.60	5.67	20.15	1.18
Furnace	12915	4234	0.075	Natural Gas	EF_FACTOR*MMSCF	0.21	MMSCF	96.60	5.67	20.15	1.18
Furnace	12915	4235	0.075	Natural Gas	EF_FACTOR*MMSCF	0.21	MMSCF	96.60	5.67	20.15	1.18
Furnace	23228	4266	0.11	Natural Gas	EF_FACTOR*MMSCF	0.31	MMSCF	96.60	5.67	29.55	1.73
Furnace	23228	4267	0.11	Natural Gas	EF_FACTOR*MMSCF	0.31	MMSCF	96.60	5.67	29.55	1.73
Boiler	13851	4270	0.199	Natural Gas	EF_FACTOR*MMSCF	0.55	MMSCF	96.60	5.67	53.46	3.14
Boiler	13853	4271	0.199	Natural Gas	EF_FACTOR*MMSCF	0.55	MMSCF	96.60	5.67	53.46	3.14
Boiler	13853	4272	0.199	Natural Gas	EF_FACTOR*MMSCF	0.55	MMSCF	96.60	5.67	53.46	3.14
Boiler	13858	4274	0.199	Natural Gas	EF_FACTOR*MMSCF	0.55	MMSCF	96.60	5.67	53.46	3.14
Boiler	13858	4275	0.199	Natural Gas	EF_FACTOR*MMSCF	0.55	MMSCF	96.60	5.67	53.46	3.14
Boiler	10577	4276	0.5	Natural Gas	EF_FACTOR*MMSCF	1.39	MMSCF	102.90	5.67	143.08	7.88
Boiler	10577	4277	0.5	Natural Gas	EF_FACTOR*MMSCF	1.39	MMSCF	102.90	5.67	143.08	7.88
Boiler	10577	4278	0.5	Natural Gas	EF_FACTOR*MMSCF	1.39	MMSCF	102.90	5.67	143.08	7.88
Boiler	10577	4279	0.5	Natural Gas	EF_FACTOR*MMSCF	1.39	MMSCF	102.90	5.67	143.08	7.88
Water Heater	6601	4282	0.075	Natural Gas	EF_FACTOR*MMSCF	0.21	MMSCF	96.60	5.67	20.15	1.18
Boiler	1806	4289	0.672	Natural Gas	EF_FACTOR*MMSCF	1.87	MMSCF	102.90	5.67	192.30	10.60
Water Heater	6005	4290	0.075	Natural Gas	EF_FACTOR*MMSCF	0.21	MMSCF	96.60	5.67	20.15	1.18
Water Heater	10130	4295	2	Natural Gas	EF_FACTOR*MMSCF	5.56	MMSCF	102.90	5.67	572.32	31.54
Boiler	13862	4303	0.199	Natural Gas	EF_FACTOR*MMSCF	0.55	MMSCF	96.60	5.67	53.46	3.14
Water Heater	10711	4304	0.075	Natural Gas	EF_FACTOR*MMSCF	0.21	MMSCF	96.60	5.67	20.15	1.18
Furnace	8312	4308	0.125	Natural Gas	EF_FACTOR*MMSCF	0.35	MMSCF	96.60	5.67	33.58	1.97
Furnace	8312	4309	0.125	Natural Gas	EF_FACTOR*MMSCF	0.35	MMSCF	96.60	5.67	33.58	1.97

