

NMED

New _____
Mexico _____
Environment
Department



Emissions Inventory Guidance Document

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Introduction

The New Mexico Environment Department – Air Quality Bureau (AQB) collects emission inventories from Major and Minor sources that meet the criteria in New Mexico Administrative Code (NMAC) 20.2.73.300. AQB requires all Major sources to submit an emissions inventory on a yearly basis per NMAC 20.2.73.300. Minor sources must submit an emissions inventory if they meet the criteria in NMAC 20.2.73.300.

AQB requires all permitted or registered Major and Minor sources submit an emissions inventory triennially. This document contains instructions on how to submit an emissions inventory to AQB.

Signing up for Air Emissions Inventory Reporting (AEIR)

The Air Emissions Inventory Reporting ([AEIR](#)) system is a web-based tool used to submit emission inventories. AQB uses this information for planning purposes, to prepare statewide emissions inventory information, and to report emissions to the U.S. Environmental Protection Agency (EPA). If you have not registered for AEIR before, please follow these steps:

- 1) Follow this link: <https://sep.net.env.nm.gov/sep/login-form>

New Mexico
ENVIRONMENT
Department

Secure Extranet Portal (SEP)

Register

Please Log In: NMED Employees should log in with their state email address and password

User ID:

Password:

[Reset Password](#)

Login **Reset**

[Secure Site](#)

NOTICE: Access to the New Mexico Environment Department (NMED) Secure Extranet Portal (SEP) is restricted to authorized personnel only. Any unauthorized access is in violation of federal and/or state laws. *DO NOT PROCEED IF YOU ARE NOT AUTHORIZED.*

WARNING: Any use or activity may be monitored. Files and other information created, stored, transferred or otherwise manipulated may also be monitored.

Registration is required. [Click here to register for an NMED application.](#)

Released 10-20-2025

 **New Mexico
ENVIRONMENT
Department** **NMED Registration Request**

Login

Register for an NMED Application

Please provide your email address below so that we may send you a link to begin the registration process.
NMED employees should click **Login** to log in with their state email address and password.

Your Email Address:

Confirm Email Address:

Enter code on the right: 

Submit

NOTICE: Access to the New Mexico Environment Department (NMED) Secure Extranet Portal (SEP) is restricted to authorized personnel only. Any unauthorized access is in violation of federal and/or state laws. **DO NOT PROCEED IF YOU ARE NOT AUTHORIZED.**

WARNING: Any use or activity may be monitored. Files and other information created, stored, transferred or otherwise manipulated may also be monitored.

Released 10-20-2025

- 2) You will receive an email notification with a unique link to the registration page. Click on the hyperlink to start the process
- 3) Fill out your profile information, then click “Create User Profile” button and you will be emailed a temporary password.

 **New Mexico
ENVIRONMENT
Department** **Application Registration - New User Profile**

Please enter your profile information.

Please complete the following user profile to begin registration for an NMED application.

First Name: * M.I.: Last Name: * Title: *

Organization/Company: * Department: Employment: *

Street Address: * Street Address 2:

City: * State ZIP Code: *

Primary telephone Number: * - - ext.: - -

Email Address: * Confirm Email Address: *

Choose a User ID: *

Create User Profile

 **Click**

4) Register for “Air Emissions Inventory Reporting” by clicking “Register”.

Select an NMED Application for Registration

Application	Description	Access
API Security	API Security Portal for NMED applications.	register
AQB Compliance Reporting	The Air Quality Bureau Compliance Reporting System	register
AQB Regulatory Archives	AQB Regulatory Archives	register
Air Cloud ResourceSpace	Air Cloud ResourceSpace for SEP	register
Air Emissions Inventory Reporting	Air Quality Bureau Air Emissions Inventory Reporting (AEIR) application to allow facilities to electronically submit an annual emissions inventory report to NMED.	register
Corrective Action Fund	PSTB's financial application for managing and tracking of release site cleanup funds. (PSTB STAFF ONLY)	register
Drinking Water Bureau Board Training Database	Drinking Water Bureau Board Training Database	register
Drinking Water Sample Collection	DWSC supports the capture of drinking Water sample data and the submission of lab results.	register
GetBytes	RESTful Services Aggregator Application	register
LabTo State (Error Reporting App)	A tool to assist laboratories and other entities with formatting, validating, and submitting water sample data to their primary agency.	register
OIT Cloud ResourceSpace	OIT Cloud ResourceSpace For SEP	register
OIT Wiki	Office of Information Technology Wiki.	register
OSHA Consult	OHSB Request A Free Safety And Health Consultation Report with update/delete option	register
OSHA Mail	List of email addresses that will receive an email from consult form	register

5) On the AEIR homepage, you will see that you have been approved. Click the link “Air Emissions Inventory Reporting” where it will take you to register for roles and facilities, and where you will create emission and GHG reports.



Application	Description	Access
AQB Compliance Reporting	The Air Quality Bureau Compliance Reporting System	approved
AQB Regulatory Archives	AQB Regulatory Archives	approved
Air Emissions Inventory Reporting	Air Quality Bureau Air Emissions Inventory Reporting (AEIR) application to allow facilities to electronically submit an annual emissions inventory report to NMED.	approved

6) Select your organization from the drop-down menu and associated facilities will appear.

**New Mexico
ENVIRONMENT
Department**

Annual Emissions Inventory Reporting

**Welcome to the New Mexico Environment Department
Air Quality Bureau Annual Air Emissions Reporting Home Page**

News and Information

Important NMED News for Air Emissions Inventory Reporters

- AEIR submittals for 2025 are due by [April 1, 2026](#).
- Additional resources and instructions can be found here: [EI Submittal](#)
- We recommend using the latest version of Firefox, Edge, or Chrome for best compatibility with AEIR.
- IMPORTANT NOTE: EXCESS EMISSIONS MUST BE INCLUDED IN YOUR SUBMITTAL**

If you have any questions, please contact Roslyn Higgin at 505-629-7677, Shannon Lopez at 505-629-6283, or Nevil Franco at 505-795-4919. roslyn.higgin@env.nm.gov, shannon.lopez@env.nm.gov, nevil.franco@env.nm.gov

Register For Additional Facilities and/or Roles at Your Existing Facilities

Edit Submittal Certify Submittal View Certified Submittal Delete In Process Submittal

Get Current NMED Facility XML File

Create New Facility Emissions Inventory Submission

Facility: Select or search for a facility...

Reporting Year: Select a facility first

Create New Annual Reporting Year Submittal

OR

XML Data File: Choose File No file chosen

Import an XML Data File For a New Submittal

Click here to download the latest XML Schema file

Create New Organization Greenhouse Gas (GHG) Emissions Inventory Submission

Organization: Select or search for an organization...

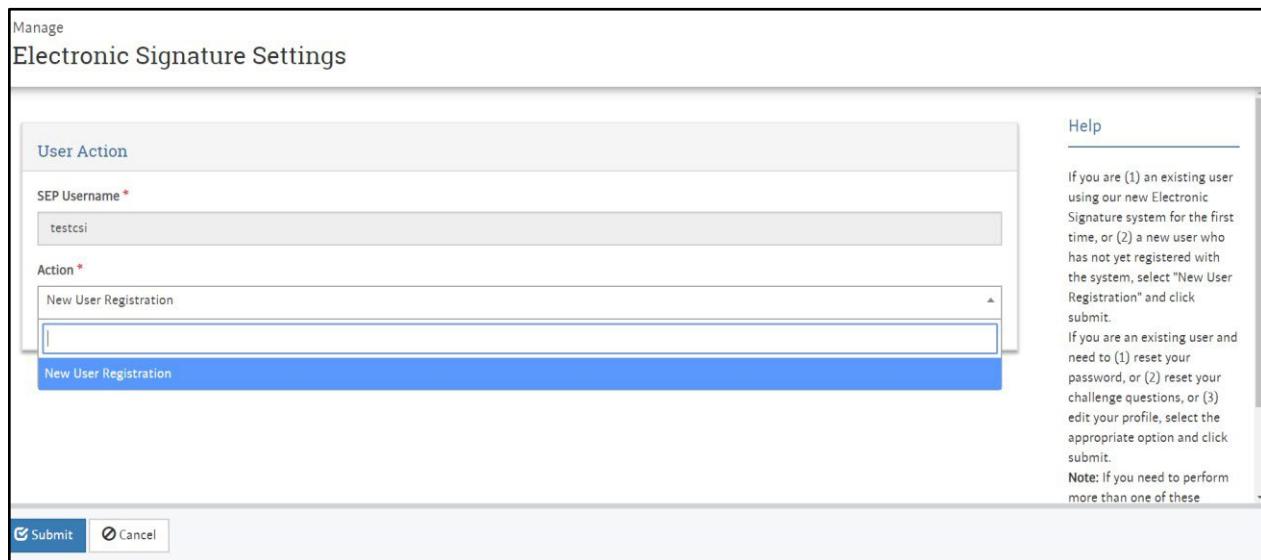
Reporting Year: Select an organization first

Create New GHG Annual Reporting Year Submittal

Manage E-Sign

To complete an emissions inventory submission, it must be certified. A Certifier role can be requested when signing up for AEIR. A Certifier must register under “Manage E- Sign” at the top of the AEIR main page. Signing up for Manage E-Sign is a requirement for new and existing Certifiers. For new Certifiers, part of the process will involve identity verification. Be careful when entering information to identify yourself because only one attempt is possible under the current system. If proving your identity fails, use an [Electronic Subscriber Application and Agreement \(ESAA\) form](#) to identity proof yourself. Certifiers should register for Manage E-Sign as soon as possible. Use the resources available on the Emission Inventory Submittal webpage <https://www.env.nm.gov/air-quality/ei-submittal/>.

