IMPERIAL COUNTY AIR POLLUTION CONTROL DISTRICT

RULE 800 - GENERAL REQUIREMENTS FOR CONTROL OF FINE PARTICULATE MATTER (PM-10)

(Adopted 10/10/94; revised 11/25/96; revised 11/08/2005)

A. General Description

The purpose of this regulation is to reduce the amount of fine Particulate Matter (PM-10) entrained in the ambient air as a result of emissions generated from anthropogenic (man-made) Fugitive Dust (PM-10) sources generated from within Imperial County by requiring actions to prevent, reduce, or mitigate PM-10 emissions. The Rules contained within this Regulation have been developed pursuant to United States Environmental Protection Agency guidance for Serious PM10 Non Attainment Areas.

B. Applicability

The requirements of this rule shall apply to any Active Operation, and/or man-made or man-caused condition or practice capable of generating Fugitive Dust (PM-10) as specified in this Regulation except those determined exempt as defined in Part E of this Rule. The definitions, exemptions, requirements, administrative requirements recordkeeping requirements, and test methods set forth in this rule are applicable to all the rules under Regulation VIII (Fugitive Dust Requirements) of the Rules and Regulations of the Imperial County Air Pollution Control District.

C. Definitions

For the purpose of this Regulation, the following terms are defined:

C.1 ACTIVE OPERATION: Activities capable of generating Fugitive Dust (PM-10), including but not limited to, Earthmoving Activities, Construction activities, Unpaved Roads, Track-Out/Carry-Out, Bulk Material storage and transport, Unpaved Haul/Access Roads.

C.2 AGGREGATE MATERIALS: Consists of sand, Gravel, quarried stone and/or rock fragments that are typically used in Construction. Aggregates may be natural, artificial or recycled.

C.3 ANEMOMETRS: Are devices used to measure wind speed and direction in accordance with manufacturer's performance standards, maintenance and calibration criteria.

C.4 ANNUAL AVERAGE DAILY VEHICLE TRIPS: annual average 24-hour total of all vehicles counted on a road.

C.5 APCD: The Imperial County Air Pollution Control District.

C.6 APCO: The Imperial County Air Pollution Control Officer.

C.7 AVERAGE VEHICLE TRIPS PER DAY: Means the average number of vehicles that cross a given point surface during a specific 24-hour period as determined by the most recent Institute of Transportation Engineers trip generation manual, tube counts, or observations.

C.8 BLM: The Bureau of Land Management.

C.9 BP: The United States Border Patrol.

C.10 BULK MATERIAL: Earth, rock, Silt, sediment, sand, Gravel, soil, fill, Aggregate, dirt, mud, debris, and other organic and/or inorganic material consisting of or containing Particulate Matter with five percent or greater Silt content. For the purpose of this Regulation, the Silt content level is assumed to be 5 percent or greater, unless the Person responsible for the Active Operation conducts the applicable laboratory tests and demonstrate that the Silt content is less than 5 percent. Active Operations seeking to determine if the Silt content is less than five percent are required to conduct the laboratory analysis in accordance with ASTM method C-136-a (Standard Test Method for Sieve analysis of Fine and Coarse Aggregates), or other equivalent test methods approved by EPA, ARB, and the APCD.

C.11 CANAL BANK: A rise of land on either side of an irrigation canal.

C.12 CHEMICAL STABILIZATION/SUPPRESSION: A means of Fugitive Dust (PM-10) control implemented to mitigate PM-10 emissions by applying petroleum resins, asphaltic emulsions, acrylics, adhesives, or any other materials approved for use by the California Air Resources Board (CARB), U.S. Environmental Protection Agency (U.S. EPA) and/or the APCO.

C.13 CONSTRUCTION: Any on-site mechanical activities preparatory to or related to the building, alteration, rehabilitation, or demolition of an improvement on real property, including, but not limited to, land clearing, excavation related to construction, land leveling, grading, cut and fill grading, and the erection or demolition of any structure. As used in Regulation VIII, a construction site may encompass several contiguous parcels, or may encompass only a portion of one parcel, depending on the relationship of the property boundaries to the actual construction activities.

C.14 DESIGNATED REPRESENTATIVE: The agent for a Person. The Designated Representative shall be responsible for and have the full authority to implement BACM on behalf of the Person.

C.15 EARTHMOVING ACTIVITIES: The use of any equipment for an activity that

may generate Fugitive Dust emissions, including, but not limited to, cutting and filling, grading, leveling, excavation, trenching, loading or unloading of Bulk Materials, demolishing, drilling, adding to or removing bulk of materials from open storage piles, weed abatement through disking, and back filling.

C.16 FUGITIVE DUST: The Particulate Matter entrained in the ambient air which is caused from man-made and natural activities such as, but not limited to, movement of soil, vehicles, equipment, blasting, and wind. This excludes Particulate Matter emitted directly in the exhaust of motor vehicles or other fuel combustion devices, from portable brazing, soldering, or welding equipment, pile drivers, and stack emissions from stationary sources.

C.17 GRAVEL: Gravel travelways shall have a three (3) inch minimum depth Stabilized Surface. The travelway shall have a relative compaction of not less than 95% as determined by Test Method No. California 216 of State of California, Business and Transportation Agency Department of Transportation, and conforming to the following grading:

Sieve Designation	¾" Maximum Percent Passing
1"	100
¾"	90-100
#4	35-60
#30	10-30
#200	2-9

Reference: California Department of Transportation Standard Specification Section 26/class II Aggregate Base

C.18 HAUL/ACCESS ROAD: Any on-site road used for commercial, industrial, institutional, and/or governmental traffic.

C.19 HAUL TRUCK: Any fully or partially open-bodied licensed motor vehicle used for transporting Bulk Material for industrial or commercial purposes.

C.20 IMPLEMENT OF HUSBANDRY: An unlicensed vehicle which is used exclusively in the conduct of Agricultural Operations. An Implement of Husbandry does not include a vehicle if its existing design is primarily for the transportation of persons or property on a highway, unless specifically designated as such by some other provision of the Vehicle Code of California.

C.21 NON-RESIDENTIAL AREA: Any unpaved vehicle and equipment traffic area operated at any commercial, manufacturing or government sites.

C.22 MODIFIED PAVED ROAD: Any Paved Road that is widened or improved so as to increase traffic capacity. This term does not include road maintenance, repair, chip seal, pavement or roadbed rehabilitation that does not affect roadway

geometrics, or surface overlay work.

C.23 OFF-FIELD AGRICULTURAL SOURCE: Any Agricultural Source or activity at an Agricultural Source that falls into one or more of the following categories:

C.23.a Outdoor handling, storage and transport of Bulk Material;

C.23.b Paved Road;

C.23.c Unpaved Road; or

C.23.d Unpaved Traffic Area.