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

Description	Location	Pri ID	Capacity (MMBTU)	Fuel	Equation	Usage PTE	Usage Units	Emission Factors NOx*	Emission Factors ROC*	Emissions (Lbs/Yr) NOx	Emissions (Lbs/Yr) ROC
Furnace	13005	4314	0.125	Natural Gas	EF FACTOR*MMSCF	0.35	MMSCF	96.60	5.67	33.58	1.97
Water Heater	11040	4315	0.04	Natural Gas	EF FACTOR*MMSCF	0.11	MMSCF	96.60	5.67	10.75	0.63
Boiler	8173	4319	1.999	Natural Gas	EF FACTOR*MMSCF	5.56	MMSCF	102.90	5.67	572.03	31.52
Water Heater	10728	4321	0.199	Natural Gas	EF FACTOR*MMSCF	0.55	MMSCF	96.60	5.67	53.46	3.14
Water Heater	8510	4331	0.034	Natural Gas	EF FACTOR*MMSCF	0.09	MMSCF	96.60	5.67	9.13	0.54
Water Heater	789	4333	0.038	Natural Gas	EF FACTOR*MMSCF	0.11	MMSCF	96.60	5.67	10.21	0.60
Water Heater	1350	4337	0.034	Propane/LPG	EF FACTOR*GALS/1000	1,079.13	GALS	13.45	0.49	14.51	0.53
Water Heater	6015	4338	0.04	Natural Gas	EF FACTOR*MMSCF	0.11	MMSCF	96.60	5.67	10.75	0.63
Boiler	6817	4339	0.5	Natural Gas	EF FACTOR*MMSCF	1.39	MMSCF	102.90	5.67	143.08	7.88
Water Heater	10525	4340	0.038	Natural Gas	EF FACTOR*MMSCF	0.11	MMSCF	96.60	5.67	10.21	0.60
Water Heater	11165	4341	0.04	Natural Gas	EF FACTOR*MMSCF	0.11	MMSCF	96.60	5.67	10.75	0.63
Water Heater	11248	4343	0.04	Natural Gas	EF FACTOR*MMSCF	0.11	MMSCF	96.60	5.67	10.75	0.63
Water Heater	11352	4344	0.04	Natural Gas	EF FACTOR*MMSCF	0.11	MMSCF	96.60	5.67	10.75	0.63
Water Heater	12006	4346	0.199	Natural Gas	EF FACTOR*MMSCF	0.55	MMSCF	96.60	5.67	53.46	3.14
Furnace	1350	4347	0.1	Propane/LPG	EF FACTOR*GALS/1000	3,173.91	GALS	13.5	0.47	42.85	1.49
Furnace	14400	4348	0.04	Natural Gas	EF FACTOR*MMSCF	0.11	MMSCF	96.60	5.67	10.75	0.63
Furnace	14400	4349	0.1	Natural Gas	EF FACTOR*MMSCF	0.28	MMSCF	96.60	5.67	26.86	1.58
Furnace	11433	4350	0.075	Natural Gas	EF FACTOR*MMSCF	0.21	MMSCF	96.60	5.67	20.15	1.18
Furnace	11433	4351	0.075	Natural Gas	EF FACTOR*MMSCF	0.21	MMSCF	96.60	5.67	20.15	1.18
Furnace	11433	4352	0.075	Natural Gas	EF FACTOR*MMSCF	0.21	MMSCF	96.60	5.67	20.15	1.18
Furnace	11433	4353	0.075	Natural Gas	EF FACTOR*MMSCF	0.21	MMSCF	96.60	5.67	20.15	1.18
Furnace	11433	4354	0.075	Natural Gas	EF FACTOR*MMSCF	0.21	MMSCF	96.60	5.67	20.15	1.18
Furnace	11433	4355	0.075	Natural Gas	EF FACTOR*MMSCF	0.21	MMSCF	96.60	5.67	20.15	1.18
Furnace	1930	4356	0.1	Propane/LPG	EF FACTOR*GALS/1000	3,173.91	GALS	13.5	0.47	42.85	1.49
Boiler	21150	4359	0.3	Propane/LPG	EF FACTOR*GALS/1000	9,521.74	GALS	13.45	0.49	128.07	4.67
Boiler	21150	4360	0.3	Propane/LPG	EF FACTOR*GALS/1000	9,521.74	GALS	13.45	0.49	128.07	4.67
Boiler	21150	4361	0.3	Propane/LPG	EF FACTOR*GALS/1000	9,521.74	GALS	13.45	0.49	128.07	4.67
Boiler	8401	648903	0.3	Natural Gas	EF FACTOR*MMSCF	0.83	MMSCF	96.60	5.67	80.59	4.73
Boiler	8401	648927	0.3	Natural Gas	EF FACTOR*MMSCF	0.83	MMSCF	96.60	5.67	80.59	4.73
Water Heater	1810	648940	0.04	Propane/LPG	EF FACTOR*GALS/1000	1,269.57	GALS	13.45	0.49	17.08	0.62
Water Heater	11433	648941	0.04	Natural Gas	EF FACTOR*MMSCF	0.11	MMSCF	96.60	5.67	10.75	0.63
Water Heater	8310	653777	0.034	Natural Gas	EF FACTOR*MMSCF	0.09	MMSCF	96.60	5.67	9.13	0.54
Boiler	10145	656862	1.5	Natural Gas	EF FACTOR*MMSCF	4.17	MMSCF	102.90	5.67	429.24	23.65
Boiler	10145	656863	1.5	Natural Gas	EF FACTOR*MMSCF	4.17	MMSCF	102.90	5.67	429.24	23.65
Boiler	11477	656889	0.199	Natural Gas	EF FACTOR*MMSCF	0.55	MMSCF	96.60	5.67	53.46	3.14
Boiler	13323	656895	0.75	Natural Gas	EF FACTOR*MMSCF	2.09	MMSCF	102.90	5.67	214.62	11.83
Water Heater	10314	656935	0.0745	Natural Gas	EF FACTOR*MMSCF	0.21	MMSCF	96.60	5.67	20.01	1.17
Furnace	1810	656947	0.06	Propane/LPG	EF FACTOR*GALS/1000	1,904.35	GALS	13.5	0.47	25.71	0.90
Furnace	1810	657188	0.06	Propane/LPG	EF FACTOR*GALS/1000	1,904.35	GALS	13.5	0.47	25.71	0.90
Water Heater	6670	657189	0.25	Natural Gas	EF FACTOR*MMSCF	0.70	MMSCF	96.60	5.67	67.16	3.94
Steam Humidifier	8173	657191	0.4	Natural Gas	EF FACTOR*MMSCF	1.11	MMSCF	96.60	5.67	107.46	6.31
Furnace	10711	657194	0.858	Natural Gas	EF FACTOR*MMSCF	2.39	MMSCF	102.90	5.67	245.53	13.53
Furnace	10713	657197	0.11	Natural Gas	EF FACTOR*MMSCF	0.31	MMSCF	96.60	5.67	29.55	1.73
