This document provides guidance for meeting the emission reporting requirements of A.A.C. R18-2-327. This guide will cover general reporting requirements as well as provide detailed instructions for use of the State and Local Emissions Inventory System (SLEIS). This guide is intended for public use.
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### VERSION HISTORY

**1.0.0** 3/3/2014

- Original version released on 03/03/2014

**1.1.0** 3/20/2014

- Added a version history section.
- Expanded Section 2.6 – Submitting Emission Reports and included more information pertaining to validating reports.

**1.1.1** 2/16/2016

- Updated contact and webpage information.

**1.2.0** 3/14/2019

- Updated contact information and web links.
- Added discussion of other ADEQ guidance/training resources for AEIQs.
- Expanded section 2.5 to include document upload.
- Expanded section 1.4 to cover extension requests and provide more useful due date details.
1.0 OVERVIEW
This guidance document will cover the methods and tools available by which the regulated community can fulfill the annual emission reporting requirements of A.A.C. R18-2-327.

1.1 General Emission Inventory Information
The EPA maintains a database of emissions data called the Emissions Inventory System (EIS). The EIS contains state, local, tribal, and EPA-submitted data for a variety of pollution sources. 40 CFR 51.A requires that each state submit emission data to the EIS for certain pollution sources within their borders. To fulfill these requirements, the Arizona Department of Environmental Quality (ADEQ) sends out annual emission inventory questionnaires in order to collect this data for submittal to the EIS. ADEQ’s specific reporting requirements are detailed in sections 1.2 – 1.5 of this document.

Below is a graphical representation of how facilities are configured in the EIS¹. The data that ADEQ collects and submits to the EIS must conform to this general framework.

¹ Information modified from EPA’s Facility Inventory – March 2012 PowerPoint presentation.
http://www.epa.gov/ttn/chief/eidocs/training.html
1.2 Who Needs to Report Emissions?
Every facility permitted by ADEQ needs to submit an annual emission inventory questionnaire. This requirement can be found in subpart A of R18-2-327:

“Every source subject to permit requirements under this Chapter shall complete and submit to the Director an annual emissions inventory questionnaire. The questionnaire ... shall include emission information for the previous calendar year. These requirements apply whether or not a permit has been issued and whether or not a permit application has been filed.”

1.3 What Data do I Need to Report?
The annual questionnaire should include the following information (subpart B of R18-2-327):

1. The source’s name, description, mailing address, contact person (w/ phone number), and physical address and location (if different than mailing address).
2. Process information for the source, including design capacity, operations schedule, and emissions control devices, their descriptions and efficiencies.
3. The actual quantity of emissions from permitted emission points and fugitive emissions as provided in the permit of the following regulated air pollutants:
   a. Any single regulated air pollutant in a quantity greater than 1 ton or the amount listed for the pollutant in the definition of “significant” in R18-2-101(130)(a), whichever is less.
   b. Any combination of regulated air pollutants in a quantity greater than 2 1/2 tons.

At a minimum, these are the pollutants you need to report:

• Sulfur dioxide (SO₂)
• Volatile organic compounds (VOC)
  o This total should include all HAPs which are also VOCs
• Nitrogen oxides (NOₓ)
• Carbon monoxide (CO)
• Lead and lead compounds
• Primary PM₂.₅. As applicable, also report filterable and condensable components
• Primary PM₁₀. As applicable, also report filterable and condensable components
• Ammonia (NH₃)

We strongly encourage you to report individual HAP emissions.
1.4 When do I Need to Report By?
As specified in section 1.2, above, the submittal deadline for inventory questionnaires is at least 90 days after they are released. The exact due date for each SLEIS report is listed on the ‘My Reports’ page (see section 2.3, below). The due date for reporting year 2018 is **June 1, 2019**. Additional details about reporting deadlines may be posted at [www.azdeq.gov/emissions-inventories](http://www.azdeq.gov/emissions-inventories).

If you will be unable to submit a completed report by the due date, please contact the emissions inventory team as soon as possible at (602) 771-2373 or [emissioninventory@azdeq.gov](mailto:emissioninventory@azdeq.gov) to request an extension.

1.5 In What Format do I Need to Report Emissions?
Major sources, as defined in R18-2-101(75), are required to submit their annual emission inventories through the State and Local Emission Inventory System (SLEIS) at [sleis.azdeq.gov](http://sleis.azdeq.gov).

