



Annual Emission Inventory Reporting Workshop

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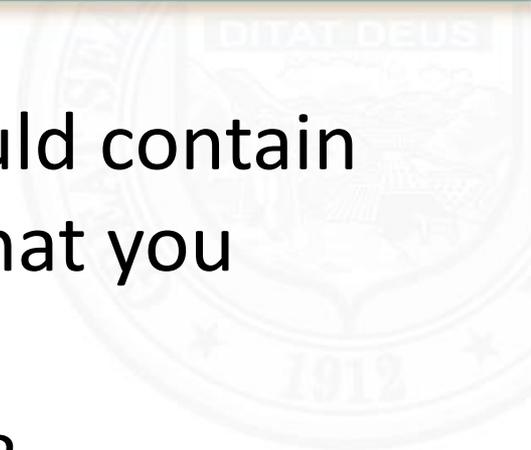


- Introduction
- Who Must Report, What Must Be Reported
And What Does ADEQ Do With Emission
Inventories (EI)?
- **Major Point Source** Reporting Through SLEIS
- **Minor Point Source** Reporting
- Q&A

Due Date for 2018 Emission Inventory Reports
(both Major and Minor Sources):

June 1st, 2019

- Your 2018 emission inventory should contain the total amount of air pollution that you *actually* emitted in 2018.
 - Generally reported as TONS per YEAR



R18-2-327. Annual Emissions Inventory Questionnaire

(A) Every source subject to permit requirements under this Chapter shall complete and submit to the Director an annual emissions inventory questionnaire.

For definitions of a source type for the purposes of determining permit types and reporting guidelines/forms, see AAC R18-2-326 & R18-2-511

Major Point Source

- Has the Potential to Emit or Emits Aggregate TPY of 10HAP | 25HAPS | 100CAP | 250CAPS
- Full Definition @ A.A.C. R18-2-401
- Must use SLEIS to report 2017 emissions

Synthetic Minor Point Source

- Permit Restrictions on Production, Operation or Emissions
- Emissions “Artificially” Below Point Source Threshold
- Can use either SLEIS or paper forms to report 2017 emissions

Minor Point Source

- Non-Major Source Subject to Regulation by Director under ARS 49-402 (B)
- E.g. Dry Cleaner
- Can use either SLEIS or paper forms to report 2017 emissions

Portable Source

- Can Operate in Multiple Places
- E.g. Rock Crusher & Screener
- Can use either SLEIS or paper forms to report 2017 emissions

- Major Point Sources Are Required To Use SLEIS
- ADEQ Reports Major Source EIs From SLEIS To The EPA
- Minor Source Permit Holders (Class II and General Permits) Should Use Excel/PDF Forms Located On ADEQ Website

- The annual questionnaire should include the following information (R18-2-327(b)):
 - The source’s name, description, mailing address, contact person (w/ phone number), and physical address and location (if different than mailing address).
 - Process information for the source, including design capacity, operations schedule, and emissions control devices, their descriptions and efficiencies.
 - The actual quantity of emissions from permitted emission points and fugitive emissions as provided in the permit of the following regulated air pollutants:
 - 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.
 - Any combination of regulated air pollutants in a quantity greater than 2 1/2 tons.

- At a minimum, you must report emissions as specified in your permit
- The following are the pollutants ADEQ needs to report to EPA:
 - Sulfur dioxide (SO₂)
 - Volatile organic compounds (VOC)
 - This total should include all HAPs which are also VOCs
 - Nitrogen oxides (NO_x)
 - Carbon monoxide (CO)
 - Lead and lead compounds
 - Primary PM_{2.5} (PM25-PRI). As applicable, also report filterable and condensable components
 - Primary PM₁₀ (PM10-PRI). As applicable, also report filterable and condensable components
 - Ammonia (NH₃)
- We strongly encourage you to report individual HAP emissions.

- A.A.C. R18-2-327(C) sets the following hierarchy for emission estimations:
 - CEMS data
 - Performance Test data
 - AP-42
 - Material Balance
 - Director Approved Alternate Method





MAJOR POINT SOURCE REPORTING WITH SLEIS

<https://sleis.azdeq.gov/>

SLEIS  State & Local Emissions Inventory System Home | Login | Help

Welcome

Welcome to the State and Local Emissions Inventory System (SLEIS), a web-based application that allows permitted facilities to compile and submit point source emissions inventory data to the Arizona Department of Environmental Quality (ADEQ). After the emissions inventory data are received, the SLEIS application is used by ADEQ to review and submit the data to the Environmental Protection Agency's (EPA) Emissions Inventory System (EIS). For additional information on SLEIS, please visit the [SLEIS product website](#).

Please Note:
Minimum browser requirements for SLEIS are Internet Explorer version 9 or later, Chrome, or Mozilla Firefox. For users of Internet Explorer version 7 or 8, please install the Chrome Frame available at <http://www.google.com/chromeframe>.

Registration and Forms:
Registration for SLEIS requires that you download and complete the provided registration form. After you have completed and signed the form, please make a copy of the form and either email or mail the original to the address indicated on the top of the form. When we receive your registration form, the information will be entered into SLEIS, and you will receive an email with a link to create your initial account password.
For questions about this process, please contact us at: SLEIS@azdeq.gov.

Please download, complete, and mail the following form to register for SLEIS:
[SLEIS User Application Form](#)

Certification after On-line Reporting:
Following successful submission of your emissions inventory report, for identify verification purposes, responsible officials must download, complete, and mail the following form:
[SLEIS Electronic Certification Form](#)

After completing the form, please make a copy of the form and mail the original along with a printout of the emissions inventory report. The report printout is an attachment to the email generated after successfully submitting your emissions inventory report electronically to ADEQ. The emissions inventory report printout can also be downloaded from the [View Submission History](#) page accessed from the SLEIS Report Homepage.

Feedback:
Your feedback regarding SLEIS is encouraged. To make an inquiry or suggestion, please click the **Submit general questions and/or comments** link below.

[Submit general questions and/or comments](#)

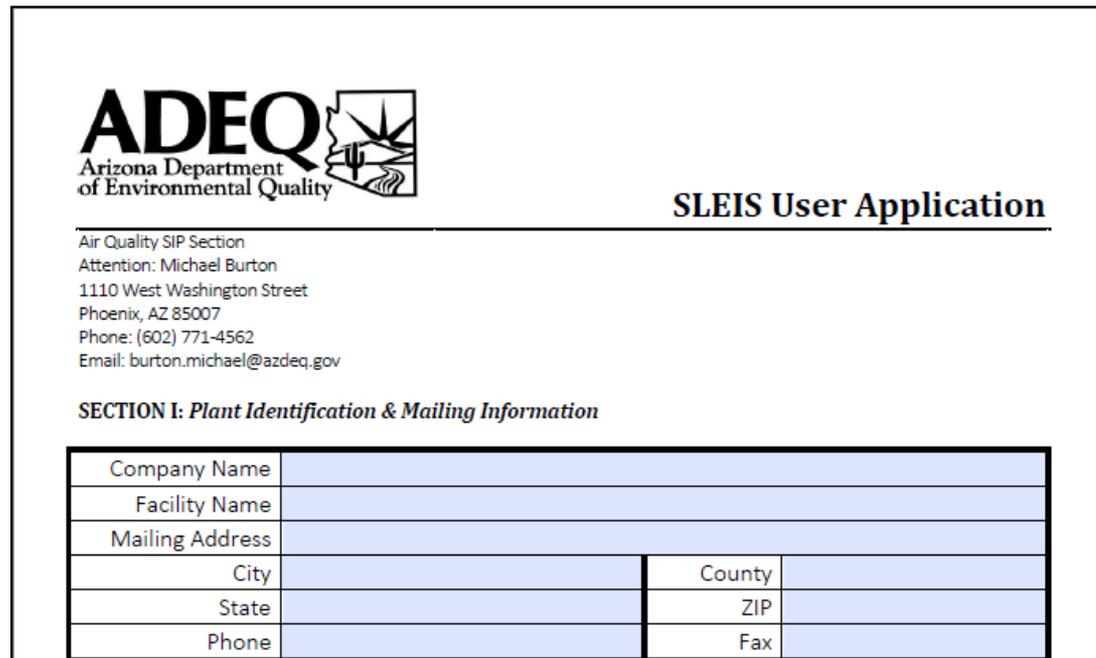
News

[2013 Emission Inventory Workshops](#)
2014-03-26

[2013 Emission Inventory](#)
2014-02-13

- 'News' section is periodically updated with important information
- Application and Certification forms available for download