Below are snapshots of what you will be seeing as you sign up. You will provide your SEP username and whether it is a new registration. When you submit this page, you will receive an email (below) that confirms your registration, a set of guidelines to follow, and a link that will take you to the final steps of registration.



The screenshot shows a web-based form titled "Manage Electronic Signature Settings". The form is divided into sections: "User Action" and "Help".

User Action:

- SEP Username *: testcsi
- Action *: A dropdown menu with "New User Registration" selected. The "New User Registration" option is highlighted with a blue background.

Help:

If you are (1) an existing user using our new Electronic Signature system for the first time, or (2) a new user who has not yet registered with the system, select "New User Registration" and click submit.

If you are an existing user and need to (1) reset your password, or (2) reset your challenge questions, or (3) edit your profile, select the appropriate option and click submit.

Note: If you need to perform more than one of these

At the bottom of the form are "Submit" and "Cancel" buttons.

[EXTERNAL] [NMED E-Signature] Registration Request and Electronic Subscriber Agreement (retain for your records)

D DoNotReply <DoNotReply@env.nm.gov>

 If there are problems with how this message is displayed, click here to view it in a web browser.

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

Please read the terms and click the link below to continue to registration.

By clicking the link below, as the person requesting authorization to prepare or submit electronic documents, you are acknowledging that you understand and agree to all of the following. Note that you **must** retain this e-mail as evidence of your agreement.

- I understand that this Electronic Signature Agreement allows me to submit electronic documents to the New Mexico Environment Department (NMED) Air Quality Bureau (AQB) under authorized programs in lieu of paper submissions.
- I agree to protect my unique electronic signature device from compromise and from use by anyone except me. Specifically, I agree to maintain the secrecy of the password; I will not divulge or delegate my user name and password to any other individual; I will not store my password in an unprotected location; and I will not allow my password to be written into computer scripts to achieve automated log-in.
- I agree to contact the NMED AQB online application administrator at NMENV-aqbeer@state.nm.us or NMENV-aqbaeir@state.nm.us or NMENV-aqbaqua@state.nm.us as soon as possible, but no later than 24 hours, after suspecting or determining that my user name or password have become lost, stolen or otherwise compromised.
- I agree that I will review the contents of all electronic submissions prior to submission.
- I understand and agree that I will be held as legally bound, obligated, or responsible by my electronic signature as I would be by my hand-written signature.
- I understand that I will automatically receive an e-mail receipt from the NMED AQB for any submission that contains a valid electronic signature, identifying the document received, the signatory, and the date and time of receipt.
- I agree that I will contact the NMED AQB online application administrator if I do not receive an e-mail receipt as specified above within one business day for any online submission to the NMED AQB.
- I understand that I will have the opportunity to review the document submitted in a human-readable format and an opportunity to repudiate the electronic document based on this review.
- I understand that the NMED AQB online system will automatically reject any electronic document submitted without a valid electronic signature if such signature is required.
- I understand that the NMED AQB may contact the Company Official who authorized me as signatory for the company in order to verify my identity.
- I agree to notify the NMED AQB online application administrator at NMENV-aqbeer@state.nm.us or NMENV-aqbaeir@state.nm.us if I cease to represent the regulated entity specified above as signatory as soon as this change in relationship occurs.
- I agree to retain a copy of this e-mail agreement as long as I continue to represent the regulated entity specified above as signatory of the company's electronic submissions.

Click [here](#) to register to certify copy-of-record documents, and to indicate your agreement with these requirements. If "here" is not a link, check with your IT department to see if the link can be restored. If that is not possible, call (505) 476-4300.

You are receiving this e-mail because you requested to register for the New Mexico Environment Department's Electronic Signature verification. If you did not request this registration, please contact: (505) 476-4300

After clicking the link, you will be sent to the CSI webpage where you provide more of your information, choose security questions and answers for added protection. You will have to answer these whenever you certify submissions, so be sure to remember these answers along with your password.

CROMERR
Registration

NMED does not store any of this information except your name and email address. This information is used to attempt to verify your identity. Please enter your personal address and legal name as this will increase the chance of successfully identifying you. You will be notified of the outcome by email and if you are not identified electronically, you will be provided a link to obtain a paper form that must be notarized and received by NMED before you can electronically certify and sign a submittal.

Identity Information

First Name *	MI	Last Name *
Test		TestCSI
Birth Date (mm/dd/yyyy) *	Last 4 digits of SSN *	
1234567890	9876543210	

Help

Select from the following help topics: Overview, Identity Information, Contact Information, Password, and Challenge Questions

Overview:

Use this page to register for signatory rights. After you enter the following information, it will be passed through an EPA database that will attempt to verify your identity. If successful, you will be able to begin certifying reports with your electronic signature immediately. If the automated identity

Password

Password must contain 8-15 characters, one upper and one lower case letter, at least one number, and no special characters. Example: Nov2020turkey.

Password *	Confirm Password *
Test1234567890	Test1234567890

topics: Overview, Identity Information, Contact Information, Password, and Challenge Questions

Overview:

Use this page to register for signatory rights. After you enter the following information, it will be passed through an EPA database that will attempt to verify your identity. If successful, you will be able to begin certifying

You will enter an answer to one of these challenge questions each time you certify a document.

Question #1

Question #2

Select from the following help topics: Overview, Identity Information, Contact Information, Password, and Challenge Questions Overview:
Use this page to register for signatory rights. After you enter the following information, it will be passed through an EPA database that will attempt to verify your identity. If successful, you will be able to begin certifying.

After submitting this information, you will receive an email confirmation (below) that the E-Sign registration is now complete.

From: DoNotReply <DoNotReply@env.nm.gov>

Subject: [EXTERNAL] [NMED E-Signature] Registration Complete

You don't often get email from donotreply@env.nm.gov. [Learn why this is important](#)

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

Congratulations! You are receiving this e-mail either because (1) your identity was successfully verified in the online CSI:NM program, or (2) we have processed and accepted your notarized ESAA form.

Your Electronic Signature registration is complete if you established a password and challenge questions and answers. If you have not set up the password and challenge questions, go to Manage E-Sign from one of the AQB applications. Once those are set up, you will be able to certify Copy-of-Record documents for the New Mexico Environment Department (NMED).

If you have any questions about this process, please contact: (505) 476-4300

Emissions Inventory Pollutants

Regulated air pollutants are required to be reported to AQB via an emissions inventory including, but not limited to, carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), particulate matter 10 µm and 2.5 µm (PM₁₀ and PM_{2.5}, respectively), particulate matter condensable, lead (Pb), and volatile organic compounds (VOCs).

Hazardous Air Pollutants (HAPs) must be reported individually, such as benzene, xylene, formaldehyde, etc. (refer to Appendix C). AEIR can accept emission values equal to or greater than 0.001 tons/year.

What Must Be Submitted

In accordance with NMAC 20.2.73.300.C, owners or operators must include actual emissions from all routine operations, fugitive emissions, excess emissions, and emissions from startup, shutdown, and maintenance, and malfunction events. For further details, please refer to the NMAC 20.2.73.300.

Actual Emissions vs Permitted Emissions

Actual emissions refer to the amount of pollutants emitted into the atmosphere from emission sources at facilities based on production, material use, or fuel use. Permitted emissions refer to the maximum allowable amounts detailed in your permit. **Only actual emissions will be accepted in the emissions inventory.**

Potential Emission Rate (PER)

PER is the maximum amount of a pollutant source could emit at full capacity, considering its design and legally enforceable limits.