Minor sources have the option to either 1) use SLEIS or 2) use the forms provided at [www.azdeq.gov/emissions-inventories](http://www.azdeq.gov/emissions-inventories) under “Minor/Non-Title V Sources”.

In addition to the guidance contained in this document and on ADEQ’s website, ADEQ may send electronic updates on emission inventory requirements, guidance, and other resources. To subscribe to these e-mail notifications, select ‘Annual Emission Inventory Questionnaire’ in the ‘Air Quality Division’ section of ADEQ’s GovDelivery subscription page: [https://public.govdelivery.com/accounts/AZDEQ/subscriber/new](https://public.govdelivery.com/accounts/AZDEQ/subscriber/new)
2.0 SLEIS
SLEIS is ADEQ’s preferred reporting format for non-general permit holders.

2.1 Setting Up a SLEIS Account
To create a user account:
1. Go to the SLEIS website: https://sleis.azdeq.gov
2. Download and fill out the SLEIS Application form.
3. Once complete, either mail the form to the address indicated or email a scanned copy to emissioninventory@azdeq.gov.
4. You will receive an email once your account has been set-up in SLEIS. Please follow the activation link in the email within one week to create a secure password. If the activation link expires before you get the opportunity to use it, please email emissioninventory@azdeq.gov.

A facility user can be assigned to various roles in SLEIS:
- **Viewer** – can only view emission reports. Cannot make changes or edit any information.
- **Editor** – can edit information within an emission report.

In addition to being either a Viewer or Editor, users can also be given the ability to be a Submitter and/or Administrator.
- **Submitter** – has the ability to officially submit an emission report to ADEQ. The submitter needs to be the ‘Responsible Official’ for the facility. Will need to fill out and notarize the ‘Responsible Official for SLEIS’ form.
- **Administrator** – has the ability to delete or edit user profiles in SLEIS. Administrators cannot add new users. It is the administrator’s responsibility to delete any users who should no longer have access to the facility in SLEIS (e.g., if an inventory preparer’s contract is not renewed, or if an employee retires).

2.2 General Information
SLEIS is an online point source emission inventory reporting and database management system. SLEIS enables ADEQ to efficiently collect emissions inventory data from regulated entities, manage and review the reported emissions inventory data, and report that emissions data to the EPA.

SLEIS allows facility users to manage multiple facilities and assign varying responsibilities to other users. All of the data is stored in a secure online server and is accessible only for users assigned to that facility. Facility users can log in and access their facility accounts from any web capable device.

Each year new emission reports are released (these are the questionnaires mentioned in section 1.2). If you have never completed an emission report through SLEIS before then you will need to enter all of the required information. If you have submitted previous emission reports, the new reports are pre-populated with information from the previous year. In order to complete an emission report, you only need to update your equipment information (if any equipment changes were made), process throughputs, and emission totals. Once complete, your annual emission report is submitted to ADEQ electronically through SLEIS. You will need to print out and mail in a signed copy of the Truth & Accuracy form. There is no need to print out a copy of the SLEIS emission report.

Below are listed some of the commonly used functions in SLEIS.
Certain fields within SLEIS are required and must be filled out before saving. These fields are indicated by red bars along the left side of the data entry field. Attempting to save without entering information into a required field will produce a validation error and prevent you from saving.

2.3 Emissions Report
When you log in to SLEIS, you will first see the ‘My Facilities’ screen. This screen will list all of the facilities for which you have access.

Once you select the facility you want, you will then be taken to the ‘My Reports’ screen. This screen will display all of the emission reports for that particular facility. Completed reports from previous years will also be available here.

It is possible to have multiple facilities in your ‘My Facilities’ list.
Once you select the emission report you want, you will be taken to that report’s main page. Below is an example of a typical emission report main page.

The emissions report page is broken down into two main areas: Facility Inventory and Emissions. The right side of the page also contains useful information including ‘Summary Reports’, which will summarize emissions data by Source (facility-wide), Release Point, or Emission Unit.

As you can see the emissions report is broken down into two main components: Facility Inventory and Emissions. The Facility Inventory area contains information regarding the physical setup of your facility including release points, control devices, emission units, and unit processes. Generally this information remains constant from year to year so once you enter it into SLEIS, it will automatically be carried forward into subsequent year’s emission reports. The Emissions area is where you will enter the activity levels (throughput, hours of operation, etc), emission factors, and actual emissions data. Much of this information will also be carried forward, making subsequent emission reports much easier to complete.
2.4 Facility Inventory
If your facility was just added to SLEIS, the first thing you will need to do is set up the Facility Inventory area. You will need to open each of the individual sections (Facility, Release Points, etc) and fill in all of the required information. Each section will be described in detail below.