Boiler	11070	657204	0.299	Natural Gas	EF FACTOR*MMSCF	0.83	MMSCF	96.60	5.67	80.32	4.71
Boiler	13854	658408	0.199	Natural Gas	EF FACTOR*MMSCF	0.55	MMSCF	96.60	5.67	53.46	3.14
Boiler	12901	658409	0.199	Natural Gas	EF FACTOR*MMSCF	0.55	MMSCF	96.60	5.67	53.46	3.14
Boiler	13859	658410	0.1	Natural Gas	EF FACTOR*MMSCF	0.28	MMSCF	96.60	5.67	26.86	1.58
Boiler	13854	658411	0.199	Natural Gas	EF FACTOR*MMSCF	0.55	MMSCF	96.60	5.67	53.46	3.14
Water Heater	1559	658416	0.04	Natural Gas	EF FACTOR*MMSCF	0.11	MMSCF	96.60	5.67	10.75	0.63
Water Heater	1749	658417	0.04	Natural Gas	EF FACTOR*MMSCF	0.11	MMSCF	96.60	5.67	10.75	0.63
Water Heater	10145	658898	0.38	Natural Gas	EF FACTOR*MMSCF	1.06	MMSCF	96.60	5.67	102.08	5.99
Water Heater	10145	658900	0.065	Natural Gas	EF FACTOR*MMSCF	0.18	MMSCF	96.60	5.67	17.46	1.02
Furnace	11146	659343	0.1	Natural Gas	EF FACTOR*MMSCF	0.28	MMSCF	96.60	5.67	26.86	1.58
Furnace	11146	659346	0.16	Natural Gas	EF FACTOR*MMSCF	0.44	MMSCF	96.60	5.67	42.98	2.52
Furnace	11146	659365	0.16	Natural Gas	EF FACTOR*MMSCF	0.44	MMSCF	96.60	5.67	42.98	2.52
Boiler	13860	659473	0.199	Natural Gas	EF FACTOR*MMSCF	0.55	MMSCF	96.60	5.67	53.46	3.14
Steam Humidifier	8173	659960	0.4	Natural Gas	EF FACTOR*MMSCF	1.11	MMSCF	96.60	5.67	107.46	6.31
Boiler	6601	661827	0.5	Natural Gas	EF FACTOR*MMSCF	1.39	MMSCF	102.90	5.67	143.08	7.88
Boiler	6601	664578	1.99	Natural Gas	EF FACTOR*MMSCF	5.53	MMSCF	102.90	5.67	569.46	31.38
Water Heater	13850	667596	0.39	Natural Gas	EF FACTOR*MMSCF	1.08	MMSCF	96.60	5.67	104.77	6.15
Water Heater	13850	667598	0.39	Natural Gas	EF FACTOR*MMSCF	1.08	MMSCF	96.60	5.67	104.77	6.15
Boiler	9192	676358	0.3	Natural Gas	EF FACTOR*MMSCF	0.83	MMSCF	96.60	5.67	80.59	4.73
Boiler	9192	676359	0.3	Natural Gas	EF FACTOR*MMSCF	0.83	MMSCF	96.60	5.67	80.59	4.73
Boiler	9192	676360	0.5	Natural Gas	EF FACTOR*MMSCF	1.39	MMSCF	102.90	5.67	143.08	7.88
Boiler	9192	676361	0.5	Natural Gas	EF FACTOR*MMSCF	1.39	MMSCF	102.90	5.67	143.08	7.88
Furnace	657	676394	0.06	Propane/LPG	EF FACTOR*GALS/1000	1,904.35	GALS	13.5	0.47	25.71	0.90
Boiler	875	676461	0.038	Natural Gas	EF FACTOR*MMSCF	0.11	MMSCF	96.60	5.67	10.21	0.60
Furnace	1628	676538	0.08	Propane/LPG	EF FACTOR*GALS/1000	2,539.13	GALS	13.5	0.47	34.28	1.19
Furnace	1628	676539	0.08	Propane/LPG	EF FACTOR*GALS/1000	2,539.13	GALS	13.5	0.47	34.28	1.19
Furnace	1628	676540	0.1	Propane/LPG	EF FACTOR*GALS/1000	3,173.91	GALS	13.5	0.47	42.85	1.49
Furnace	1628	676712	0.05	Propane/LPG	EF FACTOR*GALS/1000	1,586.96	GALS	13.5	0.47	21.42	0.75
Furnace	1628	676719	0.1	Propane/LPG	EF FACTOR*GALS/1000	3,173.91	GALS	13.5	0.47	42.85	1.49
Furnace	1628	676722	0.1	Propane/LPG	EF FACTOR*GALS/1000	3,173.91	GALS	13.5	0.47	42.85	1.49
Water Heater	5002	676740	0.04	Natural Gas	EF FACTOR*MMSCF	0.11	MMSCF	96.60	5.67	10.75	0.63
Furnace	5010	676752	0.08	Natural Gas	EF FACTOR*MMSCF	0.22	MMSCF	96.60	5.67	21.49	1.26
Water Heater	6447	676761	0.05	Natural Gas	EF FACTOR*MMSCF	0.14	MMSCF	96.60	5.67	13.43	0.79
Furnace	6510	676770	0.08	Natural Gas	EF FACTOR*MMSCF	0.22	MMSCF	96.60	5.67	21.49	1.26
Water Heater	6523	676790	0.199	Natural Gas	EF FACTOR*MMSCF	0.55	MMSCF	96.60	5.67	53.46	3.14
Water Heater	6525	676800	0.25	Natural Gas	EF FACTOR*MMSCF	0.70	MMSCF	96.60	5.67	67.16	3.94
Water Heater	7403	676807	0.08	Natural Gas	EF FACTOR*MMSCF	0.22	MMSCF	96.60	5.67	21.49	1.26
Furnace	7420	676815	0.1	Natural Gas	EF FACTOR*MMSCF	0.28	MMSCF	96.60	5.67	26.86	1.58
Furnace	7420	676816	0.1	Natural Gas	EF FACTOR*MMSCF	0.28	MMSCF	96.60	5.67	26.86	1.58
Water Heater	7420	676817	0.04	Natural Gas	EF FACTOR*MMSCF	0.11	MMSCF	96.60	5.67	10.75	0.63
Water Heater	7425	676818	0.199	Natural Gas	EF FACTOR*MMSCF	0.55	MMSCF	96.60	5.67	53.46	3.14
Water Heater	7437	676819	0.04	Natural Gas	EF FACTOR*MMSCF	0.11	MMSCF	96.60	5.67	10.75	0.63
Water Heater	8305	676821	0.033	Natural Gas	EF FACTOR*MMSCF	0.09	MMSCF	96.60	5.67	8.87	0.52
Water Heater	8337	676822	0.04	Natural Gas	EF FACTOR*MMSCF	0.11	MMSCF	96.60	5.67	10.75	0.63
Boiler	9190	676823	0.3	Natural Gas	EF FACTOR*MMSCF	0.83	MMSCF	96.60	5.67	80.59	4.73