C.24 OFF-ROAD VEHICLE: Any nonstationary device, powered by an internal combustion engine or motor, used primarily off the highways to propel, move, or draw persons or property including any device propelled, moved, or drawn exclusively by human power, and used in, but not limited to, any of the following applications: marine vessels, construction/farm equipment, utility and lawn and garden equipment, off-road motorcycles, and off-highway vehicles.

C.25 ON-FIELD AGRICULTURAL SOURCE: Any Agricultural Source or activity at an Agricultural Source that is not an Off-Field Agricultural Source, including (but not limited to) the following:

C.25.a Activities conducted solely for the purpose of preparing land for the growing of crops or the raising of fowl or animals, such as brush or timber clearing, grubbing, scraping, ground excavation, land leveling, grading, turning under stalks, disking, or tilling;

C.25.b Drying or pre-cleaning of agricultural crop material on the field where it was harvested;

C.25.c Handling or storage of agricultural crop material that is baled, cubed, pelletized, or long-stemmed, on the field where it was harvested, and the handling of fowl or animal feed materials at sites where animals or fowl are raised;

C.25.d Disturbances of cultivated land as a result of fallowing, planting, fertilizing or harvesting.

C.26 OPEN AREA: Any of the following described in Subsection C.26.a through C.26.c of this rule. For the purpose of this rule, vacant portions of residential or commercial lots and contiguous parcels that are immediately adjacent to and owned and/or operated by the same individual or entity are considered one open area. An open area does not include any Unpaved Traffic Area as defined in this rule.

C.26.a An un-subdivided or undeveloped land adjoining a developed (or partially developed) residential, industrial, institutional, governmental, or commercial area.

C.26.b A subdivided residential, industrial, institutional, governmental, or commercial lot, which contains no approved or permitted building or structures of a temporary or permanent nature.

C.26.c A partially developed residential, industrial, institutional, governmental, or commercial lot and contiguous lots under common ownership.

C.27 PARTICULATE MATTER: Any material, except uncombined water, which exists in a finely divided form as a liquid or solid at 60 degrees F and one atmosphere pressure.

C.28 PAVED ROADS: An improved street, highway, alley, public way, that is covered by concrete, asphaltic concrete, or asphalt.

C.29 PERSON: Any individual, public or private corporation, partnership, association, firm, trust, estate, municipality, or any other legal entity whatsoever which is recognized by law as the subject of rights and duties, who is responsible for an Active Operation.

C.30 PM-10: Particulate Matter with an aerodynamic diameter smaller than or equal to a nominal 10 microns as measured by the applicable State and Federal reference test methods.

C.31 RECREATIONAL USE: The use of motorized vehicles on public lands.

C.32 RURAL: Areas not classified as urban constitute “rural.”

C.33 SILT: Any Aggregate Material with a particle size less than 75 micrometers in diameter as measured by a No. 200 sieve as defined in ASTM D-2487 and as tested by ASTM-C-136 or other equivalent test methods approved by EPA, ARB, and the APCD.

C.34 STABILIZED SURFACE: Any disturbed surface area or open bulk storage pile that is resistant to wind blown Fugitive Dust emissions. A surface is considered to be stabilized if it meets at least one of the following conditions specified in this Section and as determined by the test methods specified in Appendix B, Section A, B and D-G tests of this rule:

C.34.a A visible crust; or

C.34.b A threshold friction velocity (TFV) for disturbed surface areas corrected

for non-erodible elements of 100 centimeters per second or greater; or

C.34.c A flat vegetative cover of at least 50 percent that is attached or rooted vegetation; or unattached vegetative debris lying on the surface with a predominant horizontal orientation that is not subject to movement by wind; or

C.34.d A standing vegetative cover of at least 30 percent that is attached or rooted vegetation with a predominant vertical orientation; or

C.34.e A standing vegetative cover that is attached or rooted vegetative with a predominant vertical orientation that is at least 10 percent and where the TFV is at least 43 centimeters per second when corrected for non-erodible elements; or

C.34.f A surface that is greater than or equal to 10 percent of non-erodible elements such as rocks, stones, or hard-packed clumps of soil.

C.35 STABILIZED UNPAVED ROAD: Any Unpaved Road or unpaved vehicle/equipment traffic area surface which meets the definition of Stabilized Surface as determined by the test method in Appendix B, Section C of this rule, and where VDE is limited to 20% opacity.

C.36 TACTICAL TRAINING: Training conducted by the U.S. Department of Defense, the U.S. military services, or its allies for combat, combat support, combat service support, tactical or relief operations. Examples include but are not limited to munitions training.

C.37 TEMPORARY UNPAVED ROAD: Any Unpaved Road surface which is created to support a temporary or periodic activity and the use of such road surface is limited to vehicle access for a period of not more than six months during any consecutive three-year period.

C.38 THRESHOLD FRICTION VELOCITY (TFV): The corrected velocity necessary to initiate soil erosion as determined by the test method specified in Appendix B, Section D, of this rule. The lower TFV, the greater the propensity for fine particles to be lifted at relatively low wind speeds.

C.39 TRACK-OUT/CARRY-OUT: Any and all Bulk Materials that adhere to and agglomerate on the exterior surfaces of motor vehicles and/or equipment (including tires) that may then fall onto the pavement.

C.40 TRACK-OUT PREVENTION DEVICE: A Gravel pad, grizzly, wheel wash system, or a paved area, located at the point of intersection of an unpaved area and a Paved Road that prevents or controls Track-Out.

C.41 UNPAVED ROADS: Streets, alley ways, or roadways that are not covered by one of the following: concrete, asphaltic concrete, asphalt, or other similar materials specified by the U.S.EPA, CARB and/or the APCO.

C.42 UNPAVED TRAFFIC AREA: Any nonresidential area that is:

C.42.a Not covered by asphalt, recycled asphalt, asphaltic concrete, concrete, or concrete pavement, and

C.42.b Used for fueling and servicing; shipping, receiving and transfer; or parking or storing equipment, haul trucks, vehicles, and any conveyances.

C.43 URBAN AREA: An area within an incorporated city boundary or within unincorporated areas completely surrounded by an incorporated city.

C.44 VDE: Visible dust emissions. Dust emissions that are visible to an observer.

C.45 VMT: Vehicle miles traveled.

C.46 WIND GUST: Is the maximum instantaneous wind speed as measured by an anemometer.

D. Compliance Schedule

D.1 Existing sources subject to this Regulation shall comply with its requirements no later than 90 days after its adoption date.

