



Maricopa County

Air Quality Department

DUST CONTROL PERMIT APPLICATION PACKAGE

This package contains information and forms necessary to apply for a Dust Control permit as set forth in Maricopa County Air Pollution Control Regulations Rule 310. The Dust Control Permit Application Package is organized into three major parts.

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In order to be accepted for review the Dust Control Permit Application Package must be complete. This includes answering all questions fully and accurately in the Applicant and Project information areas as well as submitting a Dust Control Plan. You may fill out Part 3 of the Dust Control Permit Application and submit it as your Dust Control Plan or you may write your own Dust Control Plan that conforms to Rule 310, Section 402.

Keep in mind, the Maricopa County Air Quality Department uses these instructions as criteria when reviewing, evaluating, and approving the Dust Control Permit Application. The rules identified in this instruction document contain legally binding and enforceable requirements. Permits issued by the Maricopa County Air Quality Department under the rules also contain legally binding and enforceable conditions and terms. This Instructions document does not supersede or change any existing federal, state, or county regulations and laws, including requirements of an approved State Implementation Plan (SIP). This Instructions document in and of itself does not impose legally binding requirements on Maricopa County or the regulated community.

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IMPORTANT RULE CHANGES EFFECTIVE MARCH 2008

Maricopa County Air Pollution Control Regulations Rule 310 "Fugitive Dust from Dust-Generating Operations" introduced requirements in early 2008 that you should be aware of including the following:

1. Dust Control Coordinator

A Dust Control Coordinator is required for any site of five or more acres of disturbed surface area that is subject to a Maricopa County dust control permit (Rule 310, Section 310). The Dust Control Permit Application requests the contact information for the Dust Control Coordinator in Part 2.1 – Applicant Information, Question #5.

2. Basic and Comprehensive Dust Control Training

The Dust Control Coordinator is required to complete a Comprehensive Dust Control Training Class at least once every three years. Site superintendents (if working on a site of more than one acre), water truck drivers, and water pull drivers must complete a Basic Dust Control Training Class. More information on these training classes can be found by calling the Training Line at 602-372-1467 or on the MCAQD's Dust Compliance Division web site at: www.maricopa.gov/aq/divisions/compliance/dust/dust_control_training.

3. Subcontractor Registration

While not actually included in the Dust Control Permit Application be aware and inform your subcontractors that a requirement of Rule 200 (Permit Requirements) is Subcontractor Registration. Subcontractors engaged in dust-generating operations at a site that is subject to a Maricopa County dust control permit are required to register with MCAQD (Rule 200, Section 306) and pay an annual fee as specified in Rule 280, Section 312. The subcontractor shall have the registration number readily accessible on-site while conducting any dust-generating operations and the registration number must be visible and readable by the public without having to be asked by the public. The registration and \$50.00 fee can be submitted by mail or in person at the One Stop Shop, 501 N. 44th Street, Suite 200, Phoenix, AZ 85008. Additional information on Subcontractor Registration requirements, submittal and current fees can be found at <http://www.maricopa.gov/aq/divisions/compliance/dust/subcontractorRegistration.aspx>.

FREQUENTLY ASKED QUESTIONS (FAQs)

1. Do I need a Dust Control Permit?

- A. Activity: Whenever a dust-generating activity will disturb more than 1/10th acre (4,356 square feet) you must obtain a dust control permit before commencing the activity. This area of disturbance includes all areas under common control such as stockpiles, storage and equipment yards as well as the area being disturbed, even if they may be separated by public or private roadways. (Rule 310, Section 302)
- B. Re-application: Dust Control permits are active for one year from the date of approval. If the project still has a disturbed surface area of more than 0.10 acre (4,356 square feet) at that time a new permit will need to be obtained by submitting a new Dust Control Application. The re-application process can take up to 14 business days so the Application must be submitted at least 14 business days before the existing Dust Control permit expires.

2. How do I apply? What are the steps?

- A. Obtain Dust Control Permit Application Package: You can either pick-up the application package in person at the Maricopa County Air Quality Department (MCAQD) Dust Control Division offices at 1001 North Central Avenue, Suite 400 in Phoenix, Arizona or download it from their website at www.maricopa.gov/eq.
- B. Review the Instructions: Read the Instructions thoroughly before beginning work on the Application. The Instructions are intended to accompany the Application, which follows the Instructions document, and give direction during the application process. The Instructions constitute a body of experience and informed judgment by the Maricopa County Air Quality Department and dust control field inspectors to which you may properly resort for guidance, including details and explanations of the information required in the Application. If you still have questions about the Application you may find answers on the MCAQD website or by calling the Dust Control Division at 602-506-6010.
- C. Complete the Permit Application Form: Fully complete both the Applicant and the Project Information portions of the Application, generally in the sequence it is written, using the Instructions and Dust Control personnel for assistance.
- D. Complete the Dust Control Plan: A dust control plan is required and the third part of the package is designed to guide project personnel in developing a dust control plan that will be posted on-site, and the project will abide by on a day to day basis. Every category or sub-category must be completed, including an explanation for those that are designated non-applicable. A project may develop its own dust control plan as long as it conforms to Rule 310, Section 402.
- E. Review the Completeness Checklist (see the first page of the Dust Control Permit Application Form, p. 23)
- F. Submit the application, including the appropriate fee, to the MCAQD at the 501 North 44th Street, Suite 200, One Stop Shop location referenced on the first page of the Application (p. 23). Allow up to 14 business days for permit processing plus four day delivery by U.S. Postal Service First Class mail.

3. What will it cost?

Detailed information on current fees can be found in the Maricopa County Air Pollution Control Regulations Rule 280 – Fees or on the Department's web site: http://www.maricopa.gov/eq/divisions/permit_engineering/permit_fees.aspx.

Basic fees for a Dust Control Permit (permit valid for one year) are calculated according to the following:

- If total surface area disturbed is 0.1 acre to less than 1 acre, submit \$350.00.
- If total surface area disturbed is 1 acre or more, submit \$350.00 per site plus \$77.00/acre (to a maximum of \$15,750).
- A late fee of \$100.00 is required for any application submitted in response to a violation.

DUST CONTROL PERMIT APPLICATION

PART 1. INSTRUCTIONS

PART 1.1 INSTRUCTIONS FOR COMPLETING PART 2 – DUST CONTROL PERMIT APPLICATION

PART 1.1.1 APPLICANT INFORMATION (PART 2.1) INSTRUCTIONS

Completed Permit Processing

When submitting the completed application to the One Stop Shop at 501 North 44th Street, include the appropriate fee for your Dust Control Permit Application, according to the Maricopa County Air Quality Department web site www.maricopa.gov/airquality or the Maricopa County Air Pollution Control Regulations Rule 280 – Fees.

Make checks payable to “Maricopa County Air Quality Department” or “MCAQD”.

The completed permit will be sent to the Applicant’s address. Allow 14 business days for permit processing plus four day delivery by U.S. Postal Service First Class mail.

1. Applicant

Please note that if you are completing this application and you are the “Applicant”, then you are the responsible authority for controlling all aspects of all the work accomplished on-site from initial groundbreaking to final stabilization. This includes canceling the Dust Control Permit when the project is complete and/or when you no longer have control over the day-to-day operations on the site.

The Applicant’s name will show on the permit and will not change on re-applications or changes to the permit that retain the original permit number. The Applicant may or may not also be the party contracting to do the work at the site. The address provided will be put on all subsequent permits with the same Applicant name and will serve as the mailing address for the permit or other compliance issues. The Applicant will be the responsible party for the purposes of this project.

The Maricopa County Air Quality Department requires Part 2.1 – Applicant Information to be fully and accurately completed, including full legal names of all entities and individuals (no DBA’s or trade names). For all Applicants, appropriate registration in the State of Arizona will be verified with the Arizona Corporation Commission or other applicable resources before a permit will be issued.

2. Parent Company if Applicant is a wholly owned subsidiary

If the Applicant is a wholly owned subsidiary provide full information for the parent company as well. If the parent company has a local or regional presence use that location providing contact information for the highest ranking official at that location.

3. Applicant President / Owner

Provide contact information for the highest ranking, local or regional when possible, company official of the Applicant.

4. Property Owner / Developer, if not Applicant

Include information regarding the property owner/developer, if different from the Applicant.

5. Dust Control Coordinator

Any site with five acres or more of disturbed surface area subject to a permit issued by the Control Officer requiring control of PM₁₀ emissions from dust-generating operations requires a designated Dust Control Coordinator per Rule 310, Section 310. The Dust Control Coordinator is required in Rule 310, Section 309.2 to complete a Comprehensive Dust Control Training Class at least once every three years, after which a unique identification badge will be issued to the coordinator and is to be referenced here in the application.

6. Primary Project Contact

Include information regarding the person knowledgeable of the project site. The phone number(s) provided should be able to reach the contact within 4 hours.

7. Certification by a Responsible Official of the Applicant

A Responsible Official of the Applicant is the person who will be contacted or named in any enforcement action initiated by the Maricopa County Air Quality Department or the Maricopa County Attorney’s Office. Pursuant to Rule 310, Section 401.3, the signature on the Dust Control permit application shall constitute agreement to accept responsibility for meeting the conditions of the Dust Control permit and for ensuring that control measures are implemented throughout the project site and during the duration of the project.

- For a corporation, a corporate officer or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person, if the representative is responsible for the dust-generating operations in the subject application. Delegation of authority to such representative shall be approved in advance by the Maricopa County Air Quality Department, Dust Control Program.
- For a partnership or sole proprietorship, a general partner or the proprietor, respectively.
- For a municipality, state, federal, or other public agency, the principle executive officer or ranking elected official of that entity. Delegation of signature authority needs to be submitted in writing to the Maricopa County Air Quality Department, Dust Control Program.

8. Application Completed By, If Not Signatory

Frequently, this person needs to be contacted to clarify information in the application or if there are questions regarding how the Dust Control Plan was filled out.

PART 1.1.2 PROJECT INFORMATION (PART 2.2) INSTRUCTIONS

9. Name of Project

Name, if any, by which this project will be referred (e.g. Pleasant Hill Acres).

10. Project Location

Provide the best available information for the project's geographic location. If there is an on-site construction office or similar physical contact point this should be referenced. If no specific street address is available, provide a block number and street name, Maricopa County Assessor's parcel number, master plan community number, geographic coordinates or any other pertinent location information or description.

11. Project Location by Township (N or S), Range (E or W), Section (1-36)

The map code or grid location in Township / Range / Section (TRS) format is required and can be obtained from a Phoenix Metropolitan map book or from the Maricopa County Assessor's parcel description.

The TRS system is based on a rectangular or grid survey system that provides for townships that are approximately six miles square and further divided into sections that are each approximately one mile square and contain 640 acres. The 36 sections in a township are numbered consecutively beginning in the northeast corner, moving west until the sixth section is reached. The seventh section begins south of the sixth and proceeds east until section 12 where the third row of sections begins south of the second, reversing the numbers again from east to west. See illustration below. Within a section, land is referred to by half and quarter sections which are read from the smallest to the largest division.

Example of Sections

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

Townships are numbered latitudinally north and south from a baseline and ranges are numbered meridionally east and west with respect to a principal meridian. In the Phoenix Metropolitan area the Gila and Salt River Base Line runs east-west generally along what is called Baseline Road while the Gila and Salt River Principal Meridian runs north-south along 115th Avenue.

As an example, T4N, R2E, S15 (read as "Township 4 North, Range 2 East, Section 15") is an area bordered by 35th Avenue to the east, 43rd Avenue to the west, Deer Valley Road to the south and Pinnacle Peak Road to the north. It can be found in the Maricopa County Assessors Book 206 and includes Maps 3, 6, 20, 21, and 40.

12. Brief Project Description

Describe the project that will be taking place on the site (e.g. 3-building commercial complex; custom home; weed control; demolition of two buildings; roadway improvement).

13. Will a basement or underground parking be excavated?

This information influences the volume of dust generating material that will be disturbed, moved, stored, and removed from the project location.

14. Will building occur on a pre-existing / prepared pad?

A pre-existing pad/prepared pad is considered to be on a parcel within an existing/prepared subdivision.

15. Size of Project

The size of the project is the total area that will be disturbed throughout the duration of the Permit. Include all unpaved staging and parking areas, as well as stockpile areas (stated in acres). Be sure to separately notate the specific area of land to be graded if it is different in size than the total area. You will also need to indicate the estimated amount of import/export Bulk Material, as defined in Section 203 of Rule 310, to/from the project site. The estimated amount of import/export Bulk Material to/from the project site is for hauling purposes and may not match the cubic yards to be moved within the boundaries of the project.

16. Is this a Re-application?

A permit is valid for 1 year after the date of approval. The re-application process may take a minimum of 14 days for review and processing and must be approved **prior** to the expiration of the old permit. You must re-apply for a permit more than 14 days before the original permit expires.

17. Estimated Project Start Date

Project Start Date and Duration of Project (next question) are used by Maricopa County to schedule inspection work load. If this is a re-application provide the original start date of the project. This information is also used to determine if the same project is on-going or a subsequent dust-generating operation is taking place at the project location.

