

Air Quality Compliance Workshop



- Rob Verville, Air Quality Inspector
- Shawn McFatter, Air Quality Inspector
- Wayne Bixler, Sr. Permit Engineer



An Introduction to ADEQ



- Arizona Department of Environmental Quality
- Our mission is to protect and enhance public health and the environment in Arizona.
- To achieve this, we administer the state's environmental laws and delegated federal programs to prevent air, water and land pollution and ensure cleanup

- **Who We Are**

The Arizona Legislature created ADEQ in 1987 as the state's environmental agency and is composed of three environmental programs: **Air, Water and Waste.**

- **What We Do**

ADEQ carries out several core functions: planning, permitting, compliance Inspections, monitoring, assessment, cleanups and outreach.

- ADEQ is EPA's delegated representative for Arizona. **Within Arizona, EPA also delegated authority to Maricopa, Pima and Pinal Counties, and some Tribal Jurisdictions.**
- Air Permits
The Air Quality Division issues air quality permits to industries and facilities that emit regulated pollutants to ensure that these emissions do not harm public health or cause significant deterioration in areas that presently have clean air.
- Air Compliance Inspections
The Air Compliance Unit conducts inspections and follow-up compliance activities at facilities that generate air pollution.

- **Regulates**
 - 47 major air pollution sources (power plants, refineries, cement plants, mining operations, landfills).
 - 59 synthetic minor (SM80) sources (hot mix asphalt, industrial plants).
 - Approximately 320 minor air pollution sources (sand and gravel type operations, smaller sources).
 - Asbestos & Agriculture

- **Air Compliance Unit:**
 - Conducts approximately 420 air quality compliance inspections yearly, including complaints.
 - Oversees more than 140 performance tests of pollution control equipment a year.
 - Responds to more than 550 air quality complaints per year.

"Air pollution" means the presence in the outdoor atmosphere of one or more air contaminants or combinations thereof in sufficient quantities, which either alone or in connection with other substances by reason of their concentration and duration are or tend to be injurious to human, plant or animal life, or cause damage to property, or unreasonably interfere with the comfortable enjoyment of life or property of a substantial part of a community, or obscure visibility, or which in any way degrade the quality of the ambient air below the standards established by the director.

The most important consideration is how much air pollution a facility has the potential to cause, or emit, if it was to operate at its maximum design capacity 24 hours a day for a full year.

This calculation of maximum air pollution emissions is referred to as the "potential to emit" (PTE).

To determine whether a facility's potential to emit requires a permit, see Arizona Administrative Code Title 18, Chapter 2, Article 3.

The facility should also determine if registration is required.

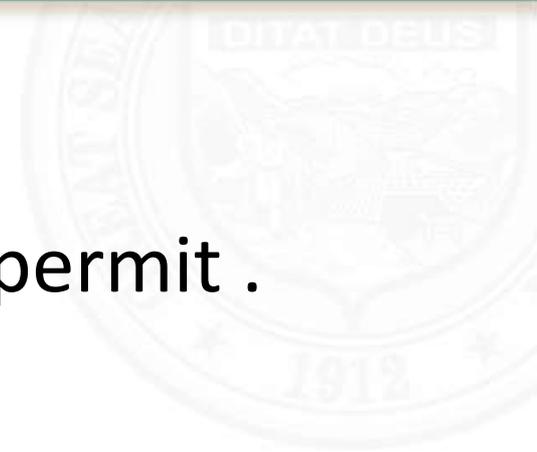
Who needs an Air Quality Permit?

Stationary sources such as businesses, utilities, government agencies and universities that meet certain criteria need an air quality permit before constructing, changing, replacing or operating any equipment or process that may cause air pollution.

This includes equipment designed to reduce air pollution. Permits are also required if an existing business that causes air pollution transfers ownership, relocates, or otherwise changes operations.

Who needs an Air Quality Permit?

Portable sources may also require a permit .



■ **General Permit**

- A general permit is a pre-approved permit that covers a specific class of sources. A general permit differs from an individual permit in that it can be applied to more than one source, is usually more restrictive, less expensive, and requires a shorter period of time for the processing and issuance of an Authorization to Operate (ATO).
- Types of General permits: Hot Mix Asphalt, Concrete Batch, Non-metallic Crushing & Screening, Soil Vapor Extraction Units, Boilers, and Air Curtain Incinerators.

■ **Individual Permit**

- site specific, developed on a case-by-case basis.

- Prior to applying for an Air Quality Permit or Renewal Permit, the ADEQ Air Permits Unit would like to have a pre-application meeting to discuss your source, application and specific details.

Welcome To



Arizona Department of Environmental Quality

Online Portal





Arizona Department of Environmental Quality

Current myDEQ Online Services

e-Permits/Registrations

- Air Quality General Permit for Concrete Batch Plant (CBP)
- Air Quality General Permit for Crushing & Screening Plant (C&S)
- Air Quality General Permit for Hot-Mix Asphalt Plant (HMAP)
- AZPDES Notice of Intent (NOI) for De Minimis General Permit (DMGP)
- AZPDES Stormwater NOI for Construction General Permit (CGP)
- AZPDES Stormwater NOI for Multi-Sector General Permit (MSGP)
- Drywell Registration
- Fleet Emissions Testing
- Resource Conservation and Recovery Act (RCRA) EPA ID Registration

e-Reporting

- Air Quality Annual Compliance Certifications for CBP, C&S, and HMAP General Permits
- Move Locations for CBP, C&S, and HMAP General Permits
- Aquifer Protection Permit (APP) – Self-Monitoring Reporting Form (SMRF)
- AZPDES Individual Permits – Discharge Monitoring Reporting (DMR)

e-Payments

- QuickPay — Pay your ADEQ bill online by electronic check, Visa, Mastercard or American Express

Other

- Underground Storage Tank (UST) Preapproval — Apply for the UST Preapproval Program
- Online Identity Verification — Signing up for myDEQ just got easier with online identity proofing, allowing you to subscribe instantly without having to submit a notarized document.

All myDEQ permits must submit a compliance certification annually, through myDEQ only:

- Concrete Batch
- Crushing & Screening
- Hot Mix Asphalt

Requirement: A.A.C. R18-2-309.2 & Attachment “A” of General Permit

All NON-myDEQ permits must submit a paper compliance certification annually or semi-annually, depending on permit requirement.

In near future, all air quality permittees will submit these through myDEQ (no more paper ones).

- No specific form or format required.
- It is easier for the analyst if it follows the permit format.



Getting a myDEQ account is easy...

- 1 Register a Responsible Officer online with myDEQ**
- 2 We will email you a Subscriber Agreement and Compliance Certification Form. Fill out the Subscriber Agreement and have it notarized. Complete the Air Compliance Certification Form and mail both to ADEQ.**
- 3 We will verify your new account and send an email to confirm that the account has been created and is ready to use.**

What to expect when using myDEQ for C&S, CBP & HMA General Permits:

1 Get your General Permit reissued by selecting the “Get New Permit” button

At the time of reissuing, you must:

- 2
- Have the address or lat/long of the current location for the permit.
 - Enter all the equipment currently at the permitted location. You will need to provide each piece of equipment’s:
 - **Maximum Rated Designed Capacity (not what you operate at)**
 - Make/model, serial or ID number
 - Date of manufacture
 - Control type

Any Questions?