Potential To Emit (PTE)

PTE is the maximum capacity of a stationary source to emit a pollutant under its physical and operational design.

Permitted emissions, PER, and PTE are NOT acceptable values to report in the emissions inventory. Please refer to Appendix D for more detailed definitions of PER and PTE.

Excess Emissions

Emissions of an air contaminant, including fugitive emissions that are above the permitted value must be reported in the facility's emissions inventory submittal.

Fugitive Emissions

Fugitive emissions are those that could not reasonably be directed through a stack, chimney, vent, or other functionally equivalent opening (40 CFR Part 70.2 and 71.2). Fugitive emissions can be categorized in two separate ways: 1) emissions that cannot be attributed to a single source (i.e., plant fugitives), and 2) emissions that can be attributed to a single source.

- 1) Plant fugitives are emitted from multiple sources across an entire plant. They include flanges, valves, connectors, seals, pump seals, and other sources. Emissions from these sources cannot be attributed to any single point source and should be reported together in one subject item in AEIR under Category: Release Point and Type: Fugitives (Appendix A).
- 2) Fugitives are also emitted from haul roads, crusher, tank vents, loading/unloading, transfer points, crushers, and other volume sources (a volume source of pollution is a three- dimensional source of pollutant emissions). Fugitive emissions from these sources can be linked to one source and should be reported using the respective Category and Type of the subject item or SI itself.

Under special circumstances, fugitive emissions can be routed through emission control devices, which can affect how they should be reported. For example, if fugitive emissions are controlled using a flare, the flare should be entered as a separate subject item with the total emissions being reported on the flare (i.e., the original emission unit will have zero emissions while the flare contains the total emissions). Another example is the recycling or capturing of

emissions using a control device such as a vapor recovery unit (VRU). Since the emissions are not being released into the atmosphere, total emissions released from the subject item or SI should be zeroed out in AEIR. Refer to Appendix A for a list of all Unit Categories and Unit Types.

Startup, Shutdown & Maintenance (SSM)

Emissions related to SSM events must be reported in the emissions inventory because they are actual emissions. Report these emission events as part of the total emissions from the equipment that released pollutants if your permit does not include SSM as a line item. A subject item (SI) is defined as any emission unit at a facility under the categories of activity, area, equipment, discharge location, release point, and treatment. Refer to Appendix A for a list of all Unit Categories and Unit Types.

Malfunctions

Any sudden and unavoidable failure of air pollution control equipment or process equipment beyond the control of the owner or operator, including malfunction during startup or shutdown (NMAC 20.2.72.7.O).

NOTE: A failure that is caused entirely or in part by poor maintenance, careless operation, or any other preventable equipment breakdown shall not be considered a malfunction.

Methods of Calculating Actual Emissions

Actual emissions can be measured or calculated using one of the methods listed below. Maintaining data related to operating hours, production rates, and quantities of materials processed, stored, or combusted over the calendar year for subject emission units will be useful for these calculations.

Compliance Stack Tests must be performed in accordance with EPA reference methods.

Continuous Emission Monitoring System (CEMS) - EPA approved CEMS method and quality assurance protocols should be used. CEMS must operate under governing state/federal regulations.

Process Simulators, such as ProMax and Aspen HYSIS, can estimate the emissions of various pollutants from certain processes and emission units.

EPA-Approved Emission Factors are the basis for many calculations. These factors represent industry-wide averages and show the relationship between emissions and a measure of production or heat input. If you encounter problems finding emission factors for an emissions source, you may contact AQB for assistance. When using EPA or other emission factors, you must use the most recent version. Sources of emission factors can be found on the EPA website found in Appendix C.

Material Balance can only be used for specific types of emission units. It is mostly used for construction industries.

Methods:

Tier 1 – Preferred

Actual Compliance Stack Test

Continuous Emissions Monitoring System (CEMS) Compliance Testing

Tier 2

Process Simulator

Manufacturer Specification

Vendor Supplied Emission Factors

Tier 3

EPA – Approved Emission Factor

Tier 4

TANKS 4.09

GRI-HAPCalc 3.0 or 4.0

Vasquez-Beggs

Material Balance (only for construction industry)

AQB's Calculation Tool

Calcatenate has been developed to calculate emissions using either equipment-specific factors or general factors. If specific emission factors are not entered, then this tool will default to EPA AP-42 emission factors for that equipment. For more information and instructions regarding Calcatenate, visit <https://www.env.nm.gov/air-quality/calcatenate/>.

Calculation Spreadsheets Requirements

Supporting documentation and calculations must be included with your submittal as an attachment in AEIR. Include the following in your calculations for each type of equipment:

- Emission factors used and their source (EPA, Vendor, etc)
- Calculation method and source
- Actual Emission Parameters used in calculations
- Example calculation for each type of equipment
- Copy of a recent Representative Liquid or Gas Analysis (refer to Appendix B for Representative Criteria)
- Copy of stack test results that summarize the operational conditions during the test and average emissions during the test periods.
- Logs for fuel usage and for hours of operation
- If you are using Calcatenate (NMED AQB's calculation tool), the calculation export is a valid substitution for the above requirements.

Leasing Facilities

The owner company (lessor) and the operating company (lessee) have different roles when reporting emissions. The owner/company that submits and holds the permit/notice is responsible for ensuring that actual emissions are reported for the inventory. For example, if the owner company has a NOI for compressor engines and leases one or more engines to an operating company, then the owner company is held responsible for reporting actual emissions for the emissions inventory.

The owner company must coordinate with the operating company to request information and supporting documentation for the emissions inventory. The owner company and the operating company can coordinate together in the submittal of the emissions inventory and avoid double reporting. However, the ultimate responsibility of emissions reporting remains with the permit holder.

Portables

General Construction Permits (GCPs) are permits that are written to handle the needs of a specific industry. GCP numbers 2, 3 and 5 (for the Aggregate Crushers, Asphalt Plants and Concrete Batch Plants, respectively) are portable, meaning that relocations can be undertaken.

Closed or Sold Facilities

If your facility was closed prior to the reporting year, but it is appearing in AEIR, please check the NSR Issuance Report on the Current Permitting Activities [web page](#). If the facility does not have closure dates listed, then complete the [Permitting Administrative Multi-form](#) (PAM). If the link does not work, it can be found on this website <https://www.env.nm.gov/forms/>.

- If the facility does have closure dates listed but is still appearing in AEIR, then use the “Request Support from NMED” button within AEIR and provide information.

Creating an Emission Inventory Submittal Through AEIR

The options to create a new annual submittal, edit a submittal, certify a submittal, view a certified submittal, delete an in-process submittal, and retrieve the latest XML file are located at the bottom of the AEIR home page.

To create a new emission inventory submittal, use the following steps:

- 1) Under “Create New Facility Emissions Inventory Submission”, search for your facility.
- 2) Select the reporting year.
- 3) Click the green “Create New Annual Reporting Year Submittal” button.

If you do not complete the submittal, then click SAVE in the Subject Item Detail Form (see section “Entering Details and Emissions Data in AEIR” below). Access it later by selecting the radio button (“o”) located to the left of submittal on the AEIR home page, then click on “Edit Submittal”.

Facility and Organization Emissions Reporting

Display Options:

Show **only** facilities that are currently active or were active in the current submittal year

Ameredev II LLC

2023 GHG Submittal is Certified, Awaiting NMED Approval (certified by [REDACTED] on 04/04/2024)

2020 Submittal is Certified, Awaiting NMED Approval (certified by [REDACTED] on 03/29/2021)

Register For Additional Facilities and/or Roles at Your Existing Facilities

Buttons: Edit Submittal, Certify Submittal, View Certified Submittal, Delete In Process Submittal, Get Current NMED Facility XML File

Create New Facility Emissions Inventory Submission

Facility: Select or search for a facility...

Reporting Year: Select a facility first

Create New Annual Reporting Year Submittal

OR

XML Data File: Choose File No file chosen

Import an XML Data File For a New Submittal

Click here to download the latest XML Schema file

Create New Organization Greenhouse Gas (GHG) Emissions Inventory Submission

Organization: Select or search for an organization...

Reporting Year: Select an organization first

Create New GHG Annual Reporting Year Submittal

NOI and GCP facilities may or may not have existing equipment or subject items, depending on whether data was entered into the AQB database by permitting staff. If you have equipment or subject items that are not listed on the subject item list page, then follow the below instructions for adding new equipment/subject item. If existing subject items at your facility do not match the listed equipment or is different than the equipment on your permit, please contact NMED through the “Request Support” button to inform us.