18. Estimated Duration of Project

See Project Start Date (previous question)

19. Project Site Drawing

Maricopa County uses a project site drawing to delineate boundaries between separate projects, so one permit holder is not held responsible for another's work. It is used as a reference, so it does not need to be to scale. It should however be as accurate as possible. The drawing should be no larger than 8½" x 11". The Dust Control Permit Application Form contains an example of what this drawing should contain (see page 26), including the following minimum elements:

- Entire project site boundaries
- Area(s) to be disturbed with linear dimensions, in feet usually (including staging areas, stockpiles, and storage)
- Nearest main crossroads
- North arrow
- Access Point(s) – Planned exit locations onto paved areas accessible to the public

20. Soil Designations

Soil Texture

According to Rule 310, Section 402.5 – Dust Control Plan Requirements for construction projects one acre or larger (except for routine maintenance and repair done under a block permit), you must provide the following information:

- Soil type naturally present at the dust-generating operation
- Soil type to be imported onto the dust-generating operation

For more detail on soil textures and types see the Appendix further in the Instructions, page 14.

21. Asbestos NESHAP Notification requirements

Any Project that includes demolition or renovation of any existing facilities must address asbestos NESHAP issues that pertain to the Project. Question #21 including all of its sub-questions must be fully completed to demonstrate whether or not there are any existing asbestos NESHAP issues and compliance with applicable rules before a Dust Control Permit can be issued.

PART 1.2 INSTRUCTIONS FOR COMPLETING PART 3 – DUST CONTROL PERMIT APPLICATION DUST CONTROL PLAN

Rule 310, Section 402 (Dust Control Plan requirements) requires the submission of a Dust Control Plan with your application. You may fill out Part 3 of the Dust Control Permit Application and submit it as your Dust Control Plan or you may write your own Dust Control Plan describing all dust control measures to be used during the project and submit it for approval as your Dust Control Plan.

Changes to the Dust Control Plan may be made after the application is approved by submitting a Dust Control Plan Change Form to the Maricopa County Air Quality Department. See below for more information regarding making changes to an approved Dust Control Permit and Dust Control Plan.

PART 1.2.1 DUST CONTROL PLAN (PART 3) CONTROL MEASURES GENERAL INFORMATION

Unlisted Dust Control Measures

You may choose to use dust control measures not currently listed in Part 3 of the Dust Control Permit Application. Such unlisted dust control measures will be reviewed by the Maricopa County Air Quality Department which may require additional information regarding their effectiveness. Any unlisted dust control measure must clearly meet the dust control requirements of Rule 310 for any dust-generating operation.

MCAQD will apply the following minimum criteria when evaluating any unlisted dust control measures:

- The dust control measure technique is a new or alternative technology that is demonstrated to be equally or more effective in meeting the dust control requirements than the existing dust control measures provided in the Dust Control Permit Application.
- Site logistics do not practically allow for implementation of a listed dust control measure as written (e.g., road width or pre-existing barriers limit the size or width of a gravel pad).
- The owner and/or operator demonstrates that a listed dust control measure is technically infeasible due to site-specific or material-specific conditions, such that implementation of the dust control measure will not provide a benefit in reducing fugitive dust (e.g., pre-soaking screened, washed rock when handling).

Written explanation and/or documentation may be required when including unlisted dust control measures in a Dust Control Permit Application.

Opacity

Rule 310, Section 303 (Visible emissions requirements for Dust-Generating Operations) requires generated dust to be less than 20% opacity. As a general rule of thumb, if at any time you can see dust being generated by equipment operations, it is already at least 10% opacity.

Opacity is measured by looking through the dust plume, while the sun is at your back. If more than 20% of the background is obscured, then the opacity is greater than 20%.

Making Changes to an Approved Dust Control Permit and Dust Control Plan

You are allowed to make changes to your approved Dust Control Permit and Dust Control Plan. Maricopa County has permit modification forms available at 1001 N. Central Avenue, 4th floor, or you can download permit modification forms from: www.maricopa.gov/aq.

You might have to change your Dust Control Plan if fugitive dust emissions from your project exceed the standards in Rule 310, even though you are following your Dust Control Plan. You might also have to change your Dust Control Plan if the acreage for your project changes or if the permit holder changes.

If you change your Dust Control Plan because fugitive dust emissions from your project exceed the standards in Rule 310, even though you are following your Dust Control Plan, then you must submit a revised Dust Control Plan to the Control Officer within three working days of being notified that your original Dust Control Plan is not effective. During the time that you are preparing revisions to your Dust Control Plan, you must still comply with all of the requirements of Rule 310.

In order to change your Dust Control Permit and/or Dust Control Plan for any other reason, Maricopa County accepts the following permit modification forms:

Parcel Sale Notification

Form requires applicant name and address, parcel(s) sold, date sold, and buyer name and address.

Permit Name Change Request

Form requires existing permit holder name and address, new Applicant name and address, and reason for the permit name change. The previously approved Dust Control Plan can stay in effect or a new Dust Control Plan can be submitted for review and approval.

Permit Cancellation Request

Form requires permit holder name and address, project location, reason for cancellation, verification that no further soil disturbing construction activities will occur, and that soils have been permanently stabilized. You must cancel your Dust Control Permit when your project is complete or when you no longer have control over the day-to-day operations on the site.

Permit Acreage Change Request

Form requires permit holder name & address, reason for acreage change, and the new acreage. The original Dust Control Permit expiration date will not change, it will remain the same. A new site plan must also be submitted showing the increase site area. Sites that increase to 1 acre or more require modifications to the originally submitted Dust Control Plan. A project information sign is required for sites of five acres or more.

Dust Control Plan Change

Form requires permit holder name and address, reason for the Dust Control Plan change, and areas of the plan to be changed. The revised Dust Control Plan must be submitted with the form and a new site plan might be required.

Control Measures

Water

When planning a contingency control method, do not choose water if it is already your primary control method. Maricopa County assumes that you will apply enough water to control dust, until it becomes an infeasible option.

Ceasing Operations

Keep in mind that weather conditions play a big part in dust control and may require that you cease operations. Ceasing operations is an acceptable contingency measure many businesses currently use. At the least it requires you to stop operations, evaluate why your primary control measure is not working, and make corrections. Ceasing operations lasts as long as it takes to resolve or abate the dust control issue.

Vehicle Speed

Vehicle speed is not an acceptable dust control measure for all dust-generating operations. Where vehicle speed is an option for dust control, you must indicate what vehicles are being limited by speed and how the speed of such vehicles is being limited.

Vegetative Ground Cover

If you choose "establish vegetative ground cover" as a control measure, you must comply with at least one of the following standards. These standards are also described in Rule 310, Section 304.3 – Stabilization requirements for Dust-Generating Operations – Disturbed Surface Area:

- Maintain a flat vegetative cover (i.e., attached/rooted vegetation or unattached vegetative debris lying on the surface with a predominant horizontal orientation that is not subject to movement by wind) that is equal to at least 50%;
- Maintain a standing vegetative cover (i.e., vegetation that is attached/rooted with a predominant vertical orientation) that is equal to or greater than 30%;
- Maintain a standing vegetative cover (i.e., vegetation that is attached/rooted with a predominant vertical orientation) that is equal to or greater than 10% and where the threshold friction velocity is equal to or greater than 43 cm/second when corrected for non-erodible elements; or
- Maintain a percent cover that is equal to or greater than 10% for non-erodible elements.

Surface Gravel, Recycled Asphalt, or other Suitable Material

If you choose "apply and maintain surface gravel, recycled asphalt, or other suitable material" as a control measure for unpaved access areas / haul roads, you must comply with the following standard. This standard is also described in Rule 310, Section 304.2 – Stabilization requirements for Dust-Generating Operations – Unpaved Haul/Access Roads:

- Do not allow visible dust emissions to exceed 20% opacity and either do not allow silt loading to be equal to or greater than 0.33 oz/ft² or do not allow silt content to exceed 6%.

If you choose to “apply and maintain surface gravel, recycled asphalt, or other suitable material” as a control measure for unpaved parking areas, you must comply with the following standard. This standard is also described in Rule 310, Section 302.1 – Stabilization requirements for Dust-Generating Operations – Unpaved Parking Lot:

- Do not allow visible fugitive dust emissions to exceed 20% opacity and either do not allow silt loading to be equal to or greater than 0.33 oz/ft² or do not allow silt content to exceed 8%.

PART 1.2.2 DUST CONTROL PLAN (PART 3) CONTROL MEASURES INSTRUCTIONS

What follows is a listing of the ten category headings (A-J) that corresponds to the same category headings (A-J) in Part 3 of the Dust Control Permit Application. Under each of the ten category headings (A-J) that follow are questions to ask and concepts to consider when designing your Dust Control Plan. You must comply with the work practice standards described in Rule 310 and you must implement, as applicable, the dust control measures in Rule 310, Section 305. Section 305 describes primary and contingency dust control measures for a variety of dust-generating operations.

When completing the Dust Control Permit Application, use this listing to select dust control measures for your project. Changes to the Dust Control Plan may be made after the application is approved by submitting a Dust Control Plan Change Form to the Maricopa County Air Quality Department. See information provided previously in Part 1.2.1 regarding making changes to an approved Dust Control Permit and Dust Control Plan.

EXAMPLES of how to complete Control Measures and Water Tables can be found on pages 19-22, following the Dust Suppressants Summary.

A. Vehicles / Motorized Equipment

A.1 Unpaved Parking Areas, Unpaved Staging Areas, and Unpaved Material Storage Areas

What areas have you set aside for parking, including areas where your employees and contractors will be parking their vehicles? What areas have you set aside for material staging? How will you keep vehicles, including the public, employees, subcontractors, utilities, and project inspectors, in areas intended for travel? Paving is acceptable as a primary control measure, if paving is done at the beginning of a project.

A.2 Unpaved Access Areas / Haul Roads

Will you be operating, hauling, or delivering equipment or materials using unpaved areas? Unpaved haul roads/access areas are unpaved roads or designated access areas for vehicles or delivery trucks. On most single residential sites, the haul road is typically the future driveway. Paving is acceptable as a primary control measure, if paving is done at the beginning of a project.

B. Disturbed Surface Areas

B.1 Before Active Operations occur

Create a plan to minimize dust before you start site work. For example Rule 310, Section 305.11 describes dust control measures to implement before site work begins. According to Section 305.11 you must either pre-water the site to depth of cuts, allowing time for penetration, or you must phase work to reduce the amount of disturbed surface areas at any one time.

If you choose to pre-water the site, you should pre-water the areas to be disturbed prior to commencing a dust-generating operation. A rule of thumb is 1 acre-foot of water (325,851 gallons) per acre of land. Pre-watering areas to depth of cuts will reduce the amount of water required for dust control. Pre-watering does not mean flooding the area to be disturbed, which may make the area unworkable. Nor does it mean allowing the watered area to dry-out before the dust-generating operation occurs, since that would prevent adequate dust control.

If you choose to phase work as a dust control measure to reduce the amount of disturbed surface areas at any one time, you must show how you will phase the project to create the least amount of disturbance at any one time. You may use the project site drawing to show the various project phases, along with a time line showing relative start and stop times. Indicate on the application that you have shown the various project phases on the project site drawing.

B.2 During Active Operations

Water must be applied continuously in front of or in conjunction with a scraper/grader/dozer. Water applied behind equipment is usually intended for compaction purposes and not dust control. If a water truck is required to leave the project site for refilling, the contingency measure must be implemented, as needed, to comply with Rule 310, Section 303 – Visible emissions requirements for Dust-Generating Operations.

If you choose to limit vehicle speed, you must indicate what vehicles are being limited by speed and how the speed of such vehicles is being limited.

B.3 Temporary Stabilization including weekends, after work hours, holidays, and any other inactive periods 24 hours per day, seven days per week

How are you going to stabilize your site during non-work hours including any and all times there are no active operations occurring but the site has not been permanently stabilized? How will you control wind generated dust?

B.4 Permanent Stabilization of Disturbed Surface Areas required when the Dust-Generating Operation is finished for a period of 30 days or longer

How will the open areas of the site be permanently stabilized? How will the site be stabilized if construction is halted?

Open areas and vacant lots need to remain stabilized (i.e., maintain a visible crust, vegetation, or surface gravel) and inaccessible to motorized vehicles. When your site is permanently stabilized and your project is complete, you should cancel your Dust Control Permit. Maricopa County has permit cancellation request forms available at 1001 N. Central Avenue, 4th Floor, or you can download the form from: www.maricopa.gov/aq.

C. Bulk Material Handling

C.1 Off-Site Hauling onto Paved Areas accessible to the Public

Will you be conducting debris clean up or lot clean up? Will you be exporting materials?

C.2 Hauling / Transporting within the Boundaries of the Work Site but not crossing a Paved Area accessible to the Public

Will you be moving dirt or rock from one area to another area on your site?