D.2 New sources subject to this Regulation shall comply with its requirements prior to initiation of activity.

D.3 The BLM and BP shall each comply with the following compliance schedule:

D.3.a Submit a draft dust control plan addressing all applicable portions of this Regulation including section F.5 within three (3) months of the adoption date of this rule, to which the APCO shall respond within 60 days;

D.3.b Submit a final dust control plan addressing all APCO comments within two (2) months after receiving APCO's comments, which the APCO shall transmit to CARB and U.S. EPA for 45-day review and comment;

D.3.c Implement all final dust control plan elements within six (6) months of submittal; and

D.3.d Submit an updated dust control plan every two calendar years by the procedures described in D.3.a to D.3.c. The updated plans shall be transmitted to the District no later than 90 days after the end of the

calendar year and, in addition to information required of the initial plan, shall include a summary of actions taken to prevent or mitigate PM10 emissions during the previous two years.

E. Exemptions

The following activities are exempt from provisions of this Regulation:

E.1 Actions required by the Federal or State Endangered Species Act or any order issued by a court or governmental agency.

E.2 Off-Field Agricultural Sources necessary to minimize or respond to adverse effects on agricultural crops caused during freezing temperatures as declared by the National Weather Service.

E.3 Emergency maintenance of flood control channels and water spreading basins.

E.4 Any emergency operation activities performed to ensure public health and safety. Emergency activities lasting more than 30 days shall be subject to this Regulation, except where compliance would limit the effectiveness of the emergency activity performed to ensure public health and safety.

E.5 Blasting operations permitted by the California Division of Industrial Safety. Other activities performed in conjunction with blasting are not exempt from complying with the provisions of this rule.

E.6 The Recreational Use of public lands covered by the most recent BLM dust control plan that complies with Rule 800, including but not limited to Off-Road Vehicles, all-terrain vehicles, trucks, cars, motorcycles, motorbikes or motorbuggies.

E.7 The following military training activities conducted by the Department of Defense: (1) military Tactical Training, (2) maintenance, repair, and removal of targets and munitions associated with military Tactical Training, (3) open areas on active military ranges, including but not limited to designated impact areas, landing zones, and bivouac areas. Other activities performed in conjunction with military Tactical Training are not exempt from complying with the provisions of this rule.

F. General Requirements

F.1 Materials used for Chemical Stabilization of soils, including petroleum resins, asphaltic emulsions, acrylics, and adhesives shall not violate State Water Quality Control Board standards for use as a soil stabilizer. Materials accepted by the California Air Resources Board (ARB) and the United States Environmental Protection Agency (EPA), and which meet State water quality standards, shall be

considered acceptable to the ICAPCD.

F.2 Any material prohibited for use as dust Suppressant by EPA, the ARB, or other applicable law, rule, or regulation is also prohibited under Regulation VIII.

F.3 Use of hygroscopic materials may be prohibited by the APCD in areas lacking sufficient atmospheric moisture of soil for such materials to effectively reduce Fugitive Dust emissions. The atmospheric moisture of soil is considered to be sufficient if it meets the application specifications of the hygroscopic product manufacturer. Use of such materials may be approved in conjunction with sufficient wetting of the controlled area.

F.4 Any use of dust Suppressants or gravel pads, and paving materials such as asphalt or concrete for paving, shall comply with other applicable District Rules.

F.5 Bureau of Land Management (BLM) Requirements

The BLM shall prepare a dust control plan to minimize PM10 emissions for sources under the control of BLM. The dust control plan shall include at a minimum the following:

F.5.a A stipulation that all new authorizations for point and area stationary emission sources obtain all necessary permits and satisfy all applicable SIP provisions, including Regulation VIII specific control measures;

F.5.b A summary of: the total miles of BLM roads that are paved, paved with unpaved shoulders, and unpaved roads with 50 or more average vehicle trips per day, including length and level of usage of each such road; the priority for control of road segments based on annual and episodic (e.g. event) usage; the plans for control of PM-10 emissions from these roads; the location and extent (e.g. acreage) of open areas disturbed by legal and illegal Recreational Use; the priority for control of these open areas based on annual and episodic (e.g. event) usage; the plans for control of PM-10 emissions from these areas;

F.5.c BLM must demonstrate in its dust control plan that Unpaved Roads, parking, and Open Areas are controlled pursuant to the applicability and requirements of Rules 804 and 805 except where measures are demonstrated by BLM to be prohibited by federal or state laws, regulations, or approved plans concerning wilderness preservation and species management and recovery.

F.5.d Where compliance with any control measure in Rules 804 and 805 is prohibited pursuant to F.5.c, the dust control plan must discuss and commit to implement other possible control measures, such as vehicle speed limits.

F.5.e The dust control plan must describe all PM-10 control measures that will be implemented, such as restricted use areas, stabilization of Unpaved Traffic Areas and current Recreation Area Management Plan (RAMP) measures, to reduce PM10 emissions during off-road events and/or competitions on public land and include all those measures that are feasible and not prohibited by the laws, regulations and plans described in F.5.c;

F.5.f Use BLM-standard road design and drainage specifications when maintaining existing roads or authorizing road maintenance and new road construction; and

F.5.g Include public educational information on reducing PM-10 emissions with BLM open area literature (e.g. identification of restricted areas and/or applicable speed limits) and on related information signs in heavily used areas.

F.6. Border Patrol (BP) Requirements

The BP shall prepare a dust control plan designed to minimize PM10 emissions from sources under the control of the BP. The dust control plan shall include those dust control measures found in Rules 804 and 805. The dust control plan shall include the following fugitive dust control measures:

F.6.a A stipulation that all new authorizations for point and area stationary emission sources obtain all necessary permits and satisfy all applicable SIP provisions, including Regulation VIII specific control measures;

F.6.b Implement alternatives to tire-dragging that result in fewer PM10 emissions, unless BP demonstrates such alternatives to be inconsistent with the monitoring of immigration across the U.S.-Mexico border; and

F.6.c Control dust emissions from certain Unpaved Roads and routes owned or operated by the BP as identified through general BP planning consistent with Rule 805 unless those dust control measures are demonstrated to be inconsistent with BP authority and/or mission.

G. Administrative Requirements

G.1 Test Methods

G.1.a Determination of VDE Opacity

Opacity observations to determine compliance with VDE standards shall be conducted in accordance with the test procedures for "Visual

Determination of Opacity" as described in Appendix A of this rule. Opacity observations for sources other than unpaved traffic areas (e.g., roads, parking areas) shall be conducted per Section B of Appendix A and shall require 12 readings at 15-second intervals.