- The SLEIS User Application form is used to:
 1. Create new facilities in SLEIS
 2. Add users to existing facilities



ADEQ 
Arizona Department
of Environmental Quality

SLEIS User Application

Air Quality SIP Section
Attention: Michael Burton
1110 West Washington Street
Phoenix, AZ 85007
Phone: (602) 771-4562
Email: burton.michael@azdeq.gov

SECTION I: Plant Identification & Mailing Information

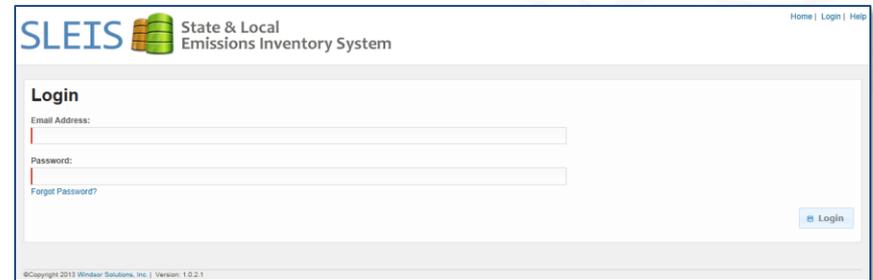
Company Name			
Facility Name			
Mailing Address			
City		County	
State		ZIP	
Phone		Fax	

- Two main roles:
 - **Editor** – Can make changes to emission reports
 - **Viewer** – Can only view emission reports
- In addition, you can also be:
 - **Administrator** – Can edit other user accounts for the facilities they are assigned to
 - **Submitter** – Allowed to submit official version of emission report. Needs to be a responsible official of the facility.

■ Administrators

- Be aware that you are responsible for maintaining the user accounts for your facilities.
- If someone leaves your company, it is up to you to remove or inactivate their user account.

1. Go to the secure application site at <https://sleis.azdeq.gov/SLEIS/>
2. Click login in the top right corner
3. Enter user email address and password
 - Only authorized facility users may access SLEIS
 - Submitters are responsible for everything submitted under your facility



The screenshot shows the SLEIS (State & Local Emissions Inventory System) login interface. The page title is "SLEIS State & Local Emissions Inventory System". In the top right corner, there are links for "Home", "Login", and "Help". The main content area is titled "Login" and contains three input fields: "Email Address:", "Password:", and "Forgot Password?". A "Login" button is located in the bottom right corner of the form. At the bottom of the page, there is a small copyright notice: "©Copyright 2013 Windsor Solutions, Inc. | Version: 1.0.2.1".

Accessing Your Facility Reporting Page

My Facilities

Identifier	Name	Roles	Ready for Submission	Actions
1111	EXAMPLE FACILITY	Editor, Submitter, Administrator		

Click Here 

My Reports

Reporting Year	Due Date	Submitted Date	Status	Actions
2012	2013-10-31		In Process	

Click Here 

EXAMPLE FACILITY

Identifier:
1111

Address:

Your roles at this facility are:
Editor, Submitter, Administrator

Authorized Users

0 other users at your facility have
access to emissions report data.

[View facility users](#)

First Things First: Emission Report Review

- Facility Information
- Release Points
- Control Devices
- Emission Units
- Unit Processes

SLEIS State & Local Emissions Inventory System

Welcome Michael Burton
Home | Quick Find | My Facilities | My Profile | Help | Logout

2012 Emissions Report In Process

Facility Inventory

- Facility
- Release Points
- Control Devices
- Emission Units
- Unit Processes

Emissions

- Process Emissions
- Report Attachments

Download Template Import Data

More Actions

- Validate Report Initiate Submission

EXAMPLE FACILITY

Identifier: 1111
Address:
Your roles at this facility are: Editor, Submitter, Administrator

Submission Status

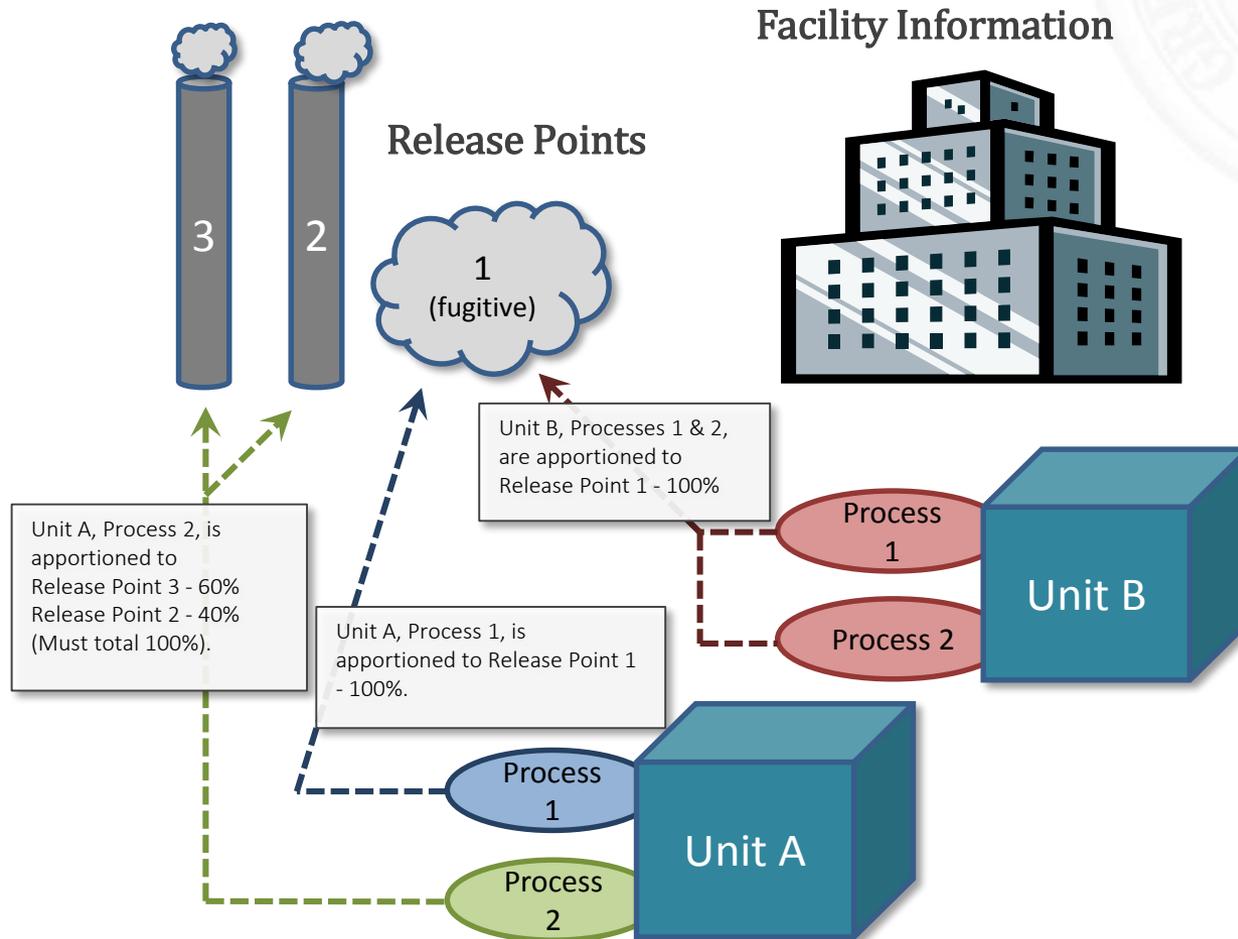
This emissions report has not been submitted.

Summary Reports

- Total Emissions by Source
- Total Emissions by Release Point
- Total Emissions by Emission Unit

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EPA's Emission Inventory System (EIS)



2011 Emissions Report

In Process 

Facility Inventory

- 
Facility
- 
Release Points
- 
Control Devices
- 
Emission Units
- 
Unit Processes

- Facility Users can Add:
 - Release Points
 - Control Devices
 - Emissions Units
 - Unit Processes
- Once submitted, Emissions Units, Control Devices and Release Points are Added to the Master Facility Inventory list. This Master list will be used to generate next year's emissions report.