Required Header Information

Under the Submittal Information blue bar there are general questions about the facility. Make sure you are using the appropriate NAICS code in the dropdown menu that best describes your facility. Make sure you know that the facility was operational during the reporting year. If you choose “No”, you will not input data for this facility. Please include whether the facility has leased equipment and includes those in the item list, and indicate the number of engines, tanks, etc., in the boxes. After responding to all questions then click on ‘Save Submittal Header Information’ to continue.

Facility Annual Emissions - Subject Item List

Agency ID: 33105
Facility Name: A State 42 Battery
Organization Name: Hilcorp Energy Company
Submittal Status: 2022 Submittal (In Process)
Permit Type: Notice of Intent

*Facility NAICS Code: 21113 - Natural Gas Extraction

Submittal Information

*Was this facility active at any time during the year? Yes

*Oil & Gas Industry Segment (Please click this [link](#) for detailed information):
Gathering and Boosting - 40 CFR 98.230(a)(9)

*Did this facility run leased/fleet or temporary equipment that is not on the permit during the year? No

Submittal Comments (2000 character maximum)

Save Submittal Header Information

Entering Details and Emission Data in AEIR

To enter the required details and emissions into a newly created or existing SI in AEIR, follow the steps below:

- 1) Click on the radio button for the SI of interest and click on the “Detail” button to enter data.
- 2) The Facility Annual Emissions Subject Item Detail page (below) will appear requesting General Information, Supplemental Parameters, and Operating Details for the SI. You may also enter any comments regarding your submittal in the comment field.

Facility Annual Emissions - Subject Item Detail Form

Please note that this page will expire if inactive for 30 minutes.

Agency ID: 39355
Facility Name: V Laughlin Battery
Organization Name: Hilcorp Energy Company
Submittal Status: 2024 Submittal (In Process)
Permit Type: Notice of Intent

Facility NAICS Code: 21112
Was this facility active at any time during the year? Yes
Oil & Gas Industry Segment: Gathering and Boosting - 40 CFR 98.230(a)(9)
Leased/fleet/temporary equipment? No

Subject Item ID: EQPT-3
Designation: HT-1
Description: 0.5 MMBtu/hr
Type: Heater
SCC: Industrial Processes, Oil and Gas Production, Process Heaters, Natural Gas

General Information

*Was this equipment active at any time during the year?

Supplemental Parameters

*Fuel Type: <input type="button" value="Select one"/>	Amount <input type="button" value="Select One ▾"/>	Unit of Measure <input type="button" value="Select one ▾"/>
*Fuel Consumed: <input type="button" value="Select one"/>	Fuel Heating Value: <input type="button" value="Select one"/>	Percent Sulfur of Fuel: <input type="button" value="Select one"/>
Percent Ash of Fuel: <input type="button" value="Select one"/>	Percent Carbon Content: <input type="button" value="Select one"/>	Percent <input type="button" value="Select one"/>
		Percent <input type="button" value="Select one"/>
		Percent <input type="button" value="Select one"/>

Operating Detail

Operating Detail Help	Value
*Operating Time in Hours per Day:	24
*Operating Time in Days per Week:	7
*Operating Time in Weeks per Year:	52
*Operating Time in Hours per Year:	<input type="button" value="Select one"/>
*Percent of Operation During Winter:	25
*Percent of Operation During Spring:	25
*Percent of Operation During Summer:	25
*Percent of Operation During Fall:	25

Subject Item Comments

2000 character maximum

3) General Information – indicate whether the subject item was active during the submittal year:

- If “Yes” is selected, please complete the information on the Details Form, as well as the Emissions Form in the next step. Make sure you log accurate hours of operation
- If “No” is selected, all other fields will be greyed out. Click on “Save” then “Close” on the following Emissions Form to complete the subject item entry.

4) Supplemental Parameters

- Fuel Type: Select the fuel type that the subject item used.
- Fuel Consumed: Indicate how much fuel was consumed by the subject item.
- Unit of Measure (UOM): Specific unit of measurement
- Materials Processed: Select the material that was processed through the subject item.
- Fuel Heating Value: Indicate the fuel heating value.

5) Operating Parameters

AEIR requires the operating details for each SI. The operating details are listed below with sample scenarios.

- Operating Time in Hours per Day: Enter the actual average number of hours the process operated during a normal workday for the reporting year. The number should not exceed 24.
- Operating Time in Days per Week: Enter the actual average number of days the process operated during a normal work week for the reporting year. The number should not exceed 7.
- Operating Time in Weeks per Year: Enter the actual number of weeks the process operated during the reporting year. The number should not exceed 52.
- Operating Time in Hours per Year: The hours per year should be consistent with the values entered for hours/day, days/week, and weeks/year, as entered. For certain SIs that do not run on a constant schedule, enter the precise total runtime throughout the year. In general, if equipment does not run at consistent intervals throughout the year, estimate the above three fields and mark an accurate representation of the actual yearly runtime in this field.
- Winter – January, February & December (%)
- Spring – March, April & May (%)
- Summer – June, July & August (%)
- Fall – September, October & November (%): For each of the four meteorological seasons, specify the percentage of the total operating time attributable to each season. Estimates are acceptable. The total for all four seasons should equal 100%.

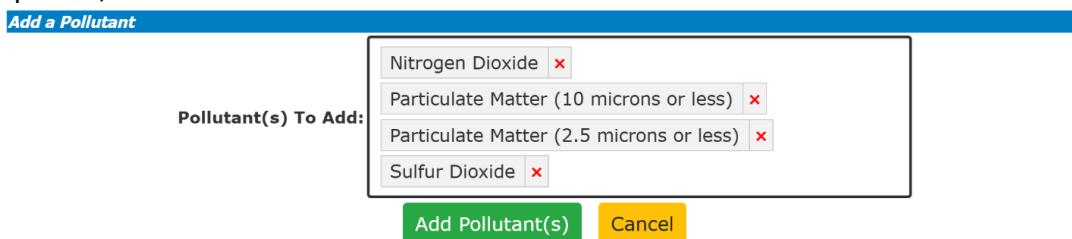
6) Entering emissions

After clicking “Save” on the Subject Item Detail Form, you will be brought to the SI Emissions Form as shown below. Fill out pollutants, emission amounts, and calculation used for each SI during the submittal year. By default, the criteria pollutants are added onto each new SI.

<p>Subject Item ID: EQPT-4 Designation: FL-1 Description: Flare Type: Process Flare SCC: Industrial Processes, Oil and Gas Production, Natural Gas Production, Flares</p>				
<p>Actual Pollutants (required) ONLY Actual Emissions must be entered in this section. Please do NOT enter Permitted or Potential values.</p>				
Pollutant	Amount	Unit of Measure	Calculation Method	Status
Carbon Monoxide:	4.1	tons/y	Engineering judgment	
Hexane:	0.0	tons/y	Engineering judgment	
Hydrogen sulfide (NMAAQ):	0.0	tons/y	Engineering judgment	
Nitrogen Dioxide:	4.2	tons/y	Engineering judgment	
Sulfur Dioxide:	0.1	tons/y	Engineering judgment	
Volatile Organic Compounds (VOC):	2.33	tons/y	Engineering judgment	
<p>Set Emissions to Zero Save Add Pollutant Remove Pollutant Cancel</p>				

To add additional pollutants, click on the “Add Pollutant” button, and to remove pollutants, click on the “Remove Pollutant” button. You can also set all emissions to zero. Be sure to select the appropriate calculation method from the drop-down menu.

By default, the criteria pollutants and VOCs are added onto each new SI for convenience. For certain pieces of equipment that do not emit a specific pollutant, then simply remove that pollutant in AEIR. For example, tanks do not emit NO₂, but it will appear if this is an added piece of equipment, so use the ‘Remove Pollutant’ button to remove NO₂ for the tanks.



Pollutant(s) To Add:

- Nitrogen Dioxide
- Particulate Matter (10 microns or less)
- Particulate Matter (2.5 microns or less)
- Sulfur Dioxide

Add Pollutant(s) **Cancel**

7) Click on the “Save” button when you are finished filling out your emissions data.

You will be sent back to the list of SIs where a green check mark (✓) will appear in the “Complete” column next to your SI on your submittal page. This indicates that all necessary information has been filled out for that SI. If the green check mark does not appear, please doublecheck that all your information has been filled out correctly.

