Maricopa County
AIR QUALITY
DEPARTMENT

Rule 310
Dust Abatement Handbook

March 2022

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INTRODUCTION

Maricopa County Air Quality Department's (MCAQD's) Rule 310-Fugitive Dust from Dust-Generating Operations is a comprehensive set of regulations that, when properly implemented, dramatically reduces dust emissions and improve air quality. The need for improved air quality for dust (PM_{10}) is urgently important in Maricopa County.

Rule 310 is a critical element in Maricopa County's strategy to achieve improved air quality and compliance with the rule's provisions is essential. MCAQD has instituted a comprehensive program to monitor compliance with Rule 310 and strict enforcement is leading to reduced dust emissions.

About This Handbook

The purpose of this handbook is to provide a practical guide offering a comprehensive overview of MCAQD's policies and interpretations of Rule 310. The handbook is organized to respond to topical questions and is structured to provide answers to the most commonly encountered compliance challenges.

MCAQD has also produced the Dust Abatement Field Guide for the Construction Industry, a pocket-sized, quick reference designed to provide information about how to comply with Rule 310 in the field. While not as comprehensive as this handbook, the field guide is a durable, reliable, and brief summary of the most important points that designated site representatives and workers in the field should know about Rule 310.

Disclaimer

This Dust Abatement Handbook and the related field guide are provided to assist in better understanding the provisions of MCAQD's Rule 310. The contents of this handbook and the field guide should not be viewed as the definite statement of the rule and how to achieve compliance. Where the clear language of Rule 310 and any formally issued policy related to Rule 310 conflicts with this handbook or the field guide, Rule 310 and the policy will prevail.

This handbook is not intended to serve as an alternative to Rule 310 which is, by itself, the definite statement of dust control requirements.

Acronyms

ADEQ	Arizona Department of Environmental Quality
A.R.S.	Arizona Revised Statutes
ASTM	American Society for Testing and Materials
cm/second	centimeters per second
CMP	A code preceding a subcontractor's registration number; previously "SC"
EPA	U.S. Environmental Protection Agency
ft^2	Square feet
Facility ID	A sequence of letters and numbers used to identify a facility in MCAQD's database
MCAQD	Maricopa County Air Quality Department
mm	millimeters
mph	miles per hour

NESHAP	National Emission Standards for Hazardous Air Pollutants
oz/ft^2	Ounces per square foot
PM_{10}	Particulate matter less than or equal to 10 microns in diameter
SC	Subcontractor
TFV	Threshold friction velocity
yd^3	Cubic yards

SECTION 1: BEFORE STARTING WORK

Why Rule 310?

Because air quality in the greater metropolitan Phoenix area does not meet air quality standards for dust (PM_{10}), it is necessary to a have a comprehensive program to control PM_{10} air pollution. MCAQD's Rule 310–Fugitive Dust from Dust-Generating Operations, was developed as part of this comprehensive program.

Coverage of Rule 310

Rule 310 is a county-wide rule and can be enforced in any portion of Maricopa County. Rule 310 applies to any activity that results in soil disturbance. While a few activities are exempt, a good rule of thumb is to assume that the activity you are planning is covered by Rule 310 until you confirm otherwise.

The following activities are covered:

- Land clearing, maintenance, and land cleanup using mechanized equipment
- Earthmoving
- Weed abatement by discing or blading
- Excavating
- Construction
- Demolition
- Bulk material handling (e.g., bulk material hauling and/or transporting, bulk material stacking, loading, and unloading operations)
- Storage and/or transporting operations (e.g., open storage piles, bulk material hauling and/or transporting, bulk material stacking, loading, and unloading operations)
- Operation of any outdoor equipment
- Operation of motorized machinery
- Establishing and/or using staging areas, parking areas, material storage areas, or access routes to and from a site
- Establishing and/or using unpaved haul/access roads to, from, and within a site
- Disturbed surface areas associated with a site
- Installing or maintaining landscaping while using mechanized equipment

What's Not Covered?

Tribal Communities
Although tribal communities are found within the borders of Maricopa County, MCAQD has no jurisdiction over them, because they are legally considered sovereign nations. Check with tribal governments, as some have their own dust control requirements.

Normal Farm Cultural Practices
Normal farm cultural practices are all activities conducted on any facility for the production of crops and/or nursery plants, including disturbance of the field surface caused by turning under stalks, tilling, leveling, planting, fertilizing, or harvesting.

Normal farm cultural practices are under the jurisdiction of the Arizona Department of Environmental Quality (ADEQ), not Maricopa County. However, construction activities that take place on agricultural lands are subject to Rule 310. For example, construction of a new food processing warehouse on farmland would be regulated by Rule 310 and a permit would be required, if the surface area that will be disturbed is equal to or greater than 0.1 acre (4,356 square feet (ft^2)).

Trackout originating from agricultural lands is regulated by Rule 310. See also MCAQD's substantive policy statement – SPS-2018-001-Trackout from Normal Farm Cultural Practices for the requirements for cleaning up trackout from a facility where normal farm cultural practices occur.

In addition, if trucks are exiting agricultural lands, the load must be covered by a tarp.

Does Rule 310 Apply?

If you are engaged in a dust-generating activity covered by Rule 310, the rule requirements apply at all times (24/7), even during inactive periods. Even if you do not need to have a permit, the dust control provisions of Rule 310 still apply to your project.

At facilities with a Title V or a Non-Title V permit, dust-generating operations that are conducted as part of the primary operations of the facility must be performed under the existing permit and dust control plan.

- Dust-generating operations that are not part of the primary operations of the facility and meet the definition of "routine" (any dust-generating operation that occurs more than four times per year or lasts 30 cumulative days or more per year), must be performed under the existing permit and dust control plan (e.g., weed abatement of adjacent property owned by a helicopter repair facility and done every six months).
- Dust-generating operations that are not part of the primary operations of the facility and do not meet the definition of "routine", may be performed under the existing permit and dust control plan, if the owner or operator uses their own equipment and labor (e.g., to build a shed).
- Dust-generating operations that are not part of the primary operations of the facility and do not meet the definition of "routine", must be performed under a separate permit and dust control plan (e.g., paving an unpaved parking lot at a semiconductor facility).

At facilities with an Authority to Operate (ATO) under a Stationary Dust-Generating Source General permit, the following dust-generating operations apply:

- Businesses with routine dust-generating operations disturbing 0.10 acre (4,356 ft^2) or more that are not engaged in any other regulated activities
- Residential property with dust-generating operations disturbing 0.10 acre (4,356 ft^2) up to 10 acres, excluding construction projects
- Bulk material handling (e.g., hauling, transporting, stacking, loading operations, unloading operations, and storage piles)
- Composting, mulching, or green waste
- Inert landfill
- Land clearing using mechanized equipment
- Landfill (closed) general maintenance
- Landscape and decorative rock, gravel, and sand distribution
- Landscaping with mechanized equipment
- Weed abatement by discing or blading

If a facility has obtained a permit from MCAQD for nonmetallic mineral processing and/or related operations and the permit contains fugitive dust control requirements from Maricopa County Air Pollution Control Regulations Rule 316 (Nonmetallic Mineral Processing), the facility does not need to obtain a dust control permit before commencing construction, demolition, grading, overburden removal, and other dust-generating operations. Instead, the facility must submit a revised dust control plan and comply with the requirements of Rule 316. The permit holder is ultimately responsible for ensuring that all operations and activities conducted under the permit are in compliance with applicable requirements.

If a contractor will be hired to complete a demolition or construction project, the project contractor should obtain a dust control permit before any dust-generating operations associated with the project commence. The area that is covered by the dust control permit will be subject to Rule 310 and the dust control permit holder will be responsible for compliance.

In addition, the demolition or construction project could be subject to the National Emission Standard for Hazardous Air Pollutants (Asbestos NESHAP) and Maricopa County Air Pollution Control Regulations Rule 370 (Federal Hazardous Air Pollutant Program).

If a facility stores or handles bulk materials, especially biodegradable materials, a permit is required when:

- The operations cover an area with a disturbed surface area equal to or greater than 0.1 acre (4,356 ft^2).
- The operations are conducted on concrete or asphalt and emit greater than 0.5 tons of PM_{10} per year.

A permit is not required when:

- Normal farm cultural practices have 50% or more of the bulk materials used in adjacent normal farm cultural practices, no shredding is done on site, and the bulk materials are not sold or provided as a product.
- Unintentional storage operations resulting from illegal dumping on vacant lots as indicated by a lack of business signage/solicitation (e.g., a sign indicating clean fill dirt wanted) and/or fencing; in some cases, "No Trespassing" signs may be present.
- Unintentional storage and handling operations that have been abandoned for more than 12 consecutive months.
- Unintentional storage and handling operations that will be located at a site for less than 24 consecutive months. This type of operation must obtain a dust control permit if it disturbs 0.1 acre (4,356 ft^2) or more.

Is a Dust Control Permit Required?

The threshold for a dust control permit is based on the amount of surface area disturbed by a project. If the area disturbed will meet or exceed 0.1 acre (4,356 ft^2), a permit is required. A tenth of an acre (0.1 acre or 4,356 ft^2) is a relatively small amount of land and is roughly the size of a basketball court.

Helpful Hints

- If in doubt, ask. Contact the Desk Duty Supervisor at 602-506-6734 or the Business Assistance Unit at 602-506-5102.
- The opacity of dust emissions from dust-generating operations cannot exceed 20%.

A Few Essentials

What do you need to do to ensure that a project is in compliance? The following list of important "Do's and Don'ts" are intended to provide a snapshot of some of the most significant provisions of Rule 310. This handbook provides more expansive discussions on each of these provisions in later sections.

Before Starting Work

- Understand your project: boundaries, type of work, areas where soil will be disturbed, locations of exits and entrances, storage areas, and equipment paths. Consider everything that could potentially create dust.
- Do not start a project that disturbs greater than or equal to 0.1 acre (4,356 ft^2) until you have obtained a dust control permit. Include paths, foot traffic areas, and all other areas that are anticipated to result in soil disturbance, in your calculations to determine the size of the project.
- Dust permit applications and payments must be processed through the MCAQD's Dust and Miscellaneous Portal.
- Plan ahead to ensure you receive your dust control permit before you start work and start the application process early. MCAQD may require up to 14 days for review once an application is deemed complete.