Facility

EDITING FACILITY INFORMATION

- Users Cannot Create a New Facility
- Users May Edit Certain Facility Attributes
 - Facility Status
 - Emission/Permit/Compliance Contact Info
 - Physical and Mailing Address
 - Additional Information
- Facility ID, Name, and Owner are Read Only



Facility



Release
Points



ADDING AND VERIFYING RELEASE POINTS

2011 Emissions Report

Release Points

Release Point

Location

Additional Information

Identifier:

Type:

Downward-facing Vent

Description:

Status:

Operating

Status Date:

Stack Height:

FEET

Stack Diameter:

FEET

Exit Gas Temp:

°F

Exit Gas Flow Rate:

- Assign a Unique Release Point Identifier
- Choose from Vertical, Horizontal, Fugitive or Vent
- Enter Description to Match Equipment or Process It Serves
- Enter Release Point Physical Characteristics



Release
Points

2011 Emissions Report

Release Points

Release Point **Location** Additional Information

Release point utilizes facility coordinates?:

Latitude (decimal degrees):

Longitude (decimal degrees):

UTM X (meters):

UTM Y (meters):

UTM Zone:

Assumes northern hemisphere

Collection Method:

Data Collection Date:
 

Geographic Reference Point:

- Some Sources May Use Facility Coordinates
- Others Enter Stack or Vent Location
- Enter Lat/Long or UTM Coordinates
- The Converse Will Auto-populate



Release
Points

- A release point is needed for every emission source
- It is generally acceptable to have a single Facility-wide fugitive release point along with release points for stacks
- For these purposes, exhaust pipes from emergency generators do not count as stacks



Release
Points



Control
Devices

ADDING AND VERIFYING CONTROL DEVICES

2011 Emissions Report

Control Devices

Control Device

Additional Information

Identifier:

Description:

Status:

Status Date:

Control Measure:

Controlled Pollutants:

 %

Related Unit Processes:

Comments:

- Choose a Unique Identifier for Your Control Device
- Description Should Adequately Identify the Control Device
- SLEIS will Auto-Populate Control Measures
- Choose Your Controlled Pollutants Carefully!



Control
Devices

2011 Emissions Report

Control Devices

Control Device **Additional Information**

Local Control Equipment Identifier/Name:

Serial Number:

Manufacturer:

Installation Date:
 

- Most Information Entered on This Page is Voluntary
- Please Enter This Info if You Have it
- Helps with the QA/QC of Emission Reporting



Control
Devices



Emission
Units

ADDING AND VERIFYING EMISSION UNITS

2011 Emissions Report

Emission Units

Emission Unit

Regulatory Programs

Additional Information

Identifier:

Type:

Description:

Status:

Status Date:

Operation Start Date:

Design Capacity

Related Unit Processes:

Comments:

- Identifier Designate Emission Creating Units
- Description Personalizes EUs of Facility
- Design Capacity Required for Certain EU Types



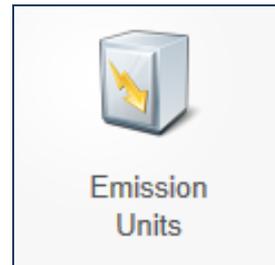
Emission
Units

“Emissions Units include **all individual pieces of equipment that emit air pollutants** at a stationary source. EPA regulations define an emissions unit as any part of a stationary source which emits or would have the potential to emit any pollutant subject to regulation under the Clean Air Act. **Examples** of common emissions units include Stationary Internal Combustion Engines, Boilers or Steam Generators, Combustion Turbines, Printing Presses, Solvent Degreasers, and Paint Spray Booths.”



Emission
Units

- The Emission Units in SLEIS should match the equipment list in your permit



- Used Mainly to Track Regulatory Program Associated with EU
 - E.G. MACT Standards
 - E.G State and Local Regulations
- Internal Tool for Facility to Track EU
 - Tracks Title V EUs
 - Alphanumeric Value of 10 Characters or Less



Emission
Units



Unit
Processes



ADDING AND VERIFYING UNIT PROCESSES

2011 Emissions Report

Unit Processes

Unit Process

Control Approach

Release Point Apportionment

Additional Info

Process Identifier:

Emission Unit Identifier:

SCC:

Code:

Description:

Last/Final Emissions Year:

Related Process Emission:

Comments:

- Links Release Points, Control Devices, Emission Units
- Choose Identifier of EU that Matches Process
- Choose Appropriate Source Classification Code (SCC) and Description



Unit
Processes

- **NOTE:** It is important to know your emission factors when creating your processes.
- You will only be able to enter one type of throughput for each process.



Unit
Processes

- In general, a separate Unit Process is needed for each different Source Classification Code (SCC) associated with a particular emission unit.

EXAMPLE #1: Gasoline Storage Tanks

SCC 40400201 – Breathing Loss (RVP 13, Fixed Roof)

SCC 40400204 – Working Loss (RVP 13, Fixed Roof)

EPA's TANKS program gives emission totals for both breathing loss and working loss.



Unit
Processes

EXAMPLE #2: Electric Generation

SCC 10100601 – Natural Gas

SCC 10100501 – Distillate Oil

In this example, if both natural gas and distillate oil are used in the same generation unit, a separate unit process would need to be created for each of these processes. You would *not* create an emission unit for each.



Unit
Processes

A list of SCC's can be found in EPA's Appendix 6 – Code Tables:

<http://www.epa.gov/ttn/chief/eiinformation.html>

Click on 'EIS Code Tables (including SCCs)'



Unit
Processes

- ADEQ has updated the SLEIS SCC list
 - Only current, valid, point source SCCs may be used
- SCC codes used in past inventories might not be valid
 - When updating SCCs check out EPA's tools
 - Issues? Contact ADEQ



2011 Emissions Report

Unit Processes

Unit Process	Control Approach	Release Point Apportionment	Additional In
<p>Not Controlled?: <input type="checkbox"/></p> <p>Control Approach Description: <input type="text"/></p> <p>Capture Efficiency: <input type="text"/> %</p> <p>Control Devices: <input type="text" value="Begin typing..."/></p>			

- If Uncontrolled, Check Box and Skip
- If Controlled
 - Add Description
 - Add Capture Efficiency
 - Designate Applicable Control Devices
 - Inherent vs. add-on



Unit
Processes

- Class I Sources Pay An Annual Emission-Based Fee
- All Sources Pay Permit Processing/Annual Fees
- Fee Rule Summary:
<http://www.azdeq.gov/environ/air/permits/fees.html>
- Fee Rule A.A.C. R18-2-326:
http://www.azsos.gov/public_services/Title_18/18-02.htm



Unit
Processes

- **Release Point Appointment**
 - Allows for Designation of Emissions/Release Point
 - Can Designate one or Multiple Release Points
 - Must be Entered Prior to Appointment
- **Additional Information: Billable Emissions**
 - Are Emissions From This Process Billable?
 - If Non-Billable...Why? You Need To Include Justification In Comment Box.



Unit
Processes

SLEIS State & Local Emissions Inventory System

Welcome Michael Burton
Home | Quick Find | My Facilities | My Profile | Help | Logout

2012 Emissions Report In Process

Facility Inventory

- Facility
- Release Points
- Control Devices
- Emission Units
- Unit Processes

Emissions

- Process Emissions
- Report Attachments

[Download Template](#) [Import Data](#)

More Actions

- [Validate Report](#)
- [Initiate Submission](#)

EXAMPLE FACILITY

Identifier: 1111
Address:
Your roles at this facility are: Editor, Submitter, Administrator

Submission Status

This emissions report has not been submitted.

Summary Reports

- Total Emissions by Source
- Total Emissions by Release Point
- Total Emissions by Emission Unit

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- Process Emissions
- Report Attachments



Process
Emissions



THE NITTY GRITTY: REPORTING PROCESS EMISSIONS

In Process

2011 Emissions Report

Process Emissions

Retrieved records 1 - 3 of 3, showing 3.