Adding New Subject Items (Equipment) to a Submittal in AEIR

If SIs or equipment does not appear in AEIR, then use the instructions below to add equipment. If equipment does not appear for your NSR or Title V facility, then use Request Support. Once the permitting section has reviewed the request, then follow the instructions below.

NOTE: NOI and GCP sources can only add equipment to AEIR submittals.

The three buttons that appear if you are adding equipment are: “Add,” “Modify,” and “Remove,” as shown below. These buttons only work for Added equipment.

When creating subject items for engines and engine-powered equipment, enter these as separate subject items in AEIR. The engine is a combustion source, while the engine-powered equipment is not. For example, a crusher-engine combination should be entered as two separate subject items: one for the crusher and another for the internal combustion engine. The crusher does not use fuel so it is not considered to be combustion equipment and must be entered separately.

To add a SI, follow the steps below:

- 1) When the “Add” button is selected, AEIR will bring you to the following page, where you can fill out information about the SI you are trying to add. The ones marked by a red asterisk (“*”) are required. These parameters can be edited later by selecting the radio button for the SI, then clicking on the “Modify” button on the submittal page.

Facility Annual Emissions - New Equipment (Subject Item)

Please note that this page will expire if inactive for 30 minutes.

Agency ID: 35767
Facility Name: A State 40 Tank Battery
Organization Name: Hilcorp Energy Company
Submittal Status: 2022 Submittal (In Process)
Permit Type: GCP Oil and Gas

General Information (* indicates a required field)							
<p>*Unit Designation: <input type="text"/></p>							
<p>*Unit Category: <input type="button" value="Select One"/></p>							
<p>*Unit Type: <input type="button" value="Select a Category First"/></p>							
<p>*Description: <input type="text"/></p>							
<p>Manufacturer: <input type="text"/></p>							
<p>Rated Capacity: <input type="text"/> Units: <input type="button" value="Select One"/></p>							
<p>Construction Date: <input type="text" value="mm/dd/yyyy"/></p>							
<p>*Source Classification: <input type="button" value="Select One"/></p>							
<p>(Select items from lists or enter the SCC) <input type="button" value="Select From Above First"/></p>							
<p><input type="button" value="Select From Above First"/></p>							
<p><input type="button" value="Select From Above First"/></p>							
<p><input type="button" value="Select From Above First"/></p>							
<p><input type="text"/> (Source Classification Code (SCC))</p>							
Stack Information (* indicates a required field / + indicates a required field depending on Type selected)							
<p>Existing facility stack: <input type="button" value="Select One"/> <input type="button" value="Copy This Stack"/></p>							
<p>OR <input type="button" value="Create New Stack"/></p>							
Stack ID	*Description	*Type	*Height Above Ground(ft)	+Temp. (F)	+Flow Rate (acfs)	+Velocity (ft/sec)	+Inside Diameter (ft) Status
<p><input type="button" value="Save"/> <input type="button" value="Cancel"/></p>							

- 2) Unit Designation: The name or ID assigned by the company.
- 3) Unit Category: Select the correct category for the SI or equipment. The categories include Activity, Area, Discharge Location, Equipment, Release Point, and Treatment. See Appendix A.
- 4) Unit Type: Select the Unit Type from the drop-down list, which is dependent on the Unit Category. See Appendix A.
- 5) Source Classification Code (SCC): The SCC is an **8-digit numeric code** that identifies the specific type of emission source and activity (for example, a particular industrial process or fuel type). **Always verify the SCC against the official SCC list before submitting.** Please refer to Appendix C for the official SCC website.
- 6) Stack Information: Each piece of equipment must have a stack. A new stack can be created by

clicking on “Create New Stack”. Please provide the required information for this stack.

For Fugitive stacks, the description and height above ground (defaults to 10 ft but can be changed) are required. For other stack types, all fields are required.

An example SI entry is illustrated below. (Note: These are not real values. This is a fictitious example.)

Facility Annual Emissions - New Equipment (Subject Item)

Please note that this page will expire if inactive for 30 minutes.

Agency ID: 35767
Facility Name: A State 40 Tank Battery
Organization Name: Hilcorp Energy Company
Submittal Status: 2022 Submittal (In Process)
Permit Type: GCP Oil and Gas

General Information (* indicates a required field)								
*Unit Designation:	Eng X							
*Unit Category:	Equipment							
*Unit Type:	Internal combustion engine							
*Description:	engine running generator							
Manufacturer:	Good Engines Inc.							
Rated Capacity:	500 Units: hp							
Construction Date:	10/20/2010							
*Source Classification:	2 - Internal Combustion Engines							
(Select items from lists or enter the SCC)	2 - Industrial							
	2 - Natural Gas							
	53 - 4-cycle Rich Burn							
	2-02-002-53 (Source Classification Code (SCC))							
Stack Information (* indicates a required field / + indicates a required field depending on Type selected)								
Existing facility stack:	Select One							
OR	Copy This Stack							
	Create New Stack							
Stack ID	*Description	*Type	*Height Above Ground(ft)	+Temp. (F)	+Flow Rate (acfs)	+Velocity (ft/sec)	+Inside Diameter (ft)	Status
0	Stack X	Vertical	6	200	50	17	0.25	NEW X
Save Cancel								

7) Click on the “Save” button when you are finished filling out information for the SI. You will be brought back to the submittal page, and you should see the new SI created (see below). Repeat these steps for each SI you need to add your submittal.

<input type="radio"/> Unpaved roads	AREA-1	ROAD	Haul Roads	Active 01/01/2020	
<input type="radio"/> Internal combustion engine	EQPT-11	Eng 01	Engine	NEW 10/20/2025	

[Detail](#) [Emissions](#) [Add](#) [Modify](#) [Remove](#) [Export](#) [Total Emissions](#)

[Request Support from NMED](#)

File Attachments

Please attach calculations following the requirements in the Emissions Inventory Guidance Document.

[Attach File to Submittal](#)

Select the “Modify” and “Remove” buttons for new equipment modification or removal. The Remove button cannot be used for permitted and/or already existing SIs or equipment in our database.

Note: Some NOI or GCP facilities may already have subject items or equipment present in the submittal because they were entered into the Air Quality Bureau’s database during the permitting process. If these are incorrect, please contact us through the “Request Support” button.

Once information has been successfully entered for every subject item or equipment at a facility, resulting in a green check mark indicating completion, the “Review for Submittal” button will appear. At this time, new subject items or equipment can still be added, modified, or removed as necessary. If the submittal is complete, then select the “Review for Submittal” button to review your data in preparation for certification.

<input type="radio"/> Tank - Above Ground	EQPT-1	TK-1 - TK-2	Removed-500 bbl Crude Oil Storage Tanks	Removed 04/11/2024	
<input type="radio"/> Tank - Above Ground	EQPT-2	TK-3	Removed-400 bbl Crude Oil Tank	Removed 04/11/2024	
<input type="radio"/> Tank - Above Ground	EQPT-6	PWTK-1	Produced Water Tank	Active 04/11/2024	
<input type="radio"/> Tank - Above Ground	EQPT-7	PWTK-2	Produced Water Tank	Active 04/11/2024	
<input type="radio"/> Tank - Above Ground	EQPT-8	TK-1	Oil Tank	Active 04/11/2024	
<input type="radio"/> Tank - Above Ground	EQPT-9	TK-2	Oil Tank	Active 04/11/2024	
<input type="radio"/> Transfer Point	RPNT-2	OILLOAD-1	Removed-Crude Oil Loading	Removed 04/11/2024	
<input type="radio"/> Unpaved roads	AREA-1	ROAD	Haul Roads	Active 01/01/2020	

[Detail](#) [Emissions](#) [Add](#) [Modify](#) [Remove](#) [Export](#) [Total Emissions](#)



[Review for Submittal](#)

[Request Support from NMED](#)

Facility Annual Emissions - Subject Item Submittal Review

Agency ID: 39407
 Facility Name: NMGSU Battery 89
 Organization Name: Hilcorp Energy Company
 Submittal Status: 2024 Submittal (In Process)

Facility NAICS Code: 21112
 Was this facility active at any time during the year? Yes
 Oil & Gas Industry Segment: Well Site [20.2.50.7.W.(3)]
 Leased/fleet/temporary equipment? Yes
 Number of Engines: 1
 Number of Tanks: 1
 Number of Flare: 1
 Number of Heater: 1
 Number of Other: 0