G.1.b Determination of Stabilized Surface

Observations to determine compliance with the conditions specified for a stabilized surface, in any inactive disturbed surface area, whether at a work site that is under construction, at a work site that is temporarily or permanently inactive, or on an open area and vacant lot, shall be conducted in accordance with the test methods described in Appendix B of this rule. If a disturbed surface area passes any of the applicable Appendix B-Section A, B and D-G tests, then the surface shall be considered stabilized.

G.1.c Determination of Soil Moisture Content

Soil moisture content shall be determined by using ASTM Method D2216-98 (Standard Test Method for Laboratory Determination of Water [Moisture] Content of Soil and Rock by Mass), or other equivalent test methods approved by the EPA, ARB, and the APCO.

G.1.d Determination of Silt Content for Bulk Materials

Silt content of a Bulk Material shall be determined by ASTM Method C136a (Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates), or other equivalent test methods approved by EPA, ARB, and the APCD.

G.1.e Determination of Silt Content for Unpaved Roads and Unpaved Vehicle/Equipment Traffic Areas

Silt Content for Unpaved Roads and Unpaved Traffic Areas shall be determined by using Section C of Appendix B of this Rule or other equivalent test methods approved by EPA, ARB, and the APCO.

G.1.f Determination of Threshold Friction Velocity (TFV)

TFV shall be determined by using Section D of Appendix B of this Rule or other equivalent test methods approved by EPA, ARB, and the APCO.

H. Record of Control Implementation

Any Person subject to the requirements of this rule shall compile and retain records that provide evidence of control measure application and compliance with this rule (i.e.,

receipts and/or purchase records). Such Person shall describe, in the records, the type of treatment or control measure, extent of coverage, and date applied. For control measures which require multiple daily applications, recording the frequency of application will fulfill the recordkeeping requirements of this rule (i.e., water being applied three times a day and the date) Records shall be maintained and be readily accessible for two years after the date of each entry and shall be provided to the APCD upon request.

I. Violations

Failure to comply with any provisions of this rule shall constitute a violation of Regulation VIII. Failure to comply with the provisions of an APCO approved dust control plan shall also constitute a violation of this Regulation. Regardless of whether an APCO approved dust control plan is being implemented or not, or whether a Person responsible for an Active Operation(s) is complying with an approved dust control plan, the Person is still subject to the requirements of Regulation VIII at all times.

APPENDIX A
Visual Determination of Opacity

SECTION A Test Method For Unpaved Roads and Unpaved Traffic Areas
SECTION B Test Method For Time-Averaged Regulations

SECTION A TEST METHOD FOR UNPAVED ROADS AND UNPAVED TRAFFIC AREAS

A. Opacity Test Method. The purpose of this test method is to estimate the percent opacity of Fugitive Dust plumes caused by vehicle movement on Unpaved Roads and Unpaved Traffic Areas. This method can only be conducted by an individual who has current certification as a qualified observer.

A.1 Step 1: Stand at least 16.5 feet from the fugitive dust source in order to provide a clear view of the emissions with the sun oriented in the 140° sector to the back. Following the above requirements, make opacity observations so that the line of vision is approximately perpendicular to the dust plume and wind direction. If multiple plumes are involved, do not include more than one plume in the line of sight at one time.

A.2 Step 2: Record the Fugitive Dust source location, source type, method of control used, if any, observer's name, certification data and affiliation, and a sketch of the observer's position relative to the Fugitive Dust source. Also, record the time, estimated distance to the Fugitive Dust source location, approximate wind direction, estimated wind speed, description of the sky condition (presence and color of clouds), observer's position to the Fugitive Dust source, and color of the plume and type of background on the visible emission observation form both when opacity readings are initiated and completed.

A.3 Step 3: Make opacity observations, to the extent possible, using a contrasting background that is perpendicular to the line of vision. Make opacity observations approximately 1 meter above the surface from which the plume is generated. Note that the observation is to be made at only one visual point upon generation of a plume, as opposed to visually tracking the entire length of a dust plume as it is created along a surface. Make two observations per vehicle, beginning with the first reading at zero seconds and the second reading at five seconds. The zero-second observation should begin immediately after a plume has been created above the surface involved. Do not look continuously at the plume but, instead, observe the plume briefly at zero seconds and then again at five seconds.

A.4 Step 4: Record the opacity observations to the nearest 5% on an observational record sheet. Each momentary observation recorded represents the average opacity of emissions for a 5-second period. While it is not required by the test method, EPA recommends that the observer estimate the size of the vehicles which generate dust plumes for which readings are taken (e.g. mid-size passenger car or heavy-duty

truck.) and take the approximate speeds the vehicles are traveling when the readings are being taken.

A.5 Step 5: Repeat Step 3 (Section A.3. of this appendix) and Step 4 (Section A.4. of this appendix) until you have recorded a total of 12 consecutive opacity readings. This will occur once six vehicles have driven on the source in your line of observation for which you are able to take proper readings. The 12 consecutive readings must be taken within the same period of observation but must not exceed 1 hour. Observations immediately preceding and following interrupted observations can be considered consecutive.

A.6 Step 6: Average the 12 opacity readings together. If the average opacity reading equals 20% or lower, the source is in compliance with the opacity standard described in the applicable rule.

SECTION B TEST METHOD FOR VISUAL DETERMINATION OF OPACITY OF EMISSIONS FROM SOURCES FOR TIME-AVERAGED REGULATIONS

B. Applicability. This method is applicable for the determination of the opacity of emissions from sources of visible emissions for time-averaged regulations. A time-averaged regulation is any regulation that requires averaging visible emission data to determine the opacity of visible emissions over a specific time period.

B.1 Principle. The opacity of emissions from sources of visible emissions is determined visually by a qualified observer who has received certification.

B.2 Procedures. A qualified observer who has been certified shall use the following procedures for visually determining the opacity of emissions.

B.2.a Position. Stand at a position at least 5 meters from the Fugitive Dust source n order to provide a clear view of the emissions with the sun oriented in the 140° sector to the back. Consistent as much as possible with maintaining the above requirements, make opacity observations from a position such that the line of sight is approximately perpendicular to the plume and wind direction. The observer may follow the Fugitive Dust plume generated by mobile earthmoving equipment, as long as the sun remains oriented in the 140° sector to the back. As much as possible, if multiple plumes are involved, do not include more than one plume in the line of sight at one time.