Filter:

Emission Unit Identifier:	Process Identifier:	SCC:	Annual Throughput:	Actions
001 Natural Gas Boiler	1 Natural Gas Boiler	10300602 Ext Comb /Comm-Inst /Natural Gas /10-100 Million Btu/hr	110 MILLION STANDARD CUBIC FEET (Natural Gas) (Input)	
002 Emergency Diesel Generator	1 Emergency Diesel Generator	20300101 Int Comb /Comm-Inst /Distillate Oil (Diesel) /Reciprocating	210 HORSEPOWER-HOURS (Diesel) (Output)	
003 Crusher #1	3 Primary Crusher	30504030 Mining&Quarrying Nonmetallic Minerals /Primary Crusher		

- Emissions Must be Calculated for Each Process
- Users May Import and Export Data for All Process Emissions



Process
Emissions

2011 Emissions Report

Process Emissions

Process

Operations

Emissions

Process is Reported?:

Uncheck this box if there are no reportable emissions for the reporting year

Annual Throughput:

Throughput Unit of Measure:

Throughput Type:

Throughput Material:

Process is CBI?:

Check this box to not report Throughput and Emission Factors to EPA

Supplemental Calculation Parameters:

Ash (%)

Sulfur (%)

Heat Content
(MMBTU/Unit)

Comments:

- Determine if Process Must be Reported
- Enter Throughput Information in Accordance to SCC
- Supplemental Calculation Parameters Necessary for Combustion Equipment
- Previous Years Information will Populate Some Fields



Process
Emissions

New – Process Tab

2011 Emissions Report

Process Emissions

Process | Operations | Emissions

? Process is Reported?:
 Uncheck this box if there are no reportable emissions for the reporting year

? Annual Throughput:
[Text Input Field]

? Throughput Unit of Measure:
[Dropdown Menu]

? Throughput Type:
[Dropdown Menu]

? Throughput Material:
[Text Input Field]

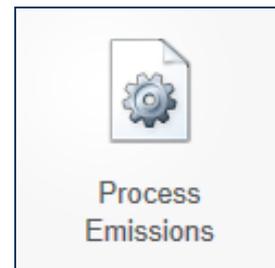
? Process is CBI?:
 Check this box to not report Throughput and Emission Factors to EPA

? Supplemental Calculation Parameters:

[Text Input Field]	[Text Input Field]	[Text Input Field]
Ash (%)	Sulfur (%)	Heat Content (MMBTU/Unit)

? Comments:
[Text Input Field]

- % ash, % sulfur, and heat content cannot be zero (but can be blank)
- % sulfur must be under 10%



2011 Emissions Report

Process Emissions

Process **Operations** Emissions

ⓘ Average Hours/Day:

ⓘ Average Days/Week:

ⓘ Average Weeks/Year:

ⓘ Actual Hours:

Seasonal Operations:

ⓘ December-February (%)

ⓘ March-May (%)

ⓘ June-August (%)

ⓘ Total Ozone Season Days
(May-September)

ⓘ Total Summer Season Days
(June-August)

ⓘ Total
(December-February)

- Average Hours/Days/Weeks of Operation Required
- Actual Hours of Operation Calculates Automatically
- Please Enter Seasonal Operations



Process
Emissions

New – Operations Tab

2011 Emissions Report

Process Emissions

Process **Operations** Emissions

✓ Average Hours/Day:

✓ Average Days/Week:

✓ Average Weeks/Year:

✓ Actual Hours:

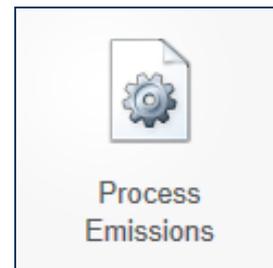
Seasonal Operations:

✓ December-February (%) ✓ March-May (%) ✓ June-August (%)

✓ Total Ozone Season Days (May-September) ✓ Total Summer Season Days (June-August) ✓ Total Winter Season Days (December-February)

New to Operations Tab

- Average Weeks per Year AND Actual Hours must be an integer (no decimals)



2011 Emissions Report

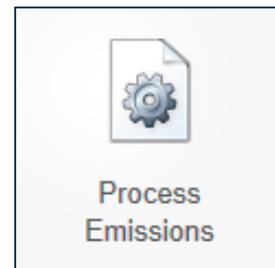
Process Emissions

Process Operations **Emissions**

<input type="text"/>	<input type="text"/>

+ Add

- Users Can Calculate Multiple Emissions Per Process
- Be Sure Pollutant Code Matches That of Control Measure
- All Data in Process Emission Can Be Imported
- Saving will Run Error Report/Estimated Emissions



- If you report PM2.5-FIL you *must* also report PM10-FIL. Same for PM2.5-PRI.
- For a single process, PM2.5 emissions should *not* exceed PM10 emissions.
- To ensure accurate totals please report PM10/2.5-PRI for all processes that have PM emissions. This will reduce need for EPA to augment our emissions.



Process
Emissions

- SLEIS has new quality control checks
- If inventory includes value for total VOCs AND values for individual VOCs, then individual VOCs must be less than or equal to total VOCs.
- If a process has both PM2.5-PRI and PM10-PRI, PM2.5-PRI must be less than or equal to PM10-PRI (same for filterable PM).



Process
Emissions

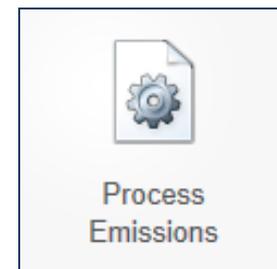
- If a process has PM10-PRI AND PM10-FIL, PM10-FIL must be less than or equal to PM10-PRI (same for PM2.5).
- If a process has PM10-PRI AND PM-CON, PM-CON must be less than or equal to PM10-PRI (same for PM2.5).
- If a process has PM10-PRI, PM10-FIL, and PM-CON, then PM10-FIL and PM-CON must add to PM10-PRI, up to a tolerance of +/- 1 ton (same for PM2.5).



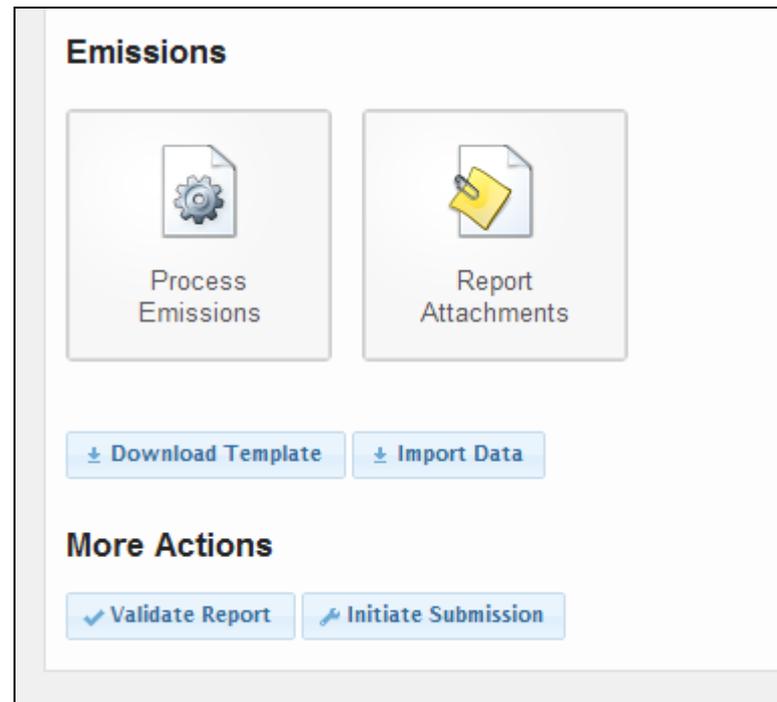
- Additional new quality control features in SLEIS
 - Negative emissions estimates will give error, but not zero.
 - You cant leave emissions blank for direct input methodologies (CEMs, Material Balance, Engineering Judgement). If you have no emissions for a given process, but don't want to delete it, fill in zero.
 - Emission factors cant be negative or zero – must be positive
 - If you select an emission factor calculation method you cant leave it blank.