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

Description	Location	Pri ID	Capacity (MMBTU)	Fuel	Equation	Usage PTE	Usage Units	Emission Factors NOx*	Emission Factors ROC*	Emissions (Lbs/Yr) NOx	Emissions (Lbs/Yr) ROC
Water Heater	9307	676824	0.04	Natural Gas	EF FACTOR*MMSCF	0.11	MMSCF	96.60	5.67	10.75	0.63
Furnace	9320	676825	0.2	Natural Gas	EF FACTOR*MMSCF	0.56	MMSCF	96.60	5.67	53.73	3.15
Water Heater	9360	676826	0.04	Natural Gas	EF FACTOR*MMSCF	0.11	MMSCF	96.60	5.67	10.75	0.63
Furnace	10122	676827	0.175	Natural Gas	EF FACTOR*MMSCF	0.49	MMSCF	96.60	5.67	47.01	2.76
Furnace	10122	676828	0.4	Natural Gas	EF FACTOR*MMSCF	1.11	MMSCF	96.60	5.67	107.46	6.31
Furnace	10130	676829	0.1	Natural Gas	EF FACTOR*MMSCF	0.28	MMSCF	96.60	5.67	26.86	1.58
Furnace	10130	676830	0.2	Natural Gas	EF FACTOR*MMSCF	0.56	MMSCF	96.60	5.67	53.73	3.15
Furnace	10130	676831	0.075	Natural Gas	EF FACTOR*MMSCF	0.21	MMSCF	96.60	5.67	20.15	1.18
Furnace	10130	676832	0.2	Natural Gas	EF FACTOR*MMSCF	0.56	MMSCF	96.60	5.67	53.73	3.15
Furnace	10130	676833	0.2	Natural Gas	EF FACTOR*MMSCF	0.56	MMSCF	96.60	5.67	53.73	3.15
Furnace	10130	676834	0.2	Natural Gas	EF FACTOR*MMSCF	0.56	MMSCF	96.60	5.67	53.73	3.15
Furnace	10130	676835	0.12	Natural Gas	EF FACTOR*MMSCF	0.33	MMSCF	96.60	5.67	32.24	1.89
Furnace	10130	676836	0.12	Natural Gas	EF FACTOR*MMSCF	0.33	MMSCF	96.60	5.67	32.24	1.89
Furnace	10130	676837	0.12	Natural Gas	EF FACTOR*MMSCF	0.33	MMSCF	96.60	5.67	32.24	1.89
Furnace	10317	676839	0.01	Natural Gas	EF FACTOR*MMSCF	0.03	MMSCF	96.60	5.67	2.69	0.16
Furnace	10363	676841	0.125	Natural Gas	EF FACTOR*MMSCF	0.35	MMSCF	96.60	5.67	33.58	1.97
Furnace	10363	676842	0.11	Natural Gas	EF FACTOR*MMSCF	0.31	MMSCF	96.60	5.67	29.55	1.73
Furnace	10375	676843	0.13	Natural Gas	EF FACTOR*MMSCF	0.36	MMSCF	96.60	5.67	34.92	2.05
Furnace	10375	676844	0.13	Natural Gas	EF FACTOR*MMSCF	0.36	MMSCF	96.60	5.67	34.92	2.05
Furnace	10375	676846	0.13	Natural Gas	EF FACTOR*MMSCF	0.36	MMSCF	96.60	5.67	34.92	2.05
Furnace	10375	676849	0.06	Natural Gas	EF FACTOR*MMSCF	0.17	MMSCF	96.60	5.67	16.12	0.95
Water Heater	10525	676854	0.04	Natural Gas	EF FACTOR*MMSCF	0.11	MMSCF	96.60	5.67	10.75	0.63
Furnace	10711	676857	0.855	Natural Gas	EF FACTOR*MMSCF	2.38	MMSCF	102.90	5.67	244.67	13.48
Furnace	10711	676860	0.04	Natural Gas	EF FACTOR*MMSCF	0.11	MMSCF	96.60	5.67	10.75	0.63
Furnace	10711	676862	0.035	Natural Gas	EF FACTOR*MMSCF	0.10	MMSCF	96.60	5.67	9.40	0.55
Water Heater	11041	676865	0.199	Natural Gas	EF FACTOR*MMSCF	0.55	MMSCF	96.60	5.67	53.46	3.14
Water Heater	11041	676866	0.199	Natural Gas	EF FACTOR*MMSCF	0.55	MMSCF	96.60	5.67	53.46	3.14
Boiler	11041	676868	0.5	Natural Gas	EF FACTOR*MMSCF	1.39	MMSCF	102.90	5.67	143.08	7.88
Boiler	11041	676871	0.5	Natural Gas	EF FACTOR*MMSCF	1.39	MMSCF	102.90	5.67	143.08	7.88
Water Heater	11042	676875	0.199	Natural Gas	EF FACTOR*MMSCF	0.55	MMSCF	96.60	5.67	53.46	3.14
Water Heater	11042	676878	0.199	Natural Gas	EF FACTOR*MMSCF	0.55	MMSCF	96.60	5.67	53.46	3.14
Boiler	11042	676881	0.5	Natural Gas	EF FACTOR*MMSCF	1.39	MMSCF	102.90	5.67	143.08	7.88
Boiler	11042	676882	0.5	Natural Gas	EF FACTOR*MMSCF	1.39	MMSCF	102.90	5.67	143.08	7.88
Boiler	11352	676888	0.042	Natural Gas	EF FACTOR*MMSCF	0.12	MMSCF	96.60	5.67	11.28	0.66
Furnace	11352	676890	0.11	Natural Gas	EF FACTOR*MMSCF	0.31	MMSCF	96.60	5.67	29.55	1.73
Furnace	11352	676892	0.11	Natural Gas	EF FACTOR*MMSCF	0.31	MMSCF	96.60	5.67	29.55	1.73
Furnace	11352	676894	0.11	Natural Gas	EF FACTOR*MMSCF	0.31	MMSCF	96.60	5.67	29.55	1.73
Furnace	11432	676897	0.085	Natural Gas	EF FACTOR*MMSCF	0.24	MMSCF	96.60	5.67	22.83	1.34
Furnace	11432	676899	0.085	Natural Gas	EF FACTOR*MMSCF	0.24	MMSCF	96.60	5.67	22.83	1.34
Furnace	11432	676901	0.085	Natural Gas	EF FACTOR*MMSCF	0.24	MMSCF	96.60	5.67	22.83	1.34
Furnace	11439	676903	0.04	Natural Gas	EF FACTOR*MMSCF	0.11	MMSCF	96.60	5.67	10.75	0.63
Furnace	11439	676904	0.04	Natural Gas	EF FACTOR*MMSCF	0.11	MMSCF	96.60	5.67	10.75	0.63
Water Heater	11439	676905	0.036	Natural Gas	EF FACTOR*MMSCF	0.10	MMSCF	96.60	5.67	9.67	0.57
Furnace	11510	676911	0.115	Natural Gas	EF FACTOR*MMSCF	0.32	MMSCF	96.60	5.67	30.89	1.81
Water Heater	12905	676921	0.075	Natural Gas	EF FACTOR*MMSCF	0.21	MMSCF	96.60	5.67	20.15	1.18
Furnace	13005	676922	0.75	Natural Gas	EF FACTOR*MMSCF	2.09	MMSCF	102.90	5.67	214.62	11.83
Boiler	13857	676923	0.199	Natural Gas	EF FACTOR*MMSCF	0.55	MMSCF	96.60	5.67	53.46	3.14
Boiler	13857	676924	0.199	Natural Gas	EF FACTOR*MMSCF	0.55	MMSCF	96.60	5.67	53.46	3.14
Boiler	13859	676925	0.1	Natural Gas	EF FACTOR*MMSCF	0.28	MMSCF	96.60	5.67	26.86	1.58
Boiler	13861	676926	0.199	Natural Gas	EF FACTOR*MMSCF	0.55	MMSCF	96.60	5.67	53.46	3.14
Boiler	13861	676927	0.199	Natural Gas	EF FACTOR*MMSCF	0.55	MMSCF	96.60	5.67	53.46	3.14
Boiler	870	694919	0.399	Natural Gas	EF FACTOR*MMSCF	1.11	MMSCF	96.60	5.67	107.19	6.29
Boiler	1737	694920	1	Natural Gas	EF FACTOR*MMSCF	2.78	MMSCF	102.90	5.67	286.16	15.77
Water Heater	799	694968	0.075	Natural Gas	EF FACTOR*MMSCF	0.21	MMSCF	96.60	5.67	20.15	1.18
Boiler	1737	694969	1	Natural Gas	EF FACTOR*MMSCF	2.78	MMSCF	102.90	5.67	286.16	15.77
Water Heater	9320	694974	0.04	Natural Gas	EF FACTOR*MMSCF	0.11	MMSCF	96.60	5.67	10.75	0.63
Furnace	9340	694975	0.06	Natural Gas	EF FACTOR*MMSCF	0.17	MMSCF	96.60	5.67	16.12	0.95
Furnace	10122	694976	0.14	Natural Gas	EF FACTOR*MMSCF	0.39	MMSCF	96.60	5.67	37.61	2.21
Furnace	10130	694977	0.2	Natural Gas	EF FACTOR*MMSCF	0.56	MMSCF	96.60	5.67	53.73	3.15
Furnace	10250	694980	0.5	Natural Gas	EF FACTOR*MMSCF	1.39	MMSCF	102.90	5.67	143.08	7.88
Furnace	10250	694981	0.5	Natural Gas	EF FACTOR*MMSCF	1.39	MMSCF	102.90	5.67	143.08	7.88
Furnace	10250	694982	0.5	Natural Gas	EF FACTOR*MMSCF	1.39	MMSCF	102.90	5.67	143.08	7.88
Furnace	10250	694983	0.5	Natural Gas	EF FACTOR*MMSCF	1.39	MMSCF	102.90	5.67	143.08	7.88
Furnace	10317	694984	0.1	Natural Gas	EF FACTOR*MMSCF	0.28	MMSCF	96.60	5.67	26.86	1.58
Furnace	10366	694985	0.11	Natural Gas	EF FACTOR*MMSCF	0.31	MMSCF	96.60	5.67	29.55	1.73
Furnace	10366	694986	0.11	Natural Gas	EF FACTOR*MMSCF	0.31	MMSCF	96.60	5.67	29.55	1.73
Water Heater	10366	694987	0.04	Natural Gas	EF FACTOR*MMSCF	0.11	MMSCF	96.60	5.67	10.75	0.63
Food Prep Burner	10366	694988	0.095	Natural Gas	EF FACTOR*MMSCF	0.26	MMSCF	96.60	5.67	25.52	1.50
Furnace	10711	694989	1.6	Natural Gas	EF FACTOR*MMSCF	4.45	MMSCF	102.90	5.67	457.86	25.23
Furnace	10715	694990	0.1	Natural Gas	EF FACTOR*MMSCF	0.28	MMSCF	96.60	5.67	26.86	1.58
Furnace	11070	694991	0.175	Natural Gas	EF FACTOR*MMSCF	0.49	MMSCF	96.60	5.67	47.01	2.76
Furnace	11070	694992	0.125	Natural Gas	EF FACTOR*MMSCF	0.35	MMSCF	96.60	5.67	33.58	1.97
Furnace	11070	694993	0.125	Natural Gas	EF FACTOR*MMSCF	0.35	MMSCF	96.60	5.67	33.58	1.97
Furnace	11070	694994	0.175	Natural Gas	EF FACTOR*MMSCF	0.49	MMSCF	96.60	5.67	47.01	2.76
Furnace	11070	694995	0.175	Natural Gas	EF FACTOR*MMSCF	0.49	MMSCF	96.60	5.67	47.01	2.76
Furnace	11070	694996	0.25	Natural Gas	EF FACTOR*MMSCF	0.70	MMSCF	96.60	5.67	67.16	3.94
Furnace	11070	694997	0.125	Natural Gas	EF FACTOR*MMSCF	0.35	MMSCF	96.60	5.67	33.58	1.97
Furnace	11070	694998	0.25	Natural Gas	EF FACTOR*MMSCF	0.70	MMSCF	96.60	5.67	67.16	3.94
Furnace	11070	694999	0.25	Natural Gas	EF FACTOR*MMSCF	0.70	MMSCF	96.60	5.67	67.16	3.94
Furnace	11070	695000	0.175	Natural Gas	EF FACTOR*MMSCF	0.49	MMSCF	96.60	5.67	47.01	2.76
Furnace	11070	695001	0.225	Natural Gas	EF FACTOR*MMSCF	0.63	MMSCF	96.60	5.67	60.44	3.55
Furnace	11070	695002	0.35	Natural Gas	EF FACTOR*MMSCF	0.97	MMSCF	96.60	5.67	94.02	5.52
Furnace	11070	695003	0.35	Natural Gas	EF FACTOR*MMSCF	0.97	MMSCF	96.60	5.67	94.02	5.52
Furnace	11070	695004	0.5	Natural Gas	EF FACTOR*MMSCF	1.39	MMSCF	102.90	5.67	143.08	7.88
Furnace	11070	695005	0.5	Natural Gas	EF FACTOR*MMSCF	1.39	MMSCF	102.90	5.67	143.08	7.88
Furnace	11070	695006	0.5	Natural Gas	EF FACTOR*MMSCF	1.39	MMSCF	102.90	5.67	143.08	7.88
Furnace	11070	695007	0.175	Natural Gas	EF FACTOR*MMSCF	0.49	MMSCF	96.60	5.67	47.01	2.76
Furnace	11070	695008	0.125	Natural Gas	EF FACTOR*MMSCF	0.35	MMSCF	96.60	5.67	33.58	1.97