C.3 Hauling / Transporting within the Boundaries of the Work Site and Crossing and / or accessing a Paved Area accessible to the Public

Crossing a paved area is when you are traveling perpendicular to the paved area, typically entering and leaving it with the primary purpose of arriving at a destination on the other side. If you are not crossing a paved area (not traveling perpendicular to a paved area), then you are traveling along the paved area. Traveling along the paved area may take you outside the work area, unless such area has been barricaded to public travel.

C.4 Prior to and / or during Stacking, Loading, and Unloading Operations

Will you be trenching, backfilling, and/or importing/exporting Bulk Material?

Stacking, loading, and unloading operations include any time Bulk Materials are loaded into a truck or when materials are put into spoils piles from trenching operations.

If you choose to use water to control dust for cut and fill activities, a rule of thumb is (1) 10,000 gallon water pull for each 7,000 cubic yards of material moved per day. When determining the total amount of water necessary for a project, another rule of thumb is that it takes at least 30 gallons of water to control dust from each cubic yard of material to be moved.

C.5 Open Storage Piles

How will you control dust from storage or spoils piles? Will you have spoils and/or storage piles for any length of time?

Open storage piles include piles that are on-site for any length of time. If you apply water or dust suppressant(s) to open storage piles when not conducting stacking, loading, and unloading operations, make sure that you limit unauthorized vehicle access to the area.

D. Trackout, Carry-out, Spillage, and Erosion

D.1 Trackout Control Device

What will you use as a trackout control device if trenching removes an existing gravel pad? What will you use as a control device during curb and gutter installation? How will you direct traffic to the designated exit locations and restrict traffic from using other exit points?

Trackout control devices are preventative devices intended to reduce the amount of dirt transferred onto paved areas and entrained into the atmosphere. Trackout control devices are required at every exit to a paved area accessible to the public (any retail parking lot or public roadway that is open to public travel primarily for purposes unrelated to the dust-generating operation) for job sites 2 acres or larger or when 100 cubic yards of bulk material are hauled on-site or off-site per day. Trackout control devices include, but are not limited to, the following:

Gravel Pad

A layer of washed gravel, rock, or crushed rock that is at least one inch or larger in diameter that is maintained at the point of intersection of a paved area accessible to the public and a work site entrance to dislodge mud, dirt, and/or debris from the tires of motor vehicles and/or haul trucks, prior to leaving the work site.

Grizzly

A device (i.e., rails, pipes, or grates) used to dislodge mud, dirt, and/or debris from the tires and undercarriage of motor vehicles and/or haul trucks prior to leaving the work site.

Paving

Application and maintenance of asphalt, concrete, or other similar material to a roadway surface (i.e., asphaltic concrete, concrete pavement, chip seal, or rubberized asphalt).

Wheel Wash System

A system, station, or device either temporary or permanent, that utilizes a bath or spray of water for the purpose of cleaning mud, soil, and rock from the tires and undercarriage of vehicles to prevent tracking of those materials onto paved surfaces.

Rule 310, Section 306 addresses dust control measures for trackout control. According to Section 306 you must prevent trackout by installing, at all access points to the site, a trackout control device such as a grizzly, a wheel wash system, or a gravel pad, defined in Rule 310, Section 217 to be at least 30 feet wide, 50 feet long, and 3 inches deep. Or you must pave starting from the point of intersection with a paved area accessible to the public and extending for a centerline distance of at least 100 feet and a width of at least 20 feet.

If you are using a paved area accessible to the public as the trackout control device, then the paved area accessible to the public must be part of your designated work site. You must identify such paved area accessible to the public as a trackout control device in your Dust Control Plan and you must follow the requirements for maintaining a trackout control device. See Rule 310, Section 306 – Trackout, Carry-out, Spillage, and/or Erosion.

It is a violation of Rule 310 if your site is required to have a trackout control device and does not, regardless of whether trackout is present.

D.2 Cleaning

Trackout/carry-out is 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 a paved area accessible to the public. You are required to immediately clean trackout/carry-out extending 25 feet or more. Trackout/carry-out that is less than 25 feet requires cleaning by the end of the work day. During import/export operations and following rain events, cleaning may need to be done on a consistent basis to control trackout/carry-out.

Cleaning trackout/carry-out includes removing any and all bulk material that has been deposited onto public roadways, medians, gutters, and sidewalks. Cleaning trackout/carry-out can be accomplished by manually sweeping up the deposits, by operating a street sweeper or wet broom, or by power washing. Some street sweepers (e.g., street sweepers with steel brushes) are more efficient than others, especially on stubborn trackout/carry-out. Many work sites are located in areas where the paved areas may not be cleaned by power washing with water due to Storm Water Pollution Prevention Plans (SWPP) or National Pollutant Discharge Elimination Standards (NPDES).

It is a violation of Rule 310 if you have not cleaned trackout/carry-out, regardless of whether a trackout control device is present. If a street sweeper has been chosen as the primary control measure and is needed immediately but is not available, then you must employ the contingency measure.

E. Weed Abatement by Discing or Blading

If this is a long project, will weed removal or weed control be an issue in the future? Weed abatement for the purpose of this question is the removal of a weed and its roots by turning over the soil, usually with a disc or blade implement, thereby disturbing the surface area and removing a means of stabilizing the surface area.

F. Blasting Operations

Will blasting be conducted for removal of structural concrete? Is there an available site for stockpiling material? Will underlying material require blasting?

G. Demolition Activities

If concrete removal quantity is sizable, is there an available dump site? Has dust control for this staging or storage area been addressed?

H. Wind Event

A "wind event" is when the 60-minute average wind speed is greater than 25 m.p.h. In category H, some control measures are to be used in the "nonattainment area" and some control measures are to be used in the "attainment area". A "nonattainment area" is an area designated by the Environmental Protection Agency (EPA) as exceeding national ambient air quality standards based upon data collected through air quality monitoring.

Maricopa County does not meet the national ambient air quality standards for particulate matter (PM₁₀). Consequently, Maricopa County is considered a nonattainment area for PM₁₀. The general geographical boundary of Maricopa County's PM₁₀ nonattainment area is as follows: Salt River Mountains on the south, Phoenix Mountains on the northwest, Estrella Mountains on the southwest, White Tank Mountains on the west, and Superstition Mountains on the east. Maricopa County's PM₁₀ nonattainment area includes all cities within this geographical boundary.

What has been done to address a possible wind event when no one is on-site such as on a weekend or a holiday?

I. Water

For categories A-H in Part 3 of the Dust Control Permit Application, for which you choose to "apply water" as a dust control measure, you must describe the size and number of pieces of the equipment that you will use to supply the water, and the size and number of pieces of equipment that you will use to apply the water.

Soil Rating. For the purpose of completing the minimum water availability tables, soil types have been simplified from the four ratings categories in the Appendix F Soil Map into two rating categories. A Severe rating includes clay, silty clay, and sandy clay while the Moderate rating includes all other soil types. (See Part 1.3.3, pages 14-16 for additional information to assist in determining soil rating)

Water supply means how water will be supplied to the site. Equipment options for water supply include, but are not limited to, metered hydrant, water tower, and water pond.

Water application system means how water will be applied to the site. Equipment options for water application system include, but are not limited to, hoses, water truck, water pull, and water buffalo.

Minimum water availability means water supply in conjunction with water application system.

- A minimum water availability table is included for different construction phases to be used in Part 3 where "apply water" is chosen as a dust control measure.
- Each minimum water availability table lists the minimum amount of water that you must have available for the duration of the project for dust control and compaction in severe and moderate soil types.
- Use each minimum water availability table to determine the size and number for the equipment that you will use to supply the water and to apply the water.

Regardless of the minimum amount of water that you have available to your site or on your site and regardless of your water supply and water application, in no case shall you exceed 20% opacity. Test methods for opacity can be found in Appendix C of the Maricopa County Air Pollution Control Regulation

J. Dust Suppressants other than water

Although water is a dust suppressant, the information required by Table J in Part 3 in the Dust Control Permit Application should not include information on water supply and water application systems.

The information required by Table J in Part 3 of the Dust Control Permit Application is for all other dust suppressants that you use. Fill out the applicable areas in Table J in Part 3 of the Dust Control Permit Application. Be sure to attach information on environmental impacts and approvals or certifications related to appropriate and safe use for ground application. Also, attach product specification(s) and application sheet(s) or label instructions.

Different types of soil require more intensive water use or the use of water in combination with dust suppressants, in order to meet the requirements of Rule 310. Brief descriptions of dust suppressants and related information can be found in the Appendix below (Part 1.3.4).

PART 1.3 APPENDIX – ADDITIONAL INFORMATION ON KEY TOPICS

PART 1.3.1 GLOSSARY OF TERMS (A more complete list of definitions can be found in Rule 310, Section 200)

Caliche – Common in, and somewhat unique to, the southwestern United States is a soil component known as caliche. Caliche is defined as an amorphous (non-crystalline) mass of calcium carbonate (limestone) mixed with clay. Caliche is a general term for any secondary calcium carbonate (CaCO_3) that forms in sediments or in voids and crevices within bedrock just below the surface in semiarid regions, as a result of soil-forming processes (pedogenic caliche) or ground-water evaporation (ground-water caliche). Caliche is material left behind by the evaporation of ground water or soil moisture that is no longer present at that level, although ground water may be present at much lower depths beneath the caliche.

Disturbed Surface Area – 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. For the purpose of Rule 310, an area is considered to be a disturbed surface area until the activity that caused the disturbance has been completed and the disturbed surface area has been permanently stabilized.

Dust-Generating Operation – Any activity capable of generating fugitive dust, including but not limited to, land clearing, earthmoving, weed abatement by discing or blading, excavating, construction, demolition, bulk material handling, storage and/or transporting operations, vehicle use and movement, the operation of any outdoor equipment, or unpaved parking lots. For the purpose of Rule 310, landscape maintenance and playing on or maintaining a field used for non-motorized sports shall not be considered a dust-generating operation. However, landscape maintenance shall not include grading, trenching, or any other mechanized surface disturbing activities performed to establish initial landscapes or to redesign existing landscapes.

Fugitive Dust – The particulate matter not collected by a capture system that is entrained in the ambient air and is caused from human and/or natural activities, such as, but not limited to, movement of soil, vehicles, equipment, blasting, and wind. For the purpose of Rule 310, fugitive dust does not include particulate matter emitted directly from the exhaust of motor vehicles and other internal combustion engines, from portable brazing, soldering, or welding equipment, and from pile drivers, and does not include emissions from process and combustion sources that are subject to other rules in Regulation III-Control Of Air Contaminants of the Maricopa County Air Pollution Control Regulations.

PART 1.3.2 APPLICABLE MARICOPA COUNTY AIR POLLUTION CONTROL REGULATIONS

1. Rule 200 (Permit Requirements), Section 305 (Dust Control Permit)

- Requires any dust-generating operation disturbing more than 0.10 acres (4,356 sq.ft.) to obtain a permit,
- Applies the provisions of Rule 310 (Fugitive Dust from Dust-Generating Operations) to Dust Control permits.

2. Rule 200 (Permit Requirements), Section 309 (Standards for Applications)

- Gives the Control Officer authority to design permit applications that contain all the information necessary to enable the Control Officer to make the determination to grant or deny a permit,
- Such applications can contain terms and conditions as the Control Officer deems necessary to assure a source's compliance with the requirements of the Maricopa County Air Pollution Control Regulations.