- Some Sources may Prefer to Import Data Into SLEIS
- You May Download Formatted CSV Templates for Data Entry
 - ❖ Please download new templates each year. Do not reuse templates from year to year.
- These CSV Templates can Be Uploaded Directly Into SLEIS



- Begin by downloading the CSV file templates



- A ZIP file will be downloaded

- The ZIP file contains three CSV files
 - Processes.csv
 - ProcessEmissions.csv
 - ReferenceDataValues.csv
- You will need to unzip these files and save them to your computer



- Contains throughput and activity level information for each emission process
- Required data
 - Throughput
 - Quantity (Column C)
 - Unit (Column D)
 - Type (Column E)
 - Material (Column F)
 - Activity Level
 - Actual hours of operation (Column S)
 - Average hours/day (Column T)
 - Average days/week (Column U)
 - Average weeks/year (Column V)



Required data

C1							fx	ThroughputQuantity
	A	B	C	D	E	F		
1	EmissionL	ProcessId	Throughp	Throughp	Throughp	Throughp	Janu	
2	001	1	11	E6FT3S	I			209
3	002	1	21	HP-HR	O			44
4								

S1						fx	ActualHrsOperation
	S	T	U	V	W	X	
1	ActualHrs	AvgHrsPer	AvgDaysP	AvgWeek	DecToFeb	MarTo	
2	11	1	1	1			
3	21	2	2	2			
4							

– Throughput

- Quantity (Column C)
- Unit (Column D)
- Type (Column E)
- Material (Column F)

– Activity Level

- Actual hours of operation (Column S)
- Average hours/day (Column T)
- Average days/week (Column U)
- Average weeks/year (Column V)

- Contains pollutant name, emission factor, and pollutant quantity
- Required data
 - All fields are required
 - Emission totals will auto-calculate based on throughput and emission factors
 - If using CEMS or other source for emission totals, you will need to enter the actual amount of pollutant
 - Unless you are changing or adding pollutant or emission factor data, none of this information needs to be edited

- Once you have updated the CSV files, upload them to SLEIS by clicking the 'Import Data' button
 - You will be prompted to select both the Processes.csv and ProcessEmissions.csv files.

Select Import Files

Select the *Processes.CSV* file for the report:

Select the *ProcessEmissions.CSV* file for the report:

- If the upload was successful, a blue status bar will appear.



- If the upload was unsuccessful, you will see a list of errors.

Import File Validation	
showing 2.	
 Error	 Context
ProcessId or EmissionUnitId is invalid.	Processes Line 2
ProcessId or EmissionUnitId is invalid.	Processes Line 3

- The 'Error' column will tell you the row contains the error.
- The 'Context' column will tell you the file (Processes or ProcessEmissions) and line #

 Error	 Context
ProcessId or EmissionUnitId is invalid.	Processes Line 2
ProcessId or EmissionUnitId is invalid.	Processes Line 3

- In this example, there is an error in either the 'ProcessId' or 'EmissionUnitId' of lines 2 and 3 of the Processes.csv file.

- An error will occur if your Process or Emission Unit ID #'s contain leading zeroes.

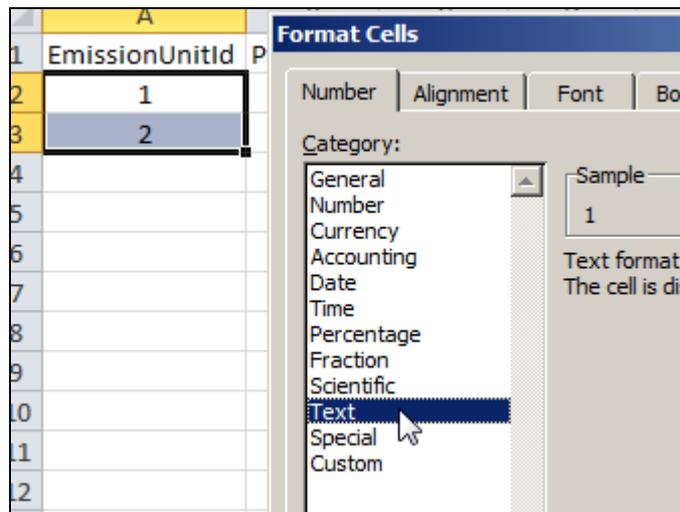
 <u>Emission Unit Identifier:</u>	 <u>Process Identifier:</u>
001 Natural Gas Boiler	1 Natural Gas Boiler
002 Emergency Diesel Generator	1 Emergency Diesel Generator



	A	B	
1	EmissionUnitId	ProcessId	T
2	1	1	
3	2	1	
4			

- Excel will disregard these leading zeroes and convert it into a number

- To correct this error, you will need to force Excel to treat the ID #'s as **Text**



	A	B	
1	EmissionUnitId	ProcessId	Thru
2	001	1	
3	002	1	
4			

- Then change the ID #'s so that they exactly match what's in SLEIS

The screenshot displays a web interface for emissions management. On the left, under the heading "Emissions", there are two main action buttons: "Process Emissions" (with a gear icon) and "Report Attachments" (with a document icon). Below these are two smaller buttons: "Download Template" and "Import Data". Under the heading "More Actions", there are two buttons: "Validate Report" and "Initiate Submission". On the right side of the interface, under the heading "Summary Reports", there is a list of three report types: "Total Emissions by Source", "Total Emissions by Release Point", and "Total Emissions by Emission Unit".

- Users May Attach Any Required Supporting Document
 - If using Material Balance or Engineering Judgment you *must* provide supporting documentation

More Actions

SLEIS State & Local Emissions Inventory System

Welcome Michael Burton

Home | Quick Find | My Facilities | My Profile | Help | Logout

2012 Emissions Report In Process

Facility Inventory

- Facility
- Release Points
- Control Devices
- Emission Units
- Unit Processes

Emissions

- Process Emissions
- Report Attachments

Download Template Import Data

More Actions

- Validate Report
- Initiate Submission

EXAMPLE FACILITY

Identifier: 1111

Address:

Your roles at this facility are:
Editor, Submitter, Administrator

Submission Status

This emissions report has not been submitted.

Summary Reports

- Total Emissions by Source
- Total Emissions by Release Point
- Total Emissions by Emission Unit

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- Validate Report
- Initiate Submission

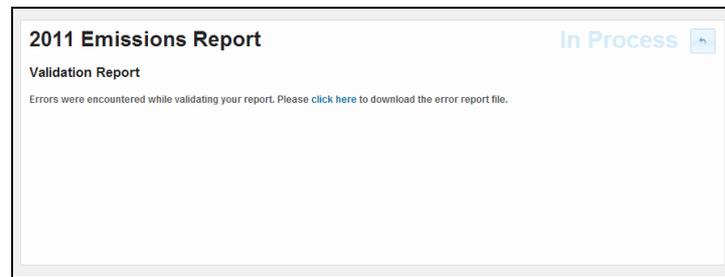
✓ **Validate Report**

🔑 **Initiate Submission**

SUBMITTING YOUR EMISSION REPORT

- Validate report will run automated quality assurance checks on your current emission report
- Can be run at any time...you don't need to wait until report is complete to check for errors
- Once clicked you will be taken to the Validate Report screen...

- If there are errors:



- The error report will be downloaded as a CSV file:

	A	B	C	D
1	Error	Context		
2	Process Emission Operations Average Hours/Day is r	Emission Unit: 003, Process: 3		
3	Process Emission Operations Average Days Per Weel	Emission Unit: 003, Process: 3		
4	Process Emission Throughput Material Type is requir	Emission Unit: 003, Process: 3		
5	Process Emission Annual Throughput is required	Emission Unit: 003, Process: 3		
6	Process Emission Throughput Unit of Measure is req	Emission Unit: 003, Process: 3		
7	Process Emission Operations Average Weeks/Year is	Emission Unit: 003, Process: 3		
8	Process Emission Throughput Type is required	Emission Unit: 003, Process: 3		
9	Process Emission requires at least one Pollutant	Emission Unit: 003, Process: 3		
10				

<h2>2011 Emissions Report</h2> <p>Validation Report</p> <p>No errors were encountered while validating your report.</p> <p>Please click the Mark as Ready for Submission checkbox if this report is now ready for submission.</p>	<p>In Process </p> <hr/> <p>EXAMPLE FACILITY</p> <p>Identifier: 1111</p> <p>Address: NF-131 Tonto National Forest Young, AZ 85554</p> <p>Mark as Ready for Submission?</p> <p><input type="checkbox"/> The report will be displayed on the My Facilities page for users with the Submitter role for the report's facility.</p>
-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

- Once all errors have been corrected the report is ready to submit

2012 Emissions Report

In Process

Submission Review

Please click **View electronic document** and review the contents of the report being submitted before continuing the submission.