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

Description	Location	Pri ID	Capacity (MMBTU)	Fuel	Equation	Usage PTE	Usage Units	Emission Factors NOx*	Emission Factors ROC*	Emissions (Lbs/Yr) NOx	Emissions (Lbs/Yr) ROC
Furnace	11070	695009	0.175	Natural Gas	EF FACTOR*MMSCF	0.49	MMSCF	96.60	5.67	47.01	2.76
Furnace	11070	695010	0.175	Natural Gas	EF FACTOR*MMSCF	0.49	MMSCF	96.60	5.67	47.01	2.76
Furnace	11070	695011	0.175	Natural Gas	EF FACTOR*MMSCF	0.49	MMSCF	96.60	5.67	47.01	2.76
Furnace	10711	695630	0.612	Natural Gas	EF FACTOR*MMSCF	1.70	MMSCF	102.90	5.67	175.13	9.65
Boiler	8310	695764	1	Natural Gas	EF FACTOR*MMSCF	2.78	MMSCF	102.90	5.67	286.16	15.77
Boiler	1559	697049	0.399	Natural Gas	EF FACTOR*MMSCF	1.11	MMSCF	96.60	5.67	107.19	6.29
Boiler	7403	698034	0.6	Natural Gas	EF FACTOR*MMSCF	1.67	MMSCF	102.90	5.67	171.70	9.46
Water Heater	7015	698107	0.199	Natural Gas	EF FACTOR*MMSCF	0.55	MMSCF	96.60	5.67	53.46	3.14
Boiler	7425	698138	0.5	Natural Gas	EF FACTOR*MMSCF	1.39	MMSCF	102.90	5.67	143.08	7.88
Boiler	7425	698139	0.5	Natural Gas	EF FACTOR*MMSCF	1.39	MMSCF	102.90	5.67	143.08	7.88
Furnace	1749	698205	0.075	Natural Gas	EF FACTOR*MMSCF	0.21	MMSCF	96.60	5.67	20.15	1.18
Furnace	1749	698206	0.075	Natural Gas	EF FACTOR*MMSCF	0.21	MMSCF	96.60	5.67	20.15	1.18
Furnace	1749	698207	0.075	Natural Gas	EF FACTOR*MMSCF	0.21	MMSCF	96.60	5.67	20.15	1.18
Furnace	1749	698208	0.075	Natural Gas	EF FACTOR*MMSCF	0.21	MMSCF	96.60	5.67	20.15	1.18
Boiler	9360	698360	0.299	Natural Gas	EF FACTOR*MMSCF	0.83	MMSCF	96.60	5.67	80.32	4.71
Water Heater	1546	698361	0.34	Natural Gas	EF FACTOR*MMSCF	0.95	MMSCF	96.60	5.67	91.34	5.36
Water Heater	8195	698399	0.034	Natural Gas	EF FACTOR*MMSCF	0.09	MMSCF	96.60	5.67	9.13	0.54
Water Heater	8173	698745	0.076	Natural Gas	EF FACTOR*MMSCF	0.21	MMSCF	96.60	5.67	20.42	1.20
Boiler	871	698766	0.7	Natural Gas	EF FACTOR*MMSCF	1.95	MMSCF	102.90	5.67	200.31	11.04
Furnace	1705	700460	0.132	Natural Gas	EF FACTOR*MMSCF	0.37	MMSCF	96.60	5.67	35.46	2.08
Furnace	10715	700461	0.01	Natural Gas	EF FACTOR*MMSCF	0.03	MMSCF	96.60	5.67	2.69	0.16
Furnace	9340	701725	0.6	Natural Gas	EF FACTOR*MMSCF	1.67	MMSCF	102.90	5.67	171.70	9.46
Furnace	13330	701726	0.1	Natural Gas	EF FACTOR*MMSCF	0.28	MMSCF	96.60	5.67	26.86	1.58
Furnace	13330	701727	0.35	Natural Gas	EF FACTOR*MMSCF	0.97	MMSCF	96.60	5.67	94.02	5.52
Furnace	13330	701728	0.35	Natural Gas	EF FACTOR*MMSCF	0.97	MMSCF	96.60	5.67	94.02	5.52
Furnace	13330	701729	0.35	Natural Gas	EF FACTOR*MMSCF	0.97	MMSCF	96.60	5.67	94.02	5.52
Furnace	13330	701730	0.35	Natural Gas	EF FACTOR*MMSCF	0.97	MMSCF	96.60	5.67	94.02	5.52
Water Heater	1705	701731	0.034	Natural Gas	EF FACTOR*MMSCF	0.09	MMSCF	96.60	5.67	9.13	0.54
Water Heater	1707	701732	0.04	Natural Gas	EF FACTOR*MMSCF	0.11	MMSCF	96.60	5.67	10.75	0.63
Water Heater	7403	701733	0.04	Natural Gas	EF FACTOR*MMSCF	0.11	MMSCF	96.60	5.67	10.75	0.63
Water Heater	8175	701734	0.0751	Natural Gas	EF FACTOR*MMSCF	0.21	MMSCF	96.60	5.67	20.17	1.18
Water Heater	8305	701735	0.04	Natural Gas	EF FACTOR*MMSCF	0.11	MMSCF	96.60	5.67	10.75	0.63
Water Heater	8317	701736	0.034	Natural Gas	EF FACTOR*MMSCF	0.09	MMSCF	96.60	5.67	9.13	0.54
Furnace	11442	701737	0.12	Natural Gas	EF FACTOR*MMSCF	0.33	MMSCF	96.60	5.67	32.24	1.89
Furnace	11442	701738	0.12	Natural Gas	EF FACTOR*MMSCF	0.33	MMSCF	96.60	5.67	32.24	1.89
Boiler	3000	703338	1.9	Natural Gas	EF FACTOR*MMSCF	5.28	MMSCF	102.90	5.67	543.70	29.96
Boiler	3000	703339	1.9	Natural Gas	EF FACTOR*MMSCF	5.28	MMSCF	102.90	5.67	543.70	29.96
Water Heater	2530	703348	0.075	Natural Gas	EF FACTOR*MMSCF	0.21	MMSCF	96.60	5.67	20.15	1.18
Boiler	13137	703917	0.5	Natural Gas	EF FACTOR*MMSCF	1.39	MMSCF	102.90	5.67	143.08	7.88
Boiler	13137	703918	0.5	Natural Gas	EF FACTOR*MMSCF	1.39	MMSCF	102.90	5.67	143.08	7.88
Boiler	13137	703919	0.5	Natural Gas	EF FACTOR*MMSCF	1.39	MMSCF	102.90	5.67	143.08	7.88
Boiler	13137	703920	0.5	Natural Gas	EF FACTOR*MMSCF	1.39	MMSCF	102.90	5.67	143.08	7.88
Boiler	13321	703942	0.3	Natural Gas	EF FACTOR*MMSCF	0.83	MMSCF	96.60	5.67	80.59	4.73
Water Heater	11177	704017	0.034	Natural Gas	EF FACTOR*MMSCF	0.09	MMSCF	96.60	5.67	9.13	0.54
Boiler	13675	704072	0.3	Natural Gas	EF FACTOR*MMSCF	0.83	MMSCF	96.60	5.67	80.59	4.73
Boiler	13863	704088	0.199	Natural Gas	EF FACTOR*MMSCF	0.55	MMSCF	96.60	5.67	53.46	3.14
Boiler	13321	704757	0.3	Natural Gas	EF FACTOR*MMSCF	0.83	MMSCF	96.60	5.67	80.59	4.73
Boiler	13321	704758	0.3	Natural Gas	EF FACTOR*MMSCF	0.83	MMSCF	96.60	5.67	80.59	4.73
Boiler	11070	704759	0.86	Natural Gas	EF FACTOR*MMSCF	2.39	MMSCF	102.90	5.67	246.10	13.56
Boiler	8175	704761	0.399	Natural Gas	EF FACTOR*MMSCF	1.11	MMSCF	96.60	5.67	107.19	6.29
Water Heater	6607	704767	0.05	Natural Gas	EF FACTOR*MMSCF	0.14	MMSCF	96.60	5.67	13.43	0.79
Water Heater	6607	704769	0.04	Natural Gas	EF FACTOR*MMSCF	0.11	MMSCF	96.60	5.67	10.75	0.63
Boiler	490	704772	0.12	Propane/LPG	EF FACTOR*GALS/1000	3,808.70	GALS	13.5	0.47	51.42	1.79
Furnace	542	704775	0.1	Natural Gas	EF FACTOR*MMSCF	0.28	MMSCF	96.60	5.67	26.86	1.58
Water Heater	542	704778	0.04	Natural Gas	EF FACTOR*MMSCF	0.11	MMSCF	96.60	5.67	10.75	0.63
Boiler	475	705824	1.5	Propane/LPG	EF FACTOR*GALS/1000	47,608.70	GALS	13.5	0.47	642.72	22.38
Water Heater	11013	706417	0.034	Natural Gas	EF FACTOR*MMSCF	0.09	MMSCF	96.60	5.67	9.13	0.54
Water Heater	10343	706526	0.04	Natural Gas	EF FACTOR*MMSCF	0.11	MMSCF	96.60	5.67	10.75	0.63
Water Heater	11510	706527	0.032	Natural Gas	EF FACTOR*MMSCF	0.09	MMSCF	96.60	5.67	8.60	0.50
Water Heater	1628	707800	0.04	Propane/LPG	EF FACTOR*GALS/1000	1,269.57	GALS	13.5	0.47	17.14	0.60
Boiler	660	707832	0.5	Natural Gas	EF FACTOR*MMSCF	1.39	MMSCF	102.90	5.67	143.08	7.88
Furnace	789	707833	0.5	Natural Gas	EF FACTOR*MMSCF	1.39	MMSCF	102.90	5.67	143.08	7.88
Boiler	799	707834	0.105	Natural Gas	EF FACTOR*MMSCF	0.29	MMSCF	96.60	5.67	28.21	1.66
Boiler	799	707835	0.106	Natural Gas	EF FACTOR*MMSCF	0.29	MMSCF	96.60	5.67	28.48	1.67
Furnace	1579	707836	0.1	Propane/LPG	EF FACTOR*GALS/1000	3,173.91	GALS	13.5	0.47	42.85	1.49
Furnace	5002	707837	0.08	Natural Gas	EF FACTOR*MMSCF	0.22	MMSCF	96.60	5.67	21.49	1.26
Water Heater	5010	707838	0.2	Natural Gas	EF FACTOR*MMSCF	0.56	MMSCF	96.60	5.67	53.73	3.15
Water Heater	10660	707839	0.199	Natural Gas	EF FACTOR*MMSCF	0.55	MMSCF	96.60	5.67	53.46	3.14
Boiler	10660	707840	0.399	Natural Gas	EF FACTOR*MMSCF	1.11	MMSCF	96.60	5.67	107.19	6.29
Water Heater	12907	707841	0.034	Natural Gas	EF FACTOR*MMSCF	0.09	MMSCF	96.60	5.67	9.13	0.54
Water Heater	13022	707842	0.036	Natural Gas	EF FACTOR*MMSCF	0.10	MMSCF	96.60	5.67	9.67	0.57
Boiler	13640	707843	0.99	Natural Gas	EF FACTOR*MMSCF	2.75	MMSCF	102.90	5.67	283.30	15.61
Water Heater	13640	707844	0.199	Natural Gas	EF FACTOR*MMSCF	0.55	MMSCF	96.60	5.67	53.46	3.14
Water Heater	13848	707845	0.199	Natural Gas	EF FACTOR*MMSCF	0.55	MMSCF	96.60	5.67	53.46	3.14
Boiler	13848	707846	0.399	Natural Gas	EF FACTOR*MMSCF	1.11	MMSCF	96.60	5.67	107.19	6.29
Boiler	13855	707847	0.199	Natural Gas	EF FACTOR*MMSCF	0.55	MMSCF	96.60	5.67	53.46	3.14
Boiler	13855	707848	0.199	Natural Gas	EF FACTOR*MMSCF	0.55	MMSCF	96.60	5.67	53.46	3.14
Boiler	13856	707849	0.199	Natural Gas	EF FACTOR*MMSCF	0.55	MMSCF	96.60	5.67	53.46	3.14
Boiler	13864	707851	0.199	Natural Gas	EF FACTOR*MMSCF	0.55	MMSCF	96.60	5.67	53.46	3.14
Boiler	13864	707852	0.199	Natural Gas	EF FACTOR*MMSCF	0.55	MMSCF	96.60	5.67	53.46	3.14
Boiler	13865	707853	0.199	Natural Gas	EF FACTOR*MMSCF	0.55	MMSCF	96.60	5.67	53.46	3.14
Boiler	13865	707854	0.199	Natural Gas	EF FACTOR*MMSCF	0.55	MMSCF	96.60	5.67	53.46	3.14
Boiler	13866	707855	0.199	Natural Gas	EF FACTOR*MMSCF	0.55	MMSCF	96.60	5.67	53.46	3.14
Boiler	13866	707856	0.199	Natural Gas	EF FACTOR*MMSCF	0.55	MMSCF	96.60	5.67	53.46	3.14
Water Heater	14300	707857	0.275	Natural Gas	EF FACTOR*MMSCF	0.76	MMSCF	96.60	5.67	73.88	4.34
Boiler	16200	707858	1.26	Natural Gas	EF FACTOR*MMSCF	3.50	MMSCF	102.90	5.67	360.56	19.87
Boiler	6523	707930	0.85	Natural Gas	EF FACTOR*MMSCF	2.36	MMSCF	102.90	5.67	243.24	13.40
Furnace	1628	707998	0.08	Propane/LPG	EF FACTOR*GALS/1000	2,539.13	GALS	13.5	0.47	34.28	1.19