3. Rule 310 (Fugitive Dust from Dust-Generating Operations)

- Requires an owner and/or operator of a dust-generating operation to submit a Dust Control Plan with any Dust Control Permit as well as before commencing any routine dust-generating operation at a site that has obtained or must obtain a Title V, Non-Title V, or general permit under Maricopa County Air Pollution Control Regulations, Regulation II (Permits And Fees),
- Required from initial ground breaking through final stabilization,
- Valid for one year from the date of issuance,
- Re-application must be submitted at least 14 calendar days prior to the expiration date of the original permit, if more than 0.10 acres (4,356 sq.ft.) remain disturbed at the expiration of the original permit,
- Must describe all control measures to be implemented before, after, and while conducting any dust-generating operation, including during weekends, after work hours, and on holidays,
- Maricopa County approves, disapproves, or conditionally approves a Dust Control Plan, in accordance with the criteria used to approve, disapprove, or conditionally approve a permit,
- Failure to comply with the provisions of the approved Dust Control Plan and/or failure to comply with all other requirements of Rule 310 is deemed to be a violation of Rule 310,
- Once approved by the Control Officer, the Dust Control Permit and Dust Control Plan must be posted on-site.
- Any person who conducts Dust-Generating operations that require a Dust Control Plan shall keep a written record of self-inspection on each day Dust-Generating Operations are conducted. (Also referred to as a "Dust Control Log")
- Permit holder must cancel the permit when the project is complete or when the permit holder no longer has control over the day-to-day operations on the site. (See pages 5-6 of the Instructions)

PART 1.3.3 SOIL TEXTURE AND TYPE SUMMARY

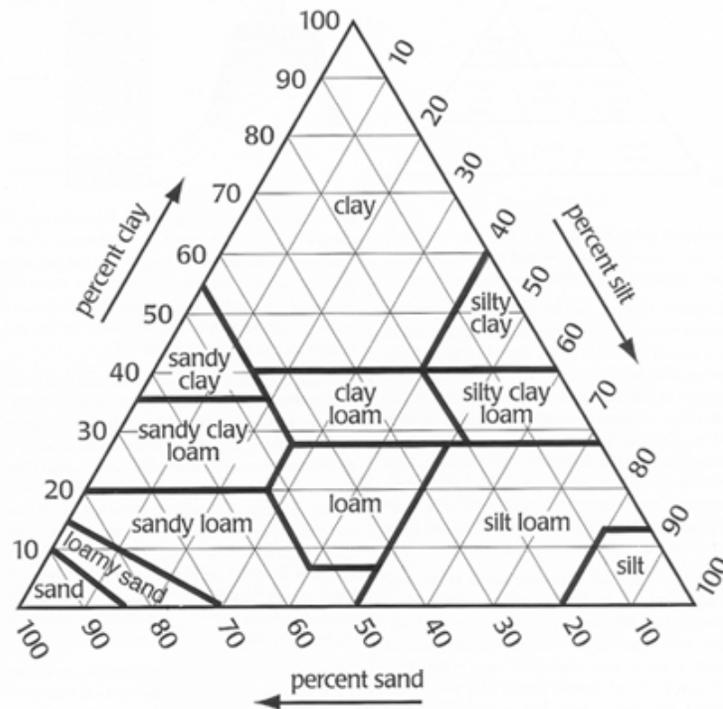
Soil texture is the single most important physical property of the soil. Knowing the soil texture alone will provide information about: (1) water flow potential, (2) water holding capacity, and (3) suitability for many urban uses. Soils can be divided into three basic classifications: sands, silts, and clays. (Caliche, commonly found in the Southwest, is basically a form of clay. See Glossary of Terms, p. 13 of the Instructions for more information regarding caliche).

There is great variation within the three basic classifications: sands, silts, and clays, but these classifications will suffice for the purpose of choosing appropriate dust control measures for a work site.

Soils are visually classified by the Unified Soil Classification System on the boring logs. Grain-size analysis and Atterberg Limits Tests are often performed on selected samples, and the results entered onto a plasticity chart, to aid in classification. The classification system is outlined in the chart on page 16 of the Instructions. For a more detailed description of the system, including plasticity and liquid limits, see "The Unified Soil Classification System" ASTM Designation D2487 at <http://www.astm.org/Standards/D2487.htm>.

Once the amount of sand, silt, and clay is known, you can give the soil a texture class name. These names change depending on how much of each size particle is in the soil. The textural triangle (shown below) is used to determine the names of the textural classes.

Textural Triangle



Different textural classes will require more intensive water use or the use of water in combination with dust suppressants (see the tables on pages 16 and 17 of the Instructions), so that visible emissions do not exceed 20% opacity. Test methods for opacity can be found in Appendix C of the Maricopa County Air Pollution Control Regulations (see http://www.maricopa.gov/aq/divisions/planning_analysis/rules/docs/AppendixC-0803.pdf).

Rule 310, Section 303 – Visible Emissions requirements for Dust-Generating Operations requires visible fugitive dust emissions to be less than 20% opacity. See previously in this document, page 8, for more information regarding opacity.

Unified Classification System for Soils

Major Division		Group Symbol	Typical Description
Coarse-Grained Soils (less than 50% passes No. 200 sieve)	Gravels (50% or less of course fraction passes No. 4 sieve)	Clean Gravels (less than 5% passes No. 200 sieve)	
		GW	Well graded gravels, gravel-sand mixtures or sand-gravel-cobble mixtures
		GP	Poorly graded gravels, gravel-sand mixtures, or sand-gravel-cobble mixtures
		Gravels With Fines (more than 12% passes No. 200 sieve)	
	GM	Limits plot below "A" line & hatched zone on plasticity chart Silty gravels, gravel-sand-silt mixtures	
	GC	Limits plot above "A" line & hatched zone on plasticity chart Clayey gravels, gravel-sand-clay mixtures	
	Sands (more than 50% of course fraction passes No. 4 sieve)	Clean Sands (less than 5% passes No. 200 sieve)	
		SW	Well graded sands, gravelly sands
SP		Poorly graded sands, gravelly sands	
Sands With Fines (more than 12% passes No. 200 sieve)			
SM	Limits plot below "A" line & hatched zone on plasticity chart Silty sands, sand-silt mixtures		
SC	Limits plot above "A" line & hatched zone on plasticity chart Clayey sands, sand-clay mixtures		
Fine-Grained Soils (50% or more passes No. 200 sieve)	Silts (limits plot below "A" line & hatched zone on plasticity chart)		
	Silts Of Low Plasticity (liquid limit less than 50)		
	ML	Inorganic silts, clayey silts with slight plasticity	
	Silts Of High Plasticity (liquid limit more than 50)		
MH	Inorganic silts of high plasticity, silty soils, elastic silts		
Clays (limits plot above "A" line & hatched zone on plasticity chart)		Clays Of Low Plasticity (liquid limit less than 50)	
CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays		
Clays Of High Plasticity (liquid limit more than 50)		CH	Inorganic clays of high plasticity, fat clays, silty and sandy clays of high plasticity

Note: Coarse-grained soils with between 5% & 12% passing the No. 200 sieve and fine-grained soils with limits plotting in the hatched zone on the plasticity chart to have dual symbol.

Soil Map

The soil map in Appendix F of the Maricopa County Air Pollution Control Regulations (available at http://www.maricopa.gov/aq/divisions/planning_analysis/rules/docs/AppendixF-0404.pdf) designates soil texture ratings within the PM₁₀ nonattainment area. See page 12 for more information regarding the PM₁₀ nonattainment area in Maricopa County.

Four soil texture ratings in the table below – severe, moderate, slight, and very slight – refer to a soil's potential to create PM₁₀. The table summarizes the soil map in Appendix F and designates control measures that could be used with each soil type. Also, the table shows which soil texture rating relates to which group symbol used in the chart of the Unified Classification System for Soils previously on this page.

The soil map in Appendix F is to be used to identify soil types for purposes of completing Part 2.2 of the Dust Control Permit Application, in lieu of submitting actual measured soil types with your Dust Control Plan. However, the actual measured soil types take precedence over any mapped soils.

If any requirements stated in the Instructions or in the Dust Control Permit Application contradict recommendations of a site geotechnical report, attach a copy of the report to the Dust Control Plan. The report will be incorporated as part of the Dust Control Plan.

Summary of Soil Map in Appendix F of the Maricopa County Air Pollution Control Regulations

Map Color Designations	Soil Texture Ratings	Soil Types	Group Symbols	Characteristics Of Soil	Control Measures
Red	Severe	Clay Silty Clay Sandy Clay	CL CH	<ul style="list-style-type: none"> • Low hydraulic conductivity (the rate at which water can flow through the soil) • Retains water • Hardens in heat of summer • Warms-up slower in spring 	Apply water Or Apply water and a dust suppressant
Orange	Moderate	Loam Silty Loam Clay Loam Sandy Clay	ML MH	<ul style="list-style-type: none"> • Retains more water than sandy soil • Drains well • Easier to work than clay 	Apply water Or Apply water and a dust suppressant
Green	Slight	Very Fine Sandy Loam	SW SP SM SC	<ul style="list-style-type: none"> • Retains more water than sandy soil • Drains well • Easier to work than clay 	Apply water
Light Yellow	Very Slight	Fine Sand Coarse Sand	GW GP GM GC	<ul style="list-style-type: none"> • High hydraulic conductivity (the rate at which water can flow through the soil) • Tends not to compact 	Apply water

1.3.4 ADDITIONAL ASSISTANCE

You can reach the MCAQD Dust Control Division offices at 1001 North Central Avenue, Suite 400 in Phoenix, Arizona, by calling 602-506-6010, or on their website at www.maricopa.gov/aq for more information and forms to accompany this application. Some useful places on the website include:

- Information on current fees can be found on the Department's web site: www.maricopa.gov/aq/divisions/permit_engineering/permit_fees.aspx.
- Dust Compliance main page: www.maricopa.gov/aq/divisions/compliance/dust/Default.aspx.
- Dust Compliance resources including;
 - Sample Dust Control Logs
 - Applications
 - Other Forms
 - Informational video and brochure
 can be found at www.maricopa.gov/aq/divisions/compliance/dust/resources.aspx.
- Questions concerning Asbestos NESHAP regulations should be referred to the Maricopa County's Asbestos NESHAP Coordinator at 602-506-6708 or 602-506-0421. Forms, contacts, regulations and additional information not covered in the application package may be obtained on our website at http://www.maricopa.gov/aq/divisions/compliance/air/asbestos_neshap/Default.aspx.
- Maricopa County Air Pollution Control Regulations Rule 200 (Permit Requirements) and Rule 310 (Fugitive Dust from Dust-Generating Operations) which contain information regarding the requirements and work practices associated with this application can be found at: www.maricopa.gov/aq/divisions/planning_analysis/AdoptedRules.aspx.
- Document Request Forms, in the event the permit and application are not received after the processing and mail period has passed: www.maricopa.gov/materials/Document_Request/public_record_request.asp.
- Assistance in completing the application may be available by calling the Training Line at 602-372-1467 or online at: <http://www.maricopa.gov/aq/divisions/compliance/dust/Default.aspx>.

1.3.5 DUST SUPPRESSANTS SUMMARY

Dust suppressants are defined in Rule 310 as: water, hygroscopic material, solution of water and chemical surfactant, foam, non-toxic chemical stabilizer or any other dust palliative, which is not prohibited for ground surface application by the Environmental Protection Agency (EPA) or the Arizona Department Of Environmental Quality (ADEQ) or any applicable law, rule, or regulation, as a treatment material for reducing fugitive dust emissions.

Dust suppressants work by either agglomerating the fine particles, adhering/binding the surface particles together, or increasing the density of the road surface material. They reduce the ability of the surface particles to be lifted and suspended by either vehicle tires or wind and non-water suppressants do so with a minimum amount of added water and usually a longer useful life than water alone.

One important factor in evaluating dust suppressants is the long-term monetary cost versus that of water alone. Environmental impacts of both methods on water quality and plant life must also be considered.

More detail can be found on the MCAQD Dust Compliance website at: www.maricopa.gov/aq/divisions/compliance/dust/resources.aspx

DUST SUPPRESSANT CATEGORIES:

1. **Water-Attracting Chemicals:** Chlorides, Salts, Brine Solutions.
2. **Organic, Non-Bituminous Chemicals:** Lignosulfonates, Sulphite, Liquors, Tall Oil Pitch, Pine Tar, Vegetable Oils, Molasses.
3. **Electro-Chemical Stabilizers:** Sulphonated Petroleum, Ionic Stabilizers, Bentonite.
4. **Polymers:** Polyvinyl Acrylics, Acetates.
5. **Microbiological Binders:** Cryptogams, Blue-Green Algae Inoculants, Enzyme Slurries.

DUST SUPPRESSION TECHNOLOGIES:

In addition to categories of dust suppressants, the subject can also be divided by dust suppression technologies including the following:

1. **Wetting Agents:** Surfactant (see below) formulations that improve the ability of water to wet and agglomerate fine particles.
2. **Foaming Agents:** Surfactant formulations used to convert water and air into a dry, stable, small-bubbled foam with a consistency similar to shaving cream.
3. **Binding / Agglomerating Agents:** Performs similar functions as wetting and foaming agents but provides a longer residual effect than water alone and thus is used when it is either impractical or uneconomical to control dust using just water technologies.
4. **Crusting Agents:** Binding agents that are chemically similar to latex paint in that their primary active components are water-based latex polymers that cure to form a mechanically stable water-insoluble film.

DUST SUPPRESSION MATERIALS:

1. **Surfactants:** Surface-active agents, make water more efficient by making water "wetter", lowering its surface tension allowing drops of water to spread out and contact surfaces more effectively
2. **Tackifiers:** Substances used with water to hold together mulches and other dust suppressants, binding small particles together without forming a hard crust
3. **Flocculants:** Chemicals that cause a dispersed colloidal system (such as clay) to coagulate and form flocs. Most flocculants are either multivalent cations such as calcium, magnesium, aluminum, or ion polymers. High pH, high salinity, and high temperature can also cause clay flocculation.