Subject Item ID: RPNT-1
 Designation: FUG
 Description: Fugitive Emissions
 Type: Fugitives
 SCC: Industrial Processes, Oil and Gas Production, Fugitive Emissions, Fugitive Emissions

General Information

Was this equipment active at any time during the year? Yes

Supplemental Parameters

Operating Detail

	Value
Operating Time in Hours per Day:	24
Operating Time in Days per Week:	7
Operating Time in Weeks per Year:	52
Operating Time in Hours per Year:	8760
Percent of Operation During Winter:	25
Percent of Operation During Spring:	25
Percent of Operation During Summer:	25
Percent of Operation During Fall:	25

Edit

Actual Pollutants

Pollutant	Amount	Unit of Measure	Calculation Method
Hexane:	0.0	tons/y	Actual stack test
Hydrogen sulfide (NMAAQ):	0.0	tons/y	Actual stack test
Other HAP:	0.5	tons/y	Actual stack test
Volatile Organic Compounds (VOC):	1.2	tons/y	Actual stack test

Edit

Subject Item Comments

Edit

[Back to List](#) [Next SI >>](#) [Print SI](#) [Print All](#) [Export All](#) [Cancel](#)

Subject Item #1 of 15

Once you click the button, you will be shown a page as shown above. You will have to review every subject item by clicking “Next SI >>”. The button “Print SI” will give you the option to print the page of the current SI you are reviewing. “Print All” will give you the option to print all the SIs, and “Export All” gives you a spreadsheet of the data entry. Once you are finished reviewing, you are brought back to the AEIR home page where you can select the radio button next to your reviewed facility and select the “Certify Submittal” button at the bottom of the home page.

[39407-NMGSU Battery 89](#)

- 2020 Submittal is Certified, Awaiting NMED Approval
- 2023 Submittal is Certified, Awaiting NMED Approval
- 2024 Submittal is Awaiting Certification

Register For Additional Facilities and/or Roles at Your Existing Facilities

[Edit Submittal](#)

[Certify Submittal](#)

[View Certified Submittal](#)

[Delete In Process Submittal](#)



[Get Current NMED Facility XML File](#)

You will be brought to your emissions inventory submittal. To continue the certification process, select the “Certify All” button and agree to the statement.

Subject Item/Equipment (16 Subject Items)					
Type	ID	Designation	Description	Status	Complete
Oil & Gas	AI -39407	8698M1	NMGSAU Battery 89	Active 04/16/2024	
Fugitives	RPNT-1	FUG	Fugitive Emissions	Active 01/01/2020	✓
Fugitives	RPNT-3	MALFUNC	Malfunctions	Active 04/11/2024	✓
Fugitives	RPNT-4	SSM	Startup, Shutdown and Maintenance	Active 04/11/2024	✓
Oil/Water Separator	EQPT-3	GBS-1	Removed-500 bbl Gunbarrel Tank	Removed 04/11/2024	✓
Oil/Water Separator	EQPT-5	GB	Gunbarrel	Active 04/11/2024	✓
Process Flare	EQPT-4	FL-1	Flare	Active 04/11/2024	✓
Process Flare	EQPT-10	FL-1 SSM	Flare	Active 04/11/2024	✓
Tank - Above Ground	EQPT-1	TK-1 - TK-2	Removed-500 bbl Crude Oil Storage Tanks	Removed 04/11/2024	✓
Tank - Above Ground	EQPT-2	TK-3	Removed-400 bbl Crude Oil Tank	Removed 04/11/2024	✓
Tank - Above Ground	EQPT-6	PWTK-1	Produced Water Tank	Active 04/11/2024	✓
Tank - Above Ground	EQPT-7	PWTK-2	Produced Water Tank	Active 04/11/2024	✓
Tank - Above Ground	EQPT-8	TK-1	Oil Tank	Active 04/11/2024	✓
Tank - Above Ground	EQPT-9	TK-2	Oil Tank	Active 04/11/2024	✓
Transfer Point	RPNT-2	OILLOAD-1	Removed-Crude Oil Loading	Removed 04/11/2024	✓
Unpaved roads	AREA-1	ROAD	Haul Roads	Active 01/01/2020	✓

[Detail](#) [Emissions](#) [Add](#) [Modify](#) [Remove](#) [Export](#) [Total Emissions](#)

 [Review for Certification](#) [Certify All](#)

[Request Support from NMED](#)

After agreeing to the statement by checking the box, select “I Certify this Submittal” to be transferred to Manage E-Sign. You will then be asked to download a Copy of Record (COR) for your records. In Manage E-Sign, enter your password, challenge question answer, and select the option to certify to officially submit your emissions inventory.

**Facility Annual Air Emissions Inventory Report
2024 Submittal Certification**

Facility Name: NMGSAU Battery 89
Organization Name: Hilcorp Energy Company
NMED Agency ID: 39407

Certify Submittal

I certify on behalf of the above identified facility and organization that the information and data submitted in this air emissions inventory report is as complete, true and accurate as possible to the best of my personal knowledge, professional expertise and experience. I have read and understand the NMED Electronic Subscriber Agreement and agree that I will be legally bound by my electronic signature.

[I Certify this Submittal](#) [Cancel](#)

After a successful step towards certification, the AEIR home page will appear, and the status next to the certified submittal should read “Certified, Awaiting NMED Approval” as shown above. The submittal has been successfully submitted. If there are any questions about the submittal, the Bureau will be in contact.

Extensible Markup Language (XML)

XML files can be used to upload emission inventories through AEIR. This enhancement is intended for organizations with numerous facilities to expedite the process, but small companies can also utilize XML for reporting emissions. Calcatenate (refer to Appendix C) can be used to view, calculate, and export as an XML for upload.

When building XML files, refer to Appendix A as they contain information required for equipment. Appendix A provides information about valid subject item categories and types for a valid XML submission.

Retrieving an XML from AEIR

XMLs contain information about existing equipment directly from NMED's database and can be retrieved from AEIR on an individual facility or organizational level after registering for the associated facilities. Information on how to register for facilities in AEIR can be found in NMED's other guidance document titled "How to Access AEIR."

- Facility-level XML: Contains existing information for an individual facility.
- Organization-level XML (aka Bulk XML): Contains information for all facilities registered for under an individual company.



Uploading an XML to AEIR

XMLs can be uploaded to AEIR in the "Create New Facility Emissions Inventory Submission" section on the AEIR homepage as shown on the screenshot below. Select "Browse..." to open an XML file from your computer, then select "Import an XML Data File for a New Submittal" to upload the XML to AEIR. AEIR will compare the XML file against its schema and determine if

there are any errors within the XML file. Warnings and error messages will be displayed if they exist. Once the XML has been successfully uploaded to AEIR, reload the webpage and enter the submittal to manually review the upload.

Calcatenate can be used to calculate emissions and modify XML files. Refer to Appendix C for Calcatenate resources.

Create New Facility Emissions Inventory Submission

Facility:

Reporting Year:

Create New Annual Reporting Year Submittal

OR

XML Data File: No file selected.

Import an XML Data File For a New Submittal

[Click here to download the latest XML Schema file](#)

An example message detailing a successful XML upload to AEIR.

Create New Facility Emissions Inventory Submission

The XML file has been processed and the results are as follows:

- * The XML file provided is valid against the XML scheme.
- * For facility: 326 / and year: 2020
- Data has been saved in AEIR. Please review your information to ensure accuracy.

The XML import process has completed.

Close Messages and Reload Submittals

Appendix A: List of Unit Categories and Unit Types

Category: Activity

Accumulation and Storage	Operations	Research/Testing
Beryllium Work	Open Burn	Sandblasting
Food Processing	Transportation/Hauling	

Category: Area

Coal pile	Landfill	Mine
Processing	Raw material pile	Remediation area roads
Surface impoundment	Transfer	Unpaved roads

Category: Equipment

Air curtain	Air stripper	Amine sweetening unit	Asphalt drum/burner	Baler	Batcher	Benzene waste operation
Bins-disposal	Bins-recycle	Blower/fan	Boiler	Bottoms receiver	Burner	chipper
Compressor	Condenser	Cogeneration	Container	Conveyor	Compactor	Cooling tower
Crusher	Cryogenic unit	Distillation unit	Digester	Dryer	Fermenter	Filtration unit
Fluidized catalytic cracking unit	Foundry	Freon/refrigerator equipment	Fuel gas system	Furnace	Gas collection system	Glycol dehydrator/reboiler/burner
Glycol dehydrated still vent/flash tank	Grain elevator	Heat exchanger	Heater	Heater treater/stack pack	Hopper	Incinerator
Internal combustion	Engine	Kiln	Loading/unloading rack	Machining equipment	Medical sterilization equipment	Mixer
Nuclear reactor	Oil/water operator	Paint booth	Parts washer	Precipitation plant	Process cyclone	Process flare
Pump station	Pump	Screen	Saws	Shredder	Separator	Silo
Sulfur recover unit	Tank – above ground	Tank – underground	Tank – vat/open	Thermal oxidizer (incinerator)	Turbine	

Category: Release Point

Fugitives	Stack/Vent	Transfer Point
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Category: Treatment

Pump and treat	Soil vapor extraction
Vapor recovery system	Wastewater treatment system

Appendix B: Representative Analysis Criteria

Oil/Liquid Analysis: Oil/liquid sample analyses are required. It should match the inputs in all applicable emission calculations. For facilities that have not been constructed yet and a representative sample analysis is used then the analysis should not be older than 3 years, and it should represent the area/basin where the facility is located. For existing facilities, the representative sample analysis must be within the past 3 years.