Open Burning in Arizona



Permitted Burning Categories:

- Construction Burning
- Agricultural Burning
- Residential Burning
- Other burning not included in the list of exemptions

Exempt Burning:

- Cooking of food
- Providing warmth for humans
- Recreational Purposes
- Branding of animals
- Farm heating for frost prevention
- Proper disposal of flags

Jurisdictions:

- Statewide: Open Burn permits are administered by ADEQ and delegated to some local jurisdictions (see jurisdiction list at <http://www.azdeq.gov/node/310>).
- County: Maricopa, Pima, and Pinal Counties have delegated authority to issue burn permits.
- Tribal Lands: ADEQ does not have authority to issue burn permits on Tribal Lands.

Process:

- ADEQ: Obtain a permit application from ADEQ's webpage, complete and sign the form then fax, mail or deliver it to an ADEQ Office. There is no permit fee and permits last 1 year from the approved date.
- All other delegated authorities need to be contacted directly and in some cases there may be permit fees.

- Start ignition no earlier than one hour after sunrise and extinguish fire two hours before sunset.
- Burn only dry material.
- Maintain a clearance of 50 feet from any structure.
- Start the fire without use of items that can produce black smoke.
- Notify the local fire fighting agency prior to burning.
- Adhere to all local fire restrictions.
- Burn only during favorable wind conditions.
- Remain at the site of the fire until completely extinguished, and have equipment available to control the burn and put out the fire if necessary.
- Have a copy of the burn permit on site.

What does a good open burn look like?



- Burns can be piled, collected in a pit or ditch, or in an approved waste burner
- Attended at all times
- 50 feet from any structures
- Burn occurring during daylight hours
- Acceptable vegetative waste from cleared land being burned
- Fire controls are readily available

Prohibited Materials:

- Chemically treated wood
- Tires
- Batteries
- Hazardous waste products
- Asphalt shingles
- Asbestos
- Explosives and ammunition
- Waste petroleum products
- Poison Ivy, Poison Sumac, Poison Oak, and Oleander

Conditional Materials:

- Household waste

Can only be permitted if:

1. Generated onsite on farms / ranches of 40+ acres where no waste collection / disposal service is available.
2. Generated onsite where no waste collection / disposal service is available and the nearest dwelling is 500+ feet away.

Left smoldering



- ADEQ's Open Burn Webpage - <http://www.azdeq.gov/node/310>
- Arizona Administrative Code R18-2-602 - Unlawful Open Burning
- Arizona Revised Statutes 49-501 - Unlawful Open Burning; exceptions; civil penalty; definition
- ADEQ Air Quality Permits Contact Information – (602) 771-2338



Top 10 Violations for Rock Products and General Industry in 2017

What are the top 10 Violations for 2017?

1. Failure to Conduct Visible Emission Surveys and / or EPA Method 9 Observations
2. Failure to Employ Emission Controls
3. Opacity in Exceedance of Permitted Limit
4. Failure to have Certified EPA Method 9 Observer or ALT 082
5. Failure to submit Annual Emission Inventory / Compliance Certifications
6. Exceedance of Permitted Hours of Operation
7. Failure to Take Corrective Actions
8. Failure to Operate Emission Control Equipment
9. Failure to Submit Move Notice
10. Failure to Conduct Asbestos Surveys and / or submit NESHAP Notifications

2. Failure to Employ Emission Controls

No controls used onsite leading to high opacity



3. Opacity in Exceedance of Permit Limit

The limit is 7% for NSPS Transfer Points for equipment >2008



4. Failure to have Method 9 or ALT 082 Certification

Expired Certification = No Certification



ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

Certificate of Completion
This is to certify that

Mr. McLovin

Has successfully completed EPA Method 9 Visible Emissions Observation Training on 3/28/2016 and is qualified to evaluate visible emissions for a period of six months from the date of certification.



Robert Verville, ADEQ

5. Failure to submit Annual Emissions Inventory and / or Compliance Certification



ADEQ FORM 1.0 - GENERAL FACILITY INFORMATION **2016**

FACILITY NAME		PLACE OR	PERMIT # (LTR)	
FACILITY ADDRESS		CITY	STATE	ZIP CODE
FACILITY CONTACT		TITLE	PHONE #	
EPA#				
PRODUCT/INDUSTRIAL ACTIVITY		PLACES	NUMBER OF EMPLOYEES	
FORMS COMPLETED (mark all that apply):				
<input type="checkbox"/> Generators & Boilers <input type="checkbox"/> Soil Vapor Extraction <input type="checkbox"/> Mac Equipment <input type="checkbox"/> Dry Cleaning <input type="checkbox"/> Air Curtain Incinerators <input type="checkbox"/> Mix Emissions <input type="checkbox"/> Cotton Gin <input type="checkbox"/> Rock Products				
Pursuant to Arizona Revised Statutes §49-482 and §49-201, do you claim the Emissions Inventory data submitted is 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 EMAIL	
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 level, throughput, 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 <small>I certify that based on information and data formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.</small>				
SIGNATURE OF RESPONSIBLE OFFICIAL			DATE	
				
PRINTED NAME		TITLE		
CONTACT INFORMATION Arizona Department of Environmental Quality Air Quality Division Attention: State Implementation Planning 1110 W. Washington St. Phoenix, AZ 85007				

CONCRETE BATCH PLANT SUMMARY

Compliance Equipment:

Reporting Period: 05/26/2017 - 12/31/2017

Question: Is the equipment listed below correct for this place and duration of time?

Answer: Yes

Equipment Type	Make	Model	Serial/ID#
Concrete Batch Plant			
Boiler/Water Heater - NG			

For your entire facility:

Question: What is your status of compliance regarding the requirement to keep all records defined by this permit including but not limited to equipment maintenance, fuel supplier certifications and dust control activities?

Answer: Continuous

Question: What is your method of documenting compliance?

Answer: Records

For your Concrete Batch Plant:

Question: What are your total hours of operation at this location for this reporting period?

Answer: 120 Hours

Question: What is your status of compliance regarding your daily throughput requirements?

Answer: Continuous

Question: What are your total cubic yards of throughput processed at this location for this reporting period?

Answer: 1635 Cubic Yards

Question: What is your method of documenting compliance?

Answer: Records

Comments:

Question: Do you have any additional comments? (optional)

Answer:

■ Examples Maricopa County:

Allowable hours of operation- Annually:5020.5

Allowable hours of operation- Annually:4886.0

Allowable hours of operation- Annually:7741.5

■ Examples Pinal County:

Allowable hours of operation- Annually:3087.0

Depending on your location in Arizona (Non-Attainment/Attainment), and how much equipment you have permitted, you may be limited in hours of operation, and if you are a portable source this limit can change with each move.

7. Failure to take Corrective Actions

Continued operations without fixing the problem



8. Failure to Operate Emissions Control Equipment

Baghouse not being used properly leading to high opacity



9. Failure to Submit Move Notices

MyDEQ Format:

CRUSHING & SCREENING SUMMARY

Place Name: [REDACTED]
 Latitude/Longitude: [REDACTED]

CRUSHING & SCREENING OPERATIONS:

Are you moving your equipment to a different location?

Answer: Yes

Will this move be to an out-of-state location?

Answer: No

Will you be crushing and/or screening only non-metallic rock at this location?

Answer: Yes

Are you planning to operate solely in PINAL over the next 5 years?

Answer: No

Are you willing to limit the production of your plant to these quantities?