- As part of the permit application process, you will be required to complete an application which includes the dust control plan. The approved permit and the plan must be on site before you start work.
- Read and understand your approved dust control plan. During preconstruction meetings inform all project workers of dust control plan requirements to ensure a successful project start-up.
- Request a courtesy visit by the Business Assistance Unit to answer any questions in a pre-construction meeting or during construction.
- Familiarize yourself with Rule 310 and this handbook. Rule 310 contains important details and requirements that may not be addressed in the handbook. Develop a working knowledge of the dust control requirements and related challenges.
- If your project is one acre or larger in size, your application must identify the soil texture found at the site. The soil texture is generally found in a soils report prepared for the project site. Alternatively, Maricopa County Air Pollution Control Regulations Appendix F (Soil Designations) contains a map of soil descriptions.
- While trackout is prohibited for any size project, if the project site is two acres or larger or you will be moving 100 cubic yards (yd^3) of material per day, you must establish a controlled exit with a trackout control device.
- If your project disturbs an area greater than one acre, the site superintendent must have completed the Basic Dust Control Training Class within the past three years.
- If your project disturbs an area five acres or larger, an on-site Dust Control Coordinator is required. Make sure you have a certified Dust Control Coordinator with a valid certification before starting work.
- Ensure that you are prepared to control dust prior to starting a project. For example, secure a water source and be ready to apply water prior to initiating soil disturbance.
- Post required project information signs when the permit area is five acres or greater.

Helpful Hints

- MCAQD has up to 14 days to review a paid, technically complete permit application package. Have a Dust Control Coordinator, hydrants, and control equipment to be used at your site identified prior to submitting the application package. Consider municipal requirements, such as backflow prevention devices and obtaining hydrant meters.
- Ideally, the dust control plan should be completed by someone familiar with controlling dust emissions.
- Rule 310 requires a permit and a dust control plan be located on site at all times. Experience has shown that the best way to ensure the approved dust control plan remains on site, safe from rain, and accessible to an inspector, is to place it in a breaker box locked with a combination lock in an accessible location on site. If no one is on site at the time of an inspection, the inspector can call the primary project contact to obtain the combination, open the box, and view the permit, dust control plan, and dust logs.

While Your Permit is Active

- Ensure subcontractors have a current registration number. The number will begin with "SC" or "CMP".
- Complete and retain dust control records for each day during which earthmoving operations are occurring.
- Never allow on-site emissions to exceed 20% opacity.
- Actively monitor trackout during the course of each workday.
- Do not allow any visible dust to cross your property line.
- Apply water to control emissions before, during, and after earthmoving operations, but remember there are other options besides water to control emissions. Follow the approved dust control plan.
- If the primary dust control measure is ineffective, immediately implement the contingency measure from your approved dust control plan. While the contingency measure can be applied along with the primary control measure, use of both, concurrently is not required.
- Document the use of the contingency measure in your daily log.
- If dust emissions cannot be controlled, stop work.
- Understand and meet stabilization standards.

As Your Project Nears Completion

Know when your permit expires and place the expiration date on your calendar. Should you require a new permit, remember that MCAQD has up to 14 days to process your complete application. If the application is not complete or errors are present, additional time will be required to resolve any issue. A dust control permit that expires while a dust control permit application is pending will be subject to immediate enforcement for operating without a permit.

Helpful Hints

- Dust control permits are not "renewed"; they are valid for one year. If the dust-generating operation continues beyond one year, you must submit another dust control permit application. The Dust and Miscellaneous Portal allows you to copy most of the existing permit information into the dust control permit application.
- Once your dust control permit application is approved, you will receive a new dust control permit with a new dust control permit number. However, the facility ID will remain the same for all dust control permits issued for all work done at the project location.
- Dust permit cancellations are processed through the Dust and Miscellaneous Portal when work is completed. Ensure that disturbed areas within the permitted area are stabilized and meet stabilization standards.
- Once you understand the project and the obligations of your dust control plan, factor dust control costs into your project bid and budget. Include the cost of signage, training, dust-control staff, trackout control devices, and all other personnel and materials used to control dust.
- Provide a dust control plan with bid materials to subcontractors so they understand what is required and can submit accurate bids.

What Activities Are Covered by Rule 310?

If you are engaged in dust-generating operations, no matter how small, you must control fugitive dust emissions and comply with Rule 310. If you are disturbing 0.1 acre (4,356 ft^2) or more, you must comply with Rule 310 and obtain a dust control permit.

Rule 310 applies to all activities that may result in fugitive dust emissions but mainly regulates dust emissions associated with construction activities. Generally, if the surface of the ground is disturbed in some manner, or if bulk materials are moved from one location to another or stockpiled, the potential exists for fugitive dust emissions.

In Rule 310, Maricopa County defines "disturbance" as "a portion of the earth's surface or material placed on the earth's surface that has been physically moved, uncovered, destabilized, or otherwise modified from its undisturbed native condition if the potential for the emission of fugitive dust is increased by the movement, destabilization, or modification."

Examples of activities that can disturb 0.1 acre (4,356 ft^2) or more and would require a dust control permit include:

- Parking five pickup trucks next to each other on open dirt
- Staging 10 yd^3 of aggregate base
- Driving 360 feet onto undisturbed land

What is Considered a Dust-Generating Activity?

A primary dust-generating activity is any operation capable of generating fugitive dust, including but not limited to, the following:

- Land clearing, maintenance, and land cleanup using mechanized equipment
- Earthmoving
- Weed abatement by discing or blading
- Excavating
- Construction
- Demolition
- Bulk material handling (e.g., bulk material hauling and/or transporting, bulk material stacking, loading, and unloading operations)
- Storage and/or transporting operations (e.g., open storage piles, bulk material hauling and/or transporting, bulk material stacking, loading, and unloading operations)
- Operation of any outdoor equipment
- Operation of motorized machinery
- Establishing and/or using staging areas, parking areas, material storage areas, or access routes to and from a site
- Establishing and/or using unpaved haul/access roads to, from, and within a site
- Disturbed surface areas associated with a site
- Installing or maintaining landscaping while using mechanized equipment

Remember: Disturbed surfaces do not have to be contiguous (connected to or adjacent to each other).

What is Required Before Commencing Work at a Project Site?

- Apply for and receive a permit before doing anything that will disturb as little as 0.1 acre (4,356 ft^2) of land.
- Prepare a dust control plan and submit it to MCAQD as part of your permit application.
- Remember:
    - Permit coverage is required for only those areas in your permit that will be disturbed, including the working area, prep areas, and parking areas. You can add areas as needed through the Dust and Miscellaneous Portal.
    - The dust control permit is valid for one year; permits for shorter or longer periods are not available.
    - A dust control permit is not effective until the fee is paid.
    - A dust control permit and the approved dust control plan must be kept on site at all times. Work cannot begin on the site until the approved permit is received and on site.
    - All project workers on your site, including subcontractors, should be familiar with the dust control plan.
- Prepare a description of the site-specific soil designations, if the site is one acre or greater. See Maricopa County Air Pollution Control Regulations Appendix F.

What Do I Do When My Permit is Close to Expiring?

- Apply for a new permit at least 14 calendar days prior to expiration. Keep in mind:
    - A new dust control plan must be submitted with the new permit application.
    - A facility ID will be issued. The facility ID will remain the same for all dust control permits issued for all work done at the project location.
    - For project information signs that had a permit number instead of the facility ID, the project information sign should be updated with the facility ID in place of a permit number.

Understand Your Obligations

- When the applicant agrees to the statement of truth and accuracy on the dust control permit application, such agreement represents a binding agreement and obligates the applicant to implement identified control measures on the permitted area for the life of the permit (i.e., one year).
- The permit holder is ultimately responsible for ensuring the permitted site is in compliance at all times to prevent risks to the environment and the public, even if non-compliance is the result of an action by an owner, subcontractor, or trespasser.
- The provisions of an approved dust control plan are binding and enforceable. If you do not intend to implement a provision of the plan, do not include it. Conversely, if you plan to take an action to control dust, ensure that action is included in your permit as one of your options.
- The approved dust control plan is effective at all times, including holidays, nights, and weekends. Therefore, dust must be controlled at all times.

Helpful Hint

Become familiar with Rule 310 and its requirements at Maricopa.gov/1951.

SECTION 2: DUST CONTROL PERMIT

Applying for a Permit

MCAQD utilizes the Dust and Miscellaneous Portal for dust permit applications. Dust permit applications submitted by email will not be processed and will be returned. The Dust and Miscellaneous Portal is designed to provide a user-friendly interface for industry representatives to submit the required information to process a dust permit application. Users have the ability to:

- Complete paperless applications and submit payment information all in one convenient place
- Modify submitted applications and update contact information
- Electronically submit and revise the project site map and disturbed acreage
- Access their account to view and track all dust permits that have been created

First time users must begin by creating an account. Once an account is created, you will be able to begin the application process.

The Dust and Miscellaneous Portal also features a public database containing all dust permit applications submitted to MCAQD. The use of this feature does not require an account.

What Do I Do if I Have Questions or Need Assistance?

Call 602-506-6010 or email AQPermits@maricopa.gov.

Fees

Basic fees for a dust control permit (permit valid for one year) are calculated on the basis of the total disturbed acreage. Fees are established according to the following schedule:

$530	0.1 to less than one acre
$1,060	One acre to less than ten acres
$3,855	Ten acres to less than 50 acres
$6,425	50 acres to less than 100 acres
$9,635	100 acres to less than 500 acres
$15,415	500 acres or greater

A late fee of $100 is required for any application submitted in response to a violation.

If paying by electronic check, make checks payable to “Maricopa County Air Quality Department" or "MCAQD” and reference the permit application number on the check.

Block Permit Information

The block permit fee is $2,000. Block permits are only issued to municipalities, government agencies, or utilities for one or more of the following projects that occur in multiple, small areas scattered throughout Maricopa County:

- Routine operations (e.g., the maintenance of infrastructure, weed control around a prison, canal road grading, road grading, road shoulder grading)
- Installation of fiber optic cable and natural gas line extension
- Expansion or extension of utilities, paved roads, unpaved roads, road shoulders, alleys, and public rights-of-way at non-contiguous sites

Block Permits and Utility Responsibilities

The purpose of the block permit is to allow municipalities, governmental agencies, and utilities to conduct similar activities at multiple sites across the county. Covered activities include routine operation and maintenance of urban infrastructure, as well as the expansion or extension of that infrastructure such as roads, utilities (e.g., pipelines and electric substations), and other public rights-of-way.

Use the Dust and Miscellaneous Portal to submit a "Block Permit Application", a "Block Permit Site List Attachment or Update", and a "Block Permit Subcontractor List Update".

A block permit can only be issued to municipalities, governmental agencies, or utilities. However, when municipalities, government agencies, or utilities don't have the resources to conduct these projects themselves, they find it necessary to hire contractors.
MCAQD's substantive policy statement SPS-2018-009-Block Permits and Contractors explains the applicability of block permits to contractors who are hired by municipalities, government agencies, or utilities, and the responsibilities of the contractor and municipalities, government agencies, and utilities (the block permit holder). While the permit is held by the authorized block permit holder, subcontractors to the authorized permit holder may operate under the cover of the permit as would the employees of the permit holder.

The block permit is applicable to those locations that are listed in the "Block Permit Site List Attachment or Update". To conduct work at a location other than those locations, the block permit holder must notify MCAQD of the intent to work in a new location at least three days in advance of the planned activity. The notice must include information describing the location and the anticipated start date of the work. This requirement does not apply to emergency activities conducted by utility or government agencies in order to prevent public injury or to restore critical utilities to functional status.