B.2.b Field Records. Record the name of the site, Fugitive Dust source type (i.e., pile, material handling (i.e., transfer, loading, sorting)), method of control used, if any, observer's name, certification data and affiliation, and a sketch of the observer's position relative to the Fugitive Dust source. Also, record the time, estimated distance to the Fugitive Dust source location, approximate wind direction, estimated wind speed, description of

the sky condition (presence and color of clouds,) observer's position relative to the fugitive dust source, and color of the plume and type of the background on the visible emission observation form when opacity readings are initiated and completed.

B.2.c Observations. Make opacity observations, to the extent possible, using a contrasting background that is perpendicular to the line of sight. For storage piles, make opacity observations approximately 1 meter above the surface from which the plume is generated. For extraction operations and the loading of haul trucks in open-pit mines, make opacity observations approximately one meter above the rim of the pit. The initial observation should begin immediately after a plume has been created above the surface involved. Do not look continuously at the plume, but instead observe the plume momentarily at 15-second intervals. For Fugitive Dust from Earthmoving equipment, make opacity observations approximately 1 meter above the mechanical equipment generating the plume.

B.2.d Recording Observations. Record the opacity observations to the nearest 5% every 15 seconds on an observational record sheet. Each momentary observation recorded represents the average opacity of emissions for a 15-second period. If a multiple plume exists at the time of an observation, do not record an opacity reading. Mark an "x" for that reading. If the equipment generating the plume travels outside of the field of observation, resulting in the inability to maintain the orientation of the sun within the 140° sector or if the equipment ceases operating, mark an "x" for the 15 – second interval reading. Readings identified as "x" shall be considered interrupted readings.

B.2.e Data Reduction For Time-Averaged Regulations. For each set of 12 or 24 consecutive readings, calculate the appropriate average opacity. Sets must consist of consecutive observations, however, readings immediately preceding and following interrupted readings shall be deemed consecutive and in no case shall two sets overlap, resulting in multiple violations.

APPENDIX B
Determination of Stabilization

SECTION A TEST METHODS FOR DETERMINING STABLIZATION

The test methods described in Section B through Section G of this appendix shall be used to determine whether an area has a Stabilized Surface. Should a disturbed area contain more than one type of disturbance, soil, vegetation, or other characteristics, which are visibly distinguishable, test each representative surface separately for stability, in an area that represents a random portion of the overall disturbed conditions of the site, according to the appropriate test methods in Section B through Section G of this appendix, and include or eliminate it from the total size assessment of disturbed surface area(s) depending upon test method results.

SECTION B VISIBLE CRUST DETERMINATION

B.1 Where a visible crust exists, drop a steel ball with a diameter of 15.9 millimeters (0.625 inches) and a mass ranging from 16-17 grams from a distance of 30 centimeters (one foot) directly above (at a 90° angle perpendicular to) the soil surface. If blowsand is present, clear the blowsand from the surfaces on which the visible crust test method is conducted. Blowsand is defined as thin deposits of loose uncombined grains covering less than 50% of a site which have not originated from the representative site surface being tested. If material covers a visible crust, which is not blowsand, apply the test method in Section D of this appendix to the loose material to determine whether the surface is stabilized.

B.2 A sufficient crust is defined under the following conditions: once a ball has been dropped according to section B.1 of this appendix, the ball does not sink into the surface, so that it is partially or fully surrounded by loose grains and, upon removing the ball, the surface upon which it fell has not been pulverized, so that loose grains are visible.

B.3 Drop the ball three times within a survey area that measures 1 foot by 1 foot and that represents a random portion of the overall disturbed conditions of the site. The survey area shall be considered to have passed the Visible Crust Determination Test if the results of at least two out of the three times that the ball was dropped, met the criteria in section B.2 of this appendix. Select at least two other survey areas that represent a random

portion of the overall disturbed conditions of the site, and repeat this procedure. If the results meet the criteria of section B.2 of this appendix for all of the survey areas tested, then the site shall be considered to have passed the Visible Crust Determination Test and shall be considered sufficiently crusted.

B.4 At any given site, the existence of a sufficient crust covering one portion of the site may not represent the existence or protectiveness of a crust on another portion of the site. Repeat the visible crust test as often as necessary on each random portion of the overall conditions of the site for an accurate assessment.

SECTION C DETERMINATION OF SILT CONTENT FOR UNPAVED ROADS AND UNPAVED VEHICLE/EQUIPMENT TRAFFIC AREAS

The purpose of this test method is to estimate the silt content of the trafficked parts of Unpaved Roads and Unpaved vehicle/equipment Traffic Areas. The higher the Silt content, the more fine dust particles that are released when vehicles travel on Unpaved Roads and Unpaved vehicle/equipment Traffic Areas.

C.1 Equipment:

- C.1.a. A set of sieves with the following openings: 4 millimeters (mm), 2mm, 1mm, 0.5mm and 0.25 mm, a lid, and collector pan.
- C.1.b A small whisk broom or paintbrush with stiff bristles and dustpan 1 ft. in width (the broom/brush should preferably have one, thin row of bristles no longer than 1.5 inches in length.)
- C.1.c A spatula without holes.
- C.1.d A small scale with half-ounce increments (e.g., postal/package scale.)
- C.1.e A shallow, lightweight container (e.g., plastic storage container.)
- C.1.f A sturdy cardboard box or other rigid object with a level surface.
- C.1.g A basic calculator.
- C.1.h Cloth gloves (optional for handling metal sieves on hot, sunny days.)
- C.1.i Sealable plastic bags (if sending samples to a laboratory.)
- C.1.j A pencil/pen and paper.

C.2 Step 1: Look for a routinely traveled surface, as evidenced by tire tracks. Only collect samples from surfaces that are not damp due to precipitation or dew. This statement is not meant to be a standard in itself for dampness where watering is being used as a control measure. It is only intended to ensure that surface testing is done in a representative manner. Use caution when taking samples to ensure personal safety with respect to passing vehicles. Gently press the edge of a dustpan (1 foot in width) into the surface four times to mark an area that is 1 square foot. Collect a sample of loose surface material into the dustpan, minimizing escape of dust particles. Use a spatula to lift heavier elements such as gravel. Only collect dirt/Gravel to an approximate depth of 3/8 inch or 1 cm in the 1 square foot area. If you reach a hard, underlying subsurface that is <3/8 inch in depth, do not continue collecting the sample by digging into the hard surface. In other words, you are only collecting a surface sample of loose material down

to 1 cm. In order to confirm that samples are collected to a 1cm depth, a wooden dowel or other similar narrow object at least one-foot in length can be laid horizontally across the survey area while a metric ruler is held perpendicular to the dowel. (Optional: At this point, you can choose to place the sample collected into a plastic bag or container and take it to an independent laboratory for silt content analysis. A reference to the procedure the laboratory is required to follow is at the end of this section.)