Standalone Crushing & Screening:

Tons Per Day: 6500

Crushing & Screening with Concrete Batch Plant:

Crushing & Screening - Tons Per Day: 6500

Concrete Batch Plant - Cubic Yards Per Day: 1275

Answer: Yes

Will you have any engines at this facility that provide electricity or directly power permitted equipment?

Answer: No

Attachments:

Equipment:

Equipment Type	Capacity	Unit	Make	Model	Serial ID	Date of Mfg
Crusher	300	Tons per hr	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

Allowable hours of operation- Annually: 8760.0

Traditional Format:



AIR QUALITY DIVISION
 GENERAL PERMIT - PORTABLE SOURCE
 NOTICE OF EQUIPMENT TRANSFER (MOVE NOTICE)

Company Information: Please fill in the following. Today's Date: _____

Company Name: _____ dba: _____

Mailing Address: _____ City/State/ZIP: _____

Physical Address (if different from mailing address): _____

Contact: _____ Telephone: _____ Fax: _____

Mine/Plant/Quarry Name: _____

Present Location Address: _____

Present Location: (Nearest Town) _____ County: _____ Zip: _____ Township: _____ Range: _____ Section: _____

New Location Address: _____

New Location: (Nearest Town) _____ County: _____ Zip: _____ Township: _____ Range: _____ Section: _____

What utilities (electric, water, sewer, etc.) are available? _____

On-site Contact: _____ Telephone: _____ Cell#: _____

Driving Directions: _____

Transfer Date: _____ Start-up Date: _____

REQUIRED:

- Notification for general permits is required prior to the transfer in accordance with R19-2-513.G.
- Attach a complete list of all equipment that will be located at the new location in accordance with R19-2-513.G.E.
- Attach revised emissions calculations demonstrating that the equipment at the new location conforms to qualify for the general permit in accordance with R19-2-513.G.T. (Emissions calculation worksheets can be found on ADEQ website <http://www.adeq.gov/function/forms/apprair.html>)

Equipment to be Transferred: Please list all equipment to be transferred. Please list additional equipment on page 2.

Permit Number	Equipment Number	Serial Number	ATO Number	Rental Equipment Y/N	Description of Equipment & Name of Lessor if rental equipment
				Y N	

10. Failure to Conduct Asbestos Surveys and / or Submit NESHP Notifications

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY ASBESTOS NESHP NOTIFICATION FOR RENOVATION AND DEMOLITION ACTIVITIES National Emission Standards for Hazardous Air Pollutants (NESHP)

1. TYPE OF NOTIFICATION: <input type="checkbox"/> Original <input type="checkbox"/> Revision 1 <input type="checkbox"/> Revision 2 <input type="checkbox"/> Revision 3 <input type="checkbox"/> Revision 4 <input type="checkbox"/> Revision 5 <input type="checkbox"/> Revision 6 <input type="checkbox"/> Revision 7 <input type="checkbox"/> Revision 8 <input type="checkbox"/> Revision 9 <input type="checkbox"/> Other					
2A. FACILITY OWNER INFORMATION					
Name of Company or Business:					
Address:					
City/Community:		State:		Zip:	
Contact Person:		Contact No.:		Email:	
2B. ASBESTOS REMOVAL CONTRACTOR/OPERATOR:					
Address:					
City:		State:		Zip:	
Contact Person:		Contact No.:		Email:	
2C. DEMOLITION CONTRACTOR/OPERATOR:					
Address:					
City:		State:		Zip:	
Contact Person:		Contact No.:		Email:	
3. TYPE OF OPERATION: <input type="checkbox"/> Renovation <input type="checkbox"/> Emergency Renovation <input type="checkbox"/> Demolition <input type="checkbox"/> Other Demolition <input type="checkbox"/> Annual Non-emergency Demolition					
4. PROVIDE DATE OF THOROUGH INSPECTION OF FACILITY, OR AFFECTED PART BY AN ASBESTOS (asbestos) Hazard Emergency Response and CERTIFIED BUILDING INSPECTION DATE:					
5. FACILITY DESCRIPTION (Under site location may be resident structure at the street address or location)					
Building Name:		NREL Location of Activity: (Building #, Room #, Unit #, Equipment, Identifying Feature)			
Street Address:		City:		State: Zip: County:	
6. PROCEDURE, INCLUDING ANALYTICAL METHOD, EMPLOYED TO DETECT THE PRESENCE OF ASBESTOS AND CATEGORY AND CATEGORY 2 IMPROVABLE SCORE: <input type="checkbox"/> Portable Light Microscopy (PLM) <input type="checkbox"/> Polar Counting <input type="checkbox"/> Asbestos <input type="checkbox"/> Other: _____					
NHLAP Laboratory Name:		Number of Samples: _____ Date Analyzed: _____			
7. APPROXIMATE AMOUNT OF ASBESTOS, INCLUDING: *NOTE: Update surface as necessary including when the amount of asbestos abated changes by a factor 20%.					
	Amount of Asbestos to be Removed or Replaced	Amount of Asbestos ACM to be Removed		Amount of Asbestos ACM to be Removed during Renovation	
		CAT 1	CAT 2	CAT 1	CAT 2
On Facility Components: Floor (Squid Feet)					
On Facility Components: Surface Area (Square Feet)					
On Facility Components: Volume (Cubic Feet)					
8. DATES FOR ASBESTOS REMOVAL:				Date of Completion: M / P / Y, A. S. '00	
Start Date:		Completion Date:		Date of Completion:	
9. DATES FOR DEMOLITION:				Date of Completion: M / P / Y, A. S. '00	
Start Date:		Completion Date:		Date of Completion:	
SEE BELOW TO: THIS AREA FOR NESHP REGULATORY AGENCY USE ONLY					
4009 - Asbestos NESHP Program 170 West Washington Street Phoenix, Arizona 85007 800.771.2634		U.S. Postal Service Postmark Date		Consent/Work Order Date	



1. Failure to Conduct Visible Emission Surveys and / or EPA Method 9 Observations
2. Failure to Employ Emission Controls
3. Opacity in Exceedance of Permitted Limit
4. Failure to have Certified EPA Method 9 Observer or ALT 082
5. Failure to submit Annual Emission Inventory / Compliance Certifications
6. Exceedance of Permitted Hours of Operation
7. Failure to Take Corrective Actions
8. Failure to Operate Emission Control Equipment
9. Failure to Submit Move Notice
10. Failure to Conduct Asbestos Surveys and / or submit NESHAP Notifications



Air Forecasting Products

[< RETURN TO LEARN MORE ABOUT AIR QUALITY PROGRAMS](#)

Air Forecasting

Revised on: 2018-04-23 09:49

ADEQ meteorologists provide Air Quality Index (AQI) and Air Quality Risk-Based (AQR) forecasts to serve and assist the public, industry and agricultural operations in Arizona.

Air Quality Index (AQI) Forecast

These forecasts are based on the Environmental Protection Agency (EPA)'s AQI federal health standards and are issued for the following areas:

- Nogales | [View Forecast >](#) or [Download Smartphone Mobile App >](#)
- Phoenix | [View Forecast >](#)
- Tucson | [View Forecast >](#)
- Yuma | [View Forecast >](#) or [Download Smartphone Mobile App >](#)

The AQI Forecast lets the public know expected air quality conditions and provides advice about what they can do to protect their health, especially that of children, seniors and people with respiratory problems.

ADEQ also issues a:

- **Health Watch (HW)** when air pollution levels are expected to approach the federal health standard.
- **High Pollution Advisory (HPA)** when air pollution levels are expected to exceed the federal health standard | [Learn More >](#)

AQI FORECAST

- [Phoenix >](#)
- [Yuma >](#)
- [Nogales >](#)
- [Tucson >](#)

AQ RISK-BASED FORECAST

- Dust Risk:
- [Maricopa County >](#)
 - [Pinal County >](#)

- Lead Risk:
- [Hayden >](#)

SEE MORE

- [Air Pollutants Defined >](#)
- [What to do when AQ is an Unhealthy Level >](#)
- [What is Inversion... How does it affect AQ? >](#)
- [What is Area A? >](#)
- [Contrails Vs. Chemtrails >](#)
- [Air Quality Flag Program >](#)
- [Air Quality Monitoring >](#)
- [ADEQ AQ Website >](#)

Phoenix Forecast



Air Quality

UPDATED: Fri. May 4, 2018 8:40 AM

This report is updated Monday through Friday and is valid for areas within and bordering Phoenix, Arizona

Today Friday 5/4/2018 93 Ozone	 Health Statement: Unusually sensitive people should consider reducing prolonged outdoor exertion.
Tomorrow Saturday 5/5/2018 67 Ozone	Health Statement: Unusually sensitive people should consider reducing prolonged outdoor exertion.
Extended Sunday 5/6/2018 67 Ozone	Health Statement: Unusually sensitive people should consider reducing prolonged outdoor exertion.
Extended Monday 5/7/2018 74 Ozone	Health Statement: Unusually sensitive people should consider reducing prolonged outdoor exertion.
Extended Tuesday 5/8/2018 77 Ozone	Health Statement: Unusually sensitive people should consider reducing prolonged outdoor exertion.

Any Questions?

Take 5 minute break



Spray Painting Operations



R18-2-727. Standards of Performance for Spray Painting Operations

- A. No person shall conduct any spray paint operation without minimizing organic solvent emissions. Such operations other than architectural coating and spot painting, shall be conducted in an enclosed area equipped with controls containing no less than 96% of the overspray.

ADEQ Permitted sources have specific requirements.

A.A.C. R18-2-702(B)(3) (Arizona Requirement)

Opacity of a plume or effluent greater than 20% in an area that is attainment or unclassifiable for each particulate matter standard

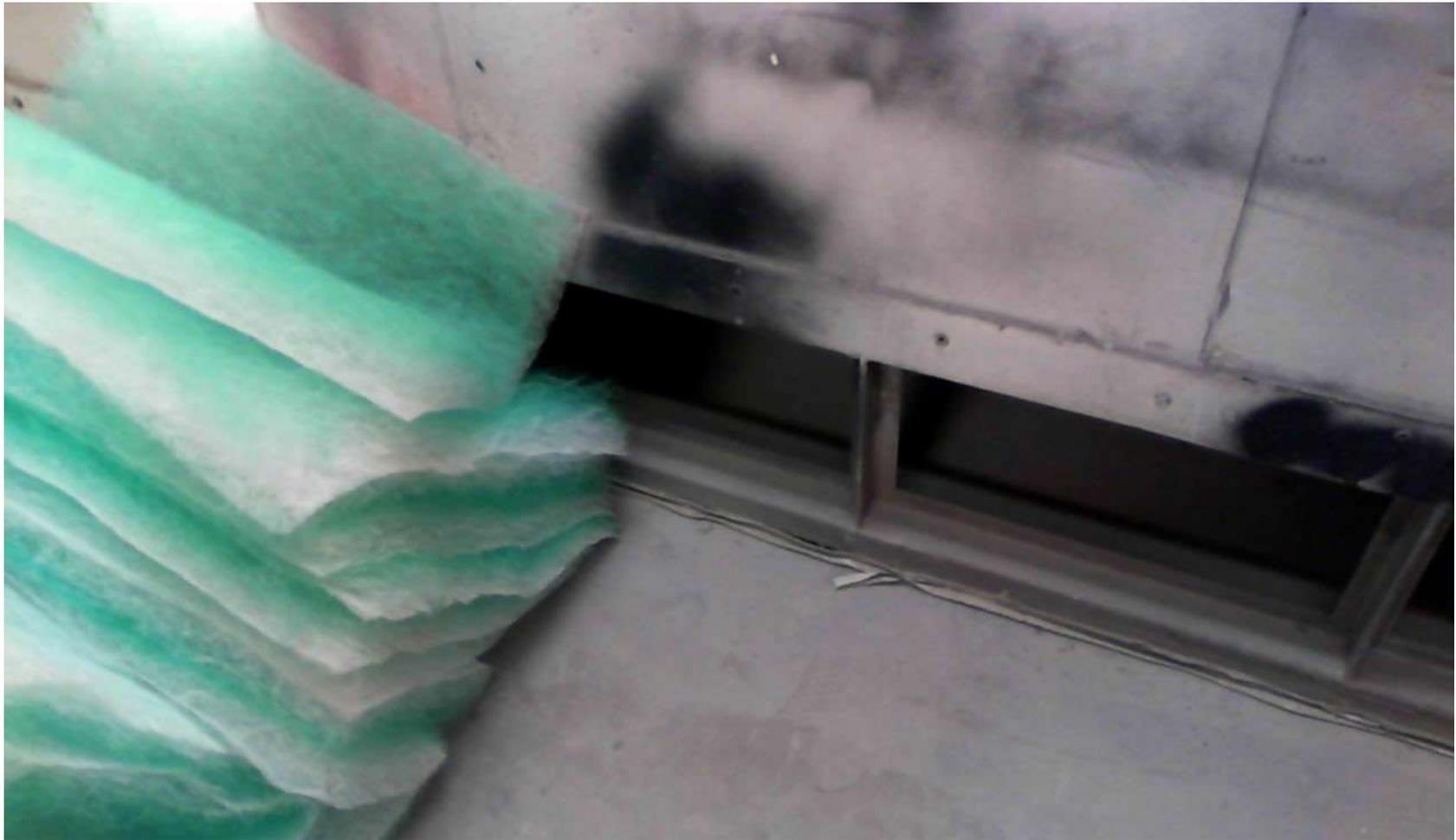
Spray booth with vent inside building - OSHA







Filters not installed

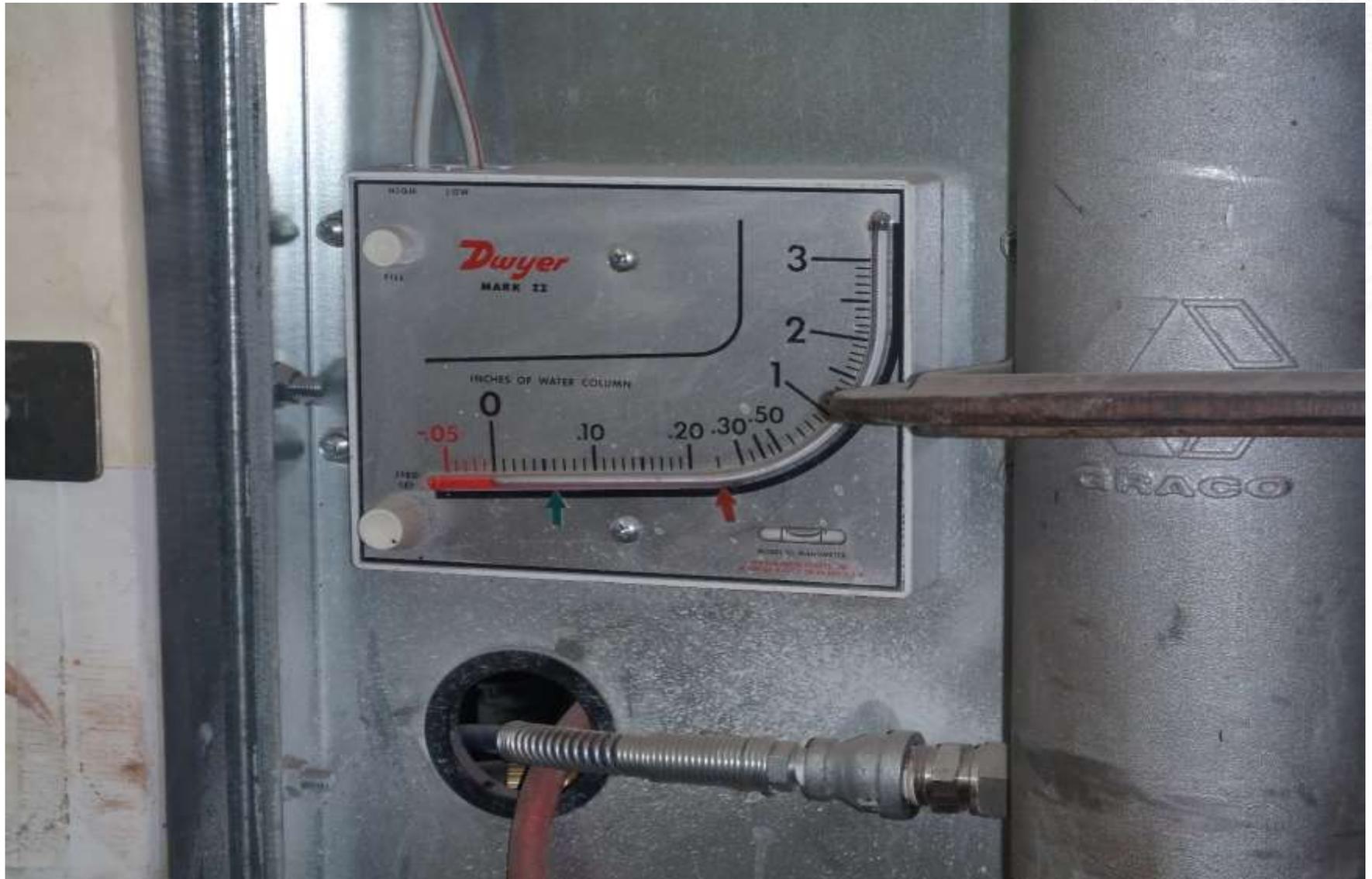


Good



Just an opening in wall, no filtration system





Gauge working



Filter pad information

PART#: PA15-2020

SIZE: 20"x20"x2.5"

DESC: Fiberglass Exhaust Pads

QTY: 100/cs

Manufacturer certifies that these filters exceed the 98% capture requirement in
EPA- NESHAP 40CFR63 subpart HHHHHH.
Do not use on waterborne coatings.
In depth-loading, install with tinted/colored side as air leaving side.



Filter model number

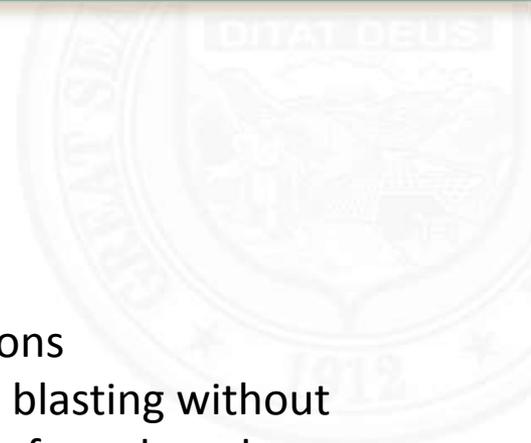


Roof vents for spray booth



Abrasive Blasting Operations





R18-2-726. Standards of Performance for Sandblasting Operations

No person shall cause or permit sandblasting or other abrasive blasting without minimizing dust emissions to the atmosphere through the use of good modern practices. Examples of good modern practices include wet blasting and the use of effective enclosures with necessary dust collecting equipment.

ADEQ Permitted sources have specific requirements.

A.A.C. R18-2-702(B)(3) **(Arizona Requirement)**

Opacity of a plume or effluent greater than 20% in an area that is attainment or unclassifiable for each particulate matter standard.

Inside spray booth



Blast residue outside building



Escaping through openings in wall



Wet blasting a process vessels



Wet blasting process vessels



Self-contained blast cabinet with inside vent



Air Quality Complaints

How does ADEQ handle complaints?

- ADEQ responds to approximately 550 complaints annually.
- Maricopa, Pima and Pinal Counties & some Tribal jurisdictions have delegated air quality programs. If appropriate, transfer complaint to delegated authority.
- Some complaints might be more appropriate for ADEQs Water Quality or Waste Programs Divisions to investigate.
- Some complaints may be referred to OSHA, city or county zoning/code enforcement, AZ Department of Health Services, Corporation Commission, etc.

Managing Complaints

- ADEQ can receive complaints from citizens through our website, phone, mail, or referrals from EPA or other governmental agencies.
- After receiving a complaint, if possible, the ADEQ inspector contacts the complainant to obtain additional and specific information about the nature of the complaint, and to explain ADEQs authority, if needed.
- ADEQ takes all complaints seriously.
- Depending on day of week complaint received, location and work schedules, may take days or a week to inspect.

Examples of Types of Complaints ADEQ Receives

- A crushing & screening operation with hot mix asphalt has started operations near our community, the dust is unbearable.
 - ADEQ investigates complaint
- I observed a smoking vehicle with license plate # making lots of pollution on the Loop 101.
 - Forward complaint to Vehicle Emissions Section
- The National Forest Service is conducting the prescribed burns and we have been inundated for days with smoke and it creates a breathing problem for me and my neighbors, What is ADEQ doing?
 - Refer complainant to ADEQ Smoke Management webpage.

Examples of Types of Complaints ADEQ Receives

- An ADEQ permitted rock product company is located adjacent to a residential neighborhood in Maricopa County, complainant states, I am elderly with COPD, the trucks go in and out of the site starting in early morning hours, the local roads are not built for the truck traffic, the trucks are a hazard to children playing and other motorists, the exhaust fumes from the trucks are irritating, the truck noise and back up alarms from the equipment are annoying, when the company blasts in the quarry we feel our home is being damaged, we continually hear noise when process equipment is operating, our house and cars are regularly covered with dust, we cannot go in our back yards, we cannot enjoy our lives anymore.
- ADEQ investigated complaint, Maricopa County may assist ADEQ and Maricopa County have received 50+ complaints about this source in the past year.



Examples of Types of Complaints ADEQ Receives

- ADEQ receives a citizen complaint about a company causing obnoxious, foul smelling vomit odors through ADEQs website.
- ADEQ investigates the complaint
- ADEQ receives a complaint referral from EPA regarding a county owned dirt road that is the source local dust pollution.
- ADEQ investigates the complaint
- Another road complaint states the County is doing culvert work on a road near our house and they have detoured traffic onto our street, more dust than usual.
- Spoke with county and they had water truck wet road once a day, closed without inspection.

Misc. Complaints and Questions ADEQ Receives

- A construction company is cutting pavers or roof tiles making lots of dust in Mesa and we have told them to stop.
 - Refer to Maricopa County
- I live in an apartment complex and we had a bad odor and we found mold in the bathroom.
 - ADEQ refers to Dept. of Health Services
- I see these chemical trails in the sky, some government agency is spraying weather or mind control chemicals.
 - What is ADEQ doing? What is ADEQ position on them?
 - Refer complainant to ADEQ contrail webpage.

Misc. Complaints and Questions ADEQ Receives

- **Does ADEQ's Air Quality Division regulate the following?**
 1. **Noise pollution**
 2. **Light pollution**
 3. **Hours of business operations**
 4. **Vehicular speed or traffic laws**
 5. **Indoor air quality**
 6. **prescribed burns in National Forests**
 7. **Zoning / code enforcement**
 8. **Backyard hobbyists**
 9. **Quarry blasting seismic activity**
 10. **Odors**

- What's in proximity to your operations?



Facility exhaust vents near homes



What is around your site?



Will people complain about my operation?



Not in my backyard



Pictures sent in by Complainant

Sun Angle issue?



Conducting the Air Quality Inspection

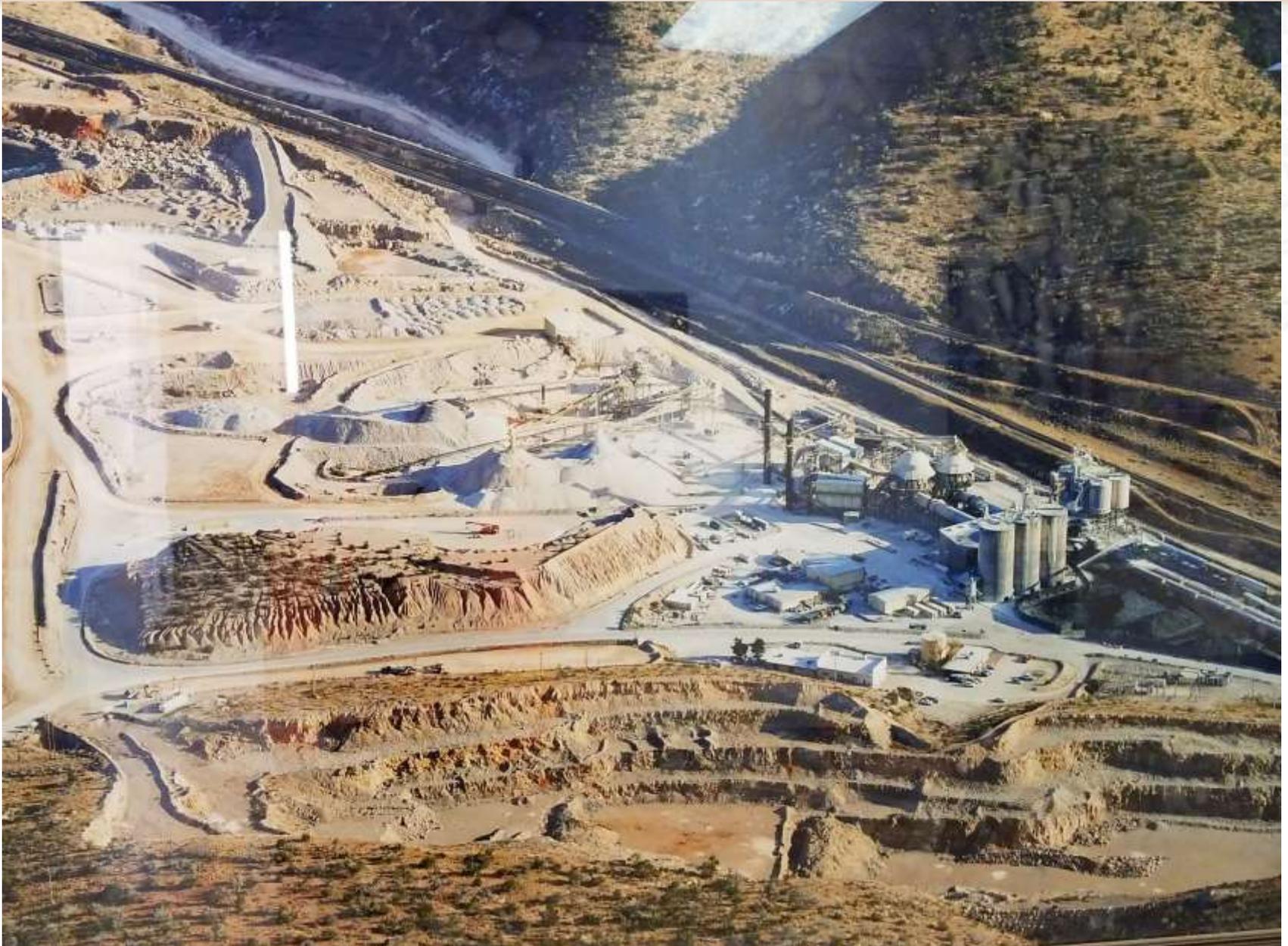


➤ The Inspection.

- ADEQ inspectors review previous inspection report, physical plant operations, equipment, and paperwork.
- At the end of an inspection, the ADEQ inspector will provide the source with an inspection report, identifying what the inspector observed during the inspection.
- If no issues of concern exist, everything is complete at end of inspection, then no further action by ADEQ.

- Notice of Opportunity to Correct Deficiencies (NOC): An informal compliance assurance tool used to put a responsible party (such as a facility owner or operator) on notice that ADEQ believes a **non-significant violation** of an environmental law has occurred.
- Pre-approved Field Issued NOC.
- Notice of Violation (NOV): An NOV is an informal compliance assurance tool used by ADEQ to put a responsible party (such as a facility owner or operator) on notice that ADEQ believes a **significant violation** of environmental law has occurred. – **This can lead to formal enforcement.**

Prior to entering, we look at site from distance



Prior to entering site, look at site from distance



If possible, from off-site location collect DOCSII observation.

Inspector enters facility, site specific training, etc., if required.

Conducts in-briefing with environmental representative. Depending on inspector, start paperwork or physical plant inspection.

What can you do during an inspection?

If an issue or concern is identified during the inspection, correct it if at all possible during the inspection.

Make corrections if you can during inspection

Powder observed



Cleaned Up

Make corrections if you can

Black smoke at burners side of
drum dryer



Damper adjusted,
no more smoke

Make corrections if you can

Dropping from conveyor



Cleaned up

Make corrections if you can

Inspector observed



Being cleaned

Make corrections if you can

Inspector observed



After cleaning

Make corrections if you can

Cleaned up

Observed during inspection



Make corrections if you can

Wetted During Insp

Observed during inspection



Make corrections if you can

Wetted During Insp

Observed during inspection



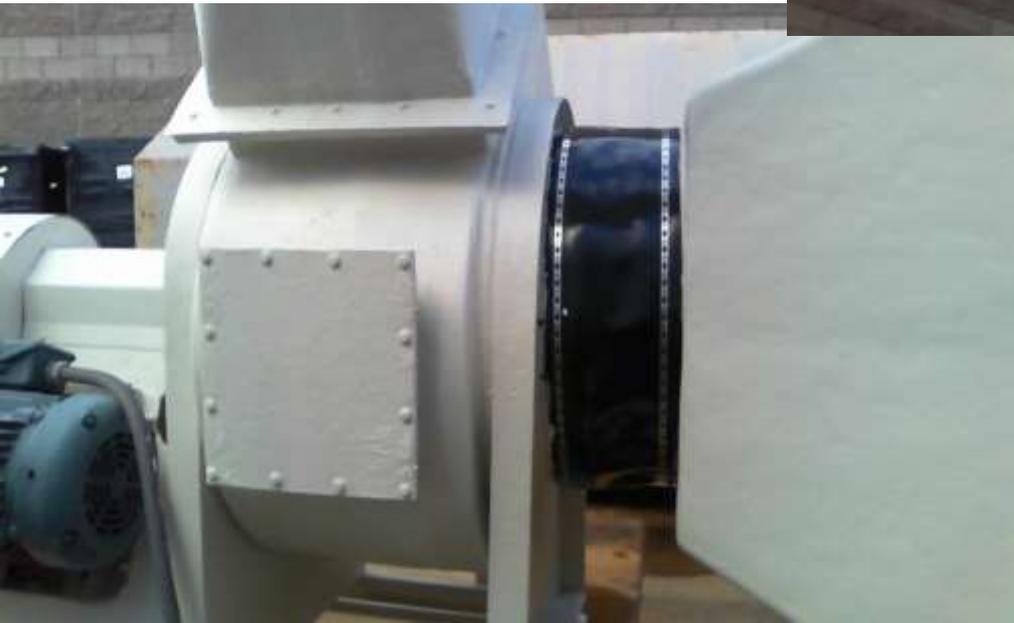
Observed during inspection



Observed during inspection, stack corrosion



System rebuilt



Refer to another program, if warranted



Refer to another program, if warranted



Refer to another program, if warranted



Refer to another program, if warranted



What's on your roof?



More roof vents



Track out Control



ADEQ: Earth or other material shall be removed from paved streets onto which earth or other material has been transported by trucking or earth moving equipment, erosion by water or by other means.

Pima & Pinal Counties similar but different.

Maricopa County: Daily vehicle counts: <60 truck or >60 trucks per day

Street sweepers, trackout control devices, gravel pads, wheel washers and truck washers.



Rain, Sleet or Snow



What do night operations look like?

5



35



15



Inspection Photographs

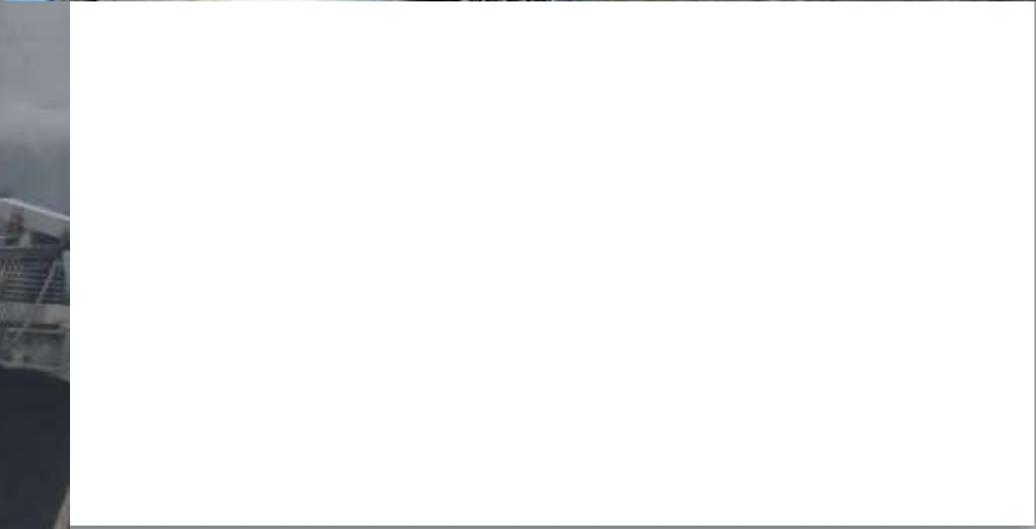
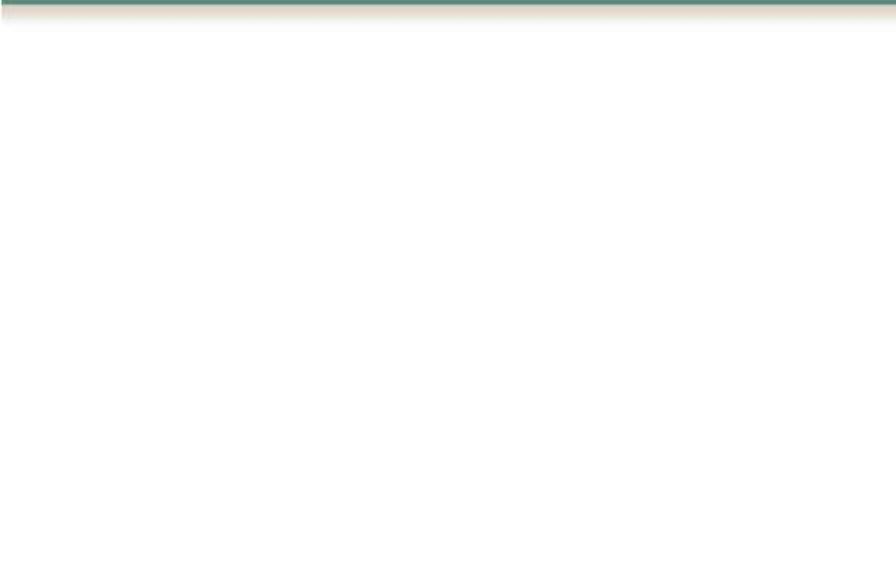












Any Questions?

Take 5 minute break





General Dust Rules

R18-2-604. Open Areas, Dry Washes, or Riverbeds (**Arizona Requirement**)

- A. No person shall cause, suffer, allow, or permit a building or its appurtenances, or a building or subdivision site, or a driveway, or a parking area, or a vacant lot or sales lot, or an urban or suburban open area to be constructed, used, altered, repaired, demolished, cleared, or leveled, or the earth to be moved or excavated, without taking reasonable precautions to limit excessive amounts of particulate matter from becoming airborne. Dust and other types of air contaminants shall be kept to a minimum by good modern practices such as using an approved dust suppressant or adhesive soil stabilizer, paving, covering, landscaping, continuous wetting, detouring, barring access, or other acceptable means.

General Dust Control Continued

B. No person shall cause, suffer, allow, or permit a vacant lot, or an urban or suburban open area, to be driven over or used by motor vehicles, trucks, cars, cycles, bikes, or buggies, or by animals such as horses, without taking reasonable precautions to limit excessive amounts of particulates from becoming airborne. Dust shall be kept to a minimum by using an approved dust suppressant, or adhesive soil stabilizer, or by paving, or by barring access to the property, or by other acceptable means.

C. No person shall operate a motor vehicle for recreational purposes in a dry wash, riverbed or open area in such a way as to cause or contribute to visible dust emissions which then cross property lines into a residential, recreational, institutional, educational, retail sales, hotel or business premises. For purposes of this subsection “motor vehicles” shall include, but not be limited to trucks, cars, cycles, bikes, buggies and 3-wheelers. Any person who violates the provisions of this subsection shall be subject to prosecution under A.R.S. § 49-463.

ADEQ Permitted sources have specific requirements.

ADEQ Crushing & Screening Permit - Attachment E: Section V

For emissions that are not already regulated by opacity limit, the Permittee shall not discharge or cause or allow to be discharged into the ambient air fugitive dust emissions exceeding 20 percent opacity.

The Permittee shall not cause or allow fugitive dust emissions from any active operation, open storage pile, or disturbed surface area associated with such facility such that the presence of such fugitive dust emissions remain visible in the atmosphere beyond the property line of such facility.

Dust Control Tech

The Permittee with a rated or permitted capacity of 25 tons or more of material per hour or with five acres or more of disturbed surface area subject to a permit, whichever is greater, shall have in place a Fugitive Dust Control Technician.

Be authorized by the Permittee to have full authority to ensure that fugitive dust control measures are implemented on-site and to conduct routine inspections, recordkeeping, and reporting to ensure that all fugitive dust control measures are installed, maintained, and used in compliance with this rule.

Maricopa County Dust Control Continued

Be trained in accordance with the Comprehensive Dust Control Training Class conducted or approved by the Director, successfully complete, at least once every three years, such Comprehensive Dust Control Training Class and have a valid dust training certification identification card readily accessible on-site while acting as a Fugitive Dust Control Technician.

Be authorized by the Permittee to install, maintain, and use fugitive dust control measures, deploy resources, and shutdown or modify activities as needed.

Be on-site at all times during primary dust-generating operations related to the purposes for which the permit was obtained.

Be certified to determine opacity as visible emissions in accordance with the provisions of the EPA Method 9.

Be authorized by the Permittee to ensure that the site superintendent or other designated on-site representative of the Permittee and water truck and water pull drivers for each site be trained in accordance with the Basic Dust Control Training Class conducted or approved by the Director with jurisdiction over the site and successfully complete, at least once every three years, such Basic Dust Control Training Class.

ADEQ Crushing & Screening Permit - Attachment E: Section I

The Permittee shall provide and maintain, readily available on-site at all times, an O&M plan for equipment associated with any process fugitive emissions and fugitive dust control measures (i.e. gravel pads, wheel washers, truck washers, rumble grates, watering systems, and street sweepers) that are implemented pursuant to these conditions.

All ADEQ General Permits for CBP, C&S and HMAP have attachments for Pinal, Pima and Maricopa County operations. Those attachments have more stringent operating requirements.

ADEQ Crushing & Screening Permit - Attachment E: Section V

The Permittee shall submit, to the Director, a Dust Control Plan that describes all fugitive dust control measures to be implemented, in order to comply with this permit.

(Through myDEQ)

Facility Information Sign

The Permittee shall erect and maintain a facility information sign at the main entrance such that members of the public can easily view and read the sign at all times. Such sign shall have a white background, have black block lettering that is at least four inches high, and shall contain at least all of the following information:

Facility name and Permittee's name;

Current number of the air quality permit or of authority to operate under a general permit;

Name and local phone number of the person(s) responsible for dust control matters; and

Text stating: "Dust Complaints? Call Maricopa County Air Quality Department – (602) 372-2703, or the Arizona Department of Environmental quality at (602) 771-2286."



Non-permit stack opacity



A.A.C. R18-2-702(B)(3) **(Arizona Requirement)**

The opacity of any plume or effluent from a source shall not be greater than 20% in an area that is attainment or unclassifiable for each particulate matter standard.

20% opacity limit for these stacks



Visible Emissions



- EPA Method 9 field certification (smoke school) required every 6 months. (EPA requirement)
- Classroom required initially, only recommended every 2 years.
- Visible Emission Survey Vs. Observation
- VE **Survey** is instantaneous
- VE **Observation** 6 minutes on specific form
- DOCSII (Digital Opacity Compliance System)

- When conducting a Method 9 six-minute observation, the form must be filed out properly.
- The classroom training should include the proper use of a compass / global positioning device, range finder, abney level or clinometer, sling psychrometer or digital weather instrument relative to properly completing a Visible Emission Observation (VEO) form; **including properly completing a VEO form;**

- Training plumes within each set of 25 black and 25 white runs should be presented in a random order;
- During the training plumes, no reference points or hints should be given;
- Students observed talking or sharing answers during training plumes shall be given a verbal warning to cease. If the offending student is observed a second time they should be disqualified from the run;
- During calibration, the neutral-density filter serial numbers should be recorded for future tracking purposes, not the filter percentage. Only NIST certified and trackable filters calibrated within ± 2 percent annually should be used.

Where do you observe these emissions?



Performance Testing / Stack Testing



- Performance Test protocols must be submitted to ADEQ 14 days prior to testing.

Test reports must be submitted to ADEQ within specified timeframes written in permit.

Performance Testing



Not using sample ports specified in protocol, possible deviation.



Performance Testing



- Any deviation from the EPA promulgated test methods shall be approved by ADEQ prior to start of testing.
- Hot mix asphalt plant semi-annual black light inspection results should be included with the performance test reports, per Mr. Kim.
- ADEQ's Performance Test Contact:
Mr. David Kim
Cell: 602-771-4365
Email: DK6@azdeq.gov

Asbestos



- If you conduct any renovation and/or demolition activity, an asbestos survey must be conducted to determine the presence or absence of asbestos-containing material, **REGARDLESS** of the age of the facility.
- Definition of Demolition in Asbestos NESHAP - The **wrecking or taking out of any load-supporting structural member** of a facility together with any related handling operations or the intentional burning of any facility - Can be one load bearing wall or entire building.
- **Asbestos has never been banned for use in the United States**
- Only three types of applications were banned in the 1970's
- Popcorn ceiling texture, fireproofing, and Thermal System Insulation (TSI)

ADEQ's Asbestos Contact:

Mr. Brian Jones 602-771-2333

Mr. Jones can provide information on asbestos training opportunities and applicable regulations.



Products Currently for Sale



CSI Fingerprint Investigation Kit



This toy is based on a popular television show. The kit contained 5 suspect materials: white fingerprinting powder, black fingerprinting powder, day-glow green fingerprinting powder, black ink, and invisible ink.

Asbestos was found in the white fingerprinting powder. That test found **tremolite** asbestos in the white powder at a concentration of **7.24%**.

Contains 11% asbestos.



0.13% chrysotile and 2.60% tremolite for a total of 2.73%.



Demolition debris and landfill disposal



Demolition debris and landfill disposal



Emissions Inventory



Facilities must submit an emissions inventory questionnaire each year:

- It is due March 31 or 90 days after it is made available, whichever occurs later **(NOW June 1st)**
- It includes all emissions information from the previous year
- Use the up-to-date excel (XLS) version on the website
- Find the form that matches your source
- If you don't operate an entire calendar year, you still need to report that; fill out the non-operational source form

Requirement: A.A.C. R18-2-327.A

- Some source Emissions Inventories to be completed through myDEQ portal.
- Emissions Inventory Questions Contact Lhamo LeMoine:
 - 602-771-2373
 - EmissionsInventory@azdeq.gov

FREQUENTLY ASKED QUESTIONS:

1. Does ADEQ expect a perfectly cleaned plant?
2. How often does ADEQ perform inspections?
3. Will I always get the same inspector?
4. Do I get a mulligan?
5. Can you inspect my competition?

Inspectors:

- Rob Verville – RGV@azdeq.gov
- Adam Bankhead – AB6@azdeq.gov
- Shawn McFatter – SM16@azdeq.gov
- Gianna Trujillo – GT2@azdeq.gov

Facilities Emissions Control Section:

- Contact (602) 771-2338
- AQ Compliance Unit Manager: Jamie Abbott – JA9@azdeq.gov
- AQ Permits Unit Manger: Naveen Savarirayan – NS3@azdeq.gov