New infrastructure construction that is not an extension of an existing system must be covered under a new dust control permit.

Activity Occurring at Locations Not in the Block Permit

For any project not listed in the dust control block permit application, the applicant is required to notify MCAQD at least three working days in advance of initiating the activity.

Similarly, at new subdivisions or commercial developments, a utility will operate under its block permit and is required to notify MCAQD of its intention to work on a specific property. As with other areas, a block permit holder is required to provide MCAQD with notification of its intent to operate at a

location not previously identified in its block permit. Notification must be provided in writing within a minimum of three working days.

Enforcement and Utility Responsibilities

The permit holder retains responsibility for all work conducted within the area covered by the dust control permit. However, if a utility causes an instance of non-compliance, the utility can be cited in accordance with Rule 310. This includes the obligation to ensure that areas disturbed during utility work are adequately stabilized. A utility is obligated to meet minimum stabilization requirements of Rule 310.

Utility access by a block permit holder onto areas covered by a dust control permit may pose a special challenge. While the block permit holder is obligated to comply with all dust control measures implemented under the dust control permit, the dust control permit holder is accountable for all site conditions. A block permit holder can be held accountable for instances of non-compliance, if a block permit holder does not restore a disturbed area to its former stabilized condition.

Helpful Hints

- Some block permit holders may require contractors to obtain their own dust control permit and dust control plan. Remember to allow at least 14 days for MCAQD to process a new permit application.
- Rule 310 specifies that a dust control block permit application should include a map of the owner's and/or operator's service areas and a list of sites that are 0.1 acre (4,356 ft^2) or greater.

Accelerated Dust Control Permit Processing

You may request accelerated permit processing of a dust control permit application for a fee of two times the basic fee amount. Applications submitted with an accelerated permit fee will be processed by the end of the next business day.

Receiving Your Permit

Once issued, the completed permit will be sent to the applicant's email address. Allow up to 14 days for permit processing, unless you requested accelerated dust control permit processing, which will be completed by the end of the next business day after submittal.

What to Do When Your Permit is About to Expire

Apply for a new dust permit, using MCAQD's Dust and Miscellaneous Portal, well before your current permit is due to expire. Remember to allow up to 14 days for MCAQD to review the complete application. If the application is not complete or errors are present, additional time will be required to resolve any issue. A dust control permit that expires while a dust control permit application is pending will be subject to immediate enforcement for operating without a permit.

Keep in mind:

- A new dust control plan must be submitted with the new permit application.

- Only include those areas that are still disturbed. Hardscaped and landscaped areas do not need to be included.
- A facility ID will be issued. The facility ID will remain the same for all dust control permits issued for all work performed at the project location.
- For project information signs that had a permit number instead of the facility ID, the project information sign should be updated with the facility ID in place of a permit number.

Permitting Administrative Process

Step 1: Using the Dust and Miscellaneous Portal, the applicant completes the dust permit application, including the dust control plan, and submits the application with the appropriate fee payment.

Step 2: MCAQD receives the application, confirms fee payment, and determines if the application is complete.

Step 3: MCAQD conducts a technical review of the application and dust control plan within 14 days after submittal.

Step 4: The Control Officer approves the permit and MCAQD emails the approved permit and dust control plan to the permit applicant.

Or

The Control Officer rejects the application and MCAQD contacts the permit applicant with instructions. Return to Step 3.

Step 5: The approved permit and dust control plan are received at the project site and approved dust-generating activities can begin.

The Dust Control Plan

The dust control plan is submitted as part of the permit application. MCAQD reviews each dust control plan for completeness and technical accuracy.

Updating the Dust Control Plan

The approved dust control plan can be revised by the permit holder or as directed by MCAQD. Revisions to the dust control plan are not effective at time of submittal; they must be approved by MCAQD before becoming effective. Changes to the dust control plan required by MCAQD must be submitted within three working days of receipt of the MCAQD's directive.

Helpful Hint

Allow at least 14 days for MCAQD to approve revisions to the dust control plan. You must follow your existing, approved permit and plan until you have received notice from MCAQD that your changes have been approved.

Changes Initiated by the Permit Holder

The permit holder may request changes to the dust control plan through the Dust and Miscellaneous Portal for the reasons listed below.

- Changes in acreage
- Changes in the designated Dust Control Coordinator and/or contact information
- Substantive changes in operations
- Any change requested by the Dust Control Coordinator or designated site representative
- Changes to primary or contingency control measures

Changes Required by MCAQD

At times, dust emissions may continue to occur even if the control measures contained in the dust control plan are followed. When this occurs, MCAQD will issue a notice to the permit holder requiring revisions to the dust control plan. The permit holder must submit required revisions within three working days of receipt of the notice. If more than three working days are needed, the permit holder can request an extension. MCAQD will evaluate the request, but keep in mind that granting of an extension is not guaranteed. In any event, compliance with Rule 310 is expected immediately.

Helpful Hints

Open Your Email: Often documents will have a deadline or action date included. Don't miss critical deadlines by failing to immediately open email from MCAQD. Also, make sure permit contact information is up to date.

How is the Approved Dust Control Plan Used?

- From MCAQD's perspective, the approved dust control plan is a contract between the permit holder and MCAQD. Its terms are enforceable, even for subcontractors working on a site. The measures included in the dust control plan are the measures that inspectors expect you to apply to your site.
- Primary control measures listed in the plan are to be used first. Contingency control measures are to be used when the primary control measures are not effectively controlling dust emissions.
- If primary or contingency control measures do not result in effective control, the approved dust control plan must be revised. The obligation is on the permit holder to control dust emissions. If emissions cannot be adequately controlled using all available control measures, the project will be in violation of Rule 310 and subject to enforcement by MCAQD.

Primary Control Measure

A primary control measure if the first action you implement to control dust emissions.

Contingency Control Measure

A contingency control measure is the backup strategy to be used when the primary control measure is not effectively controlling dust emissions.

SECTION 3: APPROVED DUST CONTROL TRAINING

What Training is Required?

Rule 310 requires certain personnel at a permitted site to receive training on dust control and emission reduction strategies. The level of required training and which personnel must be trained depends on the amount of acreage disturbed within the permitted area. The table below shows who must be trained and the level of training required by size of the disturbed area.

Table 1: Rule 310 Required Training

	Water Truck And Water-Pull Drivers	Block Permit Permittees	Site Superintendent or Plant Managers or Foremen	Dust Control Coordinator
Regardless of Acreage of Disturbed Surface Area	Rule 310 Basic			
One Acre of Disturbed Surface Area for a Site, not a Cumulative Acreage of All Sites Under the Block Permit		Rule 310 Basic		
Greater Than One Acre but Less Than Five Acres of Disturbed Surface Area			Rule 310 Basic	
Equal to or Greater Than Five Acres of Disturbed Surface Area				Rule 310 Comprehensive

Who Can Provide Training?

MCAQD provides online training classes.

MCAQD's online training system, mcaqd.learningcart.com, allows users to purchase and access training classes without having to contact MCAQD in order to sign-up and pay for classes. Participants have immediate access to the class upon payment, and companies have the ability to purchase multiple seats and receive registration codes.

Training class fees:
Basic Class: $50
Comprehensive Class: $125

Please note that MCAQD does not accept or offer training classes through third-party trainers.

Certifications

Just as there are two levels of dust training (basic and comprehensive), there are two levels of certification: basic and comprehensive.

When you successfully complete dust training, you will receive a certification card. All dust control certifications are valid for three years from the date of issuance. Register for dust training before certification expires to avoid any lapse in compliance.

Newly hired employees will be granted 30 days from their date of hire to complete training.

Basic Certification

To earn basic certification, individuals must complete the three-hour training course. Water truck and water-pull drivers are required to earn basic certification.

For projects that disturb one acre or more, the permit holder must designate a site representative who has earned basic certification (i.e., site superintendent, plant manager, or foreman).

In addition, a dust control block permit holder is required to have at least one individual who has received the basic certification for those sites on which there is one acre of surface disturbance.

Employees required to have the basic certification must renew their training certification once every three years.

Comprehensive Certification

Rule 310 comprehensive training covers dust control measures in detail. Individuals who complete this training earn comprehensive certification and may be designated as a Dust Control Coordinator.

On projects that disturb five or more acres, the permit holder must identify a certified Dust Control Coordinator, who must be present at all times during primary dust-generating activities.

A Dust Control Coordinator must renew their training certification once every three years. Note: Comprehensive certification includes basic certification.

Visible Emission Certification

Visible emissions certification is not required but is strongly recommended, especially for Dust Control Coordinators.

Dust Control Coordinators

- Are required on projects that disturb five or more acres
- Must have earned the comprehensive certification
- Must be identified in the dust control permit application
- Must be on site during dust-generating operations
- Must have full authority to control dust-generating operations on the site

Helpful Hint

Dust Control Coordinator to be on site during dust-generating operations cannot be over emphasized. Experience has shown that violations often result when the Dust Control Coordinator is not available to oversee operations.

Authority to Direct Activities to Comply with Rule 310

To receive a dust control permit, the permit holder must name a site representative or Dust Control Coordinator, who has the level of training required based on the area disturbed by the project. If a site representative or Dust Control Coordinator is required based on the size of the project, he or she must be given the authority by the permit holder to control dust. This means the site representative or Dust Control Coordinator must be able to direct actions within an area covered by a permit to ensure compliance with Rule 310, including ceasing operations, if necessary, to ensure that dust is not generated.

Remember:

- Trained site representatives (i.e., site superintendent, plant manager, or foreman) are required on projects that disturb one acre but less than five acres, must be designated on the dust control permit, and must have basic certification.
- Dust Control Coordinators are required on projects that disturb five or more acres, must be designated on the dust control permit, and must have comprehensive certification.
- Permit holders who do not give site representatives and Dust Control Coordinators authority to act are subject to enforcement under Rule 310.
- Instances of non-compliance will be determined if a site representative or Dust Control Coordinator does not have full authority to ensure that dust control measures are implemented on site.

A Dust Control Coordinator is required whenever the disturbed area reaches or exceeds five acres. In some instances, there may be fewer than five acres of disturbed surface remaining in one phase of the project but there are additional permitted, yet undisturbed, areas of the project waiting to be developed. In this scenario, a Dust Control Coordinator would be required on site.

The only time a Dust Control Coordinator would not be required on site would be if the undisturbed phases were clearly identified in the dust control permit and in the dust control plan and the undisturbed area on the project site was clearly marked with access restricted.

When fewer than five acres of land (in all phases of the project) remain to be disturbed, the Dust Control Coordinator requirement would no longer apply if previously disturbed areas have been stabilized and notice of stabilization has been provided to MCAQD.

Helpful Hints

- To be accessible during an inspection, the certification card for each trained personnel member must be maintained on site electronically or in a legible photocopy.
- Courtesy site visits and industry presentations provided by MCAQD staff represent another opportunity for training. If you organize an event, such as a gathering of your firm's project superintendents, you can request that the Business Assistance Unit provide a presentation on aspects of Rule 310.