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

Description	Location	Pri ID	Capacity (MMBTU)	Fuel	Equation	Usage PTE	Usage Units	Emission Factors NOx*	Emission Factors ROC*	Emissions (Lbs/Yr) NOx	Emissions (Lbs/Yr) ROC
Furnace	1628	707999	0.1	Propane/LPG	EF FACTOR*GALS/1000	3,173.91	GALS	13.5	0.47	42.85	1.49
Boiler	6523	708039	0.85	Natural Gas	EF FACTOR*MMSCF	2.36	MMSCF	102.90	5.67	243.24	13.40
Water Heater	1731	708767	0.038	Natural Gas	EF FACTOR*MMSCF	0.11	MMSCF	96.60	5.67	10.21	0.60
Boiler	7025	708770	1.05	Natural Gas	EF FACTOR*MMSCF	2.92	MMSCF	102.90	5.67	300.47	16.56
Boiler	7025	708771	1.05	Natural Gas	EF FACTOR*MMSCF	2.92	MMSCF	102.90	5.67	300.47	16.56
Boiler	23225	708772	2	Natural Gas	EF FACTOR*MMSCF	5.56	MMSCF	102.90	5.67	572.32	31.54
Boiler	23225	708773	2	Natural Gas	EF FACTOR*MMSCF	5.56	MMSCF	102.90	5.67	572.32	31.54
Boiler	9190	709144	0.399	Natural Gas	EF FACTOR*MMSCF	1.11	MMSCF	96.60	5.67	107.19	6.29
Boiler	13852	710165	0.199	Natural Gas	EF FACTOR*MMSCF	0.55	MMSCF	96.60	5.67	53.46	3.14
Water Heater	10317	711980	0.04	Natural Gas	EF FACTOR*MMSCF	0.11	MMSCF	96.60	5.67	10.75	0.63
Water Heater	10717	713405	0.04	Natural Gas	EF FACTOR*MMSCF	0.11	MMSCF	96.60	5.67	10.75	0.63
Water Heater	1735	713406	0.01	Natural Gas	EF FACTOR*MMSCF	0.03	MMSCF	96.60	5.67	2.69	0.16
Water Heater	12915	713407	0.27	Natural Gas	EF FACTOR*MMSCF	0.75	MMSCF	96.60	5.67	72.53	4.26
Furnace	1930	714341	1	Propane/LPG	EF FACTOR*GALS/1000	31,739.13	GALS	13.5	0.47	428.48	14.92
Furnace	1930	714343	1	Propane/LPG	EF FACTOR*GALS/1000	31,739.13	GALS	13.5	0.47	428.48	14.92
Water Heater	21308	714346	0.036	Natural Gas	EF FACTOR*MMSCF	0.10	MMSCF	96.60	5.67	9.67	0.57
Water Heater	8510	714347	0.038	Natural Gas	EF FACTOR*MMSCF	0.11	MMSCF	96.60	5.67	10.21	0.60
Boiler	6523	714348	0.11	Natural Gas	EF FACTOR*MMSCF	0.31	MMSCF	96.60	5.67	29.55	1.73
Water Heater	6523	714349	0.034	Natural Gas	EF FACTOR*MMSCF	0.09	MMSCF	96.60	5.67	9.13	0.54
Boiler	2500	717170	0.25	Natural Gas	EF FACTOR*MMSCF	0.70	MMSCF	96.60	5.67	67.16	3.94
Boiler	13856	7078450	0.199	Natural Gas	EF FACTOR*MMSCF	0.55	MMSCF	96.60	5.67	53.46	3.14
									Total (lbs)	53,379.91	2,894.45
									Total (tons)	20.11	1.09

Notes:

Actual Usage is derived by pro rating total base annual reciept of fuel to all units, accounting for individual capacity rating.