If you have previously completed an emission report in SLEIS, then you will only need to verify that all of the Facility Inventory information is current and up-to-date.

2.4.1 Facility
The Facility section contains basic information on your facility. Facility name, address (both physical and mailing), and main contacts are kept here. If you are using SLEIS for the first time you will need to enter most of this data. Any information you enter will be carried forward to subsequent emission reports, you would only need to edit anything that has changed.

Make sure to fill out all of the required fields. Some of the facility information will be pre-populated based on the information contained in the initial SLEIS Application form. Any of this data can be changed and updated as necessary.

Important Information
Only fill in the ‘Status Date’ field if you are setting your ‘Status’ to either ‘Permanently Shutdown’ or Temporarily Shutdown'.
2.4.2 Release Points

A ‘Release Point’ in SLEIS refers to any place where emissions enter the atmosphere, not just ‘smokestacks’ in the traditional sense. If such a release point does not have a definable height and diameter, enter the release point type as ‘fugitive’. It is a good idea to define all ‘Release Points’ in the database before adding ‘Unit Processes’. Then, when you edit the ‘Release Point Apportionment’ tab in the ‘Unit Processes’ screen, you can call up a list to pick from.

To add a new release point, you must first click on the ‘Release Points’ icon. You will see the following screen:

Click the ‘Add’ button located at the lower right side of the screen. This prompt you to enter information relating to the release point you wish to enter.

Remember that the fields with red bars are required. Once you have entered your information, click ‘Save’.

A blue status indicator will tell you if your release point was successfully saved.
USEFUL INFORMATION

It is a good idea to list out all of your release points, emission units, and unit processes before you begin and assign them identifiers.

Once you create and save a release point, emission unit, or process, you will not be able to change its identifier.

2.4.3 Control Devices

The control devices section contains all of the control devices used at the facility, if any.

2.4.4 Emission Units

The emission units section contains all of the emission units (i.e. boilers, generators, turbines) located at the facility. Each piece of equipment that is capable of producing air pollution should be entered as a separate emission unit. For instance, if you have 5 gasoline storage tanks you will need to create an emission unit for each of these 5 tanks. Do not create one ‘Gas Storage Tank’ emission unit and assign a different unit process for each individual tank.

Below is an example of a facility that has two emission units: A natural gas boiler and an emergency diesel generator.
2.4.5 Unit Processes

The unit processes section contains all of the processes that occur at the facility. Unit processes describe processes at the facility that produce air pollution. There will be at least one unit process for each emission unit and in some cases many more. For instance, a boiler that burns natural gas only would have one unit process associated with it; the external combustion of natural gas. If that boiler burns natural gas half the year and diesel the other half, then two unit processes would be needed; one for the combustion of natural gas and the other for the combustion of diesel.

Unit processes should not be individual pieces of equipment. As noted in section 3.4.4, each piece of equipment that emits air pollution should be entered into SLEIS as an emission unit. Unit processes further define the emissions from each unit. For instance, a gasoline storage tank would be entered as an emission unit. This emission unit would then be assigned unit processes such as ‘Breathing Loss’ and ‘Working Loss’ to further define the different emissions associated with this piece of equipment.

When a new AEIQ is generated at the beginning of the year, each unit process that is marked as operational will need to have emissions associated to it.

The example below shows two unit processes, one for each of the emission units (boiler and generator).
2.5 Emissions
The emission section of the emissions report contains two areas: Process Emissions and Report Attachments. You can also download a template for SLEIS’s batch upload system, which allows you to enter and manipulate data in tables instead of the forms described below. For details on using the batch upload system, please contact ADEQ at emissioninventory@azdeq.gov.

2.5.1 Process Emissions
The process emissions screen will have an entry for each of the unit processes you’ve entered (see section 3.4.5). For each of the processes you will need to enter both activity levels and emission totals.

Here is an example of an emission report with two processes.

To begin, click on the ‘Edit’ button.
You will then see the process emissions screen for that process. There are three tabs along the top of the page: ‘Process’, ‘Operations’ and ‘Emissions’. There are required fields in each tab, so you will need to open each before you can save.

The ‘Process’ tab asks for annual throughput (i.e. activity level), throughput unit of measure, throughput type, and throughput material.

When entering throughput information it is vital that it matches the throughput of the emission factors you are using.