Note: Industry presentations are free of charge but do not take the place of formal training certifications.

The MCAQD Control Officer has the authority to suspend or revoke the basic or comprehensive certification for cause. For cause means:

- Inappropriate ethical activities or conduct associated with the dust control program; or
- Repeated failure to follow training requirements.

SECTION 4: PERMIT SIGNAGE AND RECORDKEEPING

Project Information Signs

The purpose of the project information sign is to provide the public with information about the permit status of the project and who to contact if there are dust complaints.

The requirement for a project information sign is based on the acreage of the permit. For all sites with a Dust Control permit that are five acres or larger, except for routine maintenance and repair done under a Dust Control Block permit, the owner and/or operator shall erect and maintain a project information sign at the main entrance such that members of the public can easily view and read the sign at all times.

Information to Include:

The project information sign must contain the information shown below (using text size of at least four inches). The sign must be placed at the main entrance of the site. Once the project information sign is required and is installed, it must remain throughout the life of the project, even if the project is reduced to less than five acres.

- Project name
- Permit holder's name
- Facility ID. The facility ID will remain the same for all dust control permits issued for and for all work done at the project location. The facility ID should be posted on the project information sign, not the permit number.
- Name and local phone number of person(s) responsible for dust control

In addition, your sign must include the following text:

Dust Complaints?
Call Maricopa County Air Quality Department
602-372-2703

When to Update the Sign

You must change your project information sign to reflect changes to the dust control permit or dust control plan, such as:

- A new project name
- New contact information for the project's responsible official

Where to Post the Sign

Post the sign in a location most prominently visible to the public, typically the main entrance to the site. As a project expands, an additional main entrance should be established, and an additional sign must be posted there.

Helpful Hints

Example Project Sign text:

ACME ESTATES, AZ123 DEVELOPMENT FACILITY ID F000501
CONTACT: ANITA PERMIT (602) 000-0000 DUST COMPLAINTS?
CALL THE MARICOPA COUNTY AIR QUALITY DEPARTMENT (602) 372-2703

- To avoid uncertainty when multiple entrances are used, a permit holder is encouraged to place signs at each site access point, especially where another project entrance is more visible to the public. However, only one sign is required by Rule 310.
- If only one sign is posted, it should be placed at the location that would be considered by members of the public as the main entrance to the site.
- Don't forget to change the project information sign to reflect changes in your permit.

- For example:
    - A new project name
    - New contact information for the project's responsible official

Recordkeeping – What Records Are Required?

- The dust control permit and all updates must be on site or available electronically on site.
- The dust control plan and all updates must be on site or available electronically on site.
- Dust control logs documenting dust control measures used each day must be available within 48 hours.

Each day there are dust-generating operations occurring, a self-inspection by the permit holder must be conducted with notes taken to document observations. This is an important document and can be used to show that site conditions have been carefully controlled.

Critical information required by Rule 310 includes:

- Observations of damp and crusted soil
- Trackout conditions and actions taken to clean up trackout
- Daily water usage (note how water is applied, how often, and the amount (a rough approximation is acceptable))
- Dust suppressant application
- When street sweeping occurred
- Maintenance of trackout controls (what kind and when installed)
- What kind of and when contingency measures in the dust control plan were used
- What subcontractors were on site, include registration numbers, which begin with "SC" or "CMP"
- A list of employees who have completed dust control training, the date of the class, and the name of the person who conducted the training. Keep copies of training certificates on file.
- All supporting documentation (e.g., street sweeping or water truck receipts)
- Types and results of all test methods conducted

Document Retention

Records must be retained consistent with the following time frames and whichever is longer will apply:

- Two years from the date the record was initiated, as long as operations are ongoing. For example, a five-year project only needs a two-year record log of the most current two years.
- All records must be retained for six months following termination of site operations.

Helpful Hints

- While no exact format is prescribed for recordkeeping, a three-ring binder is recommended for paper records.
- Electronic recordkeeping, used by some permit holders, is a valid form of recordkeeping.
- A scanned copy of the dust control permit accessible on a computer is an acceptable way to maintain an on-site copy.

- If the site is inactive or no dust-generating operations will be occurring, the self-inspection records should record the days as inactive or that no dust-generating operations occurred.

SECTION 5: ACCESSIBLE AREAS

Areas that are Accessible to the Public

The definition of "areas accessible to the public" is "any paved parking lot or paved roadway that can be entered or used for public travel primarily for purposes unrelated to the dust generating operation." To determine whether an area meets this definition, consider the following:

- Any paved area with local non-construction traffic is considered accessible to the public.
- To ensure that an area is closed to the public, a sign must be clearly posted that states "Construction Traffic Only". If it is difficult to distinguish between an area that is under construction and an area that is open to the public, then the area will be considered an "area accessible to the public."
- Sidewalks are considered paved areas accessible to the public, unless they are barricaded or marked off with signage. Trackout on sidewalks is included in the cumulative distance trackout calculation.
- Parking lots, including those in strip malls and churches, are always considered areas accessible to the public unless marked otherwise with signage to restrict public access.

The use of signs, barricades, ropes, or fences can help to define a controlled area and distinguish between areas that are under construction and areas that are accessible to the public. While the use of yellow rope or tape to separate the area is not required, it has practical value in ensuring that the area is visible and understood to be separate from other areas where the public has ready access.

Helpful Hints

- The public is considered to have access to any paved area on your site unless access is clearly and effectively restricted. A sign, barricades, ropes, or fences may be needed to ensure that the public will avoid an area.
- Trackout extending from your project onto paved areas off site is a common violation.
- If an area is restricted and trackout is present, it will not be cited as a trackout violation.

SECTION 6: WORKING ON OTHER SITES

Subcontractor Registration

Subcontractors are hired by a permit holder to perform various tasks on a construction site. MCAQD requires that subcontractors accessing sites covered by a dust control permit obtain registration. This applies to any subcontractor engaged in dust-generating activities (e.g., driving on roads, landscaping, and doing carpentry).

Registrations are valid for one year from the date the registration is approved/issued.

While the permit holder is responsible for all site activities that may result in a violation of the provisions of Rule 310, subcontractors may, under certain circumstances, also be held accountable. A permit holder cannot delegate primary obligations to a subcontractor to avoid compliance responsibility.

A utility is not considered to be a subcontractor when operating under its own block permit.

Displaying Subcontractor Registration Numbers

The subcontractor registration number must be displayed on a jobsite. Subcontractor registration numbers used to begin with "SC" but now begin with "CMP". New subcontractor registration numbers will begin with "CMP" and existing subcontractor registration numbers may retain "SC" or can be changed to "CMP" when the subcontractor registration is renewed.
Methods of displaying the subcontractor registration number may include:

- A sign at the project entrance
- Painting the registration number on a vehicle
- A paper sign affixed to the vehicle or equipment
- A magnet sign affixed to the vehicle (e.g., on the door or bumper)
- A rear-view mirror hanger

Subcontractors are Subject to Enforcement

A subcontractor is required to abide by the provisions of the dust control permit and Rule 310 and subcontractors will be cited for violations of Rule 310. Potential violations may include:

- Not using a trackout control device
- Grading when opacity exceeds 20%
- Loading/unloading when opacity exceeds 20%
- Wet utility/dry utility installation when opacity exceeds 20%
- Removal of barricades to avoid use of a trackout control device
- Un-tarped trucks exiting a site onto paved areas accessible to the public
- Truck freeboard limit exceeded and/or spillage while crossing a paved area accessible to the public/roadway
- Creating visible emissions beyond property lines

While a subcontractor will be held responsible for their compliance with Rule 310, the responsibility of the permit holder and the actions of a subcontractor can be difficult to separate. Factors that will be taken into account when determining which party is responsible include, but are not limited to, whether the:

- Subcontractor was informed of their obligations by the permit holder
- Subcontractor's actions can be clearly documented
- Subcontractor acted in disregard of established site protocols
- Subcontractor's actions were observed by an MCAQD inspector
- Subcontractor can be readily identified

MCAQD's Substantive Policy Statement – SPS-2018-010-Inspection and Inspection Report Policy issued August 26, 2019, states the following regarding subcontractors: The responsible party is typically the recipient of an inspection report. However, alleged violation(s) of applicable Code of Federal Regulations, air quality control statutes, rules, and/or permit conditions may occur as a result of the actions of subcontractors working on behalf of the responsible party or by persons not associated with the responsible party. An inspection report may be issued to a person other than the responsible party where:

- MCAQD is able to readily and clearly identify the subcontractor or other persons involved; and
- MCAQD is able to determine that the responsible party is not causing or directing the subcontractor or other person to create the alleged violation; and
- MCAQD is able to determine that the subcontractor actively avoided or frustrated any control measures or procedures put into place by the responsible party for the purpose of complying with the MCAQD's rules; and
- MCAQD is able to determine that the violation is not the result of prevailing site-wide or facility-wide conditions.

Helpful Hints

- Although not required by the rule, subcontractors are encouraged to have their employees complete the comprehensive dust control training.

- Permit holders are encouraged to ensure that their contractual agreements with subcontractors include:
    - Provisions for the subcontractors to conduct their activities in a manner that is in compliance with MCAQD rules
    - Provisions that hold the subcontractor liable for any penalties issued by the MCAQD that may be the result of subcontractor activity
- It is also helpful to review the approved dust control plan, as well as the controls that have been established, with subcontractors prior to starting work.
- Clear communication with subcontractors and active monitoring of their on-site activity can be effective methods to avoid creating conditions that could result in instances of non-compliance.
- A courtesy inspection could be held in conjunction with a meeting where subcontractors are invited.

Subcontractor registration is not required for the following activities:

- Lunch trucks or food vendors
- Waste management trucks
- Vendor/supply delivery trucks, as long as they are not import, export, and stacking operations, and operations using ancillary motorized equipment, such as a forklift
- Regulatory agencies

SECTION 7: TRACKOUT

Trackout is one of the most frequently cited instances of non-compliance by MCAQD's inspectors. Controlling trackout must be a priority. In Rule 310, trackout is defined as:

"Any and all bulk materials that adhere to and agglomerate on the surfaces of motor vehicles, haul trucks, and/or equipment (including tires) and that have fallen or been deposited onto an area accessible to the public."

Trackout Clean-Up Requirements

A trackout control device is required at work sites with two or more acres of disturbed surface area or when hauling 100 yd^3 or more of bulk materials on- or off-site per day regardless of the amount of disturbed surface area on the site.

Trackout must be removed immediately when the length of the trackout totals 25 feet or more, when measured from one, more than one, or all the project site's exits. An inspection report that documents instances of non-compliance will be issued when the length of the trackout extends 25 feet or more, even if the removal of the trackout is occurring at the time of the determination. The term "immediately" is viewed as when the trackout occurs. The expectation is that trackout that extends 25 feet or more will be cleaned up immediately following deposition on the roadway.