C.3 Step 2: Place a scale on a level surface. Place a lightweight container on the scale. Zero the scale with the weight of the empty container on it. Transfer the entire sample collected in the dustpan to the container, minimizing escape of dust particles. Weigh the sample and record its weight.

C.4 Step 3: Stack a set of sieves in order according to the size openings specified above, beginning with the largest size opening (4mm) at the top. Place a collector pan underneath the bottom (0.25mm) sieve.

C.5 Step 4: Carefully pour the sample into the sieve stack, minimizing escape of dust particles by slowly brushing material into the stack with a whiskbroom or brush. On windy days, use the trunk or door of a vehicle as a wind barrier. Cover the stack with a lid. Lift up the sieve stack and shake it vigorously up and down and sideways for at least 1 minute.

C.6 Step 5: Remove the lid from the stack and disassemble each sieve separately, beginning with the top sieve. As you remove each sieve, examine it to make sure that all of the material has been sifted to the finest sieve through which it can pass (e.g., material in each sieve (besides the top sieve that captures a range of larger elements) should look the same size.) If this is not the case, re-stack the sieves and collector pan, cover the stack with the lid, and shake it again for at least 1 minute. You only need to reassemble the sieve(s) that contain material, which require further sifting.

C.7 Step 6: After disassembling the sieves and collector pan, slowly sweep the material from the collector pan into the empty container originally used to collect and weigh the entire sample. Take care not to minimize escape of dust particles. You do not need to do anything with material captured in the sieves – only the collector pan. Weigh the container with the materials from the collector pan and record its weight.

C.8 Step 7: If the source is an unpaved road, multiply the resulting weight by 0.38. If the source is an Unpaved vehicle/equipment Traffic Area, multiply the resulting weight by 0.55. The resulting number is the estimated silt loading. Then, divide the total weight of the sample you recorded earlier in Step 2 (Section C.4) and multiply by 100 to estimate the percent Silt content.

C.9 Step 8: Select another two routinely traveled portions of the Unpaved Road or Unpaved vehicle/equipment Traffic Area and repeat this test method. Once you have calculated the silt loading and percent silt content of the 3 samples collected, average your results together.

C.10 Step 9: Examine Results. If the average silt loading is less than 0.33 oz/ft^2, the surface is STABLE. If the average silt loading is greater than or equal to 0.33 oz/ft^2, then proceed to examine the average percent Silt content. If the source is an Unpaved Road and the average percent Silt content is 6% or less, the surface is STABLE. If the source is an unpaved parking lot and the average percent Silt content is 8% or less, the surface is STABLE. If your field test results are within 2% of the standard (for example, 4%-8% Silt content on an Unpaved Road) it is recommended that you collect 3 additional samples from the source according to Step 1 (section C.2) and take them to an independent laboratory for Silt content analysis.

C.11 Independent Laboratory Analysis: You may choose to collect samples from the source, according to Step 1 (section C.2) and send them to an independent laboratory for Silt content analysis rather than conduct the sieve field procedure. If so, the test method the laboratory is required to use is: "Procedures For Laboratory Analysis for Surface/Bulk Dust Loading Samples," (Fifth Edition, Volume 1, Appendix C.2.3 "Silt Analysis," 1995,) AP-42, Office of Air Quality Planning & Standards, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina.

SECTION D DETERMINATION OF THRESHOLD FRICTION VELOCITY (TFV)

For disturbed surface areas that are not crusted or vegetated, determine threshold friction velocity (TFV) according to the following sieving field procedure (based on a 1952 laboratory procedure published by W.S. Chepil).

D.1 Obtain and stack a set of sieves with the following openings: 4 millimeters (mm), 2 mm, 1 mm, 0.5 mm, and 0.25 mm or obtain and stack a set of standard/commonly available sieves. Place the sieves in order according to size openings, beginning with the largest size opening at the top. Place a collector pan underneath the bottom (0.25 mm) sieve. Collect a sample of loose surface material from an area at least 30 cm by 30 cm in size to a depth of approximately 1 cm using a brush and dustpan or other similar device. Only collect soil samples from dry surfaces (i.e. when the surface is not damp to the touch). Remove any rocks larger than 1 cm in diameter from the sample. Pour the sample into the top sieve (4 mm opening) and cover the sieve/collector pan unit with a lid. Minimize escape of particles into the air when transferring surface soil into the sieve/collector pan unit. Move the covered sieve/collector pan unit by hand using a broad, circular arm motion in the horizontal plane. Complete twenty circular arm movements, ten clockwise and ten counterclockwise, at a speed just necessary to achieve some relative horizontal motion between the sieves and the particles. Remove the lid from the sieve/collector pan unit and disassemble each sieve separately beginning with the largest sieve. As each sieve is removed, examine it for loose particles. If loose particles have not been sifted to the finest sieve through which they can pass, reassemble and cover the sieve/collector pan unit and gently rotate it an additional ten times. After disassembling the sieve/collector pan unit, slightly tilt and gently tap each sieve and the collector pan so that material aligns along one side. In doing so, minimize escape of particles into the air. Line up the sieves and collector pan in a row and visibly inspect the relative quantities of catch in

order to determine which sieve (or whether the collector pan) contains the greatest volume of material. If a visual determination of relative volumes of catch among sieves is difficult, use a graduated cylinder to measure the volume. Estimate TFV for the sieve catch with the greatest volume using Table 1 of this appendix, which provides a correlation between sieve opening size and TFV.

Table 1. Determination of Threshold Friction Velocity (TFV)

Tyler Sieve No.	ASTM 11 Sieve No.	Opening (mm)	TFV (cm/s)
5	5	4	135
9	10	2	100
16	18	1	76
32	35	0.5	58
60	60	0.25	43
Collector Pan	---	---	30

D.2 Collect at least three soil samples which represent random portions of the overall conditions of the site, repeat the above TFV test method for each sample and average the resulting TFVs together to determine the TFV uncorrected for non erodible elements. Non-erodible elements are distinct elements, in the random portion of the overall conditions of the site, that are larger than 1 cm in diameter, remain firmly in place during a wind episode, and inhibit soil loss by consuming Section of the shear stress of the wind. Non-erodible elements include stones and bulk surface material but do not include flat or standing vegetation. For surfaces with non-erodible elements, determine corrections to the TFV by identifying the fraction of the survey area, as viewed from directly overhead, that is occupied by non-erodible elements using the following procedure. Select a survey area of 1 meter by 1 meter that represents a random portion of the overall conditions of the site. Where many non-erodible elements lie within the survey area, separate the non-erodible elements into groups according to size. For each group, calculate the overhead area for the non-erodible elements according to the following equations:

Average Dimensions = (Average Length) x (Average Width)	Eq. 1
Overhead Area = (Average Dimensions) x (Number of Elements)	Eq. 2
Total Overhead Area = Overhead Area Of Group 1 + Overhead Area of Group 2 (etc)	Eq. 3

Total Frontal Area = Total Overhead Area/2	Eq. 4
Percent Cover of Non-Erodible Elements = (Total Frontal Area/Survey Area) x 100	Eq. 5

Note: Ensure consistent units of measurements (e.g., square meters or square inches when calculating percent cover).