Gas Analysis: Gas sample analyses are required, and it should match the inputs in all applicable emission calculations.

Extended Gas Analysis (must be 3 years old or less): This data is required to match the inputs in all applicable emission calculations.

NOTE: If requesting to use a representative gas or oil/liquid sample, include a discussion of why the sample is representative for this facility and an explanation of how it is representative (e.g., same reservoir, same API gravity, similar composition). Provide this discussion with your attached calculations.

Appendix C: Online Resources

Calcatenate

<https://www.env.nm.gov/air-quality/calcatenate/>

Emissions Inventory Submittal Webpage (contains information on how to access AEIR, this guidance document, XML tool, public training information)

<https://www.env.nm.gov/air-quality/ei-submittal/>

EPA Emission Factors

<https://www.epa.gov/chief>

Hazardous Air Pollutants (HAPs) List

<https://www.epa.gov/haps/initial-list-hazardous-air-pollutants-modifications>

NAICS Codes and Updates

<https://www.naics.com>

https://www.naics.com/changes-from-2012-2017-naics-structures-highlights_highlights/

<https://www.naics.com/2022-naics-changes/>

New Mexico Administrative Codes (NMAC)

<http://www.srca.nm.gov/chapter-2-air-quality-statewide/>

NMED Air Quality Bureau (AQB)

<https://www.env.nm.gov>

SCC

<https://ofmpub.epa.gov/sccwebservices/sccsearch/>

<https://ofmpub.epa.gov/sccwebservices/sccsearch/docs/SCC-IntroToSCCs.pdf>

SIC Codes

<https://www.osha.gov/data/sic-search>

Appendix D: Air Quality Glossary

ACFM Actual cubic feet per minute. A measurement of exhaust rate from a release point.

Actual Emissions are the actual rate of emissions of a pollutant from an emission unit calculated using the emission unit's actual operating hours, production rates, and types of materials processed, stored, or combusted for the calendar year.

AEIR - Air Emissions Inventory Reporting is the web-based application used to submit emissions inventory.

Agency Interest (AI) is NMED's identifier for a facility, which is a number that is usually between three and five digits.

Annual Throughput is the quantity of raw material processed, handled, or used in an emission unit, such as fuels, solvents, coatings, or quantity of dust-producing material processed, handled, or transferred.

Air Pollutant is generally any substance in the air not part of the naturally occurring makeup of ambient air or that occurs in unnatural concentrations. In New Mexico, this usually refers to toxic air pollutants, hazardous air pollutants, and criteria air pollutants.

Allowable Emissions refers to the emissions rate that represents a limit on the emissions that can occur from an emissions unit. This limit may be based on federal, state, or local regulations.

Ambient Standards limit the concentration of a given pollutant in the ambient air. Ambient standards are not emissions limitations on sources, but usually result in such limits being placed on source operation as part of a control strategy to achieve or maintain an ambient standard.

Ammonia is a colorless gas with a very distinct odor. Ammonia emissions are important to air quality analyses because ammonia is involved in the formation of sulfate and nitrate, which are precursors for PM2.5. Primary ammonia remains in the same chemical form as when it was emitted into the atmosphere. Secondary ammonia, such as ammonium sulfate and ammonium nitrate, is formed by chemical reactions in the atmosphere. Only primary ammonia needs to be reported.

Attainment Area is an area considered to have air quality as good as or better than the National Ambient Air Quality Standards (NAAQS) as defined in the Clean Air Act. An area may be in attainment for one or more pollutants but be a nonattainment area for one or more other pollutants.

Capture Efficiency is the percentage of pollutants emitted from an emission unit that is caught or captured by a hood or other collection mechanism. An example is a fume hood above a

painting/coating station.

Carbon Monoxide (CO) is a colorless, odorless gas that is a product of incomplete combustion. It depletes the oxygen-carrying capacity of blood. Example sources of CO emissions include industrial boilers, incinerators, and motor vehicles.

CAS Number refers to the Chemical Abstract Services number. CAS numbers are often found on Material Safety Data Sheets and are sometimes used to identify air pollutants.

CFR is the Code of Federal Regulations. This is a collection of rules published by the federal government. Title 40 of the CFR pertains to Protection of the Environment.

Continuous Emissions Monitoring Equipment that measures the concentration or emission rate of a gas or particulate matter using analyzer measurements and a conversion equation, graph, or computer program. Installation and operation of a CEM may be required by EPA or NMED to determine compliance with specific standards. The operation of a CEM must meet performance specifications, certification procedures, and recordkeeping and reporting requirements as specified in applicable regulations.

Construction Permits are required before installing or altering equipment or control equipment, with a goal of preventing significant deterioration or degrading of clean air areas from new industrial development or expansion.

Control Efficiency is the emission reduction efficiency of a device and is a percentage value representing the amount of an emission unit's emissions that are removed from the exhaust stream by a control device.

Criteria Pollutant refers to a pollutant for which a National Ambient Air Quality Standard has been set. Criteria pollutants are carbon monoxide (CO), lead (Pb), nitrogen oxides (NO_x), ozone (O₃), particulate matter with aerodynamic diameter less than or equal to 10 micrometers (PM10) or less than or equal to 2.5 micrometers (PM2.5), and sulfur dioxide (SO₂).

Emergency Generator means any generator whose sole function is to provide backup power during an interruption of electrical power from the electric utility. An emergency generator does not include peaking units at electric generating facilities; generators at industrial facilities that typically operate at low rates but are not confined to emergency purposes; or any standby generators that are used during time periods when power is available from the electric utility. An emergency is an unforeseeable condition that is beyond the control of the owner or operator.

Emission means pollution emitted into the atmosphere from exhaust stacks, other vents and surface areas of commercial or industrial facilities; from residential chimneys; and from motor vehicle, locomotive, aircraft, or other non-road engines.

Emission Factors represent the relationship between the amount of pollution produced and the amount of raw material(s) processed. For example – pounds of CO per ton of coal fired.

Emission Inventory is a listing, by source, of the amount of air pollutants emitted into the atmosphere.

Emission Limits are limits on emissions that may be federally enforceable and exist in a permit. Such limits are usually expressed as a rate, generally in pounds per hour of emissions or as a concentration, such as grains per dry standard cubic foot (7,000 grains equals one pound).

Emission Unit is a piece of equipment where emissions are generated. Emission units may have one or more processes with actual emissions. Some examples of an emission unit with one or more processes are boilers (the ability to burn both natural gas and fuel oil), generators (the ability to burn both fuel oil and dual fuel), and grain dryers (the ability to dry grain and burn natural gas).

Excess Emissions are the release of an air contaminant above the limits (quantity, rate, opacity, concentration) set in an air quality regulation or permit, which constitutes a violation and triggers reporting/enforcement.

Engineering Estimate is a term commonly applied to the best approximation that can be made when specific emission estimation techniques such as stack testing, material balance, or emission factors are not possible. This estimation is usually made by an engineer familiar with the specific process and is based on process information.

Federally Enforceable means all limitations and conditions which are enforceable by the EPA administrator including, but not limited to, the requirements of new source performance standards, national emission standards for hazardous air pollutants, state rules (included as part of the state implementation plan (SIP)), administrative orders, construction permits, and operating permits.

Fugitive Emissions are emissions that cannot reasonably pass through a stack, chimney, duct, vent or other opening. Fugitive emission sources can include haul roads, exposed storage piles, and wastewater retention ponds, etc.

HAP or Hazardous Air Pollutants are any of the 187 pollutants listed in Section 112 of the 1990 Clean Air Act Amendments. HAPs are known or suspected of being toxic or carcinogenic.