Trackout extending less than 25 cumulative feet from the project site's exits must be cleaned-up prior to the end of the workday. Fugitive dust emissions resulting from the trackout being driven over may result in an inspection report that documents instances of non-compliance, because opacity may exceed the 20% limit.

The Difference Between Trackout and Staining

Trackout is the presence of material deposited on a road surface. Trackout can become airborne particulate matter when vehicles pass over and entrain the material into the air. In contrast, staining on a road surface is not considered to be trackout (if it is not deposited on top but in the crevices of the road). While staining may indicate that trackout may have been present at some time in the past, staining itself is not considered trackout under Rule 310 and will not result in an inspection report that documents an instance of non-compliance.

Helpful Hints

- Plan ahead and anticipate that trackout will occur.
- "Trackout is an obvious indicator of potential non-compliance. Taking the time to assess the presence and scope of trackout and whether immediate attention is required is an essential practice to maintain compliance."–Air Quality Inspector
- It is in the permit holder's best interest to clean-up trackout immediately rather than wait until it extends 25 feet or more.
- Include the cost of trackout control and maintenance in your bid.

Measuring Trackout

The distance of individual trackout paths originating from a permitted facility are combined to determine compliance. When trackout reaches a cumulative distance of 25 feet it must be cleaned up immediately. Trackout is measured from an exit onto a paved surface and along the path of trackout to the point where it ends. This may follow the actual curved path of trackout or the horizontal distance may be used instead (especially where traffic/safety is a concern). Line C on the diagram below is an example. Trackout on sidewalks and gutters are included in determining the total amount of trackout present.

Trackout Control Devices

A trackout control device is required at work sites with two or more acres of disturbed surface area or when hauling 100 yd^3 or more of bulk materials on site or off site per day regardless of the amount of disturbed surface area on the site.

Several options are available for trackout control devices. At least one of the following controls must be in-place at all exits onto paved areas accessible to the public:

- Gravel Pad: A layer of washed gravel, rock, or crushed rock, at least one inch in diameter. The gravel pad must be 30 feet wide and the greater of 50 feet long and the length of the largest haul truck on site. If the unpaved surface exit does not have an adequate width to install a 30 foot wide gravel pad, then the width of the gravel pad must cover the full width of the exit and be adequate to prevent trackout.
- Grizzly: A device used to dislodge mud, dirt, and/or debris from the tires and undercarriage of vehicles prior to leaving the project site. A grizzly must contain raised dividers a minimum of three inches tall, six inches apart, and 20 feet long.
- Paved Area: Pavement starting from the point of intersection of the site's exit and the paved area accessible to the public. The pavement must extend a centerline distance of at least 100 feet with a width of at least 20 feet.

Helpful Hint

Keep a stockpile of replacement gravel near your trackout control device and use it to refresh the gravel pad when it becomes clogged with mud.

Controlling and Changing Exits During Construction Phases

Managing the flow of traffic entering and exiting a permitted area is one of the primary challenges for a work site that is trying to ensure dust control measures are being utilized. For some, it is tempting to exit at the nearest convenient paved area rather than travel over the designated trackout control device; however, this is considered non-compliance. In addition, vehicles circumventing a trackout control device by not travelling over the full length of the device or by using an undesignated exit is considered non-compliance, regardless of the presence or not of trackout on the area accessible to the public.

Place trackout control devices at all designated exits from the permitted area onto an area accessible to the public if:

- The disturbed area is two acres or more; or

- When 100 yd^3 or more of bulk material is being hauled on or off site.

Helpful Hints

- When exits are changed at the project site, you must update your dust control plan.
- Questions to ask yourself:
    - Is a trackout control device in place and effective?
    - Does my trackout control device need maintenance?
    - Do I adequately monitor trackout?
    - Did I clean-up trackout at the end of the day?

SECTION 8: STABILIZING YOUR SITE

Ensuring that disturbed areas within a permitted area are stabilized is a primary requirement of Rule 310. The disturbed area of a site must be stabilized at all times, including holidays, nights, and weekends. Rule 310 has separate stabilization requirements and test methods in place for disturbed areas, where dust-generating operations are occurring and for inactive disturbed areas. A project site may contain both active and inactive disturbed area at the same time.

Pre-Disturbance

Before starting work, conduct site preparation: pre-water the site or phase work so that the disturbed area created is minimized. If phasing is being used as a control measure, then project phases should be clearly identified in the Dust Control Plan.

Work Phases

Within a permitted area, there may be several defined areas (representing project phases). One phase may be active with ongoing surface disturbance while another phase may not be disturbed. Ensure that areas not yet disturbed are clearly demarcated, identified in the dust control plan, and not accessible.

When phasing work, it is important to meet the stabilization requirements of Rule 310 for areas that have been disturbed but are not being actively worked.

Helpful Hints

- Keep all disturbed areas visibly damp/moist or meet one of the stabilization standards.
- Stabilization and fugitive dust control are a continuous activity. The dust control plan should designate at least one of three fundamental stabilization practices while a site is actively being worked on:
    - Apply water or a dust suppressant to keep the soil visible moist; or
    - Maintain a minimum soil moisture content at 12% (moisture content is determined by using ASTM 02216-05); or
    - Install wind fences/barriers in addition to implementing the above practices.
- During dust-generating operations, the generation of a limited amount of dust is allowed. However, dust emissions must never exceed 20% opacity.

- If dust emissions are present, it may be an indicator that the area is not sufficiently controlled and may require additional attention.
- Maintaining moist disturbed surfaces is an ideal site management practice.
- There will likely be inactive disturbed areas within a permitted area. In those areas, stabilization should be achieved following the completion of work in that area. The following stabilization standards apply:
    - Maintain a soil crust.
    - Maintain a threshold friction velocity (TFV) of 100 cm/second or higher.
    - Maintain a flat vegetative cover equal to at least 50%.
    - Maintain a standing vegetative cover equal to or greater than 30%.
    - Maintain a standing vegetative cover that is equal to or greater than 10% when the TFV is equal to or greater than 43 cm/second.
    - Maintain a percent cover that is equal to or greater than 10% of the non-erodible elements.
    - Comply with an alternative test method approved by the Control Officer.

Control Measures on Disturbed Areas (No Activity for 30 Days or Longer)

When a disturbed area will remain in its current disturbed state with no further work taking place for a period of 30 days or longer, achieve one or more of the following:

- Cover the area using gravel, pavement, or a suitable dust suppressant.
- Establish a vegetative ground cover.
- Pave, apply gravel or a suitable dust suppressant other than water, or establish a vegetative groundcover and restrict vehicle access.
- Apply water and prevent access (using signs, curbing, or barricades) sufficient to prevent trespass. Note: The specific measures intended to prevent trespass must be approved by the Control Officer.
- Restore an area to a substantially similar condition (vegetative ground cover and soil characteristics) as that of surrounding or nearby undisturbed native conditions. This stabilization standard should be achieved within 10 days following the completion of the dust-generating operation.

Trespass

While a permit is still effective, the permit holder is responsible for any disturbance that occurs as a result of illegal trespass. If an area is disturbed after final stabilization and the permit is still in effect, the permit holder is obligated to ensure that stabilization is restored. If disturbed areas that are not stable are identified during an inspection, an inspection report that documents instances of non-compliance can be issued.

It may be in the best interest of the permit holder to restrict access to the site during non-working hours. Trespassing can lead to unstable, disturbed areas and trackout, which are considered non-compliance. Issues resulting from trespassing are considered the responsibility of the permit holder. When the project has been completed and the permitted area has been properly stabilized, the permit holder must request a cancellation through the Dust and Miscellaneous Portal.

SECTION 9: VISIBLE EMISSIONS

Essentially, Rule 310 focuses on ensuring dust (particulate) emissions are minimized. Emissions are subject to two separate standards, depending on whether the emissions are observed on site or off site.

On-Site Visible Emission Opacity Limits

Within the boundary of the area covered by the permit, visible emissions can never exceed 20% opacity.

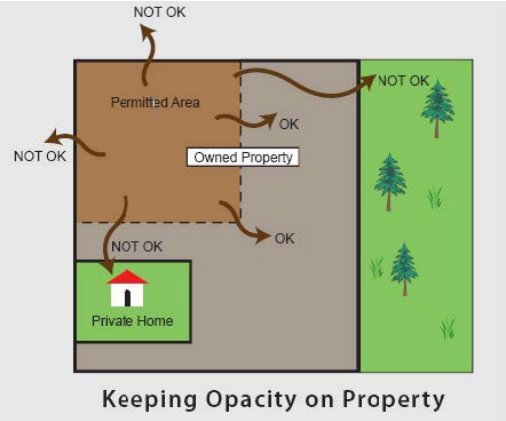
The method used to determine whether visible emissions exceed 20% opacity is found in Maricopa County Air Pollution Control Regulations Appendix C. This method consists of the average of 12 observations of five seconds each taken over a period not longer than one hour. As a practical matter, the 12 observations will most likely be completed over the period of a few minutes.

Visible Emissions Beyond the Property Line

- A property line is that demarcation between the area contained within a dust control permit and the area outside of the permit, when the area outside the permit is owned by an entity other than the permit holder.
- It is possible that, as a project matures, some areas within a permitted area will transition to private ownership and will no longer be part of the permitted area (e.g., parcels within a housing subdivision that have been sold to homeowners). Emissions cannot extend from a permitted area onto privately held parcels.
- No visible emissions are permitted beyond the property line of an area covered by a permit.
- When a dust-generating activity occurs within 25 feet of the property line, visible emissions beyond the property line are allowed. However, the emissions cannot exceed 20% opacity.

Visible Emissions Guide

Table 2: Visible Emissions Guide		
Source	**Standard**	**Method**
Unpaved roads and unpaved parking lots	20% opacity; average 12 continuous readings	Appendix C, Section 2.1.1
Non-continuous dust-generating operations	20% opacity; average 12 continuous readings	Appendix C, Section 3.3.1
Continuous dust-generating operations	20% opacity; average 12 continuous readings	Appendix C, Section 3.3.2
Property line standard	0% opacity; aggregate for 30 seconds in 6 minutes	EPA Method 22



In the figure above, the brown area is covered by a dust control permit. Surrounding this, the grey area is owned by the dust control permit holder but is not covered by a dust control permit. Visible emissions from the permitted area are allowed onto this adjacent area, since the property is owned by the permit holder and the emissions do not cross a property line. Should the emissions extend further and onto the property designated as a private home or onto the forested area, the emissions are crossing a property line and are not allowed.

Helpful Hints

Submitting a clear and accurate map in your dust control plan can help you delineate your property from others.

In the photo below, dust emissions are clearly visible crossing the property line. Although visible emissions are allowed beyond the property line, they cannot exceed 20% opacity. Also, in this instance, a serious public safety hazard is created by impairing visibility in a traffic lane.