[View electronic document](#)

[Cancel](#)

[Continue](#)

- An electronic (PDF) version of your emission report will be created
- You can't continue until you click on the "View electronic document" button

2012 Emissions Report

In Process

Submission Agreements

I certify that I have not violated any term in my Electronic Signature Agreement and that I am otherwise without any reason to believe that the confidentiality of my userID and/or password have been compromised now or at any time prior to this submission. I understand that this attestation of fact pertains to the implementation, oversight, and enforcement of a federal environmental program and must be true to the best of my knowledge.

- I am the owner of the account used to perform the electronic submission and signature.
- I have the authority to submit the data on behalf of the facility I am representing.
- I agree that providing the account credentials to sign the submission document constitutes an electronic signature equivalent to my written signature.
- I have reviewed the electronic report being submitted in its entirety, and agree to the validity and accuracy of the information contained within it to the best of my knowledge.

- You'll need to check all of the boxes under the Submission Agreement

2012 Emissions Report In Process

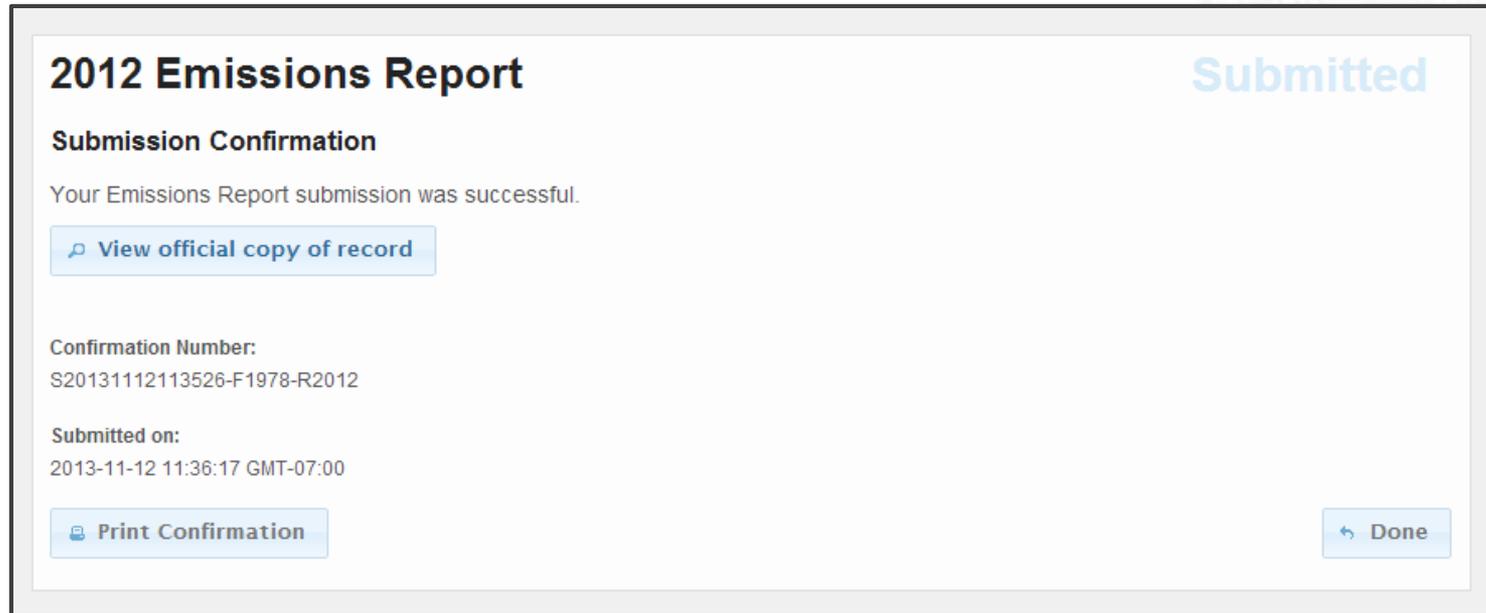
Submission Signature

Please provide the answer to your previously specified challenge question, and re-enter your account login password.

What is the name of the place your wedding reception was held?

Password:

- You'll need to answer one of your challenge questions and your password



2012 Emissions Report **Submitted**

Submission Confirmation

Your Emissions Report submission was successful.

[View official copy of record](#)

Confirmation Number:
S20131112113526-F1978-R2012

Submitted on:
2013-11-12 11:36:17 GMT-07:00

[Print Confirmation](#) [Done](#)

- When you see this page your report has been successfully submitted
- The “Official Copy of Record” and “Confirmation” documents are for your records. No need to mail them to ADEQ.

- EPA's Emission Inventory Trainings:
 - <https://www.epa.gov/air-emissions-inventories/air-emissions-inventory-training>
- ADEQ Emission Inventory Website:
 - <http://www.azdeq.gov/emissions-inventories>
- GovDelivery - EI Updates:
 - <https://public.govdelivery.com/accounts/AZDEQ/s/subscriber/new>



MINOR SOURCE REPORTING

Visit www.azdeq.gov/emissions-inventories

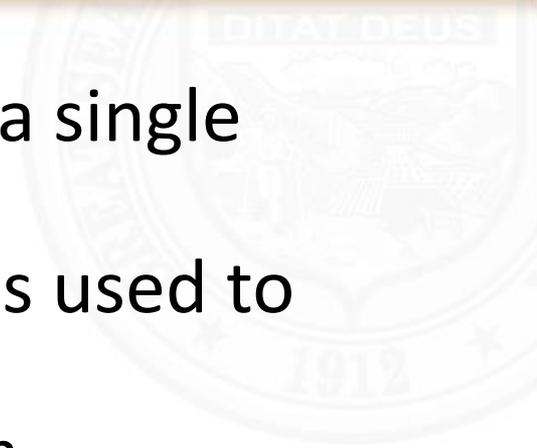
Scroll down to the bottom of the page and select the form you would like to use:

Minor Sources: Reporting Form (XLS) | [Download >](#)

Alternative PDF forms for Minor Sources:

- Air Curtain Incinerator | [Download >](#)
- Cotton Gins | [Download >](#)
- Perc Dry Cleaners | [Download >](#)
- Rock Products | [Download >](#)
- Soil Vapor Extraction | [Download >](#)
- Misc. Sources | [Download >](#)

- All necessary forms are contained in a single workbook
- This workbook contains various forms used to report emissions:
 - FORM 1.0 – General Facility Information
 - FORM 2.1 – Generators & Boilers
 - FORM 2.2 – PERC Dry Cleaners
 - FORM 2.3 – Cotton Gin
 - FORM 2.4 – Soil Vapor Extraction
 - FORM 2.5 – Air Curtain Incinerator
 - FORM 2.6 – Rock Products
 - FORM 3.0 – Misc. Equipment
 - FORM 3.1 – Misc. Emissions



- Two versions available: Excel and PDF
- Excel version will auto-calculate emissions based on activity levels (throughput, hours of operation, etc)
- PDF versions will not auto-calculate
 - Only report activity levels
 - No need to manually calculate emissions
 - ADEQ will use these levels to calculate your facilities emission totals