PTE Usage is capacity x hours per year x conversion factor (btu/units); Hours = 290; 1102 btu/scf NG, and 90468 btu/gal LPG

*Emission 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	1854	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	3633	EM = 0.041 *Q*(100-CF)	150	416	312
8190	1580 Nevada Ave	3978	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
21155	155 Corral Rd Rd	4283	EM = 0.041 *Q*(100-CF)	180	416	374.4
9320	137 13th St	4318	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
9320	334 6th St	705831	EM = 0.041 *Q*(100-CF)	180	416	374.4
					Total (Lbs/yr)	**1,961.44**
					Total (TPY)	**0.98**

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	1297	Diesel	Assumed to be negligible	4000		
Fueling Generator	64	3981	Diesel	Assumed to be negligible	150		
Fueling Generators	75	696917	Diesel	Assumed to be negligible	264		
Fueling Generator	81	3947	Diesel	Assumed to be negligible	205		
Fueling Generator	185	3114	Diesel	Assumed to be negligible	500		
Fueling Generator	185	3429	Diesel	Assumed to be negligible	175		
Fueling Generator	185	3430	Diesel	Assumed to be negligible	175		
Fueling Generator	383	3977	Diesel	Assumed to be negligible	500		
Fueling Generator	425	3115	Diesel	Assumed to be negligible	175		
Fueling Generator	490	3915	Diesel	Assumed to be negligible	79		
Fueling Generator	501	3091	Diesel	Assumed to be negligible	140		
Fueling Generator	511	3431	Diesel	Assumed to be negligible	125		
Fueling Generator	518	3604	Diesel	Assumed to be negligible	79		
Gearbox Lube for Engine 1	525	1224	Diesel	Assumed to be negligible	2500		
Gearbox Lube for Engine 2	525	1226	Diesel	Assumed to be negligible	2500		
Gearbox Lube for Engine 3	525	1228	Diesel	Assumed to be negligible	2500		
Gearbox Lube for Engine 4	525	1229	Diesel	Assumed to be negligible	2500		
Gearbox Lube for Engine 5	525	1230	Diesel	Assumed to be negligible	2500		
Fueling Generators	525	4078	Diesel	Assumed to be negligible	35		
Fueling Generators	525	4079	Diesel	Assumed to be negligible	35		
Fueling Generators	525	4080	Diesel	Assumed to be negligible	35		
Fueling Generators	525	4081	Diesel	Assumed to be negligible	35		
Fueling Generators	525	4082	Diesel	Assumed to be negligible	35		
Fueling Generators	661	675337	Diesel	Assumed to be negligible	250		
Fueling Generators	661	24851-0	Diesel	Assumed to be negligible	5000		
Fueling Generator	764	3541	Diesel	Assumed to be negligible	660		
Fueling Generators	799	700139	Diesel	Assumed to be negligible	77		
Fueling Generator	830	3542	Diesel	Assumed to be negligible	425		
Fueling Generators	830	4362	Diesel	Assumed to be negligible	480		
Fueling Generators	830	4363	Diesel	Assumed to be negligible	150		
Fueling Generator	906	3094	Diesel	Assumed to be negligible	350		
Fueling Generators	929	3959	Diesel	Assumed to be negligible	500		
Fueling Generators	964	674105	Diesel	Assumed to be negligible	253		
Fueling Generators	966	675092	Diesel	Assumed to be negligible	253		
Fueling Fire Water Pump	968	3308	Diesel	Assumed to be negligible	300		
Fueling Fire Water Pump	968	3309	Diesel	Assumed to be negligible	300		
Fueling Generator	1501	3497	Diesel	Assumed to be negligible	85		
Fueling Generator	1524	3492	Diesel	Assumed to be negligible	79		
Fueling Generator	1559	3446	Diesel	Assumed to be negligible	250		
Fueling Generator	1561	3096	Diesel	Assumed to be negligible	500		
Fueling Generator	1579	3335	Diesel	Assumed to be negligible	102		
Fueling Generator	1581	1312	Diesel	Assumed to be negligible	500		
Fueling Generator	1591	3491	Diesel	Assumed to be negligible	85		
Fueling Generator	1592	3620	Diesel	Assumed to be negligible	85		
Fueling Generator	1604	3098	Diesel	Assumed to be negligible	550		
Fueling Generator	1618	3442	Diesel	Assumed to be negligible	320		
Fueling Generators	1623	679435	Diesel	Assumed to be negligible	320		
Fueling Generator	1639	3099	Diesel	Assumed to be negligible	300		
Fueling Equipment	1699	1250	Diesel	Assumed to be negligible	20000		
Fueling Equipment	1704	1249	Diesel	Assumed to be negligible	20000		
Fueling Equipment	1705	679438	Diesel	Assumed to be negligible	200		
Fueling Equipment	1705	679439	Diesel	Assumed to be negligible	66		
Fueling Equipment	1705	679441	Diesel	Assumed to be negligible	100		
Fueling Equipment	1705	700259	Diesel	Assumed to be negligible	100		
Fueling Equipment	1735	4280	Diesel	Assumed to be negligible	500		
Fueling Equipment	1735	679443	Jet-A	Assumed to be negligible	600		
Fueling Generator	1737	3101	Diesel	Assumed to be negligible	40		
Fueling Generator	1747	4050	Diesel	Assumed to be negligible	500		
Fueling Generator	1748	3338	Diesel	Assumed to be negligible	88		
Fueling Generator	1762	3312	Diesel	Assumed to be negligible	250		
Fueling Generator	1764	3102	Diesel	Assumed to be negligible	180		
Fueling Generator	1768	3574	Diesel	Assumed to be negligible	700		
Fueling Generators	1819	684195	Diesel	Assumed to be negligible	1000		
Fueling Fire Water Pump	1829	3104	Diesel	Assumed to be negligible	325		
Fueling Fire Water Pump	1829	3402	Diesel	Assumed to be negligible	325		
Fueling Generator	1905	3339	Diesel	Assumed to be negligible	64		
Fueling Generator	1914	3561	Diesel	Assumed to be negligible	500		
Fueling Generator	1916	3909	Diesel	Assumed to be negligible	500		
Fueling Generators	1919	653798	Diesel	Assumed to be negligible	147		
Fueling Generator	1937	3499	Diesel	Assumed to be negligible	514		
Fueling Generator	1962	3562	Diesel	Assumed to be negligible	388		
Fueling Generator	1964	3563	Diesel	Assumed to be negligible	388		
Fueling Generator	1965	3908	Diesel	Assumed to be negligible	350		
Fueling Generator	1971	3564	Diesel	Assumed to be negligible	388		
Fueling Generator	1972	3565	Diesel	Assumed to be negligible	388		
Fueling Fire Water Pump	2305	3107	Diesel	Assumed to be negligible	285		
Fueling Equipment	2500	4139	Diesel	Assumed to be negligible	500		
Fueling Generator	2500	3443	Diesel	Assumed to be negligible	500		
Fueling Generators	2500	715793	Diesel	Assumed to be negligible	500		