High Wind Conditions and Visible Emissions

High wind conditions have the potential to dramatically degrade air quality and can lead to emissions even when appropriate controls are implemented. The property line emission requirement and the 20% fugitive dust opacity standard do not apply to wind-blown dust if the emissions cannot be prevented by better application, operation, or maintenance of control measures. To demonstrate that the emission limits do not apply, the following actions must be taken:

- Implement fugitive dust control measures.
- Keep records of all dust control measures that are implemented.
- For active operations, apply water or dust suppressant to keep soil visibly moist or cease operations.
- For inactive storage piles, maintain a soil crust or cover.
- For inactive disturbed surface areas, apply gravel or dust suppressant, or maintain a soil crust.

Visible Emissions Originating from Adjacent Lands

Conditions may arise where winds will drive dust from one property (e.g., a vacant field) across another. Normally, visible emissions seen crossing the property line will constitute a violation. If visible emissions are created from a location outside of the permitted facility, it is important to document the occurrence in the facility's records and even photograph or record the occurrence. This way, if an opacity violation is issued or discussed by an inspector, the facility will have proper documentation to show the inspector and/or the Business Assistance Unit. If visible dust emissions are seen passing over a permitted area and no additional dust emissions from the permitted area were added to such visible dust emissions, the permitted facility is not in violation of the property line opacity standard.

SECTION 10: ON-SITE OPERATIONS

Unpaved Parking Lots

Unpaved parking lot is defined in Rule 310 as: "Any area that is not paved and that is designated for parking in the dust control plan or that is used for parking, maneuvering, material handling, or storing motor vehicles and equipment. An unpaved parking lot includes, but is not limited to, automobile impound yards, wrecking yards, automobile dismantling yards, salvage yards, material handling yards,

and storage yards. For the purpose of this rule, maneuvering shall not include military maneuvers or exercises conducted on federal facilities."

While the use of an area for staging or for material storage may be clearly evident, an isolated instance of such use will not cause the area to be designated as an unpaved parking lot.

An unpaved parking lot, as defined by Rule 310, is present when the use of an area by vehicles goes beyond what can be considered to be incidental use.

An area used as an unpaved parking lot should normally be designated in the dust control plan. However, identifying an unpaved parking lot in the dust control plan is not required for an inspector to determine that one is present based on the observed use.

To determine that a disturbed area is an unpaved parking lot requires observations of activities that reflect actual use of the property for an activity similar in scope to those examples provided in the definition.

The definition of "unpaved parking lot" refers to the term "maneuvering." After-the-fact observation of tire tracks alone on an otherwise empty lot is not sufficient to classify an area as an unpaved parking lot without some supporting evidence that the area has been used in the manner contemplated by the definition. "Maneuver" means to direct any type of motorized vehicle through a series of movements or controlled series of changes in course or movement towards an objective. While one or two tire marks on an unpaved area constitutes incidental use and does not identify an area as an unpaved parking lot, multiple tire marks in varied directions identify that maneuvering occurred on the lot.

The following activities constitute incidental use and are not sufficient to determine that an area is being used as an unpaved parking lot:

- Use of an area by a surveying crew
- Use of an area by a landscaping service
- Delivery of materials to a home and unloading them (e.g., dropping off tile, drywall, or tools), provided those materials are not staged on the disturbed surface

Unpaved parking lots must meet a specified soil stability standard (silt loading cannot equal or exceed 0.33 oz/ft^2) and operations on the lot cannot generate dust emissions greater than 20% opacity. If silt loading is equal to or exceeds 0.33 oz/ft^2, then the silt content may not exceed 8%. (Note: As a practical matter, there is very little difference between the two values).

Whether an area is considered an unpaved parking lot or an otherwise disturbed area, stabilization is always required.

Helpful Hints

- An isolated incident of parking, maneuvering, material handling, or storing motor vehicles and equipment does not justify redesignation of an area described in the dust control plan as a vacant area to a parking lot.
- The presence of tire tracks alone may not be sufficient to classify an area as an unpaved parking

lot. The inspector will rely on judgment and the responses from the permit holder to determine whether the tracks represent incidental use of the area by vehicles.

Unpaved Haul and Access Roads

Whether marked or unmarked, an unpaved haul or access road is a road within a permitted area that is used to move material, equipment, or people from one point to another. These roads are likely to change location frequently and meeting the stabilization requirements is likely to require close attention.

By definition, an unpaved haul or access road represents a permanent or semi-permanent disturbed area that will require stabilization on an ongoing basis. At all times, visible emissions from unpaved haul or access roads must remain below 20% opacity. Additionally, Rule 310 sets silt loading and silt content levels that must never be exceeded. These levels are:

- Silt loading cannot equal or exceed 0.33 oz/ft^2.
- If silt loading is equal to or exceeds 0.33 oz/ft^2, then the silt content may not exceed 6%.

Under limited conditions, unpaved haul and access roads do not need to meet the silt loading and silt content limits set by Rule 310. These limited conditions are:

- If the dust control plan contains a description of how vehicle speeds will be restricted and a discussion on the number of vehicle trips and the type of vehicles making those trips; and
- Vehicle trips are limited to no more than 20 per day; and
- Vehicle speeds are maintained below 15 miles per hour (mph).
- Control measures for unpaved haul/access roads are required. One of the following options must be implemented:
    - Apply water so the surface is visibly moist.
    - Pave the road.
    - Apply and maintain gravel, recycled asphalt, or other suitable materials.
    - Apply and maintain a suitable dust suppressant other than water.
    - Limit vehicle trips and speeds. If you select this option be aware:
        - Vehicle trips must be limited to no more than 20 per day, and
        - Vehicle speeds must be maintained below 15 mph.
        - If vehicle trips and speeds are limited, the dust control plan must provide details of how these measures will be accomplished, including the identification of how many trips are allowed.

Helpful Hints

- If you choose the option of no more than 20 trips per day, always keep in mind that a trip to the site with one vehicle and off the site with one vehicle counts as two trips. (10 vehicles in and 10 vehicles out represent 20 trips).
- Once a project area meets a certain size, the number of trips becomes more difficult to control.
- Different control measures may be selected for different areas, provided they are clearly identified in the dust control plan.

- Remember, dust emissions cannot exceed 20% opacity, regardless of speed.
- Things to watch for on haul and access roads:
    - Vehicle speeds
    - Road stabilization
    - Visible emissions

Unpaved Roads

An unpaved road is any road, including an "equipment path", used by motorized vehicles. An unpaved road is different from an unpaved haul/access road only by its designated use.

While an unpaved road is, by definition, different from an unpaved haul/access road, control and stabilization of the disturbed area is still expected.

At a minimum, visible emissions from an unpaved access road cannot exceed 20% opacity. The road surface must be kept visibly moist or a crust must be maintained on the surface.

Helpful Hints

- If you choose to limit speeds, the method used must be explained with specificity in the dust control plan.
- Keep in mind that, in addition to limiting vehicle speed, visible emissions from vehicles must not exceed 20% opacity.
- The length of an unpaved access road can be very short. For example, a driveway located on a nearly completed lot can be considered an access road.

Trackout Control Devices

A trackout control device is required at work sites with two or more acres of disturbed surface area or when hauling 100 yd^3 or more of bulk materials on site or off site per day regardless of the amount of disturbed surface area on the site.

Several options are available for trackout control devices. At least one of the following controls must be in-place at all exits onto paved areas accessible to the public:

- Gravel Pad: A layer of washed gravel, rock, or crushed rock, at least one inch in diameter. The gravel pad must be 30 feet wide and the greater of 50 feet long and the length of the largest haul truck on site. If the unpaved surface exit does not have an adequate width to install a 30 foot wide gravel pad, then the width of the gravel pad must cover the full width of the exit and be adequate to prevent trackout.
- Grizzly: A device used to dislodge mud, dirt, and/or debris from the tires and undercarriage of vehicles prior to leaving the project site. A grizzly must contain raised dividers a minimum of three inches tall, six inches apart, and 20 feet long.
- Paved Area: Pavement starting from the point of intersection of the site's exit and the paved area accessible to the public. The pavement must extend a centerline distance of at least 100 feet with a width of at least 20 feet.

Helpful Hints

Keep a stockpile of replacement gravel near your trackout control device and use it to refresh the gravel pad when it becomes clogged with mud.

Hauling Bulk Materials

The use of haul trucks to move bulk materials from or within a site is regulated. A haul truck can be any number of different types of vehicles (e.g., a small pick-up, a flatbed truck, an 18-wheeler, a paddle-wheel scraper, a front-end loader, or a trailer towed by a motor vehicle). The purpose for which the vehicle is used is the determining factor, not the inherent nature or size of the vehicle.

Moving Bulk Materials

If bulk materials are being moved out of an area covered by a dust control permit and onto a paved area accessible to the public, a trackout control device must be installed; there is no lower acreage limit that applies when off-site hauling bulk materials. In addition, the following requirements apply:

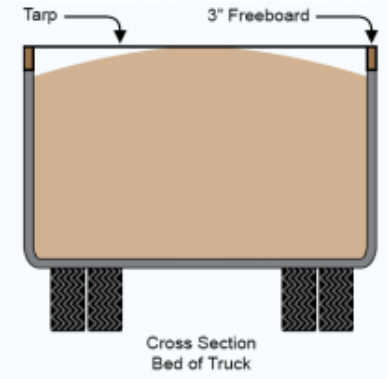
- The truck's load must be covered by a tarp.
- The freeboard must be three inches or more.
- The highest point of the load cannot exceed the height of the truck's container.
- There can be no spillage through holes or seams in the container area.
- Even when the truck is not carrying a load, the exiting haul truck must have a clean cargo bed or must be tarped or otherwise covered/enclosed.

If bulk materials are moved within an area covered by a dust control permit but do not cross a paved area accessible to the public, the following requirements apply:

- The speed of an on-site haul truck cannot exceed 15 mph; or
- Water must be applied to the top of the load; or
- The load must be covered.

If bulk materials are moved within an area covered by a dust control permit and a paved area accessible to the public is used for a short distance to travel from one portion of a permitted area to another, the load must be tarped.

Haul Truck Load Cross Section: Proper Loading



Be aware that spillage and visible emissions from a tarped load while driving on a highway constitute instances of non-compliance.

Using any portion of an area accessible to the public (other than simply crossing the road) will require the load to be tarped. There is no minimum threshold distance to travel.

Storage Piles, Bulk Material Stacking, Loading, and Unloading

Open Storage Piles

Bulk materials encompass a wide array of materials including earth, rock, sand, gravel, soil, aggregate less than two inches in length or diameter, and demolition debris among many others. When handled, bulk materials are capable of producing fugitive dust emissions. Prior to and while conducting loading, unloading, and excavating operations, spray material with water or other dust suppressant as necessary to comply with the 20% opacity standard.

The establishment of cottonseed stockpiles is not considered a dust-generating operation.