1.3.6 EXAMPLES FOR CORRECTLY COMPLETING THE APPLICATION FORM

E. Weed Abatement by Discing or Blading

(See Instructions page 12)

E.1 Disturbance Operations

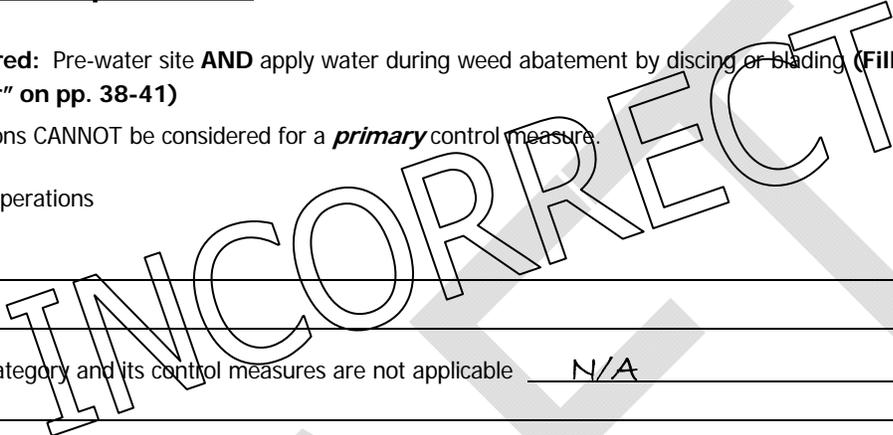
P **Required:** Pre-water site **AND** apply water during weed abatement by discing or blading (Fill out Category I, "Water" on pp. 38-41)

NOTE: The following options CANNOT be considered for a *primary* control measure.

C Cease operations

C Other: _____

Or, explain why this sub-category and its control measures are not applicable N/A



WHY?

If a Control Measure is "not applicable" you must provide an explanation for why

E. Weed Abatement by Discing or Blading

(See Instructions page 12)

E.1 Disturbance Operations

P **Required:** Pre-water site **AND** apply water during weed abatement by discing or blading (Fill out Category I, "Water" on pp. 38-41)

NOTE: The following options CANNOT

C Cease operations

C Other: _____

This is a CORRECT example of a completed "not applicable" statement with a full explanation.

Or, explain why this sub-category and its control measures are not applicable N/A because any (minimal) weed abatement required during this project will be done by spraying weed killer

A.2 Unpaved Access Areas / Haul Roads

P C Apply water (Fill out Category I, "Water" on pp. 38-41)

P C Pave (Choose one of the following): Beginning of Project* During Project* End of Project*
*Must stabilize surface prior to paving

P C Apply and maintain surface gravel, recycled asphalt, or other suitable material

P C Apply and maintain dust suppressant(s), other than water (Fill out Category J, "Dust Suppressants other than water" on p. 42)

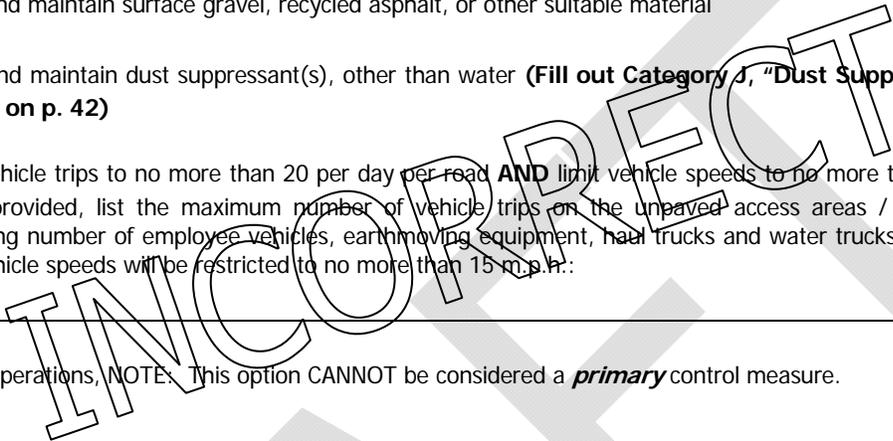
P C Limit vehicle trips to no more than 20 per day per road AND limit vehicle speeds to no more than 15 m.p.h. In the space provided, list the maximum number of vehicle trips on the unpaved access areas / haul roads each day (including number of employee vehicles, earthmoving equipment, haul trucks and water trucks) and a description of how vehicle speeds will be restricted to no more than 15 m.p.h.:



C Cease operations, NOTE: This option CANNOT be considered a *primary* control measure.

P C Other: _____

Or, explain why this sub-category and its control measures are not applicable _____



WHY?

If a Control Measure is blacked out it CANNOT be used

A.2 Unpaved Access Areas / Haul Roads

P C Apply water (Fill out Category I, "Water" on pp. 38-41)

P C Pave (Choose one of the following): Beginning of Project* During Project* End of Project*
*Must stabilize surface prior to paving

P C Apply and maintain surface gravel, recycled asphalt, or other suitable material

P C Apply and maintain dust suppressant(s), other than water (Fill out Category J, "Dust Suppressants other than water" on p. 42)

P C Limit vehicle trips to no more than 20 per day per road AND limit vehicle speeds to no more than 15 m.p.h. In the space provided, list the maximum number of vehicle trips on the unpaved access areas / haul roads each day (including number of employee vehicles, earthmoving equipment, haul trucks and water trucks) and a description of how vehicle speeds will be restricted to no more than 15 m.p.h.:

These are CORRECT examples of how to use available control measure checkboxes and avoid using non-available control measure checkboxes.

P C Cease operations, NOTE: This option CANNOT be considered a *primary* control measure.

P C Other: _____

Or, explain why this sub-category and its control measures are not applicable _____

There are two main types of tables (with multiple variations) used in the Water Table area of the Application. Following is an example of each of the main two table types and how to use each:

Soil Texture Rating	Project Phase - Staging/Parking Areas/Storage Areas Including Landscaping Installation	
	Total Acres Disturbed	Minimum Water Available
Severe (clay, silty clay, sandy clay)	0 - 2 acres	375 - 750 gallons per day
	2 - 10 acres	750 - 3,500 gallons per day
	10 - 100 acres	3,500 - 35,000 gallons per day
	> 100 acres	> 35,000 gallons per day
Moderate (all other classifications)	0 - 2 acres	225 - 400 gallons per day
	2 - 10 acres	400 - 2,250 gallons per day
	10 - 100 acres	2,250 - 22,500 gallons per day
	> 100 acres	> 22,500 gallons per day

Average Daily Disturbance in Acres 8 acres Number of Gallons per day 750 - 3,500 gal/day

Supply	Quantity and Size	Application	Quantity and Size
<input checked="" type="checkbox"/> Metered Hydrant	<u>(1) 2"</u>	<input type="checkbox"/> Hose	_____
<input type="checkbox"/> Water Tower	_____	<input checked="" type="checkbox"/> Water Truck	<u>(1) 2,000 gal</u>
<input type="checkbox"/> Water Pond	_____	<input type="checkbox"/> Water Pull	_____
<input type="checkbox"/> Off-Site	_____	<input type="checkbox"/> Water Buffalo	_____
<input type="checkbox"/> Other _____	_____	<input type="checkbox"/> Other _____	_____

Illustration:

1. Assume the project has a disturbed area of 8 acres for staging, storage and some parking with a severe soil rating.
2. Begin with the second line under the headings in the table above. This selection shows a range of 2 – 10 acres of Total Acres Disturbed in the Severe, Soil Texture Rating field.
3. Following this to the Minimum Water Available column on the right gives a range of 750 – 3,500 gallons per day. This means that even if an amount of water toward the lower end of the range is being used (750 gallons per day) the project must have the availability of water, along with the equipment to apply it, up to the highest end of the range (3,500 gallons per day), should conditions demand the higher application.
4. A 2,000 gallon water truck could be used to serve this area if it can be refilled during times of high water need. The same water truck could serve additional areas during times of low water need as long as the cumulative need for water availability does not exceed the capacity of the truck and water supply.

Soil Texture Rating	Project Phase - Mass Grading (Includes basements)	
	Minimum Water Available (November – February)	Minimum Water Available (March – October)
Severe (clay, silty clay, sandy clay)	5,000 gallons per acre per day and 30 gallons per cubic yard of material moved	10,000 gallons per acre per day and 30 gallons per cubic yard of material moved
Moderate (all other classifications)	5,000 gallons per acre per day and 30 gallons per cubic yard of material moved	10,000 gallons per acre per day and 30 gallons per cubic yard of material moved

Average Daily Disturbance in Acres 10 acres Number of Gallons per acre per day 10,000 gal/acre/day

Daily Minimum Water Availability 100,000 gallons per day
 (Number of Acres Disturbed) × (Number of Gallons per acre per day)

Supply	Quantity and Size	Application	Quantity and Size
<input checked="" type="checkbox"/> Metered Hydrant	_____	<input type="checkbox"/> Hose	_____
<input type="checkbox"/> Water Tower	_____	<input checked="" type="checkbox"/> Water Truck	<u>(2) 5,000 gal</u>
<input checked="" type="checkbox"/> Water Pond	<u>(1) 1,000,000 gal</u>	<input checked="" type="checkbox"/> Water Pull	<u>(3) 10,000 gal</u>
<input type="checkbox"/> Off-Site	_____	<input type="checkbox"/> Water Buffalo	_____
<input type="checkbox"/> Other _____	_____	<input type="checkbox"/> Other _____	_____

Illustration #1:

1. Assume the project entails grading 10 acres and all 10 acres are to be graded each day for five days during the March thru October time period.
2. 10 acres x 10,000 gallons per acre per day = 100,000 gallons per day for all 10 acres
3. (Note: Total water need for all five days = 500,000 gallons)
4. If the water trucks / water pulls are refilled on-site and rotated, 3 trucks / pulls would probably be sufficient, unless multiple areas are being graded at any given time, then the example in point #5 below may need to be followed
5. Another example of water application might be 10 separate, 10,000 gallon water trucks / water pulls if water needed to be imported from off-site or if multiple areas are to be graded simultaneously

Illustration #2:

1. If the project entails moving 3,000 cubic yards of material and is estimated to take six days, then the minimum water availability for the project would be as follows:
2. 3,000 cubic yards to be moved x 30 gallons per cubic yard of material moved = 90,000 gallons total for all six days
3. In this case one 15,000 gallon water truck / water pull each of the six days would be sufficient, or possibly one 5,000 gallon water truck if it could be refilled multiple times per day

Illustration #3:

1. If the project requires grading a total of 10 acres and one acre is to be graded each day over a 10 day period during March thru October, then the minimum water availability for the project would be as follows:
2. One acre per day x 10,000 gallons per acre per day = 10,000 gallons per day the acre to be graded
3. (Note: Total water need for all 10 acres over all 10 days = 100,000 gallons)
4. In this case one 10,000 gallon water truck / water pull each of the 10 days would be sufficient, or possibly one 5,000 gallon water truck if it could be refilled during the day



Maricopa County
Air Quality Department

Return all applications to: One Stop Shop
501 N. 44th Street, Suite 200
Phoenix, Arizona 85008
Phone (602) 372-1071 Fax (602) 372-1078

**DUST CONTROL PERMIT APPLICATION
PART 2: FORM**

For Office Use Only			
District #		Date Issued	
Permit #		Approved By	
Fee Paid / Acreage		Cross Streets	

IS MY APPLICATION COMPLETE?

- 1. **Dust Control Permit Application Form:** Completely answer all questions; fill in all blanks and check boxes as appropriate, in both the Applicant and Project Information areas of the Form. Attach a copy of the Project Site Drawing.
- 2. **Dust Control Plan:** Rule 310, Section 402 (Dust Control Plan requirements) requires the submission of a Dust Control Plan with your application. You may submit Part 3 of this application after completely filling in every category or sub-category; a primary and contingency control measure must be chosen for each or an explanation of why the category or sub-category is not applicable must be provided. Alternately, you may submit your own Dust Control Plan that conforms to Rule 310, Section 402 describing all dust control measures to be used during the project.
- 3. **Fee Payment:** Have appropriate fee ready when submitting application, see FAQ #3 above or the MCAQD website: www.maricopa.gov/aq/divisions/permit_engineering/permit_fees.aspx.

Part 2.1 – Applicant Information (See Instructions page 5)

Part 2.1 – Applicant Information must be fully and accurately completed, including full legal names of entities and individuals (no DBA's or trade names). For all Applicants, appropriate registration in the State of Arizona will be verified with the Arizona Corporation Commission or other applicable resources before a permit will be issued.