Repeat this procedure on an additional two distinct survey areas that represent a random portion of the overall conditions of the site and average the results. Use Table 2 of this appendix to identify the correction factor for the percent cover of non-erodible elements. Multiply the TFV by the corresponding correction factor to calculate the TFV corrected for non-erodible elements.

Table 2. Correction Factors for Threshold Friction Velocity

Percent Cover of Non-Erodible Elements	Correction Factor
Greater than or equal to 10%	5
Greater than or equal to 5% and less than 10%	3
Less than 5% and greater than or equal to 1%	2
Less than 1%	None

SECTION E DETERMINATION OF FLAT VEGETATIVE COVER

Flat vegetation includes attached (rooted) vegetation or unattached vegetative debris lying on the surface with a predominant horizontal orientation that is not subject to movement by wind. Flat vegetation, which is dead but firmly attached, shall be considered equally protective as live vegetation. Stones or other aggregate larger than 1 centimeter in diameter shall be considered protective cover in the course of conduction the line transect test method. Where flat vegetation exists conduct the following line transect test method.

E.1 Line Transect Test Method. Stretch a 100 foot measuring tape across a survey area that represents a random portion of the overall conditions of the site. Firmly anchor both ends of the measuring tape into the surface using a tool such as a screwdriver, with the tape stretched taut and close to the soil surface. If vegetation exists in regular rows, place the tape diagonally (at approximately a 45° angle) away from a parallel or perpendicular position to the vegetated rows. Pinpoint an area the size of a 3/32 inch diameter brazing rod or wooden dowel centered above each 1 foot interval mark along one edge of the tape. Count the number of times that flat vegetation lies directly underneath the pinpointed area at 1 foot intervals. Consistently observe the underlying surface from a 90° angle directly above each pinpoint on one side of the tape. Do not count the

underlying surface as vegetated if any portion of the pinpoint extends beyond the edge of the vegetation underneath in any direction. If clumps of vegetation or vegetative debris lie underneath the pinpointed area, count the surface as vegetated, unless bare soil is visible directly below the pinpointed area. When 100 observations have been made, add together the number of times a surface was counted as vegetated. This total represents the percent of flat vegetations cover (e.g., if 35 positive counts were made, then vegetation cover is 35%.) If the survey area that represents a random portion of the overall conditions of the site is too small for 100 observations, make as many observations as possible. Then multiply the count of vegetated surface areas by the appropriate conversion factor to obtain percent cover. For example, if vegetation was counted 20 times within a total of 50 observations, divide 20 by 50 and multiply by 100 to obtain a flat vegetation cover of 40%.

E.2 Conduct the line transect test method, as described in section E.1 of this appendix, an additional two times on areas that represent a random portion of the overall conditions of the site and average results.

SECTION F DETERMINATION OF STANDING VEGETATIVE COVER.

Standing vegetation includes vegetation that is attached (rooted) with a predominant vertical orientation. Standing vegetation, which is dead but firmly rooted, shall be considered equally protective as live vegetation. Conduct the following standing vegetation test method to determine if 30% cover or more exists. If the resulting percent cover is less than 30% but equal to or greater than 10%, then conduct the test in Section D; "Determination Of Threshold Friction Velocity (TFV,) of this appendix in order to determine if the site is stabilized, such that the standing vegetation cover is equal to or greater than 10%, where threshold friction velocity, corrected for non-erodible elements, is equal to or greater than 43cm/second.

F.1 For standing vegetation that consists of large, separate vegetative structures (e.g., shrubs and sagebrush,) select a survey area that represents a random portion of the overall conditions of the site that is the shape of a square with sides equal to at least 10 times the average height of the vegetative structures. For smaller standing vegetation, select a survey area of three feet by three feet.

F.2 Count the number of standing vegetative structures within the survey area. Count vegetation, which grows in clumps as a single unit. Where different types of vegetation exist and/or vegetation of different height and width exists, separate the vegetative structures with similar dimensions into groups. Count the number of vegetative structures in each group within the survey area. Select an individual structure within each group that represents the average height and width of the vegetation in the group. If the structure is dense (e.g., when looking at it vertically from base to top there is little or zero open air space within its perimeter,) calculate and record its frontal silhouette area, according to Equation 6 of this appendix. Also, use Equation 6 of this appendix to estimate the average height and width of the vegetation if the survey area is larger than nine square feet. Otherwise, use the procedure in section F.3 of this appendix to calculate

the frontal silhouette area. Then calculate the percent cover of standing vegetation according to Equations 7, 8, and 9 of this appendix.

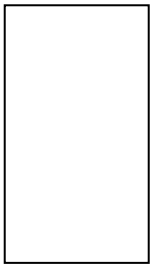
Frontal Silhouette Area = (Average Height) x (Average Width)	Eq. 6
Frontal Silhouette Area Of Group= (Frontal Silhouette Area Of Individual Vegetative Structure) x (Number Of Vegetation Structures Per Group)	Eq. 7
Total Frontal Silhouette Area = Frontal Silhouette Area Of Group 1 + Frontal Silhouette Area Of Group 2 (etc.)	Eq. 8
Percent Cover Of Standing Vegetation = (Total Frontal Silhouette Area/Survey Area) x 100	Eq. 9
Percent Open Space = [(Number Of Circled Gridlines Within The Outlined Area Counted That Are Not Covered By Vegetation/Total Number Of Gridline Intersections Within The Outlined Area) x 100]	Eq.10
Percent Vegetative Density = 100 – Percent Open Space	Eq. 11
Vegetative Density = Percent Vegetative Density/100	Eq. 12
Frontal Silhouette Area = [Max. Height x Max. Width] x [Vegetative Density/.04]o.5	Eq. 13

Note: Ensure consistent units of measurement (e.g., square meters or square inches when calculating percent cover.)