Definitions

Open Storage Pile: Any pile of bulk material with silt content of 5% or more, with a surface area greater than or equal to 150 ft^2 and reaching a height of three feet (at any point). An open storage pile is presumed to have a silt content of 5% or more; however, a permit holder has the option to show that the silt content is less than 5% using ASTM C136-06.

Permanent Areas of a Facility: Areas that remain in place for 180 days or more in 12 consecutive months (e.g., exits, office areas, and warehouses)

Managing Open Storage Piles

After an open storage pile has been created, when material is not being added or removed, use one of the following control measures:

- Apply sufficient water to maintain 1.5% soil moisture or to maintain a soil crust. Soil moisture content is to be maintained at a minimum of 12%.

- Locate the storage pile in a pit.
- Arrange storage piles so that larger diameter products are on the perimeter and act as barriers for piles that could create fugitive dust emissions.
- Construct and maintain wind barriers, storage silos, or a three-sided enclosure.
- Cover the storage pile with a tarp or similar material and ensure that the tarp or other material is sufficiently affixed to prevent its being dislodged by wind.

Prior to stacking, loading, and unloading: Mix the material with water or mix with a dust suppressant other than water.

While stacking, loading, and unloading: Apply water or apply a dust suppressant other than water.

Helpful Hint

Open storage piles are challenging to manage. Extra care needs to be taken to ensure that piles are in compliance.

Weed Abatement

Where vacant land is being disced, scraped, or bladed to control weeds, control measures must be applied. These include:

- Before and during the activity, water or a dust suppressant must be applied.

After weed abatement is completed, the area that has been disced, scraped, or bladed must be stabilized in one of the following ways:

- Apply water.
- Apply a dust suppressant other than water.
- Establish vegetative ground cover.
- Apply gravel.
- Pave the area.

Helpful Hint

If a regulated weed abatement activity is occurring on an area 0.1 acre (4,356 ft^2) or more, a dust control permit is required.

SECTION 11: PERMIT ADMINISTRATION

MCAQD has a Dust and Miscellaneous Portal for the following dust control permit modifications and revisions:

- Dust Control Plan Change
- Dust Permit Acreage Increase Request

- Dust Permit Cancellation Request
- Dust Permit Parcel Change Notification

Dust control permit modifications and revisions are required for any one of the following circumstances:

- **Changing property ownership** (e.g., when a portion of a property covered by a permit is being sold or a lease allowing access by the permit holder is being terminated). Since the permit holder will no longer have the legal right to be on the property, a Dust Permit Parcel Change Notification must be submitted through the Dust and Miscellaneous Portal.
    - Ensure the area to be removed from permit coverage is stabilized. This step is critical - a property owner will not want to assume the liability for an area disturbed by a permit holder unless it meets not only MCAQD's rules, but also any contractual obligations that were made between the parties.
    - Remember, if a project is reduced to under five acres, a project information sign is still required.
- **Changing an address or an element of the dust control plan**. A Dust Control Plan Change must be submitted through the Dust and Miscellaneous Portal.
- **Increasing permit acreage**. A Dust Permit Acreage Increase Request must be submitted through the Dust and Miscellaneous Portal. A new site drawing showing the increased site area must be submitted as well as the appropriate fee corresponding to the additional acreage amount. When the Dust Permit Acreage Increase Request is approved, the original dust control permit expiration date will not change; it will remain the same.
    - Sites that increase to one acre or more may require modifications to the originally submitted dust control plan.
    - Sites that increase to five acres or more require a project information sign.
    - If a Dust Permit Acreage Increase Request is being submitted in response to the permit holder having received a Notice of Violation, then an additional $100 late fee must be submitted with the request, in addition to the fee associated with the Dust Permit Acreage Increase Request.

Helpful Hint

Uncertain about what to do in this or a similar situation? Call the Business Assistance Unit at 602-506-5102.

Permit Renewal

A dust control permit is not "renewed". A dust control permit is valid for a one-year period. If the dust-generating operation continues beyond one year, a dust control permit application must be submitted at least 14 days prior to the expiration of the permit. A dust control permit that expires while a dust control permit application is pending will be subject to immediate enforcement for operating without a permit.

Apply for a new permit at least 14 calendar days prior to expiration. The Dust and Miscellaneous Portal allows you to copy most of the existing permit information into the dust control permit application. Keep in mind:

- A new dust control plan must be submitted with the new permit application.
- Once your dust control permit application is approved, you will receive a new dust control permit with a new dust control permit number. However, the facility ID will remain the same for all dust control permits issued for all work done at the project location.
- The project information sign should be updated with the facility ID in place of a permit number.

SECTION 12: INSPECTIONS

Compliance Warning Signs

- Trackout on paved areas or areas accessible to the public
- Visible emissions of dust
- A messy jobsite
- Disorganized traffic patterns
- Lack of an obvious source of water
- Ongoing hauling operations
- Lack of a project information sign or a sign that is missing required information
- Trucks entering or exiting a site that are either overloaded or are not tarped

All projects covered by a dust control permit are expected to be fully compliant with Rule 310 at all times. While all inspectors are assigned to conduct specific inspections, they may, in the course of their duties, observe locations that exhibit "tell-tale" signs (e.g., the presence of trackout or visible emissions), that suggest not only that an inspection is needed, but that the site may not be in compliance.

Paying attention to indicators of potential non-compliance are important. Identifying problems and correcting them is key to avoiding instances of non-compliance.

Helpful Hints

- Be available immediately after an inspector has completed the inspection to receive a verbal inspection report. You may be able to clarify the inspector's observations and gain useful information.
- After an inspection report documenting an instance(s) of non-compliance has been issued, an inspector will conduct a "disposition inspection" to ensure that the instance of non-compliance has been corrected. This will often take place the day after the initial observation of the instance of non-compliance.

Inspection Rights

As a prelude to an inspection, the inspector will present a copy of your inspection rights and ask that

the facility representative sign the document acknowledging that they were informed of their rights.

A permit holder who receives a violation may request an independent and objective case review by the Business Assistance Unit. This opportunity is described in the notice of inspection rights.

Inspection Rights Form

Maricopa County Air Quality Department (MCAQD) is conducting this inspection pursuant to Arizona Revised Statutes (A.R.S.) § 49-473, § 49-474, § 49-488, and/or the inspection and entry provisions in an Air Quality Permit or conditional order. There are no direct fees for this inspection.

I understand the following:

1. The MCAQD representative(s) identified above was/were present at the regulated site, on the indicated date and time. Upon entry to the premises, the MCAQD representative(s) met with me, presented photo identification indicating that they are a MCAQD employee and explained that the purpose of this inspection is:
    - To determine compliance with A.R.S. Title 49, Chapter 3, Article 3 and/or Maricopa County Air Pollution Control Regulations.
    - To determine compliance with an Air Quality Permit issued pursuant to A.R.S. § 49-480, and Maricopa County Air Pollution Control Regulation I, Rule 100, Section 105.
    - To determine compliance with an administrative or judicial order issued pursuant to A.R.S. § 49-491, § 49-511, and/or § 49-512.
2. I may accompany MCAQD representative(s) on the premises, except during confidential interviews.
3. Each person interviewed during the inspection will be informed that their statements may be included in the inspection report.
    - Participation in an interview is voluntary, unless the person is legally compelled to participate.
    - A person is allowed 24 hours to review and revise a written statement that is drafted by the inspector and requires the person's signature.
    - An agency inspector may not prohibit the regulated person from having an attorney or other experts in their field present during the interview to represent or advise the regulated person.
4. The inspector may not take any adverse action, treat a person less favorably, or draw any inference based on the regulated person's decision to be represented by an attorney or be advised by any other experts in the field.
5. Any trade secrets and proprietary or confidential information, identified by the regulated source as such (must be submitted to MCAQD in writing), contained in the documents provided to the inspector may be redacted before becoming public information.
6. Each person whose conversation will be tape-recorded during the inspection will be informed that the conversation is being tape-recorded.
7. I have the right to copies of any original document(s) taken during the inspection, and MCAQD will provide copies of those documents at MCAQD's expense.
8. Potential civil actions for violations cited as a result of this inspection are not subject to an applicable statute of limitation.
9. I have the right to request copies of any documents that will be relied upon to determine compliance with licensure or regulatory requirements, if the agency is permitted by law to

release such documents. Instructions for requesting records are available at Maricopa.gov/4214.

10. I have a right to a split of any sample(s) taken during the inspection, if the split of the sample(s) would not prohibit an analysis from being conducted or render an analysis inconclusive.
11. I have the right to copies of any analysis performed on sample(s) taken during the inspection and MCAQD will provide copies of this analysis at MCAQD's expense.
12. If an administrative order is issued or a permit decision is made based on the results of the inspection, I have the right to appeal that administrative order or permit decision. My administrative hearing rights are set forth in A.R.S. § 49-482, § 49-498 et seq. and Maricopa County Air Pollution Control Regulation IV, Rule 400. If I have any questions concerning my rights to appeal an administrative order or permit decision, I may contact MCAQD's Permitting Division Manager at 602-506-1842.
13. The issuance of an opportunity to correct or a notice of violation is not appealable. If I have any questions or concerns about this inspection, or I wish to dispute the inspection findings, I may contact MCAQD's Business Assistance Unit at 602-506-5102.
14. If a notice of violation is issued, I may review the enforcement summary report at Maricopa.gov/2427.
15. Audit reports may be subject to privilege under A.R.S. § 49-1402. MCAQD may refuse to accept reports for which privilege is claimed.
16. My feedback is essential in helping MCAQD achieve outstanding customer service. Please take a moment to complete a Feedback Form located at Maricopa.gov/1244 under "Customer Service Feedback."
17. While I have the right to decline to sign this form, the MCAQD representative(s) may still proceed with the inspection/investigation.

Helpful Hint

While inspectors may offer constructive operational suggestions, you should confer with your technical staff or consultant to determine your actions.

Once an Inspection Begins, What Do Inspectors Look For?

When an inspector arrives, there are several areas that will be inspected and reviewed. The list below highlights key points that an inspector will be reviewing.

A Permit

Is the dust control permit on site and accessible? Has it expired?

Completed Records

Records should be clear and meet the basic requirements. Are copies of all training certificates on site?

The Approved Dust Control Plan

Is the dust control plan on site? Are the control measure commitments being followed?

Whether a Dust Control Coordinator is On Site

Based on the size of your project, a Dust Control Coordinator may be required to be on site during primary dust-generating activities; however, if the only activity for the day is house painting and no one is disturbing soil, the Dust Control Coordinator may not be required that day.

Water

Be able to document that water is being used in sufficient quantities to meet operational requirements.

Impacts on Sensitive Groups

Is a hospital, school, or long-term care facility nearby? Is there the potential for vulnerable populations to be exposed to dust from disturbed areas?

Subcontractors

In circumstances where a site representative believes that a subcontractor is directly responsible for conditions that may result in an instance of non-compliance, the site representative may request that the inspector confer with the subcontractor to determine whether the subcontractor should be cited for the instance of non-compliance.