Indirect Heating occurs when the material being heated does not come in direct contact with the combustion gas, such as a hot water boiler.

MMcf equals 1,000,000 cubic feet. This unit of measure is most typically associated with the amount of natural gas combusted.

Material Balance or Mass Balance - A process of estimating emissions using knowledge of the process, process rate, material used, and material properties.

MACT or Maximum Achievable Control Technology are standards set under Title III of the 1990 Clean Air Act Amendments with an emphasis on technology control of hazardous air pollutants.

Maximum True Vapor Pressure means the equilibrium partial pressure of the material considering: 1) for a material stored at ambient temperature, the maximum monthly average temperature as reported by the National Weather Service, or 2) for a material stored above or below the ambient temperature, the temperature equal to the highest calendar-month average of the material storage temperature.

MSDS or Material Safety Data Sheets are an information source with details about the chemical composition of a material, safe handling, and transportation data and other environmental information. An MSDS can be a useful source of emission information and are available for all chemical substances from the supplier of the material.

National Ambient Air Quality Standards (NAAQS) are the main ambient standards for the six criteria pollutants identified above.

National Emission Standards for Hazardous Air Pollutants (NESHAP) are health-based standards set under the 1970 Clean Air Act for beryllium, mercury, vinyl chloride, benzene, arsenic, asbestos, radon, radionuclides and other HAPs. Under the 1990 Act, roughly 170 source categories are identified for eventual MACT regulations. See MACT definition above. The NESHAPs are published in 40 CFR Parts 61 and 63.

New Source Performance Standards (NSPS) are promulgated for criteria and other pollutant emissions from new, modified, or reconstructed sources that the U.S. EPA determines contribute significantly to air pollution. These are typically emission standards but may be expressed in other forms such as concentration and opacity. The NSPS are published in 40 CFR Part 60.

Nitrogen Oxides (NO_x) are a class of compounds that are respiratory irritants that react with volatile organic compounds (VOCs) in the presence of sunlight to form Ozone. NO_x compounds are also precursors to acid rain. Motor vehicles, power plants, and other stationary combustion facilities emit large quantities of NO_x.

North American Industrial Classification System (NAICS) A North American system for classifying industries by a six-digit code. This six-digit hierarchical structure allows greater coding flexibility than the four-digit structure of the SIC. NAICS allows for the identification of 1,063 industries compared to the 1,004 found in the SIC system.

Operating Permits are permits required by Title V of the 1990 Act for major sources. Operating

permits are for the facility as a whole and differ from construction permits, which are issued for individual release points.

Overall Control Efficiency is obtained by multiplying the capture efficiency by the control equipment control efficiency to provide the overall control efficiency for reporting emissions.

Ozone (O_3) is a colorless gas that damages lungs and can damage materials and vegetation. It is the primary constituent of smog and is formed primarily when nitrogen oxides (NOx) and volatile organic compounds (VOCs) react in the presence of sunlight.

Particulate Matter of aerodynamic diameter less than or equal to 10 micrometers (PM10) is a measure of small solid matter suspended in the atmosphere. Small particles can penetrate deeply into the lung where they can cause respiratory problems. Emissions of PM10 are significant from fugitive dust, power plants, commercial boilers, metallurgical industries, mineral industries, fires, and motor vehicles.

Particulate Matter of aerodynamic diameter less than or equal to 2.5 micrometers (PM2.5) is another measure of small solid matter suspended in the atmosphere. Primary PM2.5 particulate results largely from combustion of fossil fuels or biomass, although selected industrial processes can also be significant in some areas. The sources of PM2.5 include, but are not limited to, gasoline and diesel exhaust, wood stoves and fireplaces, land clearing, wildland prescribed burning, and wildfires. Sources of primary particulate including fugitive emissions from paved and unpaved roads, dust from ore processing and refining, and to a lesser extent, crustal material from construction activities, agricultural tilling, wind erosion and other crustal sources are less important based on their relatively small contribution to ambient PM2.5 concentrations. The condensable components are largely made up of semi-volatile organic compounds that condense at ambient temperature to form aerosol.

Pipeline Inspection (or Intervention) Gauge (or Gadget) (PIG) is a solid object that is forced through a pipeline, used mainly to clean, inspect, and maintain pipelines.

Potential Emission Rate (PER) the emission rate of a source at its maximum capacity to emit a regulated air contaminant under its physical and operational design, provided any physical or operational limitation on the capacity of the source to emit a regulated air contaminant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored or processed, shall be treated as part of its physical and operational design only if the limitation or the effect it would have on emissions is enforceable by the department pursuant to the Air Quality Control Act or the federal Act.

Potential to Emit (PTE) Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design only if the limitation or the effect it would have on emissions is enforceable.

Release point is the point where emissions enter the atmosphere, such as stacks, vents, and ventilation exhausts. The term release point is used interchangeably with release point.

Reported Emissions are those emission estimates that are submitted to a regulatory agency. Emission inventories are used for a variety of purposes such as planning pollution control programs, promoting compliance with laws and regulations, and conducting permit reviews.

Routine emissions are the expected releases of gases or pollutants from normal industrial operations, vehicles, and processes.

Source Classification Codes (SCCs) are codes defined by EPA that classify air emission sources by individual processes and/or operations.

Stack Tests measure the concentration of pollutants in the exhaust stack. Measurements are performed following procedures specified and developed by the US EPA. Such testing is required by NMED to be conducted by various stationary sources to determine compliance with applicable air emission limits.

SCFM Standard cubic feet per minute. A measurement of exhaust rate from a release point.

Standard Industrial Classification (SIC) A United States government system for classifying industries by a four-digit code.

State Implementation Plan (SIP) is a state plan approved by EPA for the implementation, regulation, and enforcement of air pollution standards.

Stationary Source is any building, structure, facility or installation which emits or may emit any air pollutant subject to regulation under the Clean Air Act. It includes all pollutant emitting activities which belong in the same major industrial grouping as identified by the first two digits in the facilities SIC code, are located on one or more contiguous or adjacent properties and are under common ownership or control.

Sulfur Oxides (SO_x) are a class of colorless, pungent gases that are respiratory irritants and precursors to acid rain. Sulfur oxides are emitted from various combustion or incineration sources, particularly from coal combustion.

Threshold is the level of emissions that once reached, triggers certain requirements to obtain a permit, to submit GHG emissions, etc.

Volatile Organic Compounds (VOCs) are organic compounds that contribute to ground-level ozone or smog formation. Ground level ozone is a strong lung oxidant. Large amounts of VOCs are emitted from fuel distribution, chemical manufacturing, motor vehicles, and a wide variety of industrial, commercial, and consumer solvent use.

Appendix E: Abbreviations

ACFM	Actual cubic feet per minute
ACT	Activity
AECT	Air Emissions Calculation Tool
AEIR	Air Emissions Inventory Reporting
AI	Agency Interest Number
AQB	Air Quality Bureau
CAA	Clean Air Act
CAS	Chemical Abstract Service Registry number
CFR	Code of Federal Regulation
CHIEF	Clearinghouse for Inventories and Emission Factors
CO	Carbon Monoxide
EI	Emissions Inventory
EQPT	Equipment
gr/dscf	grains per dry standard cubic foot
HAP	Hazardous Air Pollutant
kg/ 10^6 m ³	kilograms per million cubic feet
lbs/hr	pounds per hour
lbs/MMBtu	pounds per million British thermal unit
lbs/MMcf	pounds per million cubic feet
lbs/ 10^6 scf	pounds per million standard cubic feet
MACT	Maximum Achievable Control Technology
NMAC	New Mexico Administrative Code
NMED	New Mexico Environment Department
MSEI	Minor Source Emission Inventory
NAAQS	National Ambient Air Quality Standards
NAICS	North American Industrial Classification System
NESHAP	National Emission Standards for Hazardous Air Pollutants
NOx	Nitrogen Oxides
NSPS	New Source Performance Standards
NSR	New Source Review
PM10	Particulate Matter less than or equal to 10 micrometers in diameter
PM2.5	Particulate Matter less than or equal to 2.5 micrometers in diameter
Ppb	parts per billion
Ppm	parts per million
ppmv	parts per million by volume
RPNT	Release Point
SCC	Source Classification Code
SCFM	Standard cubic feet per minute
SI	Subject Item
SIC	Standard Industrial Classification
SO2	Sulfur Dioxide

TPY	Tons per year
USEPA	United States Environmental Protection Agency
VOC	Volatile Organic Compound