1. Applicant:

Relationship to property (Check all that apply):

- Property Owner General / Prime Contractor Developer Lessee

Type of Entity:

- Corporation Limited Liability Company or Partnership Sole Proprietor Individual Government

Name:

Address:

City:

State:

Zip:

Phone:

Fax:

E-Mail Address:

Local Mailing Address (if not the same as above):

Contractor License Number:

2. Is Applicant a wholly owned subsidiary of another Company?

Yes

No

If "Yes", please provide all requested information below. If "No", please proceed to Question 3:

Parent Company (if Applicant is a wholly owned subsidiary):

Type of Entity:

- Corporation Limited Liability Company or Partnership Sole Proprietor Individual Government

Name:

Address:		
City:	State:	Zip:
Phone:	Fax:	
State of Incorporation or Registration:		
3. Applicant President / Owner:		
Name:		
Address:		
City:	State:	Zip:
Phone:	Fax:	
4. Property Owner / Developer, if not Applicant:		
Type of Entity:		
<input type="checkbox"/> Corporation <input type="checkbox"/> Limited Liability Company or Partnership <input type="checkbox"/> Sole Proprietor <input type="checkbox"/> Individual <input type="checkbox"/> Government		
Name:		
Address:		
City:	State:	Zip:
Phone:	Fax:	
Contact Person:		
5. Dust Control Coordinator: (required for any site with five acres or more of disturbed surface area subject to a permit issued by the Control Officer requiring control of PM ₁₀ emissions from dust-generating operations)		
Name:		
Title:	Company Name:	
On-Site Phone:	Mobile:	Fax:
E-mail Address:		
Dust Control Badge ID Number:		
6. Primary Project Contact:		
Name:		
Title:	Company Name:	
On-Site Phone:	Mobile:	Fax:
E-mail Address:		
7. Certification by a Responsible Official of the Applicant:		
<p>A Responsible Official of the Applicant is the person who will be contacted or named in any enforcement action initiated by the Maricopa County Air Quality Department or the Maricopa County Attorney's Office. Pursuant to Rule 301, Section 401.3, the signature on the Dust Control Permit Application shall constitute agreement to accept responsibility for meeting the conditions of the Dust Control Permit and for ensuring that control measures are implemented throughout the project site and during the duration of the project.</p> <p>Arizona Revised Statute § 13-2704 makes it a criminal offense to knowingly make a false material statement to a public servant in connection with an application for any benefit, privilege, or license.</p> <p>I hereby certify that, based on information and belief formed after reasonable inquiry, the statements and information in the Dust Control Permit Application, including Part 2.1 – Applicant Information, Part 2.2 – Project Information, and Part 3 – Dust Control Plan, are true, accurate, and complete.</p>		
Signature:		
Printed Name:	Title:	

8. Application completed by (if other than Signatory):	
Signature:	
Printed Name:	Title
Phone:	Fax:
E-mail Address:	

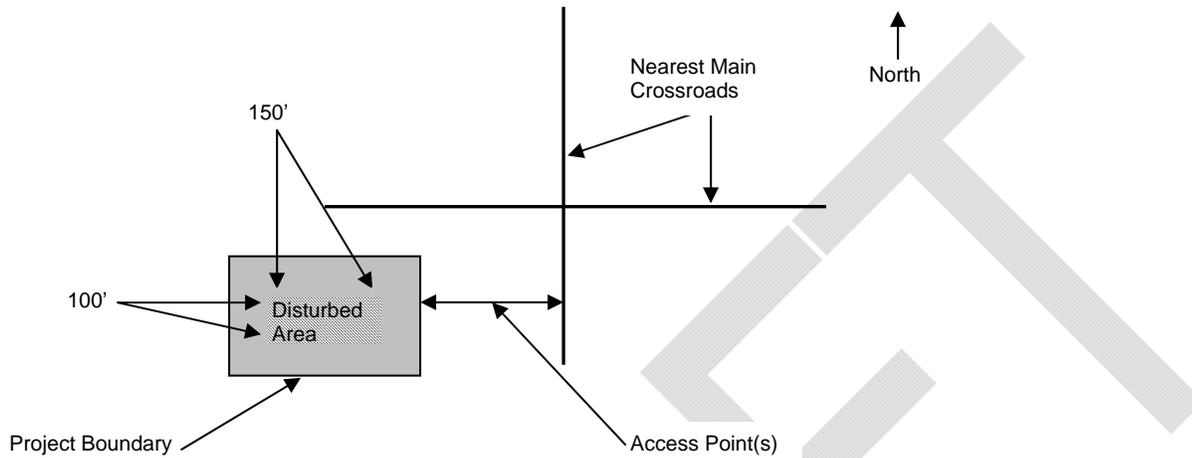
Part 2.2 – Project Information (See Instructions page 6)

9. Name of Project:		
10. Project Location: (If address is not available complete Other Location information as fully as possible)		
Address:		
City:	State: AZ	Zip:
Nearest Major Cross Street North/South:		
Nearest Major Cross Street East/West:		
Is this location:	<input type="checkbox"/> Unincorporated Area (County)	<input type="checkbox"/> Incorporated Area (City)
Other Location information: (If address is not available provide all information possible below)		
County Assessor's Parcel Number(s):		
Master Plan Community Number(s):		
Geographic Coordinates:		
11. Project Location by Township (N or S), Range (E or W), Section (1-36):		
Township:	Range:	Section:
12. Brief Project Description:		
13. Will a basement or underground parking be excavated? <input type="checkbox"/> Yes <input type="checkbox"/> No		
14. Will building occur on a pre-existing pad / prepared pad? <input type="checkbox"/> Yes <input type="checkbox"/> No		
15. Size of Project:		
Estimated total acres that will be disturbed throughout the duration of this Permit, including staging and stockpile areas as well as temporary storage yards:		
Estimated acres to be graded, if different from size of project indicated above:		
Estimated cubic yards of Bulk Material to be moved within the boundaries of the project:		
Estimated amount of import Bulk Material:		
Estimated amount of export Bulk Material:		
16. Is this a Re-application? <input type="checkbox"/> Yes <input type="checkbox"/> No Previous Permit #		
A permit is valid for 1 year after the date of approval. The re-application process may take up to 14 days for review and processing and must be approved prior to the expiration of the old permit. You must re-apply for a permit more than 14 days before the original permit expires.		
17. Estimated Project Start Date (month / day / year). If re-application, list original project start date:		
18. Estimated Duration of Project:		
19. Project Site Drawing:		
<i>(NOTE: A Dust Control Permit will not be issued unless a drawing is submitted)</i>		

Attach a separate page (8½" × 11") with a drawing showing all of the following elements:

- Entire project site boundaries
- Area to be disturbed with **linear dimensions** (including staging areas, stockpiles, and storage)
- Nearest main crossroads
- North arrow
- Access Point(s) – Planned exit locations onto paved areas accessible to the public

Example (simplified):



20. List of Soil Designations from Appendix F in Maricopa County Air Pollution Control Regulations or check here if attaching copy of the site geotechnical report:

For construction projects one acre or larger, except for routine maintenance and repair done under a block permit, designate in the table below which soil texture is naturally present on the work site and which soil texture will be imported onto the work site (if applicable). If the soil on the work site has been tested, then you should rely on the test results to complete the table and you should attach a copy of the site soil report (boring logs) to this application. If the soil on the work site has not been tested, then use Appendix F in the Maricopa County Air Pollution Control Regulations to complete the table below.

Texture of soil naturally present on work site	Texture of soil to be imported onto work site

21. Asbestos NESHAP Notification Requirements: (answer all subparts of Question 21 below)

SEPARATE notification and fee for demolition/renovation activities may be required.

Questions concerning the Asbestos NESHAP regulation should be referred to the Maricopa County's Asbestos NESHAP Coordinator at 602-506-6708 or 602-506-0421. Forms, contacts, regulations and additional information not covered below may be obtained on our website at http://www.maricopa.gov/aq/divisions/compliance/air/asbestos_neshap/Default.aspx.

Be advised that Maricopa County has been delegated regulatory jurisdiction for all regulated facilities within the boundaries of Maricopa County, including within all city boundaries contained in the county. All regulated facilities scheduled for demolition or renovation (defined below) must be inspected by a currently certified Asbestos Hazard Emergency Response Act (AHERA) Asbestos Building Inspector. There is no waiver of this requirement based on the age of the facility. The inspection must be performed within the 12 months preceding commencement of demolition or renovation activity.

Demolition: The wrecking or taking out of any load-supporting structural member of a facility together with any related handling operations or the intentional burning of a facility.

Renovation: Altering a facility or one or more facility components in any way, including the stripping or removal of Regulated Asbestos Containing Material (RACM) from a facility component.

21a. Does the Project include demolition or renovation?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
If "Yes", provide all requested information for Questions 21b to 21d. If "No", proceed to Part 3:		
21b. Description of demolition / renovation activities:		
21c. Has the property <u>ever</u> been used as a ranch, farm, business or any other commercial or industrial purpose?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
21d. Is there a guesthouse, more than one structure or house on the property, or is work being done in conjunction with another property in the area?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
If "Yes" to either Question 21c or 21d then answer the following Question 21e as "No" and provide all requested information for Questions 21f to 21i, If "No" to both Question 21c and 21d, continue and answer Question 21e:		
21e. Is this a residential property?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
If "Yes", proceed to Part 3. If "No", provide all requested information for Questions 21f to 21i:		
21f. Description of each structure:		
21g. Has an asbestos inspection been conducted by an AHERA Certified Building Inspector within the last 12 months before the time of scheduled activities?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
If "Yes", provide requested information for Question 21h. If "No", proceed to Question 21i:		
21h. Date of AHERA inspection:		
21i. Has a 10-Day NESHAP Notification been submitted?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
If "Yes", provide all requested information for Questions 21j to 21l. If "No", you need to file the appropriate form(s), therefore, check online or call the Coordinator as referenced above.		
21j. 10-Day NESHAP Notification submittal date (Attach a copy):		
21k. 10-Day NESHAP Notification number: ASBO		
21l. 10-Day NESHAP Notification filed by (contractor):		
For Central Office Use Only		
Demolition Notification number on file:	Approved by:	
Renovation Notification number on file:	Date approved:	
Scheduled days of operation:	Date contacted:	
Follow up:	Phone approval:	
	Date contacted:	

In order to be accepted for review the Dust Control Permit Application Package must be complete. This includes answering all questions fully and accurately in the preceding Applicant and Project information areas as well as submitting a Dust Control Plan. You may fill out the following Part 3 of the Dust Control Permit Application and submit it as your Dust Control Plan or you may write your own Dust Control Plan that conforms to Rule 310, Section 402.

DRAFT

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DUST CONTROL PERMIT APPLICATION

DUST CONTROL PLAN

PART 3
DUST CONTROL PLAN

The following 13 pages will become the dust control plan that will be followed for the project named in this permit. Once completed in full and approved this Dust Control Plan must be posted on-site with the Dust Control Permit.

Primary ("P") and Contingency ("C") Control Measures:

Every category and/or sub-category requires at least one Primary control measure ("P") and at least one Contingency control measure ("C"). A contingency control measure is the back-up or secondary action(s) that needs to immediately be implemented when the primary control measure(s) fails to adequately control dust emissions at the named project.

To indicate your choice, mark the box next to the appropriate letter ("P" or "C") in front of each control measure(s) that you have chosen. Do this for both primary and contingency control measures in every category and/or sub-category.

Categories and/or sub-categories that are not applicable:

When a category and/or sub-category does not apply to the named project this must be acknowledged by completely filling out the final entry in the category and/or sub-category. An explanation must be supplied for WHY the category and/or sub-category is not applicable. This is in addition to simply writing "NA" or "not applicable".

Part 3 – Dust Control Plan (See Instructions pages 8-12, 19-22)

When completing the following Dust Control Plan, use the Instructions, Part 1.2, pages 8-12 and 19-22, preceding this application to help you select dust control measures and keep in mind the following:

- Every category and/or sub-category requires at least one "P" (Primary) and at least one "C" (Contingency).
- Categories and/or sub-categories of dust-generating operations C3, C5, E1, F, and G, in the following Dust Control Plan, have primary control measures, "P", required by Rule 310. You will need to choose a contingency measure, "C", for these dust-generating operations.
- Where has replaced a "P", the dust control measure **CANNOT** be used as a primary control measure; this measure may only be considered a contingency control measure when selected.
- Where has replaced a "C", the dust control measure **CANNOT** be used as a contingency control measure and is required to be used as a primary control measure whenever that category and/or sub-category applies to a project.
- Where "Other" is listed without reference to opacity or surface stabilization standard(s) and is selected as a primary control measure, then the description must meet the criteria in the Instructions, Part 1.2.1 – Unlisted Dust Control Measures (See Instructions page 8).
- If a category and/or sub-category does not apply to the project named in this application the last item in that category and/or sub-category must be fully completed. An explanation of why it is not applicable is required.

**After your Dust Control Permit Application has been approved, you must post
your Dust Control Permit along with this Dust Control Plan on-site, as
required by County Rule 310, Section 409.**

Category A. Vehicles/Motorized Equipment

(See Instructions page 10)

A.1 Unpaved Staging Areas, Unpaved Parking Areas, and Unpaved Material Storage Areas

- P C Apply water (Fill out Category I, "Water" on pp. 38-41)
- P C Pave (Choose one of the following): Beginning of Project* During Project* End of Project*
*Must stabilize surface prior to paving
- P C Apply and maintain gravel, recycled asphalt, or other suitable material
- P C Apply and maintain dust suppressant(s), other than water (Fill out Category J, "Dust Suppressants other than water" on p. 42)
- P C Limit vehicle trips to no more than 20 per day per road **AND** limit vehicle speeds to no more than 15 m.p.h. In the space provided, list the maximum number of vehicle trips on the unpaved parking / staging / material storage areas each day (including number of employee vehicles, earthmoving equipment, haul trucks and water trucks) and a description of how vehicle speeds will be restricted to no more than 15 m.p.h.:
- _____
- P C Other: _____
- _____

Or, explain why this sub-category and its control measures are not applicable _____

A.2 Unpaved Access Areas / Haul Roads

- P C Apply water (Fill out Category I, "Water" on pp. 38-41)
- P C Pave (Choose one of the following): Beginning of Project* During Project* End of Project*
*Must stabilize surface prior to paving
- P C Apply and maintain surface gravel, recycled asphalt, or other suitable material
- P C Apply and maintain dust suppressant(s), other than water (Fill out Category J, "Dust Suppressants other than water" on p. 42)
- P C Limit vehicle trips to no more than 20 per day per road **AND** limit vehicle speeds to no more than 15 m.p.h. In the space provided, list the maximum number of vehicle trips on the unpaved access areas / haul roads each day (including number of employee vehicles, earthmoving equipment, haul trucks and water trucks) and a description of how vehicle speeds will be restricted to no more than 15 m.p.h.:
- _____
- C Cease operations, NOTE: This option CANNOT be considered a *primary* control measure.