FORM 1.0: GENERAL FACILITY INFO

ADEQ Arizona Department of Environmental Quality		FORM 1.0 - GENERAL FACILITY INFORMATION		2014	
ANNUAL EMISSIONS INVENTORY QUESTIONNAIRE					
FACILITY NAME		PLACE ID#	PERMIT# or LTF#		
FACILITY ADDRESS		CITY	STATE	ZIP CODE	
FACILITY CONTACT		TITLE	PHONE #		
E-MAIL					
PRODUCT/PRINCIPAL ACTIVITY		NAICS	NUMBER OF EMPLOYEES		
FORMS COMPLETED (mark all that apply):					
<input type="checkbox"/> Generators & Boilers		<input type="checkbox"/> Soil Vapor Extraction		<input type="checkbox"/> Misc Equipment	
<input type="checkbox"/> Dry Cleaning		<input type="checkbox"/> Air Curtain Incinerators		<input type="checkbox"/> Misc Emissions	
<input type="checkbox"/> Cotton Gin		<input type="checkbox"/> Rock Products			
Pursuant to Arizona Revised Statutes §49-432 and §49-201, do you claim the Emissions Inventory data submittal confidential? NO, I do not request confidentiality.					
If YES, include which portions of the inventory are confidential along with a brief explanation:					
PARENT COMPANY NAME					
MAILING ADDRESS		CITY	STATE	ZIP CODE	
CONTACT NAME		CONTACT TITLE	CONTACT E-MAIL		
TOTAL FACILITY EMISSIONS (TONS PER YEAR)					
<i>If you are using the PDF forms, emission totals do not need to be reported. Simply fill out your operational data (activity levels, throughputs, etc) on the appropriate forms and submit them to ADEQ. ADEQ will calculate your emission totals and contact you if additional information is needed.</i>					
CERTIFICATION OF TRUTH & ACCURACY					
I certify that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.					
PRINT NAME OF PERSON COMPLETING FORM		TITLE			
SIGNATURE		DATE			
PRINT NAME OF RESPONSIBLE OFFICIAL		TITLE			
SIGNATURE		DATE			
CONTACT INFORMATION					
Arizona Department of Environmental Quality Air Quality Division Attention: Michael Burton 1110 W. Washington St. Phoenix, AZ 85007					

- Enter general facility information
- Should be filled out with every questionnaire

FORM 2.1 – GENERATORS & BOILERS

ADEQ Arizona Department of Environmental Quality		FORM 2.1 - GENERATORS & BOILERS			2014	
FACILITY NAME			PLACE ID#	PERMIT# or LTF#		
EQUIPMENT INFORMATION						
GENERATORS	Equipment Description	Equipment ID	ATO#	Fuel Type	Max. Capacity (HP)	Actual Hours Operated
#1						
#2						
#3						
#4						
#5						
#6						
#7						
BOILERS	Equipment Description	Equipment ID	ATO#	Fuel Type	Rated Capacity (MMbtu/hr)	Actual Hours Operated
#1						
#2						
#3						
#4						
#5						
#6						
#7						

- Used to capture emissions from any generators or boilers at a facility
- The form will auto-calculate emission totals based on fuel type, capacity, and hours of operation.

FORM 2.1 – GENERATORS & BOILERS

1	ADEQ Arizona Department of Environmental Quality		FORM 2.1 - GENERATORS & BOILERS			2014	
2	ANNUAL EMISSIONS INVENTORY QUESTIONNAIRE - Version 1.3						
3	FACILITY NAME		PLACE ID#		PERMIT# or LTF#		
4	0		0		0		
5	EQUIPMENT INFORMATION						
6	GENERATORS	Equipment Description	Equipment ID	ATO#	Fuel Type	Max. Capacity (HP)	Actual Hours Operated
7	#1						
8	#2				DIESEL		
9	#3				NATURAL GAS		
10	#4						
11	#5						
12	#6						
13	#7						
14	#8						
15	#9						
16	#10						
17	#11						
18	#12						
19	#13						
20	#14						
21	#15						
22							
23							
24	BOILERS	Equipment Description	Equipment ID	ATO#	Fuel Type	Rated Capacity (MMbtu/hr)	Actual Hours Operated
25	#1						
26	#2						
27	#3						
28	#4						
29	#5						
30	#6						
31	#7						
32	#8						
33	#9						
34	#10						
35	#11						
36	#12						
37	#13						
38	#14						
39	#15						
40							

- In the Excel version, you need to use the drop down list to select your fuel type.
- To do this, select the cell and a down arrow will appear. Click this arrow and select the appropriate fuel.

FORM 2.2 – PERC DRY CLEANING

 FORM 2.2 - PERC DRY CLEANING		2014	
ANNUAL EMISSIONS INVENTORY QUESTIONNAIRE			
FACILITY NAME		PLACE ID#	PERMIT# or LTF#
YEARLY PERCHLOROETHYLENE PURCHASED & CONSUMED			
Perchloroethylene purchased & consumed during the year	Month	Perchloroethylene Purchased (Gallons)	Perchloroethylene Consumed (Gallons)
	January		
	February		
	March		
	April		
	May		
	June		
	July		
	August		
	September		
	October		
	November		
	December		
Total			

- Used to capture emissions from use of PERC at dry cleaning facilities
- Boiler information will need to be entered into FORM 2.1

FORM 2.3 – COTTON GIN



FORM 2.3 - COTTON GIN EQUIPMENT

ANNUAL EMISSIONS INVENTORY QUESTIONNAIRE

2014

FACILITY NAME		PLACE ID#	PERMIT# or LTF#
PROCESS DATA			
SOURCE	Quantity	Amount Processed (bales/year)	
Unloading fan			
No. 1 dryer & cleaner			
No. 2 dryer & cleaner			
No. 3 dryer & cleaner			
Overflow fan			
Lint cleaner with high-efficiency cyclones			
Lint cleaner with screened drums or cages			
Cyclone robber system			
Mote fan			
Mote trash fan			
Battery condenser with high-efficiency cyclones			
Battery condenser with screened drums or cages			
Master trash fan			
FUGITIVE EMISSION DATA			
SOURCE	VEHICLE MILES TRAVELED (MILES/YEAR)		
Haul Roads			

- Enter number of each source in the ‘Quantity’ field and the total amount of material processed
- Also captures emission from unpaved haul roads

FORM 2.4 – SOIL VAPOR EXTRACTION

DATE		CITY & COUNTY OF OPERATION	LATITUDE	LONGITUDE	ADDRESS OR DRIVING DIRECTIONS
FROM	TO				
EMISSIONS FROM CONTAMINATED SOIL					
SAMPLING RESULTS DATE					
HOURS OF OPERATION					
EPA 8015 & 8021 EFFLUENT (PPM BY VOL)	VOC				
	BENZENE				
	TOLUENE				
	ETHYLBENZENE				
	XYLENE				
FLOW RATE (FT3/MIN)					

- Equipment info for the soil vapor extractor units
- Location info if the units have moved during the year
- Sampling results along with hours of operation

FORM 2.5 – Air Curtain Incinerator

		FORM 2.5 - AIR CURTAIN INCINERATOR			2014	
ANNUAL EMISSIONS INVENTORY QUESTIONNAIRE						
FACILITY NAME			PLACE ID#		PERMIT# or LTF#	
EQUIPMENT INFORMATION						
Equipment Type	Equipment ID	ATO #	Max. Rated Capacity	Amount Processed (tons)	Hours Operated	
LOCATION INFORMATION						
DATE		CITY & COUNTY OF OPERATION	LATITUDE	LONGITUDE	ADDRESS OR DRIVING DIRECTIONS	
FROM	TO					

- Equipment info for the air curtain incinerator unit(s) along with hours of operation
- Location information if the units have moved during the year

FORM 2.6 – ROCK PRODUCTS

ADEQ Arizona Department of Environmental Quality		FORM 2.6 - ROCK PRODUCTS		2016				
FACILITY NAME		PLACE ID#		PERMIT# or LTF#				
ASPHALT PLANTS								
PROCESS TYPE	AMOUNT PROCESSED (TONS)	FUEL TYPE	CONTROL DEVICE					
Rotary Drum Dryer								
SOURCE	AMOUNT OF FUEL USED	FUEL TYPE						
Asphalt Tank Heater								
SOURCE	TONS PROCESSED							
Plant Load-Out								
Material Handling Operations								
CRUSHING & SCREENING OPERATIONS								
SOURCE	TONS PROCESSED	SOURCE	TONS PROCESSED					
Batch Drop Operations		Feed Hoppers						
Crushed		Screened						
Fine Screened		Stacked						
SOURCE	# OF TRANSFER POINTS	TONS THROUGH EACH TRANSFER POINT						
Conveyor Transfer Points								
Conveyor Transfer Points								
Conveyor Transfer Points								
Conveyor Transfer Points								
Conveyor Transfer Points								
Conveyor Transfer Points								
Conveyor Transfer Points								
CONCRETE BATCH PLANTS								
Cubic Yards of Concrete Produced								
FUGITIVE SOURCES								
Number of Storage Piles								
Vehicle Miles Traveled on Unpaved Roads								
Explosive Blasting - # of Blasts								
FORM 2.6 EMISSION SUMMARY (TONS PER YEAR)								
PM ₁₀	PM _{2.5}	NOx	SOx	VOC	CO	HAPs	LEAD	NH ₃