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	2520	3911	Diesel	Assumed to be negligible	1000		
Fueling Generators	3000	641872	Diesel	Assumed to be negligible	2000		
Fueling Generators	3000	644530	Diesel	Assumed to be negligible	2000		
Fueling Generators	3000	702075	Diesel	Assumed to be negligible	500		
Fueling Equipment	5425	3438	Diesel	Assumed to be negligible	240		
Fueling Equipment	5425	3439	Gasoline	From GDF Emissions (ver 1.0)	240	24960	89.87
Fueling Generator	6510	3816	Diesel	Assumed to be negligible	500		
Fueling Generator	6819	3598	Diesel	Assumed to be negligible	80		
Fueling Generators	7025	U-16334	Diesel	Assumed to be negligible	1500		
Fueling Generator	7425	3108	Diesel	Assumed to be negligible	250		
Fueling Generator	7425	3877	Diesel	Assumed to be negligible	141		
Fueling Generators	8195	D-53051	Diesel	Assumed to be negligible	194		
Fueling Generators	8314	675248	Diesel	Assumed to be negligible	60		
Fueling Generators	8314	682749	Diesel	Assumed to be negligible	60		
Fueling Generators	8314	682750	Diesel	Assumed to be negligible	60		
Fueling Generators	8314	682751	Diesel	Assumed to be negligible	60		
Fueling Generators	8314	682752	Diesel	Assumed to be negligible	60		
Fueling Generators	8317	08317-0	Diesel	Assumed to be negligible	320		
Fueling Generator	8401	3807	Diesel	Assumed to be negligible	850		
Fueling Generators	8425	675252	Diesel	Assumed to be negligible	200		
Fueling Generator	8510	3432	Diesel	Assumed to be negligible	1000		
Fueling Generators	9320	675253	Diesel	Assumed to be negligible	56		
Fueling Generators	9320	675254	Diesel	Assumed to be negligible	100		
Fueling Generators	10314	695359	Diesel	Assumed to be negligible	170		
Fueling Generator	10525	1221	Diesel	Assumed to be negligible	150		
Fueling Generator	10579	3314	Diesel	Assumed to be negligible	200		
Fueling Generator	10660	3109	Diesel	Assumed to be negligible	88		
Fueling Equipment	10723	1214	Diesel	Assumed to be negligible	4000		
Fueling Equipment	10726	695365	Biodiesel	Assumed to be negligible	5000		
Fueling Generators	11439	U-16855	Diesel	Assumed to be negligible	150		
Fueling Generators	11477	675278	Diesel	Assumed to be negligible	85		
Fueling Generators	12000	682748	Diesel	Assumed to be negligible	1555		
Fueling Generator	12008	3474	Diesel	Assumed to be negligible	300		
Fueling Generator	12008	3475	Diesel	Assumed to be negligible	300		
Fueling Generators	12008	25122	Diesel	Assumed to be negligible	10000		
Fueling Generators	13850	28945-0	Diesel	Assumed to be negligible	550		
Fueling Generator	21150	1317	Diesel	Assumed to be negligible	1500		
Fueling Generator	21203	3743	Diesel	Assumed to be negligible	425		
Fueling Generators	22312	711744	Diesel	Assumed to be negligible	500		
Fueling Generator	23160	3606	Diesel	Assumed to be negligible	79		
Fueling Generator	23201	3583	Diesel	Assumed to be negligible	140		
Fueling Fire Water Pump	23209	3434	Diesel	Assumed to be negligible	200		
Fueling Generators	23243	682143	Diesel	Assumed to be negligible	100		
Fueling Generators	23243	K012312	Diesel	Assumed to be negligible	2000		
Fueling Generators	BASEWIDE	675197	Diesel	Assumed to be negligible	110		
Fueling Generators	BASEWIDE	681967	Diesel	Assumed to be negligible	110		
Fueling Generators	BASEWIDE	681976	Diesel	Assumed to be negligible	110		
Fueling Equipment	976/977	674098	Aerozine50	Assumed to be negligible	2528		
Fueling Equipment	SLC-2	1220	Diesel	Assumed to be negligible	235		
Fueling Equipment	SLC-2	1232	Gasoline	From GDF Emissions (ver 1.0)	235	24440	55.60
Fueling Equipment	SLC-2	1234	Gasoline	From GDF Emissions (ver 1.0)	235	24440	55.60
					Total	**73,840.0**	201.06
					Total (tpy)		0.10

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	700	1.50E-02	4.70E-03	10.50	3.29	AP-42; Table 15.9.3-1 and -2
ANFO[a]	800	17	NA	6.80	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)	80.01	7.48	
			Total (Tons/Year)	0.04	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 2011-2018

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	1,995	1.60E-03	3.19	AP-42; Highest Values from Tables 15.2.2-1 through 15.2.7-1.
5.56 mm	311,864	8.50E-05	26.51	AP-42; Highest Value from Tables 15.1.4-1 through15.1.9-1.
7.62 mm	180,400	9.70E-05	17.50	AP-42; Highest Value from Tables 15.1.12-1 through 15.1.16-1
9 mm	94,400	1.50E-05	1.42	AP-42; Tables 15.1.21-1 .
		Total (Lbs/Year)	48.69	
		Total (Tons/Year)	0.02	

Notes:

[a] For this source, the amount of charge is the highest annual consumption from CY 2011-2018

Table A-10. Wood Chipper Emissions

Building Number	Equip. Location	Operator ID	Equation	Emission Rate	Annual Tons	PM10 Emission (Lbs)
NA	Various Locations	650037	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

Table A-13. Building 11520 Soil Vapor Extraction (SVE) Readings

Date	Concentrations (PPBV VOC) Inlet	Mid point	Outlet	Decrease	Control Efficiency
1/23/2018	4,420	78	--	4,342	98.24%
2/13/2018	3,837	80	29	3,808	99.24%
3/6/2018	5,530	55	15	5,515	99.73%
4/19/2018	3,716	89	28	3,688	99.25%
5/15/2018	3,605	89	32	3,573	99.11%
6/11/2018	3,308	89	32	3,276	99.03%
7/24/2018	5,528	258	58	5,470	98.95%
8/14/2018	3,597	222	30	3,567	99.17%
9/13/2018	3,489	652	66	3,423	98.11%
10/8/2018	3,112	306	31	3,081	99.00%
11/7/2018	3,245	3,448	12	3,233	99.63%
				Average	99.04%

Table A-14. VOC Removal and Emissions from Building 11520

Reporting Period (Dates)	Operation Period	SVE Hours Operated: During Operating Period[F]	SVE Hours Operated: Cumulative	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 ROCs Emitted in Operating Period	Cumulative ROCs Emitted
		(hours)	(hours)		(scfm)	(µg/m³)	(lbs/hr)	(lbs/day)	(µg/m³)	(lbs/hr)	(lbs/day)	(lbs)	(lbs)	(lbs)	(lbs)
1/1/18 - 1/31/18	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	0.01	0.01
	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	0.01	0.02
2/1/18 - 2/28/18	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	0.02	0.03
	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	0.05	0.08
3/1/18 - 3/31/18	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	0.05	0.13
	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	0.05	0.24
4/1/18 - 4/30/18	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	0.06	0.30
	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	0.07	0.37
5/1/18 - 5/31/18	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	0.08	0.45
	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	0.15	0.60
6/1/18 - 6/30/18	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	0.16	0.75
	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	0.21	1.22
7/1/18 - 7/31/18	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	0.21	1.76
	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	0.28	2.05
8/1/18 - 8/31/18	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	0.30	2.34
	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	0.22	2.49
9/1/18 - 9/30/18	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	0.24	2.73
	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	0.48	3.21
10/1/18 - 10/31/18	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	0.45	3.35
	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	0.30	3.65
11/1/18 -11/30/18	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	0.28	3.93
	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	0.06	3.99
	11/15/18 - 11/30/18	0.0	6,983.9	--	--	--	--	--	--	--	--	--	4.89	--	3.99
12/1/18 -	12/1/18 - 12/31/18	0.0	6,983.9	--	--	--	--	--	--	--	--	--	4.89	--	3.99

Total Mass of VOCs Emitted during 2018:	**4.89 pounds**
Average Daily VOC Emission Rate during 2018:	**0.017 pounds per**
Total Mass of ROCs Emitted during 2018:	**3.99 pounds**
Average Daily ROC Emission Rate during the Reporting Period:	**0.014 pounds per**
Average Process Flow Rate during the Reporting Period:	**121 scfm**

APPENDIX B LIST OF CURRENT DISTRICT PERMITS

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

Incorporated Permits	New Permits
6117-R7	14073
7987-R5	14366
7988-R5	14362
8350-R6	14566
8362-R7	14683
8433-R7	14574
8580-R5	14654
8629-R6	14653
8630-R7	14602
8658-R5	14625
8686-R4	14663
8688-R4	14782
8766-R5	14926
8932-R5	14246-01
9088-R4	14968
10155-R2	14969
10156-R2	15012
10791	15043
10867-R2	15065
10900-R2	15141
11143-R1	15175
11668-R1	15181
11671-R1	15283
11672-R1	15258
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	

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

Incorporated Permits	New Permits
12676	
12739	
12793	
12810	
12843	
12896	
12916	
12917	
12922	
13139	
13223	
13224	
13267	
13271	
13329	
13349	
13376	
13405	
13416	
13493	
13537	
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	