P C Other: _____

Or, explain why this sub-category and its control measures are not applicable _____

Category B. Disturbed Surface Areas
(See Instructions page 10)

B.1 Before Active Operations occur

- P C Pre-water site to the depth of cuts (Fill out Category I, "Water" on pp. 38-41)
- P C Phase work to reduce the amount of disturbed surface area at any one time. **Attach a map** delineating the phases and their extent
- P C Other: _____

Or, explain why this sub-category and its control measures are not applicable _____

B.2 During Active Operations

- P C Apply water (Fill out Category I, "Water" on pp. 38-41)
- P C Apply and maintain dust suppressant(s) other than water (Fill out Category J, "Dust Suppressants other than water" on p. 42)
- P C Apply water to maintain a soil moisture content at a minimum of 12% or at least 70% of the optimum soil moisture content for areas that have an optimum moisture content for compaction of less than 12% (Fill out Category I, "Water" on pp. 38-41)
- P C Construct wind barrier fences (in conjunction with one of the above listed measures)
- P C Cease operations, NOTE: This option CANNOT be considered a *primary* control measure.
- P C Other: _____

Or, explain why this sub-category and its control measures are not applicable _____

B.3 Temporary Stabilization including weekends, after work hours, holidays, and any other inactive periods 24 hours per day, seven days per week

- P C Apply water (Fill out Category I, "Water" on pp. 38-41)
- P C Apply and maintain dust suppressant(s) other than water (Fill out Category J, "Dust Suppressants other than water" on p. 42)
- P C Apply and maintain gravel, recycled asphalt, or other suitable material
- P C Cover open storage piles with tarps, plastic or other materials such that wind will not remove the covering(s)

P C Establish vegetative ground cover (landscaping)

P C Other: _____

Or, explain why this sub-category and its control measures are not applicable _____

B.4 Permanent Stabilization of Disturbed Surface Areas required when the Dust-Generating Operation is finished for a period of 30 days or longer

P C Pave (Choose one of the following): Beginning of Project* During Project* End of Project*
*Must stabilize surface prior to paving

P C Apply and maintain gravel, recycled asphalt, or other suitable material

P C Apply and maintain dust suppressant(s) other than water (**Fill out Category J, "Dust Suppressants other than water" on p. 42**)

P C Establish vegetative ground cover (landscaping)

P C Implement above control measures and restrict vehicle access to the area

P C Apply water (**Fill out Category I, "Water" on pp. 38-41**) and prevent access / trespass by:
(Check all of the following that apply)

ditches fences berms shrubs trees other

P C Restore area such that the vegetative ground cover and soil characteristics are similar to adjacent or nearby undisturbed native conditions (desert xeriscaping)

P C Other: _____

Or, explain why this sub-category and its control measures are not applicable _____

Category C. Bulk Material Handling

(See Instructions page 11)

C.1 Off-Site Hauling onto Paved Areas accessible to the Public

P **Required:** When a cargo compartment is loaded, cover haul trucks with a tarp or other suitable closure **AND** load all haul trucks such that the freeboard is not less than 3 inches **AND** load all haul trucks such that at no time shall the highest point of the bulk material be higher than the sides, front, and back of the cargo container area **AND** prevent spillage or loss of bulk material from holes or other openings in the cargo compartment

P **Required:** When a cargo compartment is empty, cover haul trucks with a tarp or other suitable closure **OR** clean the interior of the cargo compartment before leaving the site

P **Required:** Install, maintain, and use a suitable trackout control device that controls and prevents trackout and / or removes particulate matter from tires and the exterior surfaces of haul trucks and / or motor vehicles that traverse the site

NOTE: The following options CANNOT be considered for a *primary* control measure.

- C Apply water to the top of the load (Fill out Category I, "Water" on pp. 38-41)
- C Apply dust suppressant(s) other than water to the top of the load (Fill out Category J, "Dust Suppressants other than water" on p. 42)
- C Cease operations
- C Other: _____

Or, explain why this sub-category and its control measures are not applicable _____

C.2 Hauling/Transporting within the Boundaries of the Work Site but not crossing a Paved Area accessible to the Public

- P C Limit vehicle speed to 15 m.p.h. or less while traveling on the work site such that visible emissions coming-off the load do not exceed 20% opacity
- P C Apply water to the top of the load (Fill out Category I, "Water" on pp. 38-41)
- P C Apply dust suppressant(s) other than water to the top of the load (Fill out Category J, "Dust Suppressants other than water" on p. 42)
- P C Cover haul trucks with a tarp or other suitable closure
- C Cease operations, NOTE: This option CANNOT be considered a *primary* control measure.
- P C Other: _____

Or, explain why this sub-category and its control measures are not applicable _____

C.3 Hauling/Transporting within the Boundaries of the Work Site and crossing and/or accessing a Paved Area accessible to the Public

- P **Required:** Load all haul trucks such that the freeboard is not less than 3 inches **AND** load all haul trucks such that at no time shall the highest point of the bulk material be higher than the sides, front, and back of the cargo container area **AND** prevent spillage or loss of bulk material from holes or other openings in the cargo compartment **AND** install suitable trackout control device

NOTE: The following options CANNOT be considered for a *primary* control measure.

- C Cease operations
- C Other: _____

Or, explain why this sub-category and its control measures are not applicable _____

C.4 Prior to and/or during Stacking, Loading, and Unloading Operations

- P C Apply water (Fill out Category I, "Water" on pp. 38-41)
- P C Apply dust suppressant(s) other than water (Fill out Category J, "Dust Suppressants other than water" on p. 42)

NOTE: These following options CANNOT be considered for a *primary* control measure.

- C Cease operations
- C Other: _____

Or, explain why this sub-category and its control measures are not applicable _____

C.5 Open Storage Piles

- P C Apply water (Fill out Category I, "Water" on pp. 38-41)
- P C Apply dust suppressant(s) other than water (Fill out Category J, "Dust Suppressants other than water" on p. 42)
- P C Cover open storage piles with tarps, plastic, or other material
- P C Apply water to maintain soil moisture content at a minimum of 12% (Fill out Category I, "Water" on pp. 38-41)
- P C Apply water to maintain at least 70% of the optimum soil moisture content, for areas that have an optimum moisture content for compaction of less than 12% (Fill out Category I, "Water" on pp. 38-41)
- P C Construct wind barrier fences (in conjunction with approved measures listed above)
- P C Other: _____

Or, explain why this sub-category and its control measures are not applicable _____

Category D. Trackout, Carry-out, Spillage, and Erosion
(See Instructions page 11)

D.1 Trackout Control Device

A trackout control device must be installed if a work site has 2 acres or more of disturbed surface area or if a work site has 100 cubic yards of bulk material hauled on-site or off-site per day.

- P **Required:** Install at all exits to a paved area accessible to the public at least one of the following:
(Choose all that apply)
- gravel pad grizzly rumble grate wheel wash system paved area
- P C Other: _____

Or, explain why this sub-category and its control measures are not applicable _____

D.2 Cleaning

Trackout/carry-out must be cleaned up immediately if trackout/carry-out extends more than a cumulative distance of 25 linear feet along a paved area accessible to the public.

Trackout/carry-out must be cleaned up no later than the end of the workday if trackout/carry-out extends less than a cumulative distance of 25 linear feet along a paved area accessible to the public.

P C Operate a street sweeper or wet broom with sufficient water and at the manufacturer's recommended speed (e.g. kick broom, steel bristle broom, Teflon broom, vacuum)

P C Manually sweep-up deposits

P C Other: _____

Or, explain why this sub-category and its control measures are not applicable _____

Category E. Weed Abatement by Discing or Blading
(See Instructions page 12)

E.1 Disturbance Operations

P **Required:** Pre-water site **AND** apply water during weed abatement by discing or blading (**Fill out Category I, "Water" on pp. 38-41**)

NOTE: The following options CANNOT be considered for a *primary* control measure.

C Cease operations

C Other: _____

Or, explain why this sub-category and its control measures are not applicable _____

E.2 Stabilization

P C Pave immediately following weed abatement

P C Apply gravel

P C Apply water (**Fill out Category I, "Water" on pp. 38-41**)

P C Apply dust suppressant(s) other than water (**Fill out Category J, "Dust Suppressants other than water" on p. 42**)

P C Establish vegetative ground cover (landscaping)

P C Other: _____

Or, explain why this sub-category and its control measures are not applicable _____

Category F. Blasting Operations
(See Instructions page 12)

- P **Required:** Discontinue blasting, if wind gusts above 25 m.p.h.
- P **Required:** Pre-water **AND** maintain surface soils in a stabilized condition where support equipment and vehicles will operate **(Fill out Category I, "Water" on pp. 38-41)**
- P C Apply water **(Fill out Category I, "Water" on pp. 38-41)**
- P C Apply and maintain dust suppressant(s) other than water **(Fill out Category J, "Dust Suppressants other than water" on p. 42)**
- C Other, NOTE: This option CANNOT be considered a *primary* control measure. _____

Or, explain why this category and its control measures are not applicable _____

Category G. Demolition Activities
(See Instructions page 12)

- P **Required:** Apply water or water in combination with dust suppressant(s) to demolition debris immediately following demolition activity **(Fill out Category I, "Water" on pp. 38-41 or Category J, "Dust Suppressants other than water" on p. 42)**
- P **Required:** Apply water or water in combination with dust suppressant(s) to all surrounding areas and to all disturbed soil surfaces immediately following demolition activity **(Fill out Category I, "Water" on pp. 38-41 or Category J, "Dust Suppressants other than water" on p. 42)**
- C Other, NOTE: This option CANNOT be considered a *primary* control measure. _____

Or, explain why this category and its control measures are not applicable _____

Category H. Wind Event

(See Instructions page 12)

H.1 During Active Operation

- P C Cease dust-generating operation for the duration of the wind event when the 60-minute average wind speed is greater than 25 m.p.h. and stabilize work area if dust-generating operation is ceased for the remainder of the work day
- P C Apply water or other suitable dust suppressant at least twice per hour (once per hour if outside the nonattainment area) **(Fill out Category I, "Water" on pp. 38-41 or Category J, "Dust Suppressants other than water" on p. 42)**
- P C Apply water to maintain soil moisture content at a minimum of 12%, as determined by ASTM Method D2216-05 or other equivalent method as approved by the Control Officer and the Administrator Of The Environmental Protection Agency **(Fill out Category I, "Water" on pp. 38-41)**
- P C Maintain at least 70% of the optimum soil moisture content for areas that have an optimum moisture content for compaction of less than 12%, as determined by ASTM Method D1557-02e1, or other equivalent method as approved by the Control Officer or the Administrator Of The Environmental Protection Agency **(Fill out Category I, "Water" on pp. 38-41)**
- P C Apply water or other suitable dust suppressant(s) at least twice (once if outside the nonattainment area) per hour and construct fences or three-foot to five-foot high wind barriers with 50% or less porosity adjacent to roadways or urban areas to reduce the amount of windblown material leaving the site **(Fill out Category I, "Water" on pp. 38-41 or Category J, "Dust Suppressants other than water" on p. 42)**
- C Other, NOTE: This option CANNOT be considered a *primary* control measure. _____

Or, explain why this sub-category and its control measures are not applicable _____

H.2 Temporary Disturbed Surface Areas after work hours, weekends, holidays and any other inactive periods 24 hours per day, seven days per week

- P C Apply and maintain surface gravel or dust suppressant(s) **(Fill out Category I, "Water" on pp. 38-41 or Category J, "Dust Suppressants other than water" on p. 42)**
- P C Apply water or water in combination with dust suppressant(s) to all disturbed surface areas three times per day. If there is evidence of windblown dust, increase watering frequency to a minimum of four times per day. **(Fill out Category I, "Water" on pp. 38-41 or Category J, "Dust Suppressants other than water" on p. 42)**
- P C Apply water or water in combination with dust suppressant(s) on open storage piles at least twice per hour (once per hour if outside the nonattainment area) to maintain a visible crust **(Fill out Category I, "Water" on pp. 38-41 or Category J, "Dust Suppressants other than water" on p. 42)**
- P C Cover open storage piles with tarps, plastic, or other material such that wind will not remove the coverings
- C Other, NOTE: This option CANNOT be considered a *primary* control measure. _____

Or, explain why this sub-category and its control measures are not applicable _____

Category I. Water

(See Instructions page 13)

For each of the different project phases, indicate how the water is to be stored on or supplied to the project site and how the water will be applied to control dust-generation throughout the project lifetime. "Water supply" means how water will be supplied to the site (e.g. (2) 3,000 gal. water towers). "Water application system" means how water will be applied to the site (e.g. 1 fire hose, (3) 1,000 gal. water trucks). Minimum water availability means water supply in conjunction with the water application system.