- FORM 2.6 covers emission from the rock products industry, including hot mix asphalt plants, concrete batch (ready mix) plants and crushing & screening operations.
- FORM 2.6 contains four sections
 - Asphalt Plants
 - Crushing & Screening Operations
 - Concrete Batch Plants
 - Fugitive Sources

ADEQ Arizona Department of Environmental Quality		FORM 2.6 - ROCK PRODUCTS		2014	
ANNUAL EMISSIONS INVENTORY QUESTIONNAIRE		FACILITY NAME		PLACE ID#	PERMIT# or LTF#
ASPHALT PLANTS					
PROCESS TYPE	AMOUNT PROCESSED (TONS)	FUEL TYPE	CONTROL DEVICE		
Rotary Drum Dryer					
SOURCE	AMOUNT OF FUEL USED	FUEL TYPE			
Asphalt Tank Heater					
SOURCE	AMOUNT PROCESSED (TONS)				
Plant Load-Out					
Material Handling Operations					

- Rotary Drum Dryer – Enter amount of material (in tons) processed in the drum dryer along with fuel type and control device
- Asphalt Tank Heater – Enter the amount of fuel consumed in the asphalt cement heater along with fuel type
- Plant Load-Out – Enter the amount (in tons) of material loaded into trucks from the asphalt plant
- Material Handling Operations – Enter the amount (in tons) of material handled at the asphalt plant (aggregate loaded into hoppers, etc)

FORM 2.6 – CRUSHING & SCREENING (1)

CRUSHING & SCREENING OPERATIONS				
SOURCE	TONS PROCESSED		SOURCE	TONS PROCESSED
Batch Drop Operations			Feed Hoppers	
Crushed			Screened	
Fine Screened			Stacked	
SOURCE	# OF TRANSFER POINTS	TONS THROUGH EACH TRANSFER POINT		
Conveyor Transfer Points				

For example, under 'Crushed' you should report the total amount of material crushed at your facility. If you have multiple crushers, it will be necessary to add their individual throughputs together and report the grand total. This applies to all sources in this category.

- **Batch Drop Operations** - Enter the total amount (in tons) of material that went through a batch drop process.
- **Feed Hoppers** - Enter the total amount (in tons) of material that went through a feed hopper

FORM 2.6 – CRUSHING & SCREENING (2)

CRUSHING & SCREENING OPERATIONS				
SOURCE	TONS PROCESSED		SOURCE	TONS PROCESSED
Batch Drop Operations			Feed Hoppers	
Crushed			Screened	
Fine Screened			Stacked	
SOURCE	# OF TRANSFER POINTS	TONS THROUGH EACH TRANSFER POINT		
Conveyor Transfer Points				

- **Crushed** – Enter the total amount (in tons) of material crushed at your facility.
- **Screened** – Enter the total amount (in tons) of material screened at your facility.
- **Fine Screened** – Enter the total amount (in tons) of material fine screened at your facility.
- **Stacked** – Enter the total amount (in tons) of material that was stacked at your facility.
- **Conveyor Transfer Points** – Enter the total number of conveyor transfer points

FORM 2.6 – CONCRETE BATCH PLANTS

- The only information needed for concrete batch plants is the total cubic yards of concrete produced.

CONCRETE BATCH PLANTS	
Cubic Yards of Concrete Produced	

FORM 2.6 – FUGITIVE SOURCES

FUGITIVE SOURCES	
Number of Storage Piles	
Vehicle Miles Traveled on Unpaved Roads	
Explosive Blasting - # of Blasts	

- **Number of Storage Piles** – Enter the total number of storage piles at your facility. If storage piles are created and removed throughout the year, provide an estimate on the average number that existed during the year.
- **Vehicle Miles Traveled on Unpaved Roads** – Enter the total vehicle miles traveled (VMT) on unpaved roads. This is for all vehicle types.
- **Explosive Blasting** – Enter the number of blasts that occurred during the reporting year.

- The 'Misc.' forms should only be used if your facility utilizes equipment that's not covered under another form.
- There are no emission factors or emission sources in the Misc. forms...you will need to enter all of the data and perform the emission calculations yourself.

- FORM 3.0: Misc. Equipment List

FORM 2: EQUIPMENT DATA

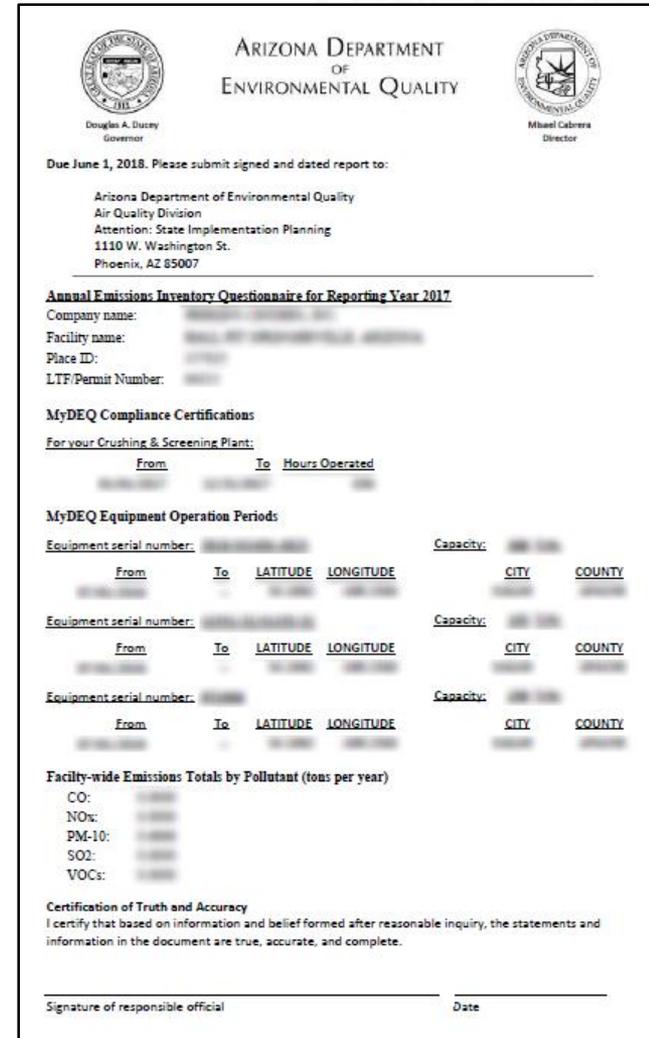
2013

Equipment Type	Equipment ID	Design Capacity	Units	Hours of Operation	Fuel Type	Control Device
<i>EXAMPLE - Boiler</i>	<i>B-101</i>	<i>10</i>	<i>Mmbtu/hr</i>	<i>8760</i>	<i>Natural Gas</i>	<i>None</i>

- Live Demo of AEIQ



- ADEQ will automatically generate inventory reports for eligible myDEQ users:
 - Rock product operations general permits only
 - Compliance certifications for the reporting year, plus any equipment moved/added/deleted, must be up-to-date in myDEQ
- If you qualify, ADEQ will mail your pre-generated report for your review



 ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY 

Douglas A. Ducey Governor Mbael Cabrera Director

Due June 1, 2018. Please submit signed and dated report to:

Arizona Department of Environmental Quality
Air Quality Division
Attention: State Implementation Planning
1110 W. Washington St.
Phoenix, AZ 85007

Annual Emissions Inventory Questionnaire for Reporting Year 2017

Company name: _____
Facility name: _____
Place ID: _____
LTF/Permit Number: _____

MyDEQ Compliance Certifications

For your Crushing & Screening Plant:

From	To	Hours Operated
_____	_____	_____

MyDEQ Equipment Operation Periods

Equipment serial number:	Capacity:
_____	_____
From To LATITUDE LONGITUDE CITY COUNTY	
_____	_____
From To LATITUDE LONGITUDE CITY COUNTY	
_____	_____
From To LATITUDE LONGITUDE CITY COUNTY	

Facility-wide Emissions Totals by Pollutant (tons per year)

CO: _____
NOx: _____
PM-10: _____
SO2: _____
VOCs: _____

Certification of Truth and Accuracy
I certify that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature of responsible official _____ Date _____

Thank You!

EmissionInventory@AZDEQ.gov
(602) 771-2373