For instance, in this example the emission factor being used has the units of lbs/10^6 scf of natural gas. Therefore, the throughput units must be ‘million standard cubic feet’ and the throughput material should be ‘natural gas’.

The Throughput Type field asks you to choose either ‘Input’, ‘Output’, or ‘Existing’. In this example you would choose ‘Input’ as the throughput material (natural gas) is being measured as it enters the process.

One the other hand, say we used emission factors with the units of lbs/million BTU. We would then set the Throughput Units to ‘million Btu’, the Throughput Type to ‘Output’ and the Throughput Material to ‘Heat’. In this case, the throughput material (Heat) is being measured as it leaves the process.

The ‘Operations’ tab asks for hours of operation. Enter your averaged hours worked per day, week, and year along with the yearly total hours worked (if known). If your facility only operates during certain portions of the year, then please fill out the seasonal breakdown. Keep in mind that the percentages must add up to 100%.
The ‘Emissions’ tab is where the actual emission values will be entered. For each pollutant you will need to enter the Pollutant Code, Calculation Method, and Emission Factor Unit. Depending on the process and the Calculation Method selected, SLEIS may auto-populate the Emission Factor for you. If it does not, you will need to find the emission factors on your own (see section 5.0 for links).

If you select ‘CEMS’ then you only need to enter the ‘Estimated Emissions (Tons)’ field.

If you select ‘Engineering Judgment’, ‘Manufacturer Specifications’, or ‘Material Balance’, you should attach supporting documents to the report which explain the estimate; see below. If the explanation of your calculation method is brief, or to refer ADEQ to a previous SLEIS report attachments, enter a Comment (e.g., “Estimated in LandGEM. See 2009 report for model inputs.”).

2.5.1 Report Attachments

In addition to facility inventory data and process emissions data, you can attach supporting documentation to a SLEIS report, using any formats or file types. Attachments are not a substitute for facility inventory data or process emissions data—even if you attach a document itemizing all of the emissions for the year, they still need to be entered into SLEIS.

If you use any emission factors that were not provided by EPA, please include documentation indicating the source of the emission factor (e.g., a copy of the manufacturer’s spec sheet).

If you enter any emissions estimates calculated using “Material Balance” or “Engineering Judgement,” please include documentation providing

1. an example of the complete calculation for one such estimate and
2. descriptions of the data sources and assumptions used for each subtotal. For example, if you assumed a certain sulfur content of feedstock or if you used weigh station reports to estimate the mass of recovered material, please provide those details.
2.6 Submitting Emission Reports

The final section of the emission report page is titled ‘More Actions’ and will contain different buttons depending on what stage of the submittal process you are in.

If you have not yet submitted your emission report, this section will contain two buttons: ‘Validate Report’ and ‘Initiate Submission’.

If you have already submitted your report, this area will contain one link: ‘Print Report’.

Once you have completed the Facility Inventory and Emissions sections of your emissions report, you will need to first validate the report by clicking on the ‘Validate Report’ button. This will cause the system to run through a series of automated quality assurance checks and then take you to the Validation Report page.

If no errors were found in your report, you will see the following screen:

You can then use the checkbox on the right side of the screen to mark the report as ready to submit. Once marked as complete, anyone with the Submitter role for your facility will be able to see this when they log in.

If errors are found, you will need to resolve them before you can submit your report. The Validation Report screen will provide a file which contains all of the errors.
Emission Report Submittal Process

This will allow you to view an electronic copy of the data that will be submitted. **There is no need to print out and send in this document.** If you notice something that needs to be changed, go back and make those changes before proceeding.

You must check all of the boxes before you can proceed to the next page.

These questions help to verify that you are the Responsible Official for your facility.

Once you reach this page your Emissions Report has been submitted. You can view or print the official copy of record (again there is no need to send this printout to ADEQ, it is only for your records).
3.0 ADDITIONAL RESOURCES

ADEQ Emission Inventory Training website: http://www.azdeq.gov/emissions-inventories
- Help videos
- Workshop information
- Guidance documents

EPA Emission Inventory Training website:
https://www.epa.gov/air-emissions-inventories/air-emissions-inventory-guidance-documents

EPA National Emission Inventory website:
https://www.epa.gov/air-emissions-inventories/national-emissions-inventory-nei

Code of Federal Regulations - Air Emission Reporting Requirements:
http://www.ecfr.gov/cgi-bin/retrieveECFR?gp=&SID=997e36b351f8631bfaa4dfe0d464d826&n=40y2.0.1.1.2&r=PART&ty=HTML