F.3. Vegetative Density Factor. Cut a single, representative piece of vegetation (or consolidated vegetative structure) to within 1cm of surface soil. Using a white paper grid or transparent grid over white paper, lay the vegetation flat on top of the grid (but do not apply pressure to flatten the structure.) Grid boxes of 1 inch or ½ inch squares are sufficient for most vegetation when conducting this procedure. Using a marker or pencil, outline the shape of the vegetation along its outer perimeter, according to Figure B, C, or D of this appendix, as appropriate. (Note: Figure C differs from Figure D primarily in that the width of vegetation in Figure C is narrow at its base and gradually broadens to its tallest height. In Figure D, the width of the vegetation generally becomes narrower from its midpoint to its tallest height.) Remove the vegetation, count and record the total number of gridline intersections within the outlined area, but do not count gridline

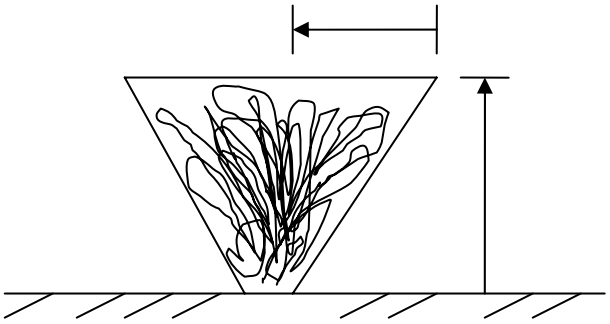
intersections that connect with the outlined shape. There must be at least 10 gridline intersections within the outlined area and preferably more than 20, otherwise, use smaller grid boxes. Draw small circles (no greater than a 3/32 inch diameter) at each gridline intersection counted within the outlined area. Replace the vegetation on the grid within its outlined shape. From a distance of approximately 2 feet directly above the grid, observe each circled gridline intersection. Count and record the number of circled gridline intersections that are not covered by any piece of the vegetation. To calculate percent vegetative density, use Equations 10 and 11 of this appendix. If percent vegetative density is equal to or greater than 30, use an equation (one of the equations-Equations 16, 17, or 18 of this appendix) that matches the outline used to trace the vegetation (Figure B, C, or D) to calculate its frontal silhouette area. If percent vegetative density is less than 30, use Equations 12 and 13 of this appendix to calculate the frontal silhouette area.

Figure B. Cylinder



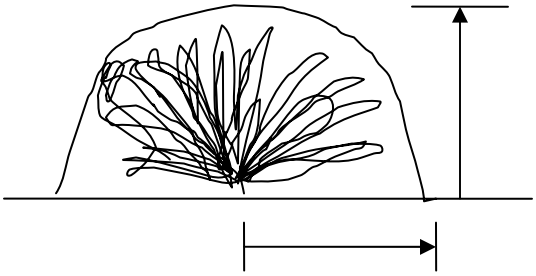
Frontal Silhouette Area = Maximum Height x Maximum Width Eq.16

Figure C. Inverted Cone



Frontal Silhouette Area = Maximum Height x ½ Maximum Width Eq. 17

Figure D. Upper Sphere



Frontal Silhouette Area = (3.14 x Maximum Height x ½ Maximum Width)/2 Eq.18

SECTION G ROCK TEST METHOD

The Rock Test Method, which is similar to Section D, Test Methods For Stabilization-Determination Of Threshold Friction Velocity (TFV) of this appendix, examines the wind-resistance effects of rocks and other non-erodible elements on disturbed surfaces. Non-erodible elements are objects larger than 1 centimeter (cm) in diameter that remain firmly in place even on windy days. Typically, non-erodible elements include rocks, stones, glass fragments, and hardpacked clumps of soil lying on or embedded in the surface. Vegetation does not count as a non-erodible element in this method. The purpose of this test method is to estimate the percent cover of non-erodible elements on a given surface to see whether such elements take up enough space to offer protection against windblown dust. For simplification, the following test method refers to all non-erodible elements as 'rocks."

G.1 Select a 1 meter by 1 meter survey area that represents the general rock distribution on the surface. A 1 meter by 1 meter area is slightly greater than a 3 foot by 3 foot area. Mark-off the survey area by tracing a straight, visible line in the dirt along the edge of a measuring tape or by placing short ropes, yard sticks, or other straight objects in a square around the survey area.

G.2 Without moving any of the rocks or other elements, examine the survey area. Since rocks >3/8 inch (1cm) in diameter are of interest, measure the diameter of some of the smaller rocks to get a sense of which rocks need to be considered.

G.3 Mentally group the rocks >3/8 inch (1cm) diameter lying in the survey area into small, medium, and large size categories. Or, if the rocks are all approximately the same size, simply select a rock of average size and typical shape. Without removing any of the rocks from the ground, count the number of rocks in the survey area in each group and write down the resulting number.

G.4 Without removing rocks, select one or two average-size rocks in each group and measure the length and width. Use either metric units or standard units. Using a calculator, multiply the length times the width of the rocks to get the average dimensions of the

rocks in each group. Write down the results for each rock group.

G.5 For each rock group, multiply the average dimensions (length times width) by the number of rocks counted in the group. Add the results from each rock group to get the total rock area within the survey area.

G.6 Divide the total rock area, calculated in section G.5 of this appendix, by two (to get frontal area.) Divide the resulting number by the size of the survey area (make sure the units of measurement match,) and multiply by 100 for percent rock cover. For example, the total rock area is 1,400 square centimeters divide 1,400 by 2 to get 700. Divide 700 by 10,000 (the survey area is 1 meter by 1 meter, which is 100 centimeters by 100 centimeters or 10,000 centimeters) and multiply by 100. The result is 7% rock cover. If rock measurements are made in inches, convert the survey area from meters to inches (1 inch = 2.54 centimeters.)

G.7 Select and mark-off two additional survey areas and repeat the procedures described in section G.1 through section G.6 of this appendix. Make sure the additional survey areas also represent the general rock distribution on the site. Average the percent cover results from all three survey areas to estimate the average percent of rock cover.

G.8 If the average rock cover is greater than or equal to 10%, the surface is stable. If the average rock cover is less than 10%, follow the procedures in section G.9 of this appendix.

G.9 If the average rock cover is less than 10%, the surface may or may not be stable. Follow the procedures in Section D.3 Determination Of Threshold Friction Velocity (TFV) of this rule and use the results from the rock test method as a correction (i.e., multiplication) factor. If the rock cover is at least 1%, such rock cover helps to limit windblown dust. However, depending on the soil's ability to release fine dust particles into the air, the percent rock cover may or may not be sufficient enough to stabilize the surface. It is also possible that the soil itself has a high enough TFV to be stable without even accounting for rock cover.

G.10 After completing the procedures described in Section G.9 of this appendix, use Table 2 of this appendix to identify the appropriate correction factor to the TFV, depending on the percent rock cover.