Soil Rating: **Severe** **Moderate**

(See Appendix F of the Maricopa County Air Pollution Control Regulations as well as the Instructions, pages 13 and 14-16)

Soil Texture Rating	Project Phase - Site Clearing/Removal of Vegetation/Debris/Demolition	
	Total Acres Disturbed	Minimum Water Available
Severe (clay, silty clay, sandy clay)	0 - 2 acres	500 - 1,000 gallons per day
	2 - 10 acres	1,000 - 5,000 gallons per day
	10 - 100 acres	5,000 - 50,000 gallons per day
	> 100 acres	> 50,000 gallons per day
Moderate (all other classifications)	0 - 2 acres	300 - 600 gallons per day
	2 - 10 acres	600 - 3,000 gallons per day
	10 - 100 acres	3,000 - 30,000 gallons per day
	> 100 acres	> 30,000 gallons per day

Average Daily Disturbance in Acres _____ Number of Gallons per day _____

<u>Supply</u>	<u>Quantity and Size</u>	<u>Application</u>	<u>Quantity and Size</u>
<input type="checkbox"/> Metered Hydrant	_____	<input type="checkbox"/> Hose	_____
<input type="checkbox"/> Water Tower	_____	<input type="checkbox"/> Water Truck	_____
<input type="checkbox"/> Water Pond	_____	<input type="checkbox"/> Water Pull	_____
<input type="checkbox"/> Off-Site	_____	<input type="checkbox"/> Water Buffalo	_____
<input type="checkbox"/> Other _____	_____	<input type="checkbox"/> Other _____	_____

Soil Texture Rating	Project Phase - Mass Grading (Includes basements)	
	Minimum Water Available (November – February)	Minimum Water Available (March – October)
Severe (clay, silty clay, sandy clay)	5,000 gallons per acre per day and 30 gallons per cubic yard of material moved	10,000 gallons per acre per day and 30 gallons per cubic yard of material moved
Moderate (all other classifications)	5,000 gallons per acre per day and 30 gallons per cubic yard of material moved	10,000 gallons per acre per day and 30 gallons per cubic yard of material moved

Average Daily Disturbance in Acres _____ Number of Gallons per acre per day _____

Daily Minimum Water Availability _____
(Number of Acres Disturbed) x (Number of Gallons per acre per day)

<u>Supply</u>	<u>Quantity and Size</u>	<u>Application</u>	<u>Quantity and Size</u>
<input type="checkbox"/> Metered Hydrant	_____	<input type="checkbox"/> Hose	_____
<input type="checkbox"/> Water Tower	_____	<input type="checkbox"/> Water Truck	_____
<input type="checkbox"/> Water Pond	_____	<input type="checkbox"/> Water Pull	_____
<input type="checkbox"/> Off-Site	_____	<input type="checkbox"/> Water Buffalo	_____
<input type="checkbox"/> Other _____	_____	<input type="checkbox"/> Other _____	_____

Soil Texture Rating	Project Phase - Underground Utilities	
	Total Acres Disturbed	Minimum Water Available
Severe (clay, silty clay, sandy clay)	0 - 2 acres	500 - 1,000 gallons per day
	2 - 10 acres	1,000 - 5,000 gallons per day
	10 - 100 acres	5,000 - 50,000 gallons per day
	> 100 acres	> 50,000 gallons per day
Moderate (all other classifications)	0 - 2 acres	300 - 600 gallons per day
	2 - 10 acres	600 - 3,000 gallons per day
	10 - 100 acres	3,000 - 30,000 gallons per day
	> 100 acres	> 30,000 gallons per day

Average Daily Disturbance in Acres _____ Number of Gallons per day _____

Supply	Quantity and Size	Application	Quantity and Size
<input type="checkbox"/> Metered Hydrant	_____	<input type="checkbox"/> Hose	_____
<input type="checkbox"/> Water Tower	_____	<input type="checkbox"/> Water Truck	_____
<input type="checkbox"/> Water Pond	_____	<input type="checkbox"/> Water Pull	_____
<input type="checkbox"/> Off-Site	_____	<input type="checkbox"/> Water Buffalo	_____
<input type="checkbox"/> Other _____	_____	<input type="checkbox"/> Other _____	_____

Soil Texture Rating	Project Phase - Unpaved Access Areas / Haul Roads	
	Total Acres Disturbed	Minimum Water Available
Severe (clay, silty clay, sandy clay)	0 - 2 acres	375 - 750 gallons per day
	2 - 10 acres	750 - 3,500 gallons per day
	10 - 100 acres	3,500 - 35,000 gallons per day
	> 100 acres	> 35,000 gallons per day
Moderate (all other classifications)	0 - 2 acres	225 - 400 gallons per day
	2 - 10 acres	400 - 2,250 gallons per day
	10 - 100 acres	2,250 - 22,500 gallons per day
	> 100 acres	> 22,500 gallons per day

Average Daily Disturbance in Acres _____ Number of Gallons per day _____

Supply	Quantity and Size	Application	Quantity and Size
<input type="checkbox"/> Metered Hydrant	_____	<input type="checkbox"/> Hose	_____
<input type="checkbox"/> Water Tower	_____	<input type="checkbox"/> Water Truck	_____
<input type="checkbox"/> Water Pond	_____	<input type="checkbox"/> Water Pull	_____
<input type="checkbox"/> Off-Site	_____	<input type="checkbox"/> Water Buffalo	_____
<input type="checkbox"/> Other _____	_____	<input type="checkbox"/> Other _____	_____

Soil Texture Rating	Project Phase - Vertical/Paved (This pertains to Dust Control during the vertical phase of the project)	
	Total Acres Disturbed	Minimum Water Available
Severe (clay, silty clay, sandy clay)	0 - 2 acres	250 - 500 gallons per day
	2 - 10 acres	500 - 2,500 gallons per day
	10 - 100 acres	2,500 - 25,000 gallons per day
	> 100 acres	> 25,000 gallons per day
Moderate (all other classifications)	0 - 2 acres	150 - 300 gallons per day
	2 - 10 acres	300 - 1,500 gallons per day
	10 - 100 acres	1,500 - 15,000 gallons per day
	> 100 acres	> 15,000 gallons per day

Average Daily Disturbance in Acres _____ Number of Gallons per day _____

Supply	Quantity and Size	Application	Quantity and Size
<input type="checkbox"/> Metered Hydrant	_____	<input type="checkbox"/> Hose	_____
<input type="checkbox"/> Water Tower	_____	<input type="checkbox"/> Water Truck	_____
<input type="checkbox"/> Water Pond	_____	<input type="checkbox"/> Water Pull	_____
<input type="checkbox"/> Off-Site	_____	<input type="checkbox"/> Water Buffalo	_____
<input type="checkbox"/> Other _____	_____	<input type="checkbox"/> Other _____	_____

Soil Texture Rating	Project Phase - Staging/Parking Areas/Storage Areas Including Landscaping Installation	
	Total Acres Disturbed	Minimum Water Available
Severe (clay, silty clay, sandy clay)	0 - 2 acres	375 - 750 gallons per day
	2 - 10 acres	750 - 3,500 gallons per day
	10 - 100 acres	3,500 - 35,000 gallons per day
	> 100 acres	> 35,000 gallons per day
Moderate (all other classifications)	0 - 2 acres	225 - 400 gallons per day
	2 - 10 acres	400 - 2,250 gallons per day
	10 - 100 acres	2,250 - 22,500 gallons per day
	> 100 acres	> 22,500 gallons per day

Average Daily Disturbance in Acres _____ Number of Gallons per day _____

Supply	Quantity and Size	Application	Quantity and Size
<input type="checkbox"/> Metered Hydrant	_____	<input type="checkbox"/> Hose	_____
<input type="checkbox"/> Water Tower	_____	<input type="checkbox"/> Water Truck	_____
<input type="checkbox"/> Water Pond	_____	<input type="checkbox"/> Water Pull	_____
<input type="checkbox"/> Off-Site	_____	<input type="checkbox"/> Water Buffalo	_____
<input type="checkbox"/> Other _____	_____	<input type="checkbox"/> Other _____	_____

Soil Texture Rating	Project Phase - Structure Excavation (Includes stem walls, footings, culverts, abutments, caissons)	
	Total Acres Disturbed	Minimum Water Available
Severe (clay, silty clay, sandy clay)	0 - 2 acres	500 - 1,000 gallons per day
	2 - 10 acres	1,000 - 5,000 gallons per day
	10 - 100 acres	5,000 - 50,000 gallons per day
	> 100 acres	> 50,000 gallons per day
Moderate (all other classifications)	0 - 2 acres	300 - 600 gallons per day
	2 - 10 acres	600 - 3,000 gallons per day
	10 - 100 acres	3,000 - 30,000 gallons per day
	> 100 acres	> 30,000 gallons per day

Average Daily Disturbance in Acres _____ Number of Gallons per day _____

Supply	Quantity and Size	Application	Quantity and Size
<input type="checkbox"/> Metered Hydrant	_____	<input type="checkbox"/> Hose	_____
<input type="checkbox"/> Water Tower	_____	<input type="checkbox"/> Water Truck	_____
<input type="checkbox"/> Water Pond	_____	<input type="checkbox"/> Water Pull	_____
<input type="checkbox"/> Off-Site	_____	<input type="checkbox"/> Water Buffalo	_____
<input type="checkbox"/> Other _____	_____	<input type="checkbox"/> Other _____	_____

Soil Texture Rating	Project Phase - Fine Grading	
	Total Acres Disturbed	Minimum Water Available
Severe (clay, silty clay, sandy clay)	0 - 2 acres	500 - 1,000 gallons per day
	2 - 10 acres	1,000 - 5,000 gallons per day
	10 - 100 acres	5,000 - 50,000 gallons per day
	> 100 acres	> 50,000 gallons per day
Moderate (all other classifications)	0 - 2 acres	300 - 600 gallons per day
	2 - 10 acres	600 - 3,000 gallons per day
	10 - 100 acres	3,000 - 30,000 gallons per day
	> 100 acres	> 30,000 gallons per day

Average Daily Disturbance in Acres _____ Number of Gallons per day _____

Supply	Quantity and Size	Application	Quantity and Size
<input type="checkbox"/> Metered Hydrant	_____	<input type="checkbox"/> Hose	_____
<input type="checkbox"/> Water Tower	_____	<input type="checkbox"/> Water Truck	_____
<input type="checkbox"/> Water Pond	_____	<input type="checkbox"/> Water Pull	_____
<input type="checkbox"/> Off-Site	_____	<input type="checkbox"/> Water Buffalo	_____
<input type="checkbox"/> Other _____	_____	<input type="checkbox"/> Other _____	_____

Import/Export Operations

Number of Yards Involved in this Phase _____ Number of Days for Operation _____

Number of Yards Imported/Exported x 30 gallons of water per yard = _____ (Total Gallons required)

Total Gallons required divided by number of days = _____

Supply	Quantity and Size	Application	Quantity and Size
<input type="checkbox"/> Metered Hydrant	_____	<input type="checkbox"/> Hose	_____
<input type="checkbox"/> Water Tower	_____	<input type="checkbox"/> Water Truck	_____
<input type="checkbox"/> Water Pond	_____	<input type="checkbox"/> Water Pull	_____
<input type="checkbox"/> Off-Site	_____	<input type="checkbox"/> Water Buffalo	_____
<input type="checkbox"/> Other _____	_____	<input type="checkbox"/> Other _____	_____

Category J. Dust Suppressants other than water

(See Instructions page 13)

Although water is a dust suppressant, the information required by Table J should not include information on water supply and water application. The information required by Table J is for all other dust suppressants that you use. Fill out the applicable areas in the table below and attach information on environmental impacts and approvals or certifications related to appropriate and safe use for ground application. Also, attach product specification(s) and application sheet(s) or label instructions.

Application Area	Manufacturer Name	Product	Application Frequency *	Intensity**
A Vehicles/Motorized Equipment				
B Disturbed Surface Areas				
C Bulk Material Handling				
D Trackout, Carry-out, Spillage, and Erosion				
E Weed Abatement by Discing or Blading				
F Blasting Operations				
G Demolition Activities				
H Wind Event				

*How often the surface will receive a complete application of dust suppressant (e.g. 3 times a day)

**The amount used over a period of time (e.g. gallons/minute)