Helpful Hint

Make someone in your organization accountable for the environmental program. One person allows focus, creates consistency, improves compliance, and reduces costs. This person should be able to give direction, arrange and track training, and record subcontractor registrations.

Site Conditions

- Is there any visible trackout?
- Does trackout extend beyond 25 feet in cumulative distance? Is someone engaged in cleaning-up trackout?
- Have disturbed areas been adequately stabilized?
- Are contingency control measures listed in the dust control plan being used? The dust control plan is an enforceable document. If commitments and/or procedures contained within the dust control plan are not being met, an instance of non-compliance may be determined.
- If required, does signage contain the required elements?

Courtesy Site Visits

- The intent of a courtesy site visit is principally educational and is encouraged to be scheduled early in the term of a permit.
- By taking advantage of a courtesy site visit, it is easier to plan ahead to ensure that activities will be in compliance.
- Courtesy site visits can be requested for any distinct phase of a project (e.g., demolition, land

development, and vertical construction).

- A request for a courtesy site visit should be arranged with a minimum one-week notice provided to the Business Assistance Unit.
- During a courtesy site visit, if instances of non-compliance are observed, the site representative is urged to make corrections or adjustments to their practices in order to achieve compliance with Rule 310.

Helpful Hint

To arrange a courtesy site visit, call the Business Assistance Unit at 602-506-5102.

SECTION 13: ENFORCEMENT

- If a site is determined to be in non-compliance, the inspector will email the preliminary findings to the responsible party within two business days/working days of the inspection.
- All inspections findings are reported to the Compliance and Enforcement Division.
- The Compliance and Enforcement Division reviews all inspection findings and documentation.
- If the findings warrant the issuance of a violation, the Compliance and Enforcement Division will issue an opportunity to correct (OTC) or a notice of violation (NOV).
- When an NOV is issued, a penalty matrix will be used to determine any fines to accompany the violation.
- Factors in the penalty matrix include severity of the violation, time to correct the violation, and proximity to sensitive groups.
- OTCs are not issued with a monetary penalty, so long as the violation is corrected within the time frame provided.
- Inspection findings and the issuance of a violation can be disputed by contacting the Business Assistance Unit.
- A Business Assistance Specialist will review all inspection findings and consult with the inspector and the responsible parties. The responsible parties will be notified in writing of the enforcement case review results.
- The responsible party may request a hearing before an administrative law judge to dispute the inspection findings for a proposed order of abatement by consent (OAC) within one of the following two time frames: (1) within 10 business days/working days after receipt of the Business Assistance Unit letter of final decision or recommendation or (2) within 10 business days/working days after receipt of a final offer to settle letter.
- Within 30 business days/working days of the date of issuance of an order of abatement, the responsible party may request a hearing for review by the Air Pollution Control Hearing Board. For details regarding the Air Pollution Control Hearing Board, see Maricopa County Air Pollution Control Regulations Rule 400 (Procedure before the Hearing Board).
- When the responsible party requests a hearing before the Air Pollution Control Hearing Board, the hearing administrator is responsible for scheduling and publicizing the hearing according to A.R.S. §§ 49-490 and 49-498.

SECTION 14: TEST METHODS

Test methods are identified in Maricopa County Air Pollution Control Regulations Appendix C. This section provides information on these methods.

Determining the Presence of Visible Emissions Crossing a Property Line

EPA Reference Method 22

Visible emissions of dust (not requiring opacity measurements) are determined using EPA Reference Method 22. A certified observer is not required. In this method, emissions may not exceed 30 seconds in duration during any six-minute period. The 30-second provision is cumulative, meaning that emissions may be observed in discrete segments that are shorter than 30 seconds and which are then added together. If the combined total of observed emissions exceeds 30 seconds when collected during a six-minute period, non-compliance has been observed.

Determining Opacity of Fugitive Emissions

Appendix C, Sections 2, 3, and 4

Opacity emissions of dust are determined using Appendix C, Sections 3 and 4. Observations made using Appendix C require the observer to be certified and to use very specific protocols to determine opacity values.

There are several distinct protocols for determining opacity based on the type of operation:

- Non-continuous dust plumes include, but are not limited to, plumes generated by bulk material loading/unloading, non-conveyorized screening, or trenching with backhoes. This method averages 12 observations taken at zero and five seconds for each event over a period not longer than one hour. As a practical matter, the 12 observations will most likely be completed over the period of a few minutes.
- Continuous dust plumes, include, but are not limited to, plumes resulting from grading, trenching, blading, clearing, leveling, and raking. This method consists of the average of 12 observations with each observation taken at intervals of ten seconds.
- For unpaved roads and unpaved parking lots, two observations per vehicle at one-meter plume height. This method averages 12 observations taken at zero and five seconds over a period not longer than one hour.
- Livestock activities (including corrals, pens, and arenas). This method uses momentary observations of plumes one meter above the ground and taken at 15 second intervals. Thirteen readings above 20% opacity represent a violation.

Determining Stabilization

Soil Crust Determination (The Drop Ball Test)

A simple test to determine if a soil crust is present is known as the drop ball test. A relatively small (15.9 millimeters (mm)) steel ball weighing between 0.56 and 0.6 ounces is dropped onto a one-foot

square area from a distance of one foot above the surface. The ball is dropped three times within this one-foot square area.

If the observation of the dropped ball passes the test criteria two out of each three times the ball is dropped, the area is considered to have passed the test. The criteria for passing are: (1) the dropped ball must not sink into the surface such that it is partially or fully surrounded by loose grains of soil and (2) when the ball is removed, the surface upon which it fell must not be pulverized so that loose grains of soil are visible.

Does a failed drop ball test apply to the whole project?
Yes. Each sample area selected at random by an inspector is considered to be representative of the soil type in the disturbed area in its entirety.

Helpful Hints

- The best test method is no test method! If a project site is visibly moist throughout, then an inspector knows immediately that any test method will pass, and therefore a test method is not needed.
- As a practical matter, the first test is a visual test.

ASTM 02216 - 05 Standard Test Methods for Laboratory Determination of Water (Moisture) Content of Soil and Rock by Mass

Determining soil moisture (12% as required in Rule 310) requires the use of a specific test procedure that is done using an oven under laboratory conditions. This method requires several hours for proper drying of the sample. A synopsis of the test method is provided on the ASTM website and the full test method is available through ASTM at astm.org/Standards/D2216.htm.

Determining Silt Content Using ASTM Method C136-06

Silt content is determined using ASTM Method C136-06-Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates. The test is used to determine the compliance status of the resulting particle size distribution. Details on the sample analysis procedure can be found at astm.org/Standards/C136.htm.

Determining Silt Loading

Silt loading is determined using ASTM Method C136-06–Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates. The test is used to determine the compliance status of the resulting particle size distribution. Details on the sample analysis procedure can be found at astm.org/Standards/C136.htm. The main difference between silt loading and silt content is a mathematical factor.

Threshold Friction Velocity

Threshold Friction Velocity (TFV) is defined as the wind velocity necessary to initiate soil erosion. A test can be readily performed in the field by an inspector to determine whether soil conditions are susceptible to dust entrainment. The TFV value is specified in Rule 310. Soils that do not meet this

value are not stable and a condition of non-compliance exists.

By passing a soil sample through a series of sieves, a distribution of particle sizes in a soil sample can be determined. This distribution is then compared to a table contained in the test methodology that allows the determination of a TFV value. The standard contained in Rule 310 is to maintain soil conditions such that the TFV value is 100 cm/sec or greater.

The details of this procedure are available for review at Maricopa.gov/DocumentCenter/View/5306.

Threshold Friction Velocity with Rock Test Method

The Rock Test Method examines the wind resistance effects of rocks and other non-erodible elements on disturbed surfaces. Non-erodible elements are objects larger than one centimeter in diameter that remain firmly in place, even on windy days. Typically, this includes rocks, stones, glass fragments, and hard-packed clumps of soil lying on or embedded in the surface. Vegetation does not count as a non-erodible element in this method. The purpose of this test is to estimate the percent cover of non-erodible elements on a given surface to determine whether they take up enough space to offer protection to diminish the wind's ability to entrain dust. For details on this test visit Maricopa.gov/DocumentCenter/View/5306.

APPENDIX A: MORE HELPFUL HINTS

- Have all site supervisors read and initial the approved dust control plan.
- Review the approved dust control plan with subcontractors.
- Keep the job site organized and presentable.
- Prominently post site rules for dust control.
- Restrict access to non-active areas.
- Establish subcontractor expectations.
- Conduct frequent dust control tailgate meetings.
- To better control trackout, monitor exits at least every 30 minutes.
- Maintain records that provide a clear understanding of site operations. Recordkeeping should be conducted in tandem with site operations and be used to help trigger corrective action (e.g., an observation of trackout greater than 25 feet should be accompanied by notations of immediate action taken to control trackout).

- Be aware of sensitive areas that surround your site. Anticipate complaints and inspections to investigate those complaints.
- Restrict exits with fencing.
- Park only in designated areas that are identified in the dust control plan or, at minimum, in areas that are posted.
- If you are hauling off site, ask the permit holder to spray water over your load before tarping to ensure that dust emissions while driving are eliminated.

APPENDIX B: RESOURCES

Applicable Rules – Maricopa.gov/1951/Adopted-Rules

Block Permit Application Tutorial – Maricopa.gov/DocumentCenter/View/63471

Courtesy Site Visits – Call 602-506-5102 or contact AQBusinessAssistance@maricopa.gov

Daily Recordkeeping Log
Blank – Maricopa.gov/DocumentCenter/View/7567
Sample – Maricopa.gov/DocumentCenter/View/7568

Desk Duty Supervisor – Call 602-506-6734

Dust Abatement Field Guide
English – Maricopa.gov/DocumentCenter/View/29724
Spanish – Maricopa.gov/DocumentCenter/View/29723

Dust Control Forms, Instructions, Information, and Samples – Maricopa.gov/5560

Dust Control Permit Application Form/Guidance – Maricopa.gov/1818/Permits-Forms-and-Applications

Dust Control Resources – Maricopa.gov/1814

Dust Permit Application via Dust and Miscellaneous Portal – Maricopa.gov/5560

Dust Sources, Control, and Training – Maricopa.gov/1913

Employee List of Training Certification
Blank – maricopa.gov/DocumentCenter/View/7569
Sample – maricopa.gov/DocumentCenter/View/7570

Maricopa County Air Quality Department Website – Maricopa.gov/aq
- Location, Hours, and Other Contact Information
- Public Records Request

- Web Contact Form

Report a Violation – Call 602-372-2703 or visit Maricopa.gov/2132

Resources for the Regulated Community – Maricopa.gov/3571

Rule 310 Dust Control Permit Help Sheet – Maricopa.gov/DocumentCenter/View/41942

Subcontractor Registration Information – Maricopa.gov/1823

Training – Maricopa.gov/1822 or Mcaqd.